

Sustainable Services Programme

Executive Summary

DRAFT Outline Business Case

Version 0.9 for submission to SaTH Trust Board

29 November 2016

EXECUTIVE SUMMARY

This document represents the Outline Business Case (OBC) for the acute service elements of the Future Fit Programme; known internally as the Sustainable Services Programme (SSP). It describes the Trust's plans to address the significant challenges to the safety and sustainability of patient services specifically in emergency and urgent care, critical care and acute medicine and builds on the previously approved Strategic Outline Case (SOC).

SaTH is the main provider of district general hospital services for around half a million people in Shropshire, Telford & Wrekin and mid Wales. The majority of the Trust's services are provided at the Princess Royal Hospital (PRH) in Telford and the Royal Shrewsbury Hospital (RSH) in Shrewsbury. Both hospitals provide a wide range of acute hospital services including accident and emergency, outpatients, day cases, diagnostics, inpatient medicine and critical care; however working across two sites results in duplicate costs and inefficiencies in many service structures.

The OBC demonstrates that there are two options that would address the Trust's workforce challenges in Accident and Emergency (A&E), Critical Care and Acute Medicine. This would be achieved by the development of an Emergency Site (that includes an Emergency Department, Critical Care Unit and access for all unplanned patients) and a Planned Care Site (that includes a Diagnostic and Treatment Centre and the majority of planned care and treatment). Both sites would still deliver urgent care, outpatients and diagnostics. The OBC also describes the solutions for addressing the 'backlog maintenance' of the estate at both PRH and RSH.

The Problem We Are Trying To Solve

NHS services within Shropshire face an increasing challenge of delivering high quality, safe and sustainable acute services. This is within a climate of rising demand, reducing levels of funding and on-going changes within the workforce.

The greatest asset of Shrewsbury and Telford NHS Trust (SaTH) is its workforce. This workforce is skilled and well trained; striving to deliver high quality patient centred care, all day, every day. However, the Trust does not have all the staff it needs in the right locations; and is faced with recruiting difficulties to essential medical and nursing clinical roles within the Emergency Departments, Critical Care services and across the Trust. This means a heavy reliance on temporary staff and increased pressure on teams which ultimately impacts upon the quality of care provided.

Continued and innovative solutions to address this recruitment challenge have been explored: recruitment drives nationally and overseas; sharing posts and rotas with neighbouring Trusts; and creating new roles such as fellowships and advanced practice. However these have all failed to provide a sustainable solution. Day to day operational plans are in place to ensure the care and safety of patients within the Trust's clinical services but a long term solution is urgently needed.

The need for a long lasting, sustainable solution is being addressed through a process of health economy wide transformational change. In line with the aspirations of the Future Fit Programme and its clinically-led models of care, the Trust has worked to address the urgent workforce challenges in A&E and Critical Care.

Workforce Challenges

The Trust employs approximately 5,100 staff, but has an ageing workforce profile. Running duplicate services on two sites presents many workforce challenges and can result in a poor employee experience for some of the Trust's medical and non-medical teams across multiple specialities. This compounds an already challenging recruitment environment and leads to difficulty in recruiting the right substantive workforce to provide high quality safe care.

With the medical workforce, the current service configuration and the requirement for consultants and other specialist staff to cover both hospital sites can at times limit their ability to provide senior patient reviews. In addition, the Trust is unable to achieve Royal College guidance standards in many areas. For non-medical workforce the challenges are similar, senior expertise is split across two sites, the learning environment and provision of workforce development challenging.

With the current staffing configuration, it will prove extremely difficult to achieve adequate staffing levels to provide 7-day working across both sites. Furthermore, because teams are spread so thinly, services are vulnerable to unexpected absences and the non-availability of staff. Current configuration continues to create cost pressures for premium rate working, poor economies of scale and duplication of rotas as well as exacerbating the Trust's ability to resource 'hard to fill' posts.

Condition of the Existing Estate

The condition of SaTH's existing estate at RSH and PRH was recorded in detailed '6 Facet' estates surveys undertaken in 2015/16, which showed that significant amounts of the existing Trust estate did not achieve 'condition B' (satisfactory standard); and a substantial number of areas were 'condition D' (life expired/unacceptable), particularly at RSH. The results of these surveys form the basis of an updated Trust-wide Estates Strategy, which also provides detail of the current level of backlog maintenance – which is £103.9m within the next 5 years, plus £69.3m of functional suitability backlog.

The wider work of the Sustainable Services Programme will address much of the Trust's backlog maintenance, with many areas of the estate brought back up to 'condition B' or replaced by new buildings.

Clinical Model

The Sustainable Services Programme is clinically-led. Key clinical leaders have been involved in all aspects of the consideration, planning and development of the clinical model. The clinical model developed for the Sustainable Services Programme is consistent with the acute components of the agreed Future Fit model of care which are:

- One Emergency Centre comprising:
 - one Emergency Department
 - one Critical Care Unit
- One Diagnostic and Treatment Centre
- Two Urgent Care Centres
- Local Planned Care (outpatients, diagnostics) on both hospital sites

In designing the clinical model, the following key objectives also had to be met:

- Align to the Future Fit activity assumptions;
- Address the Trust’s workforce challenges within emergency and critical care services;
- Be deliverable;
- Be affordable to the Trust and to the local health system.

This led to a proposal which greatly improves services for patients while tackling the Trust’s service and workforce challenges; achieved by a single purpose-built Emergency Centre, which would lead to:

- Better clinical outcomes with reduced morbidity and mortality;
- Bringing specialists together treating a higher volume of critical cases to maintain and grow skills;
- A greater degree of consultant-delivered decision-making and care;
- Improved clinical adjacencies through focused redesign;
- Improved access to multi-disciplinary teams;
- Delivery of care in an environment suitable for specialist care;
- Improved recruitment and retention of specialist’s medical and nursing professionals.

A balanced-site care model whereby patients would:

- Receive acute medical care within the Emergency Site;
- Benefit from planned care with defined separation from emergency care pathways;
- Benefit from improvements in emerging shared pathways between all providers.

This leads to an improved flow of patients, as shown in the diagram below:

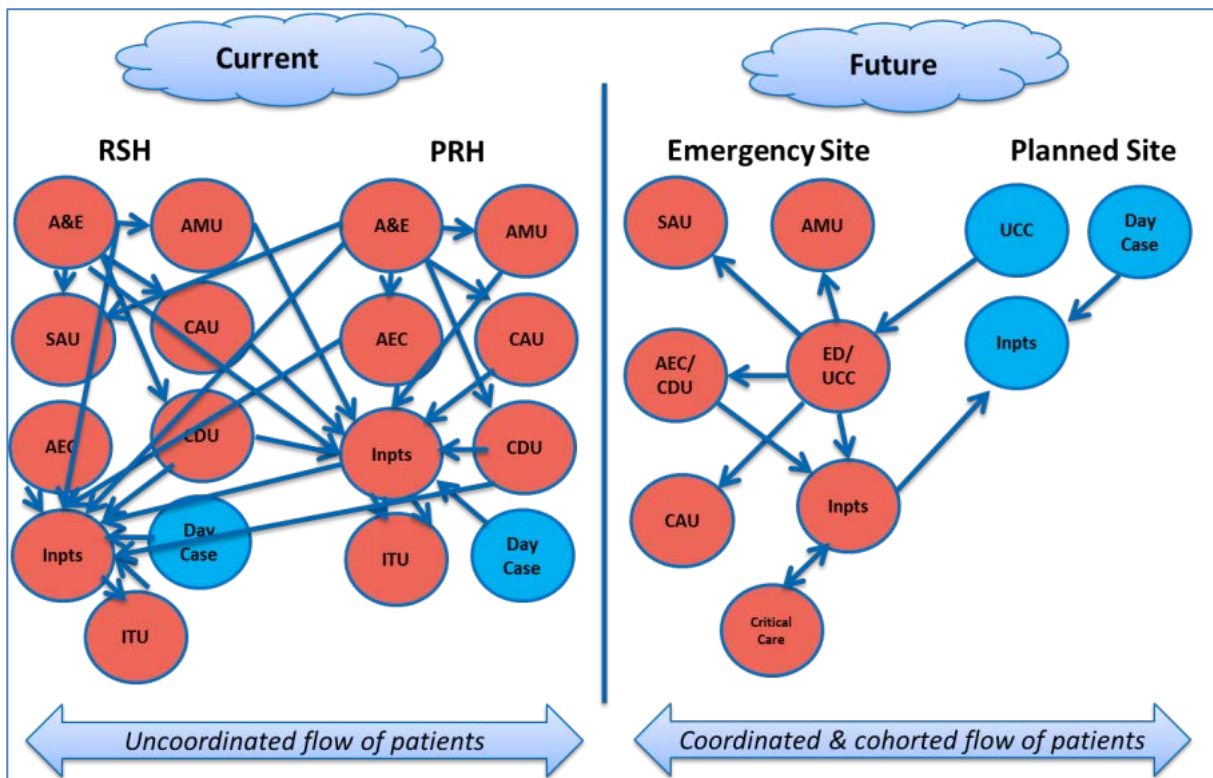


Figure 1: Current and Future Flow of Patients

Assurance

Full assurance to the SSP programme has been provided through:

- Future Fit Programme Assurance Workstream
- West Midlands Clinical Senate Review
- NHS England Assurance Reviews
- Health Overview Scrutiny Committees (HOSC)
- Internal Audit
- External review of this OBC by Deloitte

Involvement, Engagement and Communication

Extensive involvement and engagement with Trust staff has been undertaken and 55% of the consultant workforce has been involved in detailed discussions pivotal to SSP; and key clinical leaders have been involved in all aspects of the planning and development of the clinical model. Considerable engagement with all staff groups continues at a pace and a number of groups/information sessions are well established and attended.

The Trust and the NHS Future Fit Team have carried out a robust programme of communications and engagement with patients, members of the public, stakeholders, partner organisations and SaTH staff to make them aware of the development of the Sustainable Services Programme and how the proposals improve the service for patients, and why change is needed.

Work is underway, led by the Future Fit Team and the Clinical Commissioning Groups to develop a consultation document and plan for the 12-week formal consultation.

The Current Situation

SaTH's acute hospital services are of a good standard, recognised in the Care Quality Commission report published in 2015. Nevertheless, it is recognised the current hospital configuration is not sustainable due to the healthcare and workforce issues including:

- Changing healthcare needs of the population now and into the future
- Quality standards that are required and that individuals and organisations aspire to deliver
- A need for improved productivity and a reduction in inefficiencies (in line with the Carter Review 2016 and the Trust's work with the Virginia Mason Institute)
- On-going developments in medicine and technology
- Workforce changes in terms of skills, availability and training
- Poor quality existing facilities and level of backlog maintenance

The Service Brief

Discussions and debate involving local clinicians, staff and the public regarding the current service provision was developed during the major consultation exercise in November 2013 in response to the national Call to Action for the NHS. Those who participated in the Call to Action recognised the need to tackle two things: the real and pressing local service issues, and challenges faced by health services nationally that have an impact locally (with the key challenge locally being workforce). The issues and challenges identified in the Call to Action include:

- Changes within the medical workforce
- Staffing within the key acute services (A&E; Critical Care; Acute Medicine)
- Changes in the populations profile and patterns of illness
- Higher expectations, clinical standards, and developments in medical technology
- Economic challenges, and opportunity cost in quality of service
- Impact of accessing services
- The quality of the patient facilities and the Trust's estate

Capacity Modelling

As a starting point for consideration of the models of care for urgent and emergency care, the original Future Fit algorithm was applied to the Trust's activity data for 2015/16 to determine whether patients need emergency or urgent care services, including mapping different elements of the casemix to different scenarios. This showed 65% of the patients that currently attend the Trust's A&E departments do not have life or limb threatening illness or injury and could potentially be seen and treated by the Urgent Care Service. The remaining 35% of patients could be treated within the Trust's single Emergency Centre (EC).

Central to the plans for the delivery of a revised clinical model are the improved outcomes for patients. Research has been undertaken to understand improvements, recommendations and evidence from elsewhere and the opportunities for the Sustainable Services Programme, specifically around Urgent and Emergency, Ambulatory and Planned Care.

The core element of the proposed clinical model is the Trust's plan that all patients are seen in the right place, at the right time by the right person. If the right place for the patient is the acute setting, then the services that patient's access need to be suitable for their needs. All unplanned patients would therefore be assessed and admitted to the Emergency Site. If clinically appropriate, patients could be transferred to the Planned Care for their on-going care and treatment.

The majority of adult patients having a day-case operation or procedure would be admitted to the Planned Care Site. High risk patients would have their day-case at the Emergency Site, as would children in two of the options.

Sustainability and Transformation Plan (STP) and Neighbourhoods

In 2015, NHS organisations were asked to work together to produce Sustainability and Transformation Plans (STPs) outlining how they are going to develop and deliver viable health and social care services over an agreed area, including improving services for local people. The STP focuses on smaller areas called 'Neighbourhoods' as the basis of the model for addressing and preventing ill health and promoting the support that local communities already offer.

There are 11 neighbourhoods within Shropshire and four in Telford and Wrekin, which would be used to provide a range of services at a local level for people who need the support of primary care professionals such as GPs, social workers, community nurses, therapists and mental health workers. These Neighbourhood Care Teams would be a first port of call for people with Long Term Conditions (LTC) e.g. patients with diabetes. The aspiration is that Communities would support vulnerable people, and fewer people would need to go to hospital, and those who do would be discharged quicker.

Building Requirements

All of the new estate created through the Sustainable Services Programme will be to modern standards, incorporating best practice, and reflecting the needs of patients and staff. Facilities will be high quality and adaptable, greatly improving access for patients, staff and visitors. The Trust has created a set of baseline Schedules of Accommodation establishing the space standards required across all departments.

An initial detailed phasing strategy has been developed to ensure operational services are maintained with as little disruption as possible whilst protecting the privacy and dignity of patients; and limiting the amount of temporary accommodation and departmental decants.

The scheme is being developed flexibly using modularisation to allow the build to be delivered in phases should this be required. In addition, all of the new accommodation is being designed flexibly, to allow for potential changes to the service in the future.

Workforce Requirements

The Trust workforce plan incorporates the guidance within the recent publication from the National Quality Board (July 2016) in 'Supporting NHS providers to deliver the right staff, with the right skills, in the right place at the right time'. In order to deliver the clinical model within the Sustainable Services Programme, the workforce will increasingly be:

- Treating higher acuity patients on the Emergency Site as a matter of routine
- Working more autonomously and delivering a more complex case load
- Working in more flexible ways across traditional professional groups
- Developed to support new roles required
- Up-skilled to take on extended roles
- Required to use new technology to deliver clinical care and non-clinical services
- More routine working new patterns of employment e.g. 24/7 on site presence, 7-day working and delivering routine services in the evening and at weekends

Health Informatics

The ICT Strategy provides solutions to meet the clinical and business requirements of the reconfigured services. This service change provides a fantastic opportunity to further the IT development from previous reconfigurations and aid the roll out of a modern, resilient and integrated IT solution that is beneficial to staff and service users.

Development of the Options

The Outline Business Case has further developed three potential solutions, plus the 'do nothing':

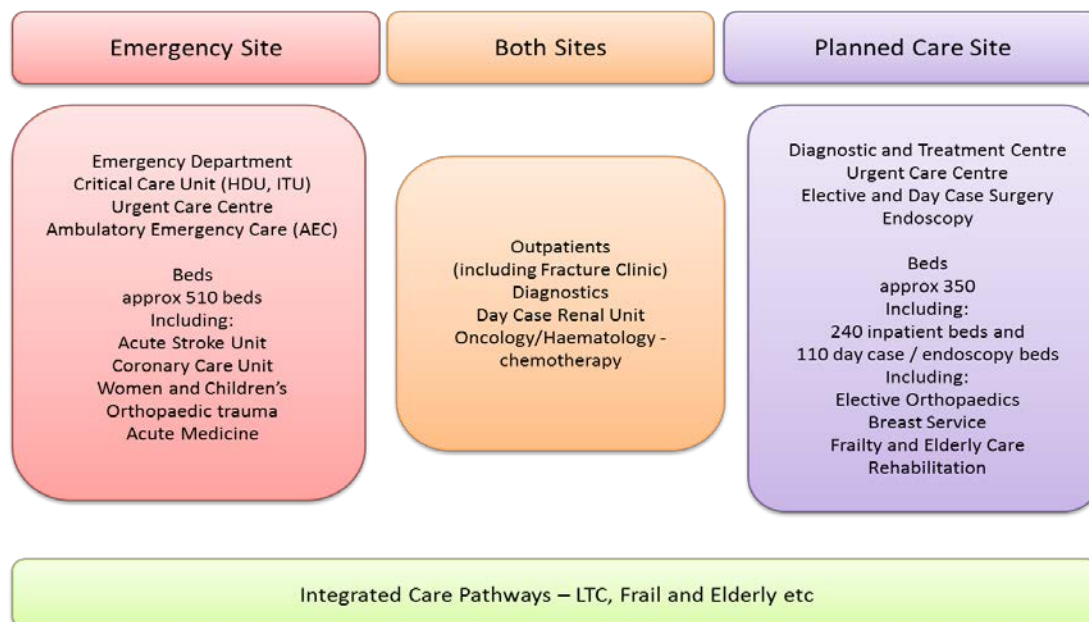
- Do Nothing (Option A)
- Emergency Care at PRH and Planned Care at RSH (Option B)
- Emergency Care at RSH and Planned Care at PRH (Option C1)
- Emergency Care at RSH and Planned Care at PRH, with Women and Children's retained at PRH (Option C2)

The Trust’s clinical teams reviewed Option C2 in detail, and concluded it is not deliverable, safe or sustainable given the essential clinical adjacency of Women and Children’s services with Emergency and Critical Care services. A further review was held by the Manchester CSU Clinical Review Group, to determine what was required to make Option C2 safe and sustainable. Evidence suggests that the probability of achieving and sustaining a clinical workforce to support Option C2 would be very challenging, it would not meet the necessary standards of the Royal Colleges, and Care Quality Commission (CQC) issues would be raised.

Much of the detailed work in developing the OBC has focussed on identifying those services that have a clinical and workforce interdependency with the two services at the centre of the need for change (A&E and Critical Care). Based on this, a detailed assessment has been carried out to determine the optimum balance of services across an Emergency Site and a Planned Care Site:

The Potential OBC Solution - Essential Service Change (Options B and C1)

Service balance based on clinical adjacency needs and resolving workforce issues



NB Inpatient bed base does not include Neonatology and Critical Care numbers

Figure 2: Emergency and Planned Care Site Configuration

Options Economic Appraisal

An overall Economic Appraisal of the shortlisted options was carried out by Future Fit, comprising:

- Non-Financial Appraisal
- Financial Appraisal

The Non-Financial Appraisal was undertaken by a panel of local healthcare representatives and experts on 23 September 2016 with fifty members in attendance. The panel were presented with evidence which addressed four non-financial criteria (accessibility, quality, workforce, and deliverability). The panel then scored each of the four shortlisted options against the four criteria, with the results shown below:

TOTALS	Agreed Weighting	Total Weighted Scores			
		Option A	Option B	Option C1	Option C2
ACCESSIBILITY	25.1%	59.8	45.2	65.1	47.7
QUALITY	31.2%	39.0	65.0	91.5	24.7
WORKFORCE	27.3%	26.0	67.0	76.8	26.2
DELIVERABILITY	16.3%	19.6	40.5	42.4	22.2
	100.0%	144.4	217.6	275.8	120.8
	RANK	3	2	1	4
	DIFFERENCE	47.7%	21.1%	0.0%	56.2%

Table 1: Weighted Scores for Each Option

The Financial appraisal of the four options was undertaken to determine the Net Present Cost (NPC) and the Equivalent Annual Cost (EAC) of each option, with the results shown below:

	Option A	Option B	Option C1	Option C2
	£000s	£000s	£000s	£000s
Net Present Cost	9,356,590	8,555,517	8,659,431	8,705,510
Equivalent Annual Cost	351,473	321,381	324,070	325,794
Economic Value	4	1	2	3

Table 2: EAC cost of Each of Option

Sensitivity analysis was undertaken on both the non-financial and financial scores.

Two alternative methods have been used to combine the results of the Non-Financial and Financial Appraisals in order to test for robustness. The outcomes from the Appraisals are that:

Option B and Option C1 are deliverable and affordable for the Trust and the wider health system.

- Option B scored the highest in the financial appraisal
- Option C1 scored the highest in the non-financial appraisal
- Option C2 scored the lowest in the non-financial appraisal and third in the financial appraisal

The Future Fit Programme Board will meet to review the Appraisal Report on 30 November 2016. The outcome of this meeting will determine the basis of the formal consultation with the public.

Commercial Issues

In order to achieve the objectives of the Sustainable Services Programme, a number of goods and services need to be procured. This includes professional services, construction, temporary facilities, and equipment.

It is assumed at this stage that the project will be capially funded, using a Public Dividend Capital (PDC) route. The Trust is however aware of the potential shortage of availability of capital, and as such would explore alternative funding routes should sufficient capital not be available.

The Trust is also considering a number of commercial opportunities to reduce the overall capital cost of the project, including revenue-led solutions for new multi-storey car parks, energy supply contracts to fund new energy plant; and increased revenue opportunities through cafes and retail.

Assuming the required capital is able to be obtained, the Trust will procure the construction work using the Department of Health's ProCure22 (P22) procurement route, following good recent experience of using ProCure21+ for the Future Configuration of Hospital Services (FCHS) project.

A significant amount of new furniture, fittings, and equipment will be required. This will be new, except for any specialist items, or any items which have been recently purchased.

Financial Case

A capital cost estimate for each of the shortlisted Options, B, C1 and C2, has been undertaken by Cost Advisors Rider Hunt, following best practice and the guidance, as set out in the table below:

Costs	Option A	Option B	Option C1	Option C2
	£000s	£000s	£000s	£000s
Total at Outturn (at PUBSEC 214)		249,613	311,636	294,497

Table 3: Capital Cost Estimates for Each Option

The overall affordability of each option has been assessed taking into account income from commissioners; and expenditure, including the revenue cost and benefits of each option. The results are detailed in the table below:

	Baseline	Option A	Option B	Option C1	Option C2
	£000s	£000s	£000s	£000s	£000s
Recurrent 2016/17 Baseline Position	(16,553)	(16,553)	(16,553)	(16,553)	(16,553)
Recurrent 2020/21 Position	5,664	(10,114)	6,231	2,594	584

Table 4: Overall Affordability for Each Option

The table above demonstrates the affordability of the options at both RSH and PRH to the Trust resulting in recurrent financial surplus for Options B, C1 and C2. Option C1 however enables the Trust to maximise the potential for repatriation of activity currently being performed for local residents in provider organisations out of the county.

SSP Project Management

The Trust recognises that the successful delivery of the Sustainable Services Programme is a significant task, which will require robust project management and a real commitment from everyone involved to ensure its success. The Trust has thorough arrangements and governance established for the management of the project, and is committed to ensuring its successful outcome.

Programme and Key Dates

The proposed timetable for the next stages of the Sustainable Services Programme is set out in Table 40 in Section 18.5. An initial detailed review of the phasing and sequencing has taken place during the OBC, which shows that two options (Option B and C1) are clinically and technically deliverable. The implementation of the new clinical model and the associated benefits of the Sustainable Services Programme will be delivered by the end of the 2020/21 financial year.

Conclusion and Recommendation

In summary, this Outline Business Case (OBC) for the Trust's Sustainable Services Programme details the Trust's solutions to sustainably address the significant challenges to the safety and quality of patient services. It describes the organisation's commitment to the creation of two balanced hospitals. Each site will continue to provide essential services for the population served including: Urgent Care, Outpatients, Diagnostics and Midwifery Led Care. In addition to this: one site will provide Emergency Care (which will include the single Emergency Department and Critical Care Unit); and the other site will provide Planned Care (which will include the Diagnostic Treatment Centre).

Option B and Option C1 are deliverable and affordable for the Trust and the wider health system.

The Trust Board is now asked to review and approve the OBC for submission to Commissioners and NHSI for the ongoing progression of the programme and public consultation.



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29 November 2016

Document Control

Version	Date	Status
0.1	25/07/16	Working document shared with leads
0.2	18/10/16	Section detail received from leads
0.3	20/10/16	Updated. Draft shared with Future Fit Programme Team to support development of PCBC
0.4	27/10/16	Updated. Forwarded to Finance Director for comment
0.5	21/11/16	Deloitte's feedback incorporated Draft sent to Future Fit team for inclusion in Gateway Review submission
0.6	21/11/16	Circulated to leads and Steering Group members for final comment
0.7	23/11/16	Updated following receipt of Steering Group members' comments and circulated for sign off
0.8	24/11/16	Updated following receipt of Steering Group members' comments and forwarded to Sustainability Committee and Trust Board members
0.9	29/11/16	Circulated following approval by Sustainability Committee

Proposed amendments recommended at 24/11/2016 Steering Group Meeting

Page Number	Section/Table	Proposed Amendments
2		Executive summary to be produced when final document is complete
61-68		Add further detail to incorporate the Buurtzorg model of care
69	Section 10.1	Add further detail on the flexibility and modularisation of the build and phasing and the development could be delivered in phases
90-92	Section 14.1	Greater clarity on shortlisted options and further explanatory notes on which options are which and a consistent naming convention across the options
97	Section 14.2.3	Paragraph 3, minor amendment to language
97	Table 24 and 25	Footnote to reference the source of the tables
99		Remove section C relating to changes from the 2015 appraisal as these were deemed not relevant to OBC
102		A note to explain that there are only two variables (workforce and finance costs) across each of the options as the same clinical model is being adopted across all options
102	Table 29	To be expanded to reflect the two variables that impact upon the options
115-120		Consistent naming convention across the options
105 135	Section 14.7 Section 19	The Steering group agreed that the overall conclusion was to remain as shown and not confirm a preferred option at this stage

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FOREWORD

The Shrewsbury and Telford Hospital NHS Trust is committed to delivering the safest and kindest care in the NHS. We know that the current configuration of our hospitals is not fit for purpose. Discussions in and outside of our organisation demonstrate a collective ambition to ensure the sustainability of the services we provide. This Outline Business Case is an essential element in the achievement of that ambition.

The Outline Business Case therefore builds on the work and thinking within the Strategic Outline Case and the Sustainability and Transformation Plan. It is a stage in a process which will continue to evolve over time to ensure the very best service delivery model within the resources available.

The detail within the business case is drawn from national and local best practice and guidance and from countless conversations and discussions with clinicians, staff, patients and the public. This work is clinically led; bringing our team's clinical skills, knowledge and aspirations together with technical expertise in planning, service improvement and facility and service design.

We have listened to the concerns of our communities. People tell us that they want to see services as close to their homes as possible; that the hospitals in Shrewsbury and Telford need to stay and deliver the health services that are important to them and their family and friends. We have worked hard to be able to deliver people's hopes for two vibrant acute hospitals in the county. For lots of services, we plan to continue to deliver these at both the Princess Royal and Royal Shrewsbury Hospitals: outpatients; diagnostics; renal dialysis; chemotherapy; midwifery led care; and non-life or limb threatening accident and emergencies will continue to be treated at both our hospital sites.

However, the case for change is clear why this is not possible for all our services. To improve the outcomes and experience for the patients we serve, we need to consolidate emergency and critical care onto one of our sites; creating an Emergency Centre that houses the Emergency Department, Critical Care Unit and Ambulatory Emergency Care. And on the other site, we need to consolidate the majority of our planned and on-going care.

We are not alone in our need to make changes to the services we provide. We do however appreciate our rurality and the challenges that this gives us when we are comparing our services to others. We will therefore continue to work hard and in partnership with our colleagues in primary and community care to redesign our service delivery such that the patients in our hospitals are only those that need our specialist care. We will also work to provide that specialist care and support, especially for patients with a long term condition, with GPs and Community Teams. We will work to enable and support patients to stay in their own homes and communities so that they receive a seamless delivery of care, based around their individual care needs.

This Outline Business Case therefore describes our future model of care and the workforce, facilities and IT solutions we will need to deliver that model. It describes how we plan to address the significant estate challenges we currently face. It details a plan for transformation and the funding and finance impact of making these changes happen over the coming years.

It remains our ambition that we provide the very safest and kindest care and treatment that we can for the people we serve. We believe that this Outline Business Case is a pivotal step forward in delivering that ambition.

EXECUTIVE SUMMARY

This document represents the Outline Business Case (OBC) for the acute service elements of the Future Fit Programme; known internally as the Sustainable Services Programme (SSP). It describes the Trust's plans to address the significant challenges to the safety and sustainability of patient services specifically in emergency and urgent care, critical care and acute medicine and builds on the previously approved Strategic Outline Case (SOC).

SaTH is the main provider of district general hospital services for around half a million people in Shropshire, Telford & Wrekin and mid Wales. The majority of the Trust's services are provided at the Princess Royal Hospital (PRH) in Telford and the Royal Shrewsbury Hospital (RSH) in Shrewsbury. Both hospitals provide a wide range of acute hospital services including accident and emergency, outpatients, day cases, diagnostics, inpatient medicine and critical care; however working across two sites results in duplicate costs and inefficiencies in many service structures.

The OBC demonstrates that there are two options that would address the Trust's workforce challenges in Accident and Emergency (A&E), Critical Care and Acute Medicine. This would be achieved by the development of an Emergency Site (that includes an Emergency Department, Critical Care Unit and access for all unplanned patients) and a Planned Care Site (that includes a Diagnostic and Treatment Centre and the majority of planned care and treatment). Both sites would still deliver urgent care, outpatients and diagnostics. The OBC also describes the solutions for addressing the 'backlog maintenance' of the estate at both PRH and RSH.

The Problem We Are Trying To Solve

NHS services within Shropshire face an increasing challenge of delivering high quality, safe and sustainable acute services. This is within a climate of rising demand, reducing levels of funding and on-going changes within the workforce.

The greatest asset of Shrewsbury and Telford NHS Trust (SaTH) is its workforce. This workforce is skilled and well trained; striving to deliver high quality patient centred care, all day, every day. However, the Trust does not have all the staff it needs in the right locations; and is faced with recruiting difficulties to essential medical and nursing clinical roles within the Emergency Departments, Critical Care services and across the Trust. This means a heavy reliance on temporary staff and increased pressure on teams which ultimately impacts upon the quality of care provided.

Continued and innovative solutions to address this recruitment challenge have been explored: recruitment drives nationally and overseas; sharing posts and rotas with neighbouring Trusts; and creating new roles such as fellowships and advanced practice. However these have all failed to provide a sustainable solution. Day to day operational plans are in place to ensure the care and safety of patients within the Trust's clinical services but a long term solution is urgently needed.

The need for a long lasting, sustainable solution is being addressed through a process of health economy wide transformational change. In line with the aspirations of the Future Fit Programme and its clinically-led models of care, the Trust has worked to address the urgent workforce challenges in A&E and Critical Care.

Workforce Challenges

The Trust employs approximately 5,100 staff, but has an ageing workforce profile. Running duplicate services on two sites presents many workforce challenges and can result in a poor employee experience for some of the Trust's medical and non-medical teams across multiple specialities. This

compounds an already challenging recruitment environment and leads to difficulty in recruiting the right substantive workforce to provide high quality safe care.

With the medical workforce, the current service configuration and the requirement for consultants and other specialist staff to cover both hospital sites can at times limit their ability to provide senior patient reviews. In addition, the Trust is unable to achieve Royal College guidance standards in many areas. For non-medical workforce the challenges are similar, senior expertise is split across two sites, the learning environment and provision of workforce development challenging.

With the current staffing configuration, it will prove extremely difficult to achieve adequate staffing levels to provide 7-day working across both sites. Furthermore, because teams are spread so thinly, services are vulnerable to unexpected absences and the non-availability of staff. Current configuration continues to create cost pressures for premium rate working, poor economies of scale and duplication of rotas as well as exacerbating the Trust's ability to resource 'hard to fill' posts.

Condition of the Existing Estate

The condition of SaTH's existing estate at RSH and PRH was recorded in detailed '6 Facet' estates surveys undertaken in 2015/16, which showed that significant amounts of the existing Trust estate did not achieve 'condition B' (satisfactory standard); and a substantial number of areas were 'condition D' (life expired/unacceptable), particularly at RSH. The results of these surveys form the basis of an updated Trust-wide Estates Strategy, which also provides detail of the current level of backlog maintenance – which is £103.9m within the next 5 years, plus £69.3m of functional suitability backlog.

The wider work of the Sustainable Services Programme will address much of the Trust's backlog maintenance, with many areas of the estate brought back up to 'condition B' or replaced by new buildings.

Clinical Model

The Sustainable Services Programme is clinically-led. Key clinical leaders have been involved in all aspects of the consideration, planning and development of the clinical model. The clinical model developed for the Sustainable Services Programme is consistent with the acute components of the agreed Future Fit model of care which are:

- One Emergency Centre comprising:
 - one Emergency Department
 - one Critical Care Unit
- One Diagnostic and Treatment Centre
- Two Urgent Care Centres
- Local Planned Care (outpatients, diagnostics) on both hospital sites

In designing the clinical model, the following key objectives also had to be met:

- Align to the Future Fit activity assumptions;
- Address the Trust's workforce challenges within emergency and critical care services;
- Be deliverable;
- Be affordable to the Trust and to the local health system.

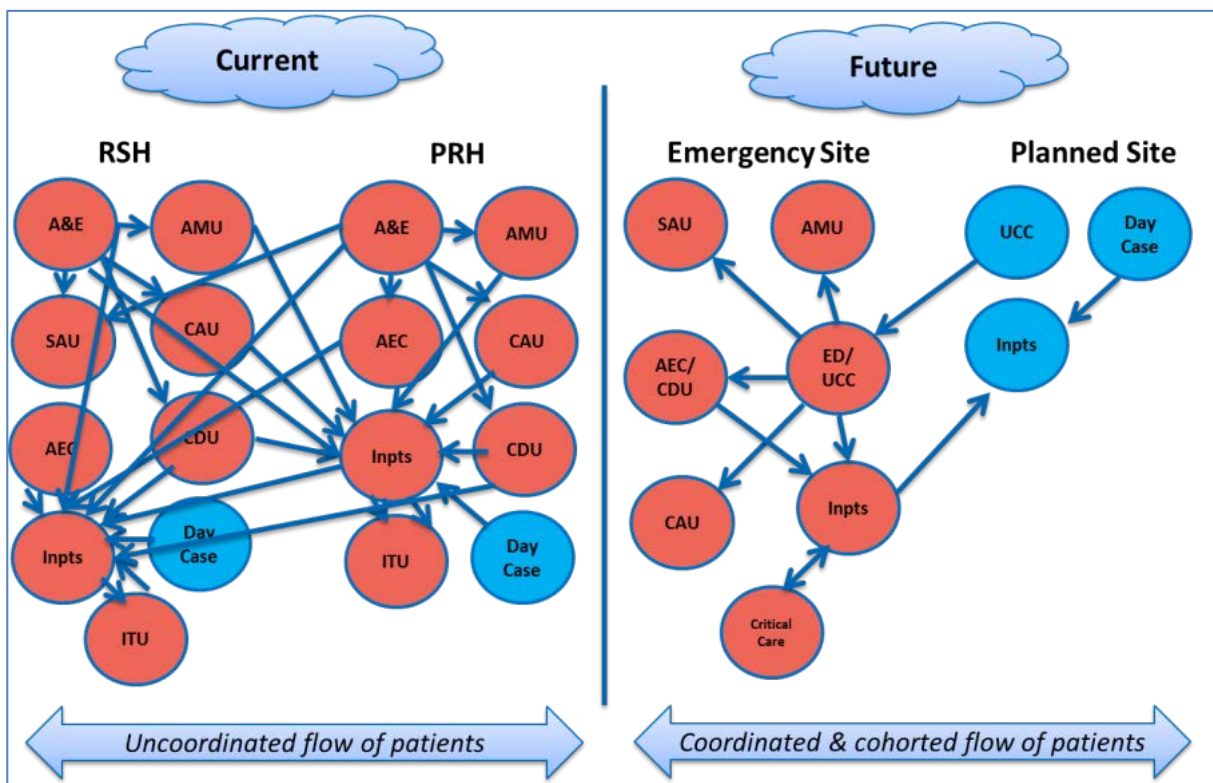
This led to a proposal which greatly improves services for patients while tackling the Trust's service and workforce challenges; achieved by a single purpose-built Emergency Centre, which would lead to:

- Better clinical outcomes with reduced morbidity and mortality;
- Bringing specialists together treating a higher volume of critical cases to maintain and grow skills;
- A greater degree of consultant-delivered decision-making and care;
- Improved clinical adjacencies through focused redesign;
- Improved access to multi-disciplinary teams;
- Delivery of care in an environment suitable for specialist care;
- Improved recruitment and retention of specialist's medical and nursing professionals.

A balanced-site care model whereby patients would:

- Receive acute medical care within the Emergency Site;
- Benefit from planned care with defined separation from emergency care pathways;
- Benefit from improvements in emerging shared pathways between all providers.

This leads to an improved flow of patients, as shown in the diagram below:



Assurance

Full assurance to the SSP programme has been provided through:

- Future Fit Programme Assurance Workstream
- West Midlands Clinical Senate Review
- NHS England Assurance Reviews
- Health Overview Scrutiny Committees (HOSC)
- Internal Audit
- External review of this OBC by Deloitte

Involvement, Engagement and Communication

Extensive involvement and engagement with Trust staff has been undertaken and 55% of the consultant workforce has been involved in detailed discussions pivotal to SSP; and key clinical leaders have been involved in all aspects of the planning and development of the clinical model. Considerable engagement with all staff groups continues at a pace and a number of groups/information sessions are well established and attended.

The Trust and the NHS Future Fit Team have carried out a robust programme of communications and engagement with patients, members of the public, stakeholders, partner organisations and SaTH staff to make them aware of the development of the Sustainable Services Programme and how the proposals improve the service for patients, and why change is needed.

Work is underway, led by the Future Fit Team and the Clinical Commissioning Groups to develop a consultation document and plan for the 12-week formal consultation.

The Current Situation

SaTH's acute hospital services are of a good standard, recognised in the Care Quality Commission report published in 2015. Nevertheless, it is recognised the current hospital configuration is not sustainable due to the healthcare and workforce issues including:

- Changing healthcare needs of the population now and into the future
- Quality standards that are required and that individuals and organisations aspire to deliver
- A need for improved productivity and a reduction in inefficiencies (in line with the Carter Review 2016 and the Trust's work with the Virginia Mason Institute)
- On-going developments in medicine and technology
- Workforce changes in terms of skills, availability and training
- Poor quality existing facilities and level of backlog maintenance

The Service Brief

Discussions and debate involving local clinicians, staff and the public regarding the current service provision was developed during the major consultation exercise in November 2013 in response to the national Call to Action for the NHS. Those who participated in the Call to Action recognised the need to tackle two things: the real and pressing local service issues, and challenges faced by health services nationally that have an impact locally (with the key challenge locally being workforce). The issues and challenges identified in the Call to Action include:

- Changes within the medical workforce
- Staffing within the key acute services (A&E; Critical Care; Acute Medicine)
- Changes in the populations profile and patterns of illness
- Higher expectations, clinical standards, and developments in medical technology

- Economic challenges, and opportunity cost in quality of service
- Impact of accessing services
- The quality of the patient facilities and the Trust's estate

Capacity Modelling

As a starting point for consideration of the models of care for urgent and emergency care, the original Future Fit algorithm was applied to the Trust's activity data for 2015/16 to determine whether patients need emergency or urgent care services, including mapping different elements of the casemix to different scenarios. This showed 65% of the patients that currently attend the Trust's A&E departments do not have life or limb threatening illness or injury and could potentially be seen and treated by the Urgent Care Service. The remaining 35% of patients could be treated within the Trust's single Emergency Centre (EC).

Central to the plans for the delivery of a revised clinical model are the improved outcomes for patients. Research has been undertaken to understand improvements, recommendations and evidence from elsewhere and the opportunities for the Sustainable Services Programme, specifically around Urgent and Emergency, Ambulatory and Planned Care.

The core element of the proposed clinical model is the Trust's plan that all patients are seen in the right place, at the right time by the right person. If the right place for the patient is the acute setting, then the services that patient's access need to be suitable for their needs. All unplanned patients would therefore be assessed and admitted to the Emergency Site. If clinically appropriate, patients could be transferred to the Planned Care for their on-going care and treatment.

The majority of adult patients having a day-case operation or procedure would be admitted to the Planned Care Site. High risk patients would have their day-case at the Emergency Site, as would children in two of the options.

Sustainability and Transformation Plan (STP) and Neighbourhoods

In 2015, NHS organisations were asked to work together to produce Sustainability and Transformation Plans (STPs) outlining how they are going to develop and deliver viable health and social care services over an agreed area, including improving services for local people. The STP focuses on smaller areas called 'Neighbourhoods' as the basis of the model for addressing and preventing ill health and promoting the support that local communities already offer.

There are 11 neighbourhoods within Shropshire and four in Telford and Wrekin, which would be used to provide a range of services at a local level for people who need the support of primary care professionals such as GPs, social workers, community nurses, therapists and mental health workers. These Neighbourhood Care Teams would be a first port of call for people with Long Term Conditions (LTC) e.g. patients with diabetes. The aspiration is that Communities would support vulnerable people, and fewer people would need to go to hospital, and those who do would be discharged quicker.

Building Requirements

All of the new estate created through the Sustainable Services Programme will be to modern standards, incorporating best practice, and reflecting the needs of patients and staff. Facilities will be high quality and adaptable, greatly improving access for patients, staff and visitors. The Trust has created a set of baseline Schedules of Accommodation establishing the space standards required across all departments.

An initial detailed phasing strategy has been developed to ensure operational services are maintained with as little disruption as possible whilst protecting the privacy and dignity of patients; and limiting the amount of temporary accommodation and departmental decants.

The scheme is being developed flexibly using modularisation to allow the build to be delivered in phases should this be required. In addition, all of the new accommodation is being designed flexibly, to allow for potential changes to the service in the future.

Workforce Requirements

The Trust workforce plan incorporates the guidance within the recent publication from the National Quality Board (July 2016) in 'Supporting NHS providers to deliver the right staff, with the right skills, in the right place at the right time'. In order to deliver the clinical model within the Sustainable Services Programme, the workforce will increasingly be:

- Treating higher acuity patients on the Emergency Site as a matter of routine
- Working more autonomously and delivering a more complex case load
- Working in more flexible ways across traditional professional groups
- Developed to support new roles required
- Up-skilled to take on extended roles
- Required to use new technology to deliver clinical care and non-clinical services
- More routine working new patterns of employment e.g. 24/7 on site presence, 7-day working and delivering routine services in the evening and at weekends

Health Informatics

The ICT Strategy provides solutions to meet the clinical and business requirements of the reconfigured services. This service change provides a fantastic opportunity to further the IT development from previous reconfigurations and aid the roll out of a modern, resilient and integrated IT solution that is beneficial to staff and service users.

Development of the Options

The Outline Business Case has further developed three potential solutions, plus the 'do nothing':

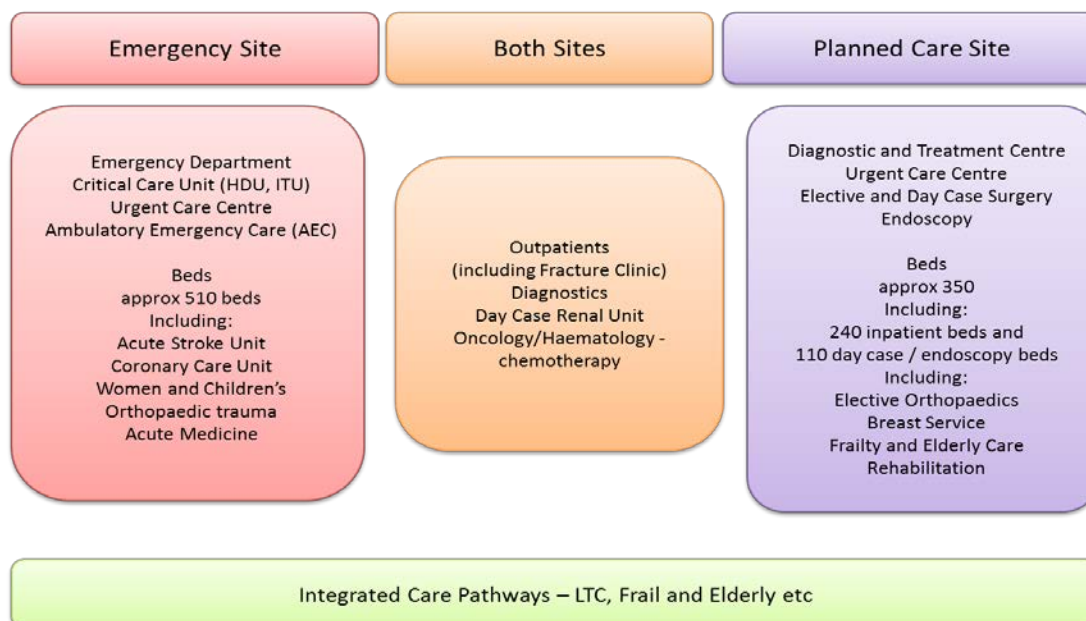
- Do Nothing (Option A)
- Emergency Care at PRH and Planned Care at RSH (Option B)
- Emergency Care at RSH and Planned Care at PRH (Option C1)
- Emergency Care at RSH and Planned Care at PRH, with Women and Children's retained at PRH (Option C2)

The Trust's clinical teams reviewed Option C2 in detail, and concluded it is not deliverable, safe or sustainable given the essential clinical adjacency of Women and Children's services with Emergency and Critical Care services. A further review was held by the Manchester CSU Clinical Review Group, to determine what was required to make Option C2 safe and sustainable. Evidence suggests that the probability of achieving and sustaining a clinical workforce to support Option C2 would be very challenging, it would not meet the necessary standards of the Royal Colleges, and Care Quality Commission (CQC) issues would be raised.

Much of the detailed work in developing the OBC has focussed on identifying those services that have a clinical and workforce interdependency with the two services at the centre of the need for change (A&E and Critical Care). Based on this, a detailed assessment has been carried out to determine the optimum balance of services across an Emergency Site and a Planned Care Site:

The Potential OBC Solution - Essential Service Change (Options B and C1)

Service balance based on clinical adjacency needs and resolving workforce issues



NB Inpatient bed base does not include Neonatology and Critical Care numbers

Options Economic Appraisal

An overall Economic Appraisal of the shortlisted options was carried out by Future Fit, comprising:

- Non-Financial Appraisal
- Financial Appraisal

The Non-Financial Appraisal was undertaken by a panel of local healthcare representatives and experts on 23 September 2016 with fifty members in attendance. The panel were presented with evidence which addressed four non-financial criteria (accessibility, quality, workforce, and deliverability). The panel then scored each of the four shortlisted options against the four criteria, with the results shown below:

TOTALS	Agreed Weighting	Total Weighted Scores			
		Option A	Option B	Option C1	Option C2
ACCESSIBILITY	25.1%	59.8	45.2	65.1	47.7
QUALITY	31.2%	39.0	65.0	91.5	24.7
WORKFORCE	27.3%	26.0	67.0	76.8	26.2
DELIVERABILITY	16.3%	19.6	40.5	42.4	22.2
	100.0%	144.4	217.6	275.8	120.8
	RANK	3	2	1	4
	DIFFERENCE	47.7%	21.1%	0.0%	56.2%

Table 1: Weighted Scores for Each Option

The Financial appraisal of the four options was undertaken to determine the Net Present Cost (NPC) and the Equivalent Annual Cost (EAC) of each option, with the results shown below:

	Option A	Option B	Option C1	Option C2
	£000s	£000s	£000s	£000s
Net Present Cost	9,356,590	8,555,517	8,659,431	8,705,510
Equivalent Annual Cost	351,473	321,381	324,070	325,794
Economic Value	4	1	2	3

Table 2: EAC cost of Each of Option

Sensitivity analysis was undertaken on both the non-financial and financial scores.

Two alternative methods have been used to combine the results of the Non-Financial and Financial Appraisals in order to test for robustness. The outcomes from the Appraisals are that:

Option B and Option C1 are deliverable and affordable for the Trust and the wider health system.

- Option B scored the highest in the financial appraisal
- Option C1 scored the highest in the non-financial appraisal
- Option C2 scored the lowest in the non-financial appraisal and third in the financial appraisal

The Future Fit Programme Board will meet to review the Appraisal Report on 30 November 2016. The outcome of this meeting will determine the basis of the formal consultation with the public.

Commercial Issues

In order to achieve the objectives of the Sustainable Services Programme, a number of goods and services need to be procured. This includes professional services, construction, temporary facilities, and equipment.

It is assumed at this stage that the project will be capital funded, using a Public Dividend Capital (PDC) route. The Trust is however aware of the potential shortage of availability of capital, and as such would explore alternative funding routes should sufficient capital not be available.

The Trust is also considering a number of commercial opportunities to reduce the overall capital cost of the project, including revenue-led solutions for new multi-storey car parks, energy supply contracts to fund new energy plant; and increased revenue opportunities through cafes and retail.

Assuming the required capital is able to be obtained, the Trust will procure the construction work using the Department of Health’s ProCure22 (P22) procurement route, following good recent experience of using ProCure21+ for the Future Configuration of Hospital Services (FCHS) project.

A significant amount of new furniture, fittings, and equipment will be required. This will be new, except for any specialist items, or any items which have been recently purchased.

Financial Case

A capital cost estimate for each of the shortlisted Options, B, C1 and C2, has been undertaken by Cost Advisors Rider Hunt, following best practice and the guidance, as set out in the table below:

Costs	Option A	Option B	Option C1	Option C2
	£000s	£000s	£000s	£000s
Total at Outturn (at PUBSEC 214)		249,613	311,636	294,497

Table 3: Capital Cost Estimates for Each Option

The overall affordability of each option has been assessed taking into account income from commissioners; and expenditure, including the revenue cost and benefits of each option. The results are detailed in the table below:

	Baseline	Option A	Option B	Option C1	Option C2
	£000s	£000s	£000s	£000s	£000s
Recurrent 2016/17 Baseline Position	(16,553)	(16,553)	(16,553)	(16,553)	(16,553)
Recurrent 2020/21 Position	5,664	(10,114)	6,231	2,594	584

Table 4: Overall Affordability for Each Option

The table above demonstrates the affordability of the options at both RSH and PRH to the Trust resulting in recurrent financial surplus for Options B, C1 and C2. Option C1 however enables the Trust to maximise the potential for repatriation of activity currently being performed for local residents in provider organisations out of the county.

SSP Project Management

The Trust recognises that the successful delivery of the Sustainable Services Programme is a significant task, which will require robust project management and a real commitment from everyone involved to ensure its success. The Trust has thorough arrangements and governance established for the management of the project, and is committed to ensuring its successful outcome.

Programme and Key Dates

The proposed timetable for the next stages of the Sustainable Services Programme is set out in Table 40 in Section 18.5. An initial detailed review of the phasing and sequencing has taken place during the OBC, which shows that two options (Option B and C1) are clinically and technically deliverable. The implementation of the new clinical model and the associated benefits of the Sustainable Services Programme will be delivered by the end of the 2020/21 financial year.

Conclusion and Recommendation

In summary, this Outline Business Case (OBC) for the Trust's Sustainable Services Programme details the Trust's solutions to sustainably address the significant challenges to the safety and quality of patient services. It describes the organisation's commitment to the creation of two balanced hospitals. Each site will continue to provide essential services for the population served including: Urgent Care, Outpatients, Diagnostics and Midwifery Led Care. In addition to this: one site will provide Emergency Care (which will include the single Emergency Department and Critical Care Unit); and the other site will provide Planned Care (which will include the Diagnostic Treatment Centre).

Option B and Option C1 are deliverable and affordable for the Trust and the wider health system.

The Trust Board is now asked to review and approve the OBC for submission to Commissioners and NHSI for the ongoing progression of the programme and public consultation.

1 Introduction

This document represents the Outline Business Case for the acute service elements of the Future Fit Programme; known internally as the Sustainable Services Programme (SSP). It describes the Trust's plans to address the significant challenges to the safety and sustainability of patient services specifically in emergency and urgent care, critical care and acute medicine and builds on the previously approved Strategic Outline Case (SOC). The SOC can be found in Appendix 1a.

The Outline Business Case (OBC) demonstrates that there are two options that would address the Trust's workforce challenges in Accident and Emergency (A&E), Critical Care and Acute Medicine. This would be achieved by the development of an Emergency Site (that includes an Emergency Department, Critical Care Unit and access for all unplanned patients) and a Planned Care Site (that includes a Diagnostic and Treatment Centre and the majority of planned care and treatment). Both sites would still deliver urgent care, outpatients and diagnostics.

The OBC also describes the solutions for addressing the 'backlog maintenance' of the estate at both PRH and RSH.

The workforce opportunities and impact of the potential solutions is included, with an emphasis on new ways of working and new and expanded roles. The capital costs associated with each solution and the revenue impact is also identified along with the interdependency with the health systems sustainability and deficit reduction plans.

1.1 The Problem we are trying to Solve

NHS services within Shropshire face an increasing challenge of delivering high quality, safe and sustainable acute services. This is within a climate of rising demand, reducing levels of funding and on-going changes within the workforce.

Like all hospitals, the greatest asset of Shrewsbury and Telford NHS Trust (SaTH) is its workforce. This workforce is skilled and well trained; striving to deliver high quality patient centred care, all day, every day. However, the Trust does not have all the staff it needs in the right locations. The organisation is faced with difficulties in recruiting to essential medical and nursing clinical roles; within the Emergency Departments, Critical Care services and other areas across the Trust. This means a heavy reliance on temporary staff and increased pressure on teams which ultimately impacts upon the quality of care provided.

Continued and innovative solutions to address this recruitment challenge have been explored: recruitment drives nationally and overseas; sharing posts and rotas with neighbouring Trusts; and creating new roles such as fellowships and advanced practice have all failed to provide a sustainable solution. Day to day operational plans are in place to ensure the care and safety of patients within the Trust's clinical services but a long term solution is urgently needed.

This need for a long lasting, sustainable solution is being addressed through a process of health economy wide transformational change. In line with the aspirations of the Future Fit Programme and its clinically-led models of care, the Trust has worked to address the urgent workforce challenges in A&E and Critical Care.

Guidance from NHS Improvement (NHSI) has been used in the development of this OBC using three core principles:

- The options are developed with people, not for them
- Its focus is redesign, not relocation; and
- A whole system view is taken, with genuine integration and joint planning

The guidance consolidates other reference sources and is consistent with HM Treasury's Green Book Guidance on Appraisal of Policies, Programmes and Projects. This OBC has been produced using the Five Case Model, HM Treasury's and Welsh Government's standard for business cases:

1. The **strategic case**
2. The **economic case**
3. The **commercial case**
4. The **financial case**
5. The **management case**

The OBC has 19 sections:

- | | |
|-------------------|---|
| Section 1 | (this section) provides the introduction |
| Section 2 | describes the background to the Sustainable Services Programme OBC |
| Section 3 | details the clinical model |
| Section 4 | explains the assurance processes within the SSP and wider STP |
| Section 5 | outlines the consultation and engagement undertaken and planned |
| Section 6 | includes the strategic case |
| Section 7 | details the service brief |
| Section 8 | describes the capacity modelling undertaken and its impact |
| Section 9 | introduces the neighbourhood work stream as described within the STP |
| Section 10 | outlines the facility requirements to deliver the revised clinical model |
| Section 11 | provides the workforce detail and transformation plans |
| Section 12 | highlights the future health informatics requirements |
| Section 13 | explains the development of the options |
| Section 14 | details the appraisal process and the economic case |
| Section 15 | describes the preferred option |
| Section 16 | provides the commercial case |
| Section 17 | outlines the financial case and the detailed financial analysis |
| Section 18 | delivers the management case and the approach to implementation |
| Section 19 | states the conclusion and recommendations |

2 Background

2.1 Strategic Outline Case (SOC)

The SOC for the Sustainable Services Programme (SSP) was approved by SaTH Trust Board on 31 March 2016 and was supported by Telford & Wrekin CCG on 10 May 2016 and the Shropshire CCG on 29 June 2016. The letter of support can be seen in Appendix 2a. There were a number of caveats associated with the approval of the SOC, which are detailed below with the Trust's response.

1.	Sustainability of Clinical Model	Lead Organisation	Comments
1.1	Further clarification to provide assurance on inter-dependencies of clinical specialties and the levels of workforce and capital investment required	SATH	All progressed in the development of the OBC. Clinical interdependencies mapped. Workforce and facilities developed in response to patient need and clinical linkages. CCG commissioned external review of Option C2. Best practice guidance used in modelling and service and workforce redesign
1.2	Further clarification around the clinical linkages on which the service reconfiguration has been based	SATH	Clinical linkages progressed and explained within the OBC
1.3	Clarification on the proposed repatriation including Quality Impact Assessments	SATH	QIAs developed and included. Repatriation in line with STP
2	Community Fit		
2.1	Given the inter-dependencies of Future Fit and Community Fit, the CCGs need more assurance of the viability of these assumptions	STP/Future Fit	Neighbourhood workstreams within the STP (formerly Community Fit) progressing the development of the service offer. Sensitivity analysis undertaken in the development of the OBC for delays in delivery on the acute facility requirements.
2.2	The CCGs require completion of sufficient further work to design the model of community care and to test assumptions about a) the scale of activity shifts and b) productivity improvements anticipated in the SOC	STP/Future Fit	As 2.1
3	Activity Assumptions		
3.1	The CCGs require detailed sensitivity analysis on the assumptions used, to be completed through the OBC process	SATH	Sensitivity analysis undertaken and included in the OBC
4	Community and/or primary care alternatives to acute care		
	The SOC has been built upon the activity modelling and uses a set of assumptions for the proposed activity on each site, plus a level of shift in activity away from the acute sector		
4.1	These assumptions also need thorough testing through the OBC process, including the application of a sensitivity analysis.	SATH	Sensitivity analysis undertaken and included in the OBC
4.2	This would also need to include the potential impact on primary care and community services in a range of activity shifts, together with an analysis of the change in financial flows away from the acute sector that will enable this activity transfer to take place	SATH	Forms part of the work within the STP and the development of the Neighbourhood models Financial analysis included within the OBC and relevant elements included within the OBC
4.3	There is also a need to quantify the impact on ambulance service provision	SATH	Commissioners led Task and Finish Group established to progress this work. Discussions held with WMAS regarding the clinical model and approach to pathway progression. All discussions to include WMAS, WAS and MSL
4.4	Further test the detail around SaTH's ambition to repatriate a level of activity from other providers		Forms part of the work within the STP. Levels adjusted since those detailed in the SOC reflecting on-going clinical conversations (£8m)

5	Affordability		
5.1	Affordability of the SOC needs further testing, including the assumptions around investments and efficiency savings and should be supported by robust sensitivity analysis	SATH/FF	Developed and included in the OBC
	Governance		
	<p>During the development of the detailed OBC the programme team will report to the Programme Board and to each organisation's governing body on a monthly basis on progress of work to clarify the areas of concern outlined in this letter, with escalation to each organisation's governing body for review, where assurance cannot be provided for:</p> <ul style="list-style-type: none"> • The viability of the proposed acute clinical model from the Clinical Senate. • The viability of the proposed and corresponding Community Fit proposal from the Clinical Senate. • Reliability of assumptions about the anticipated demand and capacity levels; and anticipated activity shifts via the sensitivity analysis. • Reliability of assumptions that the proposed models for acute and community services are financially sustainable via sensitivity testing. 	FF Office	<p>Governance in place and described within the OBC and STP. Clinical Senate review undertaken Neighbourhood work progressing within the STP Sensitivity analysis undertaken and included in the OBC</p>

Table 5: Responses to caveats raised in Letters of Support from CCG's

2.2 Trust vision and objectives

The Trust is currently in the process of launching its revamped organisational strategy and vision for the future.

The strategy sets out a vision for Shropshire, Telford & Wrekin and mid Wales to be the healthiest half million people in the world and also outlines how the organisation has begun a journey to provide the safest and kindest care in the NHS. The organisational strategy is made up of six different levels.



Figure 1: The Trust's Organisational Strategy

Stage One: Trust Values – Proud To Care, Make It Happen, We Value Respect and Together We Achieve. The Values were developed by staff and patients and represent the ethos of the Trust and what truly matters within the organisation; driving behaviours of honesty, integrity, kindness and courage.

Stage Two: Our People – the achievement of this strategy is as important as what is delivered every day. Staff are recruited having demonstrated the Trust's values. The values also form the basis of all staff annual appraisals and in practice will support consistent behaviour throughout the organisation. The Trusts also aspires to become a learning organisation and achieve University Teaching Status (as a system approach)

Stage Three: Leadership Developing our Leaders – this will be achieved through the empowerment of staff, recognition of exemplary and inspirational leaders who are at the forefront of change and innovation. Creating a brighter future together will be achieved through the redevelopment of hospital sites, the development of Centres of Excellence, integration of care delivery, the use of

technology and investment in the workforce through the development of the Transforming Care Institute (TCI).

Stage Four: Our Mission Statement – developing a one system approach through a shared vision and purpose that will be delivered by Neighbourhoods, managing demand together, working together and investing in the population’s wellbeing

Stage Five: Our Vision – the Trust will be known for providing the safest and kindest care in the NHS, designed around patient needs. The Trust will promote this way of working by removing duplication, variation and inconsistency which can introduce risks and sometimes harm. The way this will be achieved must reflect the caring, selfless nature the NHS was founded upon.

Stage Six: Patient and Family – the Trust is committed to becoming an integrated healthcare provider working in partnership to achieve the healthiest half a million population on the planet. This will be achieved by helping people to age well, putting patients first and delivering efficient, safe, kind and reliable services. The Trust aims to be exemplary, encouraging innovation and change, supporting the development of inspirational leaders through delivery of the vision, listening and engaging with patients and families at all levels to make this happen.

Change will be delivered through the Trust’s partnership with The Virginia Mason Institute (VMI). The organisation is learning about a LEAN methodology and the value it can bring to patients and staff. This has developed into the Trust’s own *Production System* and will free-up staff to transform their services and how care is delivered. The *Transforming Care Institute* has been established to capture the learning, become the base for the Kaizen Promotion Office (KPO) team and celebrate the innovations, ideas, changes and success the Trust’s teams are generating.

2.3 The Sustainability and Transformation Plan

It is widely agreed that in order for the NHS to continue to provide services for the future, changes need to be made now. In 2015, organisations were asked to work together to produce Sustainability and Transformation Plans (STPs) outlining how they are going to develop and deliver viable health and social care services over an agreed area. This also includes proposals for improving services for local people and making the most of advances in care and in technology.

The following organisations form the Shropshire Telford & Wrekin STP and have been tasked with improving the local health system:

- Shropshire Clinical Commissioning Group
- Telford & Wrekin Clinical Commissioning Group
- Shropshire Community Health NHS Trust
- The Shrewsbury and Telford Hospitals NHS Trust
- Robert Jones & Agnes Hunt Orthopaedic Hospital NHS Foundation Trust
- South Shropshire & Staffordshire Foundation NHS Trust
- ShropDoc
- Shropshire County Council
- Telford & Wrekin Council
- Powys Teaching Local Health Board

The challenges the local health economy face are similar to those being experienced across the country. Demand on services continues to rise and outstrips the available funding, putting pressure on all services, especially hospitals, GP practices and social care. It is widely known that the elderly population is increasing, many having more than one long-term health condition, which creates a greater need for certain services. An additional challenge in the provision of health care with in Shropshire and mid-wales is the numbers of patients that live in remote rural settings.

The local healthy economy can no longer continue to provide the healthcare as it does now. As well as being unable to provide the integrated pathways of care that all organisations aspire to, there is simply not enough money available to fund the existing configuration of services.

The STP members are working together to identify how £74 million could potentially be used differently and more effectively to improve services for the local population. Collectively they are developing proposals to ensure people get the best treatment – whenever and wherever they need it. This involves looking at how existing services can be provided differently and how patient information can be shared to improve services.

The STP has identified that the cause of poor health originates from the communities thus providing the focus for the plan, through supporting people to lead healthier lives, promoting self-care and therefore relieving pressure on the healthcare system.

2.2.3 Neighbourhoods

The STP focuses on smaller areas called ‘Neighbourhoods’ as the basis of the model for addressing and preventing ill health and promoting the support that local communities already offer. There are 11 neighbourhoods within Shropshire and four neighbourhoods in Telford and Wrekin.

These neighbourhoods would be used as the basis for providing health and care services for people who need the support of primary care professionals such as, GPs, social workers, community nurses, therapists and mental health workers working together to provide a consistent range of services at a local level. These Neighbourhood Care Teams would be the first port of call for people with Long Term Conditions (LTC) for example, patients with diabetes. The aspiration being that Communities themselves would be able to support vulnerable people, with the professional backing of Neighbourhood Care Teams where required. Fewer people would need to go to hospital, and those who do would be discharged quicker.

2.2.4 Acute Services

For those patients that do require treatment by the acute sector, the STP is supportive of the proposed clinical model detailed in this document. The aim is to improve the outcome for patients by using consultants and other resources most effectively. All organisations within the STP have agreed to work together to make sure the STP works in the best interests of local people. The STP believes that through a system wide approach to the integration of services would deliver clinical improvements and make the experience of using services better for patients.

There is a commitment from all organisations within the STP to work together to reduce duplication, freeing up resources to consistently provide the best possible care. Working together in this way across NHS, social care and the voluntary sector will ensure the best outcomes for the people of Shropshire, Telford & Wrekin and mid Wales.

2.4 The Shrewsbury and Telford Hospital NHS Trust

SaTH is the main provider of district general hospital services for around half a million people in Shropshire, Telford & Wrekin and mid Wales.

2.5 Services and Activities

The majority of the Trust's services are provided at the Princess Royal Hospital (PRH) in Telford and the Royal Shrewsbury Hospital (RSH) in Shrewsbury; providing 99% of Trust activity. Both hospitals provide a wide range of acute hospital services including accident & emergency, outpatients, day cases, diagnostics, inpatient medicine and critical care. Following recent service reconfigurations, inpatient adult Surgery (excluding breast) is provided at RSH, with Women and Children's Services (consultant-led obstetrics, neonatology, inpatient and day case paediatrics and inpatient Women's Services), head and neck and acute stroke care being provided at PRH. In line with many organisations where the delivery of services is across multiple sites, the Trust is challenged with duplicate costs and inefficiencies inherent in many service structures.

Services	PRH	RSH
A&E	✓	✓
Outpatients	✓	✓
Diagnostics	✓	✓
Inpatient Medical Care	✓	✓
Critical Care	✓	✓
Inpatient head & neck surgery	✓	
Inpatient acute and elective surgery		✓
Surgical Assessment Unit		✓
Ambulatory Care	✓	✓
Inpatient women & children	✓	
Outpatient children	✓	✓
Children's Assessment Unit	✓	✓
Inpatient Oncology Care		✓
Midwife-led maternity services	✓	✓
Day case surgery and procedures	✓	✓
Elective Orthopaedics	✓	*✓
Orthopaedic Trauma	✓	✓
Breast Surgery	✓	

Table 6: Services delivered at RSH and PRH

*RSH activity is provided by Robert Jones and Agnes Hunt Orthopaedic Hospital NHS Foundation Trust

Alongside services at PRH and RSH the SaTH provides community and outreach services including:

- Consultant-led outreach clinics (held in Community Hospitals and the Wrekin Community Clinic at Euston House, Telford)

- Midwife-led units at Ludlow, Bridgnorth Community Hospital and RJAH in Oswestry
- Renal dialysis outreach services at Ludlow Hospital
- Community services including midwifery, audiology and therapies
- During 2015/16 the Trust saw:
 - 49,284 elective and day case spells (3.9% increase on 2014/15)
 - 49,229 non-elective inpatient spells (4.4% increase on 2014/15)
 - 7,698 maternity and transfer spells (7.7% increase on 2014/15)
 - 412,387 outpatient appointments (2.6% increase on 2014/15)
 - 107,946 accident and emergency attendances (this does not include RSH Urgent Care activity of 13,151)

A full analysis of SaTH's patient activity for 2015/16 is provided at Appendix 2b

2.6 Workforce

The Trust employs approximately 5,100 staff as summarised by staff group in the table below:

Workforce Category	WTE
Medical and Dental	611
Administration and Estates	992
Healthcare assistants and other support staff	1116
Nursing, midwifery and health visiting staff	1555
Nursing, midwifery and health visiting learners	26
Scientific, therapeutic and technical staff	555
Healthcare science staff	269
Total	5124

Table 7: Summary of 2015/16 Workforce Whole Time Equivalents (WTEs)

The Trust has an ageing workforce profile. This consists of over half of all nursing and midwifery registered staff, over 20% of medical and dental staff, over a quarter of Healthcare Scientists, a third of Administrative and Clerical staff and over half of estates and ancillary staff being eligible to retire within the next 10 years.

2.7 Finances

SaTH turnover for 2015/16 was £326.5m of which income from patient care accounted for £304m. The majority of the clinical income came from the following three largest volume commissioning bodies:

- Shropshire CCG (Income £124.7m, 41%)
- Telford and Wrekin CCG (Income £88.9m, 29.2%)
- NHS England and Specialised Commissioners (Income £51.7, 17%)

Of the remainder of clinical income:

- 11.8% came from other commissioning organisations, including Welsh commissioners

- 1% came from 'other clinical income' which consists of income from private patients, overseas visitors and the NHS Injury Cost Recovery Scheme

A summary of the Income & Expenditure (I&E) position is shown in the table below:

Heading	£m
Income:	
Patient Care	304.0
Education, training & research	12.3
Other revenue	10.2
Total Operating Income	326.5
Expenditure:	
Pay	226.3
Non-Pay	90.9
Depreciation & Amortisation	8.2
Clinical Negligence	10.1
Impairments	16.7
Total Operating Expenses	352.2
Surplus/(deficit) for the financial year	(25.7)
PDC payable	5.3
Retained surplus/(deficit) for the year	(31.0)

Table 8: SaTH Income and Expenditure 2015/16

For reporting purposes the following are excluded:

Heading	£m
Impairments relating to plant, property and equipment	16.6
Adjustment in relation to donated asset elimination	(0.2)
Surplus/(deficit) at year end	(14.6)

Table 9: Income & Expenditure exclusions

2.8 The Estate

Full details of SaTH's estate are contained within the Trust's Estate Strategy which has been updated to reflect the findings of the six facet estate surveys, completed in the latter part of 2015 by Property Surveyors Oakleaf and NIFES.

A summary of the survey outcomes and the approach to deliver a new estates strategy is attached in Appendix 2c.

Patient care services are primarily delivered from the two main hospital sites in Shrewsbury and Telford. The buildings on the Royal Shrewsbury Hospital (RSH) site comprise several separate developments, ranging in age from 1966 to the current day:

- The Maternity and Paediatric development at the south of the site adjacent to the main entrance roadway was built in 1967
- The central development of Wards, Outpatients, A&E, Imaging and Support services, which forms the main spine of the site and came into use between 1976 to 1978
- The Cobalt Unit that includes Linear accelerators and Oncology services dating from 1982
- The Renal unit at the north of the site, which was built in 1991 and extended in 2003
- The Treatment Centre opened in 2005 also at the north end of the site
- Medical and nursing educational facilities in the north east corner of the site, built in 2002
- Residential accommodation in the south west corner of the site, built in 1974 and extended in 1982
- Rooftops accommodation in replace of some of the old residential accommodation in the south west corner of the site, completed in phases from August 2009 to December 2010
- The Boiler House and Estate Department in the north-west corner of the site, built in 1966 and 1977 respectively
- The new and extended Cancer Centre opened in 2013
- The buildings on the Princess Royal Hospital (PRH) site essentially comprise a 2 storey nucleus hospital opened in 1988 with some additions, as follows:
 - Extension in 1999 to provide a purpose designed Rehabilitation Unit
 - The Management Suite was refurbished in 2013 to create a 28 bed inpatient short stay medical ward
 - A new Women's and Children's Centre was opened in 2014
 - Staff residential blocks and a small private outpatient clinic in the south east corner of the site built in 1989
 - A number of underutilised residential blocks were refurbished in 2013 to provide office accommodation

2.9 Estate Condition

Six facet estate surveys were completed in the latter part of 2015 by Property Surveyors Oakleaf and NIFES. They were commissioned to undertake assessments of respectively the Royal Shrewsbury (RSH) and Princess Royal (PRH) Hospitals to establish the condition and performance of the existing estate. The six estate facets assessed were:

- Physical Condition

- Functional Suitability
- Space Utilisation
- Quality
- Statutory Compliance (Fire and Health & Safety requirements)
- Environmental Management

Each facet was broken down into building systems and fabric elements, plus comments included in the reports about any significant issues noted within each block to give context to the backlog findings. Each element was then given a grade of A (as new) to D (life expired and/or serious risk of imminent failure). Where assets had a remaining life assessed at less than five years then a cost estimate was provided to either repair or replace the item (backlog).

As part of the surveys the backlog maintenance cost to bring the estate assets that were below condition B in terms of their physical condition and/or compliance with mandatory fire safety requirements and statutory safety legislation up to condition B (sound and operationally safe) were identified. All of the backlog condition surveys were based on the approach described in the Department of Health's 'A risk-based methodology for establishing and managing backlog' (2004).

Costs to replace, remove or upgrade assets that already met condition A or B criteria, for example for modernisation or best practice purposes have not been classified as backlog.

A summary of the key estate asset information is shown below in the table below:

Estates Criteria	PRH	RSH	Offsite ¹	Total
Gross Internal Area (m ²)	46,765	61,400	1,477	109,642
Net Book Value (£m)	82.0	78.2	4.0	164.2
Capital Charges Relating to Buildings (£m)	5.7	5.5	0.3	11.5
Total Backlog (Years 0-5) (£m)	20.3	83.2	0.4	103.9
Functional Suitability Backlog (£m)	7.0	62.3		69.3

Table 10: Summary of SaTH Estates Data – September 2015

Table Notes: 1. Offsite area comprises the Queensway Decontamination Unit and some Business Support Departmental space within the Shrewsbury Business Park. 2. All backlog costs (unless otherwise state) are expressed as 'gross' works costs (that is the base cost to undertake the works, plus a 50% uplift to cover costs such as VAT, Consultants fees, decanting and temporary services. 3. NBV and Capital Charges as at 1st April 2015.

Tables 7 and 8 below provide a summary of the proportion of the facilities (at each of the main sites) graded between condition 'A' (excellent/new) and condition 'D' (life expired/unacceptable), with condition 'B' generally acknowledged to be a satisfactory standard.

RSH	Ratings and % of Total GIA				
	A	B	B/C	C	D
Estates Facet (%)					
Physical Condition (%)	17	14	0	29	40
Statutory Compliance (%)	2	27	0	23	48
Quality - Environmental (%)	0	0	0	100	0
Quality - Amenity (%)	13	21	0	36	30

Table 11: RSH Facilities – Summary of Six Facet Estates Survey Assessment

PRH	Ratings and % of Total GIA				
	A	B	B/C	C	D
Estates Facet (%)					
Physical Condition (%)	4	64	9	23	0
Statutory Compliance (%)	0	99	0	1	0
Quality - Environmental (%)	0	100	0	0	0
Quality - Amenity (%)	0	86	0	14	0

Table 12: PRH Facilities – Summary of Six Facet Estates Survey Assessment

Table Notes: The data has been derived from the Oakleaf surveys completed in September 2015. Over a five year investment horizon the total backlog gross cost across both main hospital sites is estimated at £103.5m, which includes £50.3m of items assessed as 'high' or 'significant' risk.

2.9.1 Clinical facilities and accommodation review

A multi-faceted review of our current clinical facilities and accommodation included input from the Technical Team review, Six Facet Estates survey and a Clinical Review. The conclusions drawn from these series of reviews were unanimous in their poor opinion of much of the existing ward accommodation. A number of wards at PRH and the main ward block at RSH (levels 3 – 5) would need substantial investment to prolong their continuing use.

Key issues identified within the patient environment following review included:

General ward areas

- Small bays resulting in poor privacy and dignity outcomes
- Lack of side rooms for end of life care, isolation and privacy and dignity
- Poor ventilation and air handling throughout the wards
- Inadequate storage areas for equipment on the wards
- Lack of quiet rooms for confidential discussions with patients and their families
- Insufficient numbers of toilets and bathrooms on all wards
- Unacceptable levels of noise impacting on the patient experience
- General poor level of décor and routine ward maintenance

Theatres

- Across both sites, 13 of the 21 operating theatres require refurbishment to bring them up to current standards i.e. operating lights, air handling systems, equipment storage, shared anaesthetic rooms and the general size of two theatres (10 & 11) have rendered these unusable for all but a small number of procedures.

The Trust is advised that to provide accommodation that complies with current standards and patient expectation; future investment would be better spent on new facilities. The current constraints within the existing ward block for example include space, if converted to comply with current regulations the bed capacity on each floor would reduce dramatically and result in the need to build additional ward capacity in a separate location. Furthermore, the heavy refurbishment of these areas would impact on the operational delivery of patient care during the period of works.

The delivery of the Sustainable Services Programme will allow the Trust to impact upon its backlog maintenance with areas of the estate brought back up to 'as built' standard or replaced by new build.

All new and refurbished estate will be to modern standards which will provide an improved patient and staff experience.

2.10 Workforce Challenges

2.10.1 Medical workforce challenges

Running duplicate services on two sites presents many workforce challenges and can result in a poor employee experience for some of the Trust's medical teams. This compounds an already challenging recruitment environment and leads to difficulty in recruiting the right substantive workforce. The Trust's reliance on temporary staffing increases the fragility of certain specialities.

The current service configuration and the requirement for consultants and other specialist staff to cover both hospital sites can at times limit their ability to provide senior patient reviews. In addition, the Trust is unable to achieve Royal College guidance standards in many areas. With the current staffing configuration, it will prove extremely difficult to achieve adequate staffing levels to provide 7-day working across both sites. Furthermore, because teams are spread so thinly services are vulnerable to unexpected absences and the non-availability of staff.

2.10.2 Emergency Department Staffing

The Trust does not currently meet staffing levels recommended by the College of Emergency Medicine across all medical roles including Consultant, Middle and Training grades. Research demonstrates a greater consultant presence in A&E reduces admissions, reduces inappropriate discharges, improves clinical outcomes and reduces risk to patients.

With this minimal workforce and the impact of unforeseen short-term staff absences, A&E staff are finding it increasingly difficult to cope with the increased numbers of attendances, the nature of the patients presenting and increasing numbers of attendances out-of-hours. The Trust is regularly hampered in the ability to provide rapid senior review to patients and this is causing significant numbers of breaches of the 4 hour A&E target at such times. These pressures in A&E; the growing age and acuity of those patients presenting, and the continued bed capacity deficit which routinely prevents timely patient flow, combine to significantly elevate risks in both the immediate term and for the foreseeable future.

2.10.3 Critical Care Staffing

In Critical Care, the Trust's staffing levels are again below the recommended standards. The core standards require:

- Care must be led by a consultant in Intensive Care Medicine
- Consultant work patterns must deliver continuity of care
- In general, the consultant/patient ratio must not exceed a range between 1:8 to 1:15 and the ICU resident/patient ratio should not exceed 1:8
- A consultant in Intensive Care Medicine must be immediately available 24/7, be able to attend within 30 minutes and must undertake twice daily ward rounds
- Consultant intensivist led multi-disciplinary clinical ward rounds within Critical Care must occur every day (including weekends and national bank holidays)

Critical Care is covered with a mix of general anaesthetists and the small number of Intensivists available, but consultant presence is still well below recommended levels. The Trust is one of very few nationally that have not been able to split its Anaesthetics and Critical Care rotas on both sites. The ability to recruit to posts has been successful on the split rota site.

The Anaesthetic and Critical Care team face daily challenges, in particular on call, during which the on call consultant could be required in up to four different places. The second on call rota is extremely challenging to cover and often relies on paying higher cost temporary staff or 'acting down' of consultant grades. This can have a negative affect both the quality and financial agendas.

The Trust has continuously attempted to recruit additional Intensivists; however potential candidates consider the absence of formal split rotas and very onerous on-call arrangements deeply unattractive.

The workforce challenges mean that the service and the team are highly vulnerable to further vacancies or unexpected absences.

2.10.4 Acute Medicine

In 2004, the Royal College of Physicians recommended that there should be a minimum of 3 acute physicians per hospital by 2008. In the 2012 Acute Care Toolkit, it is recommended that hospitals have at least 1.5 WTE acute physicians available for 12 hours per day for an Acute Medical Unit (with exact numbers based on the anticipated number of patient contacts during the core hours of service).

'Involvement of a minimum of 10 consultants in the weekend rota should ensure a sustainable frequency of weekend working, even if the weekend working arrangements are shared between two consultants. For smaller units, it may be possible to operate a rota with fewer than 10 consultants if there is a comprehensive arrangement in place to provide days off in lieu.'¹

The Trust does not meet the recommended staffing levels; this again limits the ability to provide the levels of senior review needed to ensure timely patient assessment and treatment, and move towards more 7 day working.

2.10.5 Non-medical challenges

The Trust continues to experience recruitment difficulties across a number of non-medical professions such as nursing, operating department practitioners, diagnostic radiographers, domestics and healthcare scientists. These staff groups have historically experienced recruitment challenges in

¹ Royal College of Physicians (2012)

attaining establishment levels, and this has only been compounded by the recent national demand for such roles. Supply and demand data from Heath Education West Midlands suggests that this will not be improved in the short and medium term.

Duplication of services on both sites reduces the ability to support favourable on call rotas which would improve employee experience and the ability for the Trust to be an employer of choice and improve recruitment. In addition there is limited scope to provide cost effective and efficient 7 day working. Currently it is difficult to support the development of advancing and extending practice for non-medical staff as the ability of medical colleagues to mentor, support and clinically sign off training logs is compromised by the need for them to partake in intensive rotas.

3 The Clinical Model

3.1 Clinical Leadership

The SSP is clinically-led. Key clinical leaders have been involved in all aspects of the planning and development of the clinical model in its early phases as part of Future Fit through to the production of the Outline Business Case. The names and titles of those key leads involved in the development of the acute services are included in Appendix 3a.

3.2 Clinical Model Description

It is important that the clinical model developed for the Sustainable Services Programme is consistent with the acute components of the agreed Future Fit model of care which are:

- One Emergency Centre comprising:
 - one Emergency Department
 - one Critical Care Unit
- One Diagnostic and Treatment Centre
- Two Urgent Care Centres
- Local Planned Care (outpatients, diagnostics) on both hospital sites

In designing the clinical model, the following key objectives also had to be met:

- Align to the Future Fit activity assumptions;
- Address the Trust's workforce challenges within emergency and critical care services;
- Be deliverable;
- Be affordable to the Trust and to the local health system.

This led to the development of a proposal which would improve services for patients while also tackling the service and workforce challenges facing the Trust. Achieved by having a single purpose-built Emergency Centre, which would lead to:

- Better clinical outcomes with reduced morbidity and mortality;
- Bringing specialists together treating a higher volume of critical cases to maintain and grow skills;
- A greater degree of consultant-delivered decision-making and care;
- Improved clinical adjacencies through focused redesign;
- Improved access to multi-disciplinary teams;
- Delivery of care in an environment suitable for specialist care;
- Improved recruitment and retention of specialist's medical and nursing professionals.

A balanced-site care model whereby patients would:

- Receive acute medical care within the Emergency Site;
- Benefit from planned care with defined separation from emergency care pathways;
- Benefit from improvements in emerging shared pathways between all providers.

The case for such a care model is supported by recent service reconfiguration experiences within the Trust:

- The reconfiguring of Women and Children's in 2014 onto a single site has delivered improvements in paediatric recruitment and the unit is now the 10th largest paediatric centre in the country;
- Consolidation of emergency surgery onto one site in 2012 has led to improved clinical outcomes.
- A single point of access for Acute Stroke patients was implemented in 2013, which has led to improved clinical outcomes.

The Sustainable Services clinical model has been developed through detailed work with clinical leads and operational managers. The starting point for this was to define the essential clinical adjacencies. In summary the following process has been followed:

- Activity analysis has been undertaken at a specialty, service and HRG level;
- Use of clinical best practice, benchmarking and a review of national guidance on emergency clinical pathways and workforce has been undertaken;
- Identification and prioritisation of essential clinical adjacencies.

In identifying the essential clinical adjacencies, senior clinicians considered current and future patient pathways, and rated each service in terms of:

- The strength of its clinical relationship for patients to A&E and Critical Care respectively;
- The strength of its workforce relationship to A&E and Critical Care respectively.

The rating system used spanned a range from 1 (no interdependency) to 4 (immediate horizontal or vertical adjacency required).

3.3 Clinical Pathways

At a high level, one of the primary objectives of the Sustainable Services Programme is the simplification, clarification and re-mapping of patient care pathways. Diagram 1.0 illustrates the extreme pathway complexities associated with the current configuration of services with parallel services being duplicated across two acute hospital sites. The proposed configuration of services will streamline and simplifying patient care pathways.

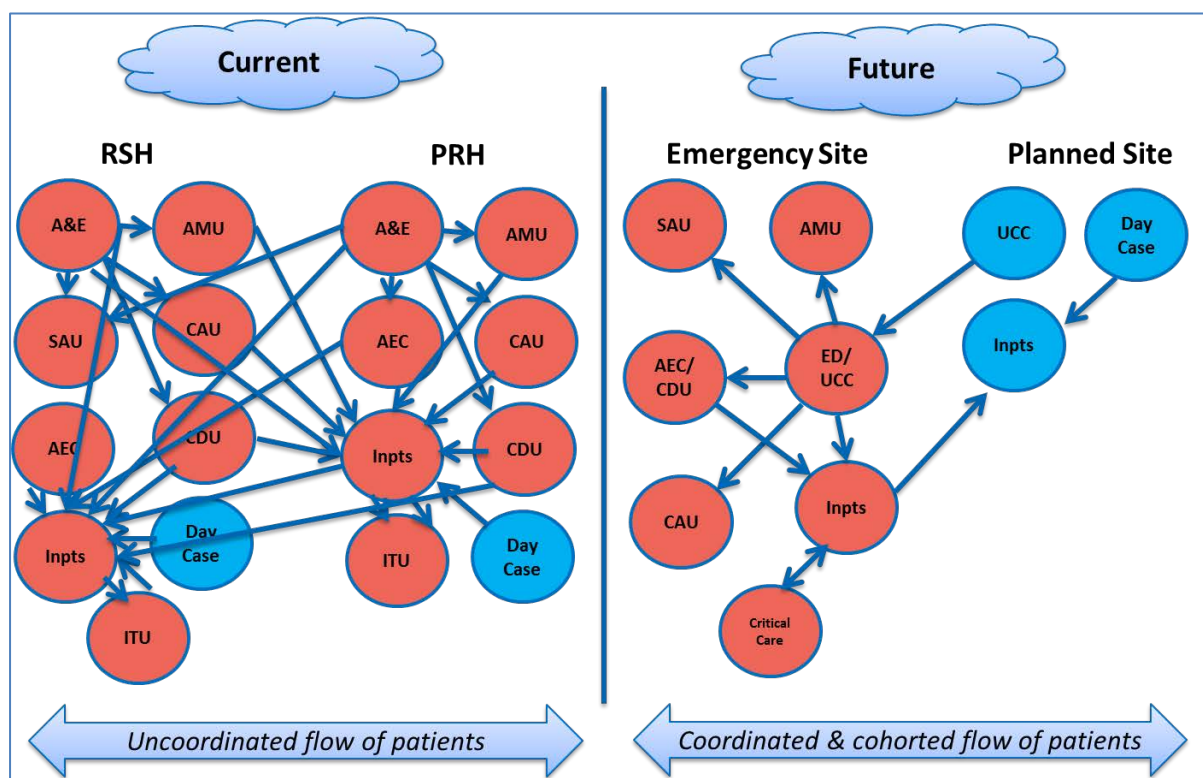


Figure 2: Current and future flow of patients

To support the development of the clinical model, key pathways have been reviewed and drafted by the clinical and operational teams within each area; for example, Emergency Department, Urgent Care Centre, Adult Critical Care and Emergency Surgery which can be seen in Appendix 3b.

Following further clinical engagement internally and within Primary Care, concerns were raised as to the potential risks associated with triaging patients to the right site at point of admission. As a result it was agreed that there would be a single site for unplanned admissions which provides improved patient safety and supports the emergency medicine workforce challenges.

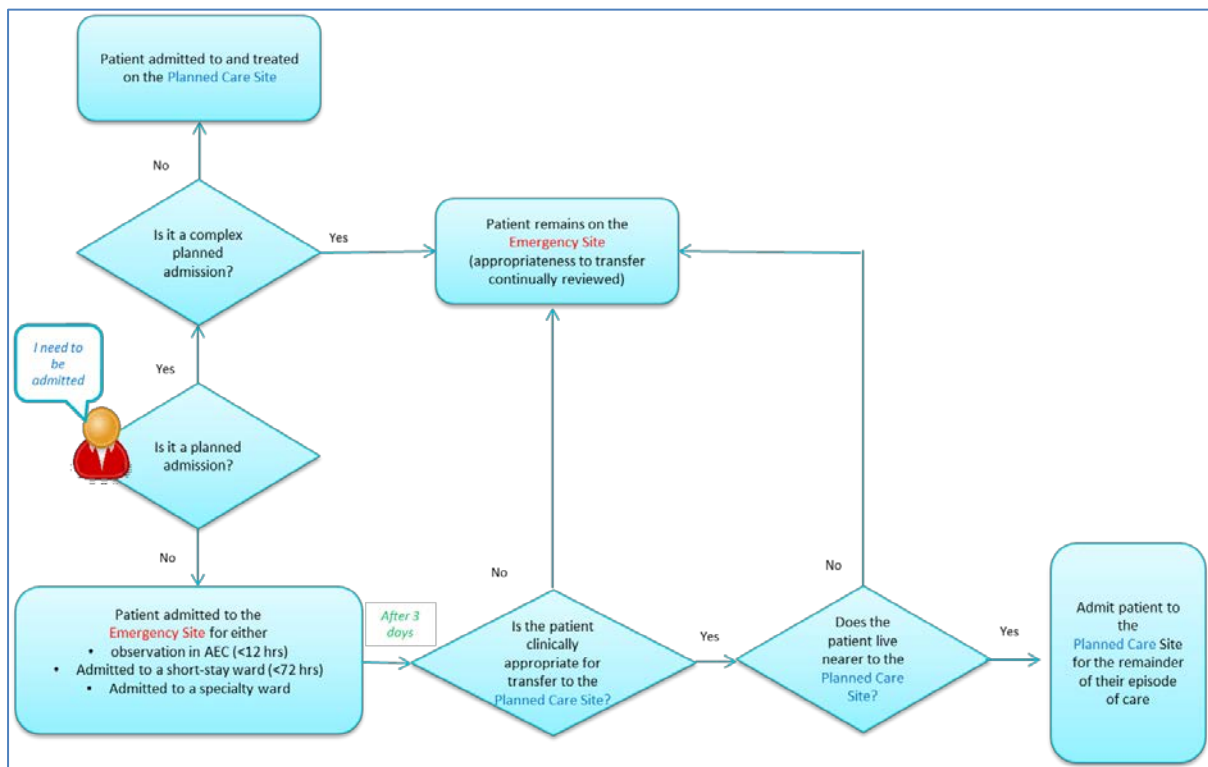


Figure 3: Patient pathway for the unplanned admitted patient

4 Assurance

4.1 Future Fit Programme Governance

The overarching Future Fit Programme is overseen by a multi-stakeholder Programme Board on behalf of the Programme Sponsors and has authority to take all decisions relating to the management of programme, with the exception of matters which are statutorily reserved to individual sponsor and/or stakeholder bodies. The programme is led by a Programme Director who is supported by a Senior Programme Manager and Programme Team.

To-date eight workstreams have supported the delivery of the programme deliverables as follows:-

- Clinical Design
- Activity and Modelling
- Workforce
- Finance
- Assurance
- Engagement and Consultation
- Impact assessment
- Feasibility study

A partnership approach is being employed by the Future Fit Programme Team and the SSP Team to deliver the required programme outputs to timescale. Key members of the SSP are members of the Future Fit governance structure to ensure co-ordination of the work programme to deliver the agreed phases of the Programme.

4.2 Future Fit Programme Assurance Workstream

The Programme is supported by a number of Workstream groups, one of which is Assurance. The purpose of the Assurance Workstream is to develop and ensure the effective implementation of a comprehensive Programme Assurance Plan in order to provide assurance to the Programme Board, sponsor Boards, the Joint Health Overview and Scrutiny committees (HOSC) and other external parties regarding the governance, management and decision making within the programme. A copy of the Assurance Workstream Terms of Reference and the Programme Assurance Plan are provided at Appendix 4a and 4b.

4.3 West Midlands Clinical Senate Review

For significant service change, it is best practice to seek the advice of the Clinical Senate on proposals in advance of any wider public involvement or formal consultation process or a decision to proceed with a particular option. The Senate review involves assurance of the evidence provided by commissioners against the Department of Health (DH) four tests and NHS England's best practice.

The West Midlands Clinical Senate was asked to provide informal advice and expert 'critical' challenge to the service models being developed in the Future Fit: Shaping Healthcare Together programme as part of NHS England's Stage 1 assurance process in 2014. The Clinical Senate Review panel concluded that there is an unsustainable health model across the Shropshire, Telford and Wrekin's health and social care economy which warranted a need for fundamental change and improvement.

The panel agreed that the remodelling and redesign of the whole health and social care economy should be commended and the approach taken reflects the scale of changes proposed and the challenges faced. However, the Clinical Senate Review Panel also recognised clinical and financial risks which required further exploration and clarification before the NHS England stage 2 review.

Details of the key issues/recommendations of the 2014 stage 1 review panel are given at Appendix 4c.

The Senate undertook its Stage 2 review in October 2016. The review report was received in November 2016. The panel reported its conclusions on each option and identified a series of recommendations for further work as the programme progresses. The final report is attached Appendix 4d.

4.4 NHSE Assurance Reviews

NHS England's role in reconfiguration is to support commissioners and their local partners to develop clear, evidence based proposals for service reconfiguration, and to undertake assurance as mandated by the Government. NHS England operates a two stage assurance process:

- Stage 1 - a strategic sense check; and
- Stage 2 - an assurance checkpoint

The date for Stage 2 Assurance is to be finalised.

4.5 Health Overview Scrutiny Committees (HOSC)

HOSC is a committee formed of members of the local authority with public representation with delegated powers of oversight and scrutiny of the local health economy. They also have powers to refer proposals to the Secretary of State on behalf of the Local Authority.

The local authorities in Shropshire and Telford & Wrekin have established a Joint HOSC which meets quarterly. The Programme has been in regular dialogue with the Joint HOSC and responded to a number of sets of questions posed of the programme by HOSC members. Details of the questions and programme responses are provided in Appendix 4e. The Joint HOSC has been supportive of the proposed model of care and the process of public engagement and communication the programme has undertaken. Both Joint HOSC chairs were observer members of the Non-Financial Appraisal on 23rd September 2016.

4.6 Internal Audit

An internal audit review of the governance arrangements in support of the Future Fit Programme was completed in October 2016 as part of the 2016/17 internal audit plan for the CCGs. The internal auditors view was that there has been a clear governance structure in place to support the Programme but that there were some operation improvements required as a result of the Future Fit governance arrangements being at a transitional stage into the STP governance arrangements.

A further audit was undertaken in November by Deloitte to review the following aspects:

- Review of the SSP Business Case focusing on the procedures put in place in respect of its development and its supporting assumptions and financials;
- Review the assumptions and classifications underpinning the split of reconfiguration spend and backlog maintenance spend in respect of the Project;
- Perform benchmarking analysis on the Business Case to appraise the appropriateness of the SSP Business Case; and
- Perform interviews with key stakeholders involved in the development of the SSP Business Case to assess the project management arrangements in place.

The full audit report can be found in Appendix 4e.

4.7 Future Fit and the STP

The Future Fit Programme governance structure has now been transitioned into the STP governance structure which is overseen by a Partnership Board of Chief Officers from all NHS providers and commissioners and the two local authorities supported by an Operational Group of Executive leads from each of the 4 value streams and 6 enabling groups. (See figure 04 below) The Future Fit Programme now comes under the remit of the Acute and Specialist Services value stream.

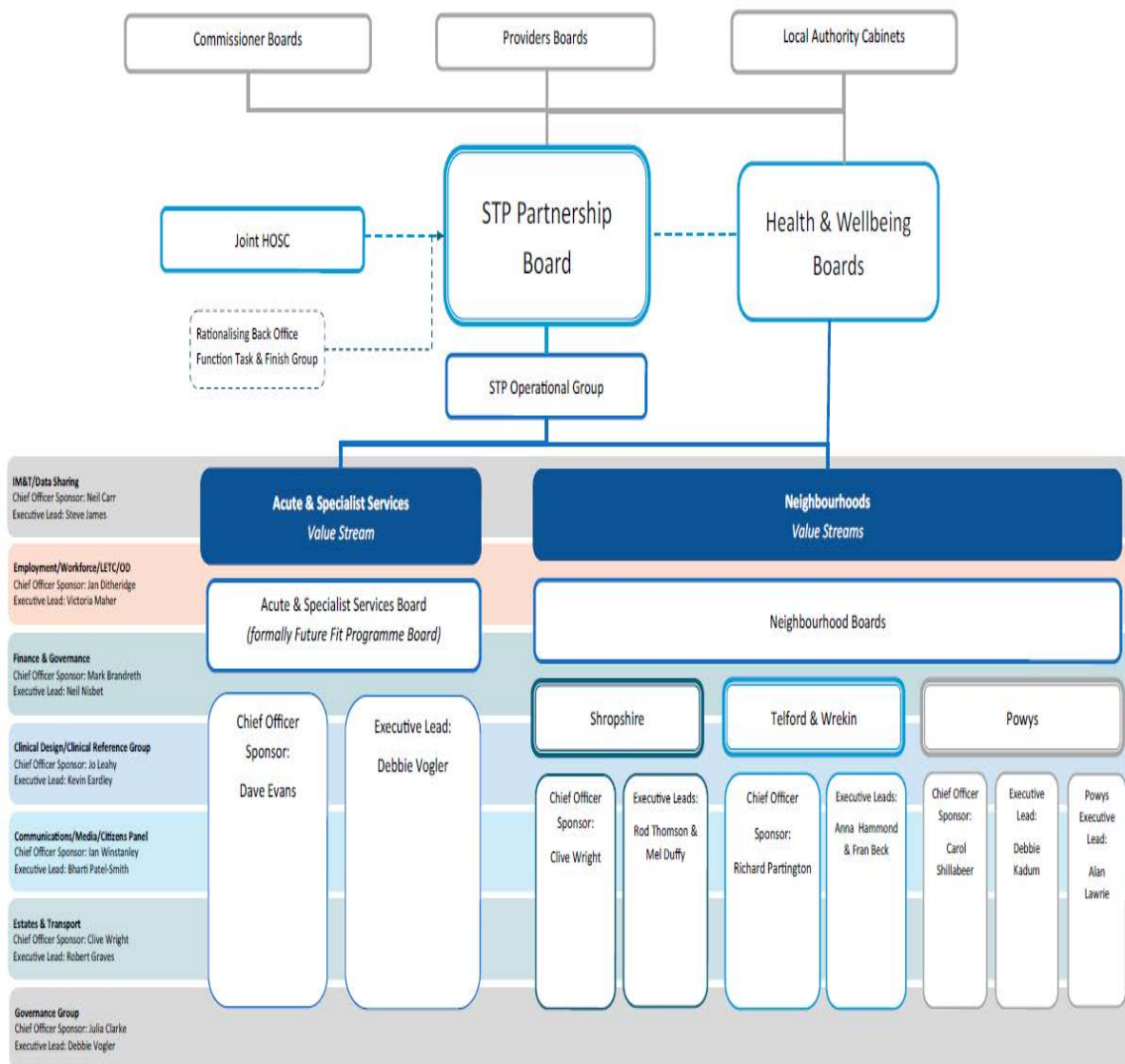


Figure 4: STP structure

5 Involvement, Engagement and Communication

5.1 Clinical Leadership and Staff Involvement

Involvement and engagement with Trust staff has remained high and to date; 55% of the consultant workforce has been involved in detailed discussions which have been pivotal to the progression of the programme. As mentioned earlier in section 3; key clinical leaders have been involved in all aspects of the planning and development of the clinical model in its early phases as part of Future Fit through to the production of the Outline Business Case. The names and titles of those key leads involved in the development of the acute services are included in Appendix 3a.

Considerable engagement with all staff groups continues at a pace and a number of groups/information sessions are well established and attended:

- Task and Finish Groups with clinicians, staff and operational teams
- Weekly road shows
- Clinical Working Groups
- Critical Friends Groups
- Gossip Groups
- All clinical and non-clinical areas at both hospital sites have been visited with details of the options, the key dates and information of how to get involved/get in touch
- Regular updates to the Trust Negotiation and Consultation Committee (TNCC)
- Regular attendance at Care Group Governance Boards

Further details on the engagement work to date can be found in Appendix 5a.

5.2 Communications, Engagement and Consultation

The Trust and the NHS Future Fit Team have carried out a robust programme of communications and engagement on the Sustainable Services Programme with patients, members of the public, stakeholders, partner organisations and SaTH staff.

5.2.1 Communications work to date

The Trust has utilised many methods in which to effectively communicate with patients and the public about the progress of the project. These have included;

- development of the SSP pages on the Trust website
- a flyer containing full information about the programme
- advertisement in the local newspapers
- a newsletter to all local stakeholders (including GP Practices) and staff
- development of a project logo
- media releases used widely by the local media including radio and newspapers
- live radio interviews and phone ins with lead clinicians
- promotion of the project through social media
- updates of the projects progress issued to a wide range of groups including, Healthwatch, parish/town/county councils, the Community Health Council, schools/colleges/universities
- development of a comprehensive stakeholder engagement plan

- Chief Executive briefings with MPs and Assembly Members

5.3 Outcomes to date

The Trust's messages reached 90,000 Shropshire Star readers and more than 150,000 readers of its sister weekly titles, and a further 65,000 readers of the Oswestry Advertiser, County Times and Whitchurch Herald. People were also to read them on local news websites including newspaper websites, BBC Online and Shropshire Live. BBC Radio Shropshire has 92,000 listeners a week.

Newsletters and the flyer were distributed widely to more than 50,000 individuals via email with more printed copies also distributed.

As a result of the communications and engagement programme members of the public, staff, stakeholders and partner organisations have been made aware of the development of the Sustainable Services Programme from submission of the Strategic Outline Case and how the proposals improve the service for patients, as well as why change is needed.

As a result of the engagement programme with GP practice localities over recent months, GPs have been made aware of the essential elements in the development of the Trust's Strategic Outline Case, how the proposal improves services for patients and how the development of the Outline Business Case (OBC) will take the case for change forward. GP colleagues have been offered opportunities to become involved in the development of the Outline Business Case and to share their ideas, thoughts and experiences, to help make the OBC proposals a viable solution for service change.

The NHS Future Fit Team has raised local awareness, not only of the programme as a whole but more specifically the reasons why local health services need to change. While in some cases most people were aware of the plans to 'close an A&E' most people were not aware of why or believed it to be a cost cutting exercise. In engaging with this wide range of stakeholders the team ensured, as far as possible, that the case for change had continued to be outlined, that people were aware of the proposals and that they would have the opportunity to be consulted during a 12-week formal consultation period. A short promotional film has been produced to explain the case for change in words of clinicians and patients. (Hyper link to be inserted when available).

In engaging with hard-to-reach groups the Future Fit Team have ensured that people are made aware of the changes and that their specific needs will be listened to as part of the consultation. By making connections now the team can go back to the groups during the consultation to ensure their views are fed into the final decision-making.

The comments and views that have been gathered have also been a barometer of the local opinions of the proposals. From listening to their feedback and utilising different methods of communication the Future Fit Team has been able to develop different communications strategies, develop new marketing materials and have been able to adapt their approach for different stakeholders. The team will continue to do this throughout the period of engagement prior to the formal consultation. The increased promotion and activity on social media means that the audience reach has grown considerably and provides the team with a quick and easy way to engage with local people.

5.4 Proposals for public consultation

Work is now under way to develop a consultation document and a plan for the 12-week formal consultation.

The consultation plan will be developed in partnership with key stakeholders of the NHS Future Fit programme. An initial draft plan has been produced which will form the basis of a number of workshops with stakeholders, utilising groups already in existence, such as the NHS Future Fit

Communications and Engagement Workstream, which a number of our key stakeholders attend. The draft plan will be a trigger for debate on what is missing and what doesn't need to be included.

A number of engagement events have been held during September and October 2016 which involved talking to members of the public about how they would most like to receive health-related information, what local media they listen to/read, which social media channels they use and how else they would like to receive information. This ensures that as many people as possible can access the consultation and have an opportunity to have their say.

Focus groups will be set-up to involve members of the public to discuss the issues in more detail, understand how hard-to-reach groups can have their say and what different communication channels are used in different areas/towns and villages. Wherever possible the events will take place in communities, rather than at the Trust's hospitals.

The consultation document will consist of a number of key documents and will be available, for those that want it, in full. It will be made available in easy read and in a summarised document, making sure the key messages are understood by all. The full document will comprise, amongst other important documents:

- Full case for change
- Options appraisal
- Integrated and equalities impact assessment and the detail around the proposals

The summarised document will be the document that is more readily available, including all the essential details so that people can make informed comments and suggestions to feed into the consultation and ultimately be considered for the final decision on where services are sited.

6 The Strategic Case

Acute hospital services provided by SaTH are of a good standard, recognised in the Care Quality Commission report published in 2015. Most services have developed over many years, with clinicians, managers and staff trying to keep pace with changes in demand, improvements in medicine and technology and increased expectations of the populations served. Nevertheless, it is recognised the current hospital configuration is not sustainable due to the healthcare and workforce issues including:

- Changing healthcare needs of the population now and into the future
- Quality standards that are required and that individuals and organisations aspire to deliver
- A need for improved productivity and a reduction in inefficiencies (in line with the Carter Review 2016 and the Trust's work with the Virginia Mason Institute)
- On-going developments in medicine and technology
- Workforce changes in terms of skills, availability and training

In addition, there are a number of estates issues, including:

- Level of backlog maintenance
- Poor quality existing facilities

All of this is underpinned by the economic climate in which the NHS must operate.

6.1 Healthcare and Workforce Need

A high level assessment of the health economy's service need against the health-service need criteria identified within the NHS Trust Development Authority Capital Regime and Investment Business Case Approvals Guidance for NHS Trusts is attached at Appendix 6a.

6.2 The Call to Action

Discussions and debate involving local clinicians, staff and many members of the public regarding the current service provision was developed during the major consultation exercise undertaken in November 2013 in response to the national Call to Action for the NHS. At this time, people started to accept that there was a case for making significant change provided there was no predetermination and that there was full engagement in thinking through the options. The outputs from Call to Action can be found on the Future Fit website (www.nhsfuturefit.org). This marked a turning point in terms of progressing a programme of works that would review and develop a new service configuration.

6.3 The Case for Change

Local clinicians, patients and members of the public who participated in the Call to Action recognised the need to tackle two things: the real and pressing local service issues and challenges faced by health services nationally that have an impact locally with the key challenge locally being workforce. The issues and challenges identified in the Call to Action include:

- Changes within the medical workforce
- Staffing within the key acute services (A&E; Critical Care; Acute Medicine)
- Changes in the populations profile and patterns of illness

- Higher expectations
- Clinical standards and developments in medical technology
- Economic challenges
- Opportunity cost in quality of service
- Impact of accessing services
- The quality of the patient facilities and the Trust's estate

6.3.1 Changes in the population profile

The welcome improvement in the life expectancy of older people experienced across the UK in recent years is particularly pronounced in Shropshire. The population over 65 has increased by 25% in just 10 years. This growth is forecast to continue over the next decade and more. As a result the pattern of demand for services has shifted, with greater need for the type of services that can support frailer people, often with multiple long-term conditions, to continue to live with dignity and independence at home and in the community.

6.3.2 Changing patterns of illness

Long-term conditions are increasing due to changing lifestyles. This means health services need to move the emphasis away from services that support short-term, episodic illness and infections towards services that support earlier interventions to improve health and deliver sustained continuing support, again in the community with consistent support for self-management and care. The increase in the elderly population and the number of people living with long-term conditions coupled with the reduction in funding in the voluntary sector and Social Services results in an increased pressure on acute services such as A&E and acute medicine.

6.3.3 Higher expectations

Quite rightly, the population demands the highest quality of care and also a greater convenience of care, designed around the realities of their daily lives. For both reasons, there is a push nationally towards 7-day provision or extended hours of some services and both of these require a redesign of how health services work given the inevitability of resource constraints.

6.3.4 Clinical standards and developments in medical technology

Specialisation in medical and other clinical training has brought with it significant advances as medical technology and capability have increased over the years. But it also brings challenges. It is no longer acceptable nor possible to staff services with generalists or juniors and the evidence shows, that for particularly serious conditions, to do so risks poorer outcomes. Staff are of course, aware of this. If they are working in services that, for whatever reason, cannot meet accepted professional standards, morale falls and staff may seek to move somewhere that can offer these standards. It is also far more difficult to attract new staff to work in such a service. Clinicians are a scarce and valuable resource. Every effort must be made to seek to deploy them to greatest effect.

6.3.5 Economic challenges

The NHS budget has grown year on year for the first 60 years of its life. In one decade across the turn of the 21st century its budget doubled in real terms however, the UK economy is now in a different place. The NHS will at best have a static budget going forward and yet the rising costs of services, energy and supplies along with innovations and technological breakthroughs that require more investment mean that without changing the basic pattern of services, costs will rapidly outstrip available resources and services will face the chaos that always arises from deficit crises.

It is estimated that without radical changes to the way the system works, the NHS will become unsustainable with huge financial pressures and debts. Current trends in funding and demand will create a gap which projections suggest could grow to £30 billion a year by 2021 if nothing is done to address it.

Locally the Shropshire health economy is challenged and has a history of deferring the resolution of structural issues. This has resulted in short-term or one-off fixes rather than making difficult decisions in order to reach sustainable long-term solutions. As a result significant change to provide services that are clinically and financially sustainable is required through innovative solutions.

6.3.6 Opportunity costs in quality of service

In Shropshire and Telford and Wrekin the inherited pattern of services, especially hospital services, across multiple sites means that services are struggling to avoid fragmentation and are incurring additional costs of duplication and additional pressures in funding. The clinical and financial sustainability of acute hospital services has been a concern for more than a decade. Shropshire has a large enough population to support a full range of acute general hospital services, but splitting these services over two sites in their current configuration is increasingly difficult to maintain without compromising the quality and safety of services.

6.3.7 Impact on accessing services

In Shropshire, Telford and Wrekin there are distinctive populations. Particular factors include a responsibility for meeting the health needs of sparsely populated rural areas in the county, and that services provided in our geography can also be essential to people in parts of Wales. Improved and timely access to services is a very real issue and one which the public sees as a high priority. A network of provision already exists across Community Hospitals that can be part of the redesign of services to increase local care.

6.4 Future Fit Clinical Model

As part of the Future Fit Programme a Clinical Reference Group (CRG) comprising fifty senior clinicians and leads from health and social care patient representatives, met in November 2013 which began the discussions and debate around the whole system design principles. The CRG agreed that there were three main area of health care delivery. These are:

- Acute and episodic care
- Long-term conditions
- Planned care

In taking the work forward to address the Trust's immediate workforce challenges and the identification and development of a potential solution for Sustainable Services, senior clinical leaders within the individual Care Groups have come together within a structure of Clinical Working Groups (CWG). A series of CWG meetings have been held which included the Trust's key senior clinicians (medical and non-medical; nursing; therapies etc.) and senior operational managers. The CWG discussed the application of the Future Fit model of care to the immediate workforce challenges faced by the Trust.

6.5 Sustainable Services Clinical Working Group Outputs

Building on from the work of the Clinical Reference Group (CRG) and progressing discussions around the immediate workforce challenges, the Sustainable Services Programme potential solution remains in line with the service principles set out within Future Fit.

6.5.1 Acute and Episodic Care

Through application of the Future Fit clinical modelling to SaTH's 2015/16 activity data nearly 65% of the patients that currently attend the Trust's A&E departments do not have life or limb threatening illness or injury and could therefore potentially be seen and treated by the Urgent Care Service. The remaining 35% of patients could be treated within the Trust's single Emergency Centre (EC) as shown in the figure below:

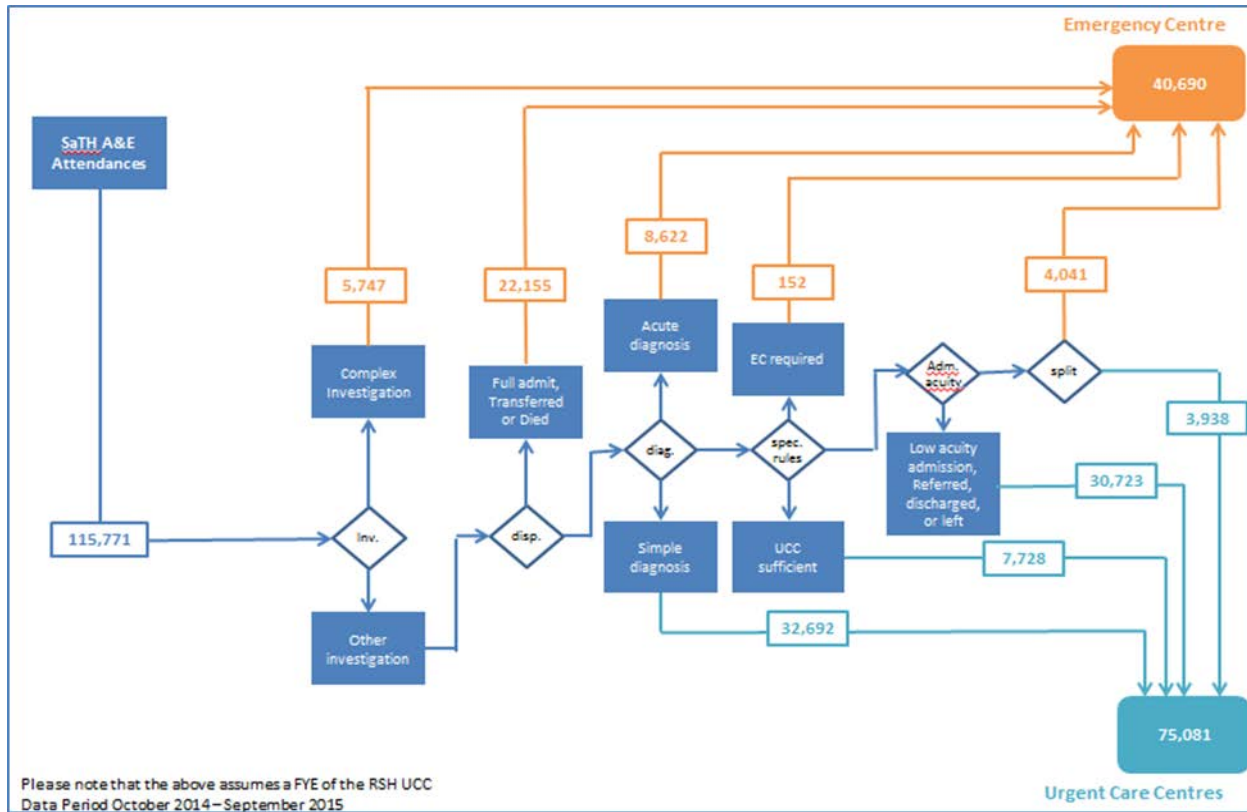


Figure 5: Emergency and Urgent Care Patient Activity Numbers

6.6 Constraints and dependencies

The constraints and dependencies identified at this stage of the Sustainable Services Programme are:

1. Community service model development
2. Capital funding
3. Timeframes for implementation and on-going service risks
4. Development of IT and network infrastructure
5. Transformation of workforce and creation of new roles
6. Clinical leadership, engagement and availability of clinical teams to progress
7. Project and programme resource

7 The Service Brief

7.1 Identification of Need

The service challenge facing the Trust requires the identification of the optimum solution by balancing:

- The clinical adjacencies essential for patients to access safe and high quality care; clinical adjacencies are critical when considering the co-location of services such as Women and Children's and the Emergency Department; the firm view of the Trust's clinicians is that Women and Children's and Emergency services need to be on the same site;
- The workforce solutions that would ensure safety and sustainability in the medium and longer term;
- A configuration of services that will make sense and will be acceptable to patients and the communities served by the Trust;
- The need to find an affordable capital solution through appropriate scaling of the amount of new build and refurbishments at both sites.

In developing the optimum service model, the Trust has been keen to take account of the latest best-practice evidence base, and to learn from experience in other health economies. Best Practice evidence has been incorporated into the planning and design, including:

- Transforming urgent and emergency care services in England, NHS England, 2015;
- Directory of Procedures, Fourth Edition, British Association of Day Surgery;
- Directory of Ambulatory Emergency Care for Adults, Version 4, NHS Elect, 2014;
- Care of Critically Ill and Critically Injured Children – Quality Standards, v5.1, Paediatric Intensive Care Society / West Midlands Quality Review Service, December 2015;
- The repeatable rooms initiative established as part of the NHS P21+ programme.

Trust managers and clinicians have also reviewed the experience of other health economies that have adopted a similar model of care to that defined by the Future Fit Programme, most notably:

- Northumbria – one Emergency Centre supported by three District General Hospitals and six Community Hospitals, covering an area of up to 3,000 square miles; (Shropshire, together with central and northern Powys, by comparison, covers an area of 2,700 square miles);
- Dorset – one emergency site and one planned care site which also has unplanned medical activity.

Following on from this, more detailed discussions with the wider clinical body within the Trust raised concerns about three key issues:

1. Acute and unplanned medical patients being admitted directly to the non-emergency site (the 'warm' site – the Emergency Site being the 'hot' site):
 - The health system's ability to deliver truly integrated and shared care pathways so that the right patients go to the right site at the right time;
 - The need to maintain sustainability of acute medicine by having Ambulatory Emergency Care on both sites;
 - The ability to recruit clinical staff to work on the 'warm' site.
2. The resultant need to provide 'critical care cover' across two sites, though many clinicians felt that this could be achieved with new roles and new ways of working. Related to this, concern was expressed at then potential number of patients that may need to be transferred to the Emergency Site for critical care.

3. The safety and sustainability of any option whereby Women and Children's services are located apart from the Emergency Centre and Critical Care.

These concerns were shared by the Trust's senior consultant body (Clinical Leads, Clinical Directors and Medical Directors), who requested that further work to be undertaken to:

- Enable acute and unplanned medical patients to be admitted to the Emergency Site only;
- Deliver Acute Medicine at the Emergency Site only;
- Reduce the number of patients on the Planned Care Site who may need critical care intervention and/or transfer to the Emergency Site for their critical care needs;
- Enable the transfer of patients from the Emergency Site to the Planned Care Site after 72 hours (if clinically appropriate) for their on-going care and treatment. This model is supported in the findings on an audit carried out in August 2016 on acute medical patients. Please refer to Appendix 7a for the detailed audit report.

7.2 Service Briefs

The Future Fit Programme identified three main areas of health care delivery to which the detailed models of care need to respond:

- Acute and episodic care;
- Long-term conditions;
- Planned care.

The Future Fit Clinical Working Group developed a detailed model of care vision for each of the above three service areas, and went on to consider the application of the Future Fit model of care to the immediate workforce challenges faced by the acute Trust. The Sustainable Services Programme has been building on this work and a guiding principle has always been to ensure that any potential solution remains in line with the service principles set out within the Future Fit Programme.

Planning assumptions were made as to which patients could be treated in the community and prevent admission into the acute trust. These assumptions were termed as Phase one and Phase two assumptions. These included:

- Phase one assumptions: relate to the changes in activity that can be expected as a result of demographic growth and a reduction in activity resulting from various initiatives such as Enhanced Recovery Programmes, the majority of which were deliverable as part of QIPP.
- Phase two assumptions: relate to specific areas for activity reduction for ICS avoided, LTC and public health interaction.

The Trust has identified further areas for consideration in the development of the model:

- Reduction of patients that are Delayed Transfers Of Care (DTC),
- Implementation of 7 day working,
- Consolidation of the workforce,
- Implementation of Best Practice Tariff (BPT)

7.2.1 Urgent and Emergency Care

As a starting point for consideration of the models of care for urgent and emergency care, the original Future Fit algorithm has been applied to the Trust's activity data for 2015/16 to determine whether patients need emergency or urgent care services. Part of this work involved the mapping of

different elements of the casemix to different scenarios e.g. the level of diagnostics required or whether the patient was admitted.

Examples of complaints/conditions to be treated at the Emergency Department that may be potentially life or limb threatening may include:

- anaphylaxis
- stroke
- severe chest pain
- multiple trauma
- compound fractures
- moderate burns
- poisoning

Examples of complaints/conditions to be treated within Urgent Care services are:

- sprains and simple fractures
- cuts and scrapes
- asthma
- Ear Nose and Throat (ENT) conditions
- scalds
- bites and stings

The outcome of this analysis has determined the suggested numbers of patients needing care in the Emergency Centre or Urgent Care Service respectively. This has established that nearly 64% of the patients that currently attend the Trust's A&E departments do not have life- or limb-threatening illness or injury and could therefore potentially be seen and treated in an Urgent Care Centre. The remaining 36% of patients could be treated within the Trust's single Emergency Department (ED) as detailed in the diagram below:

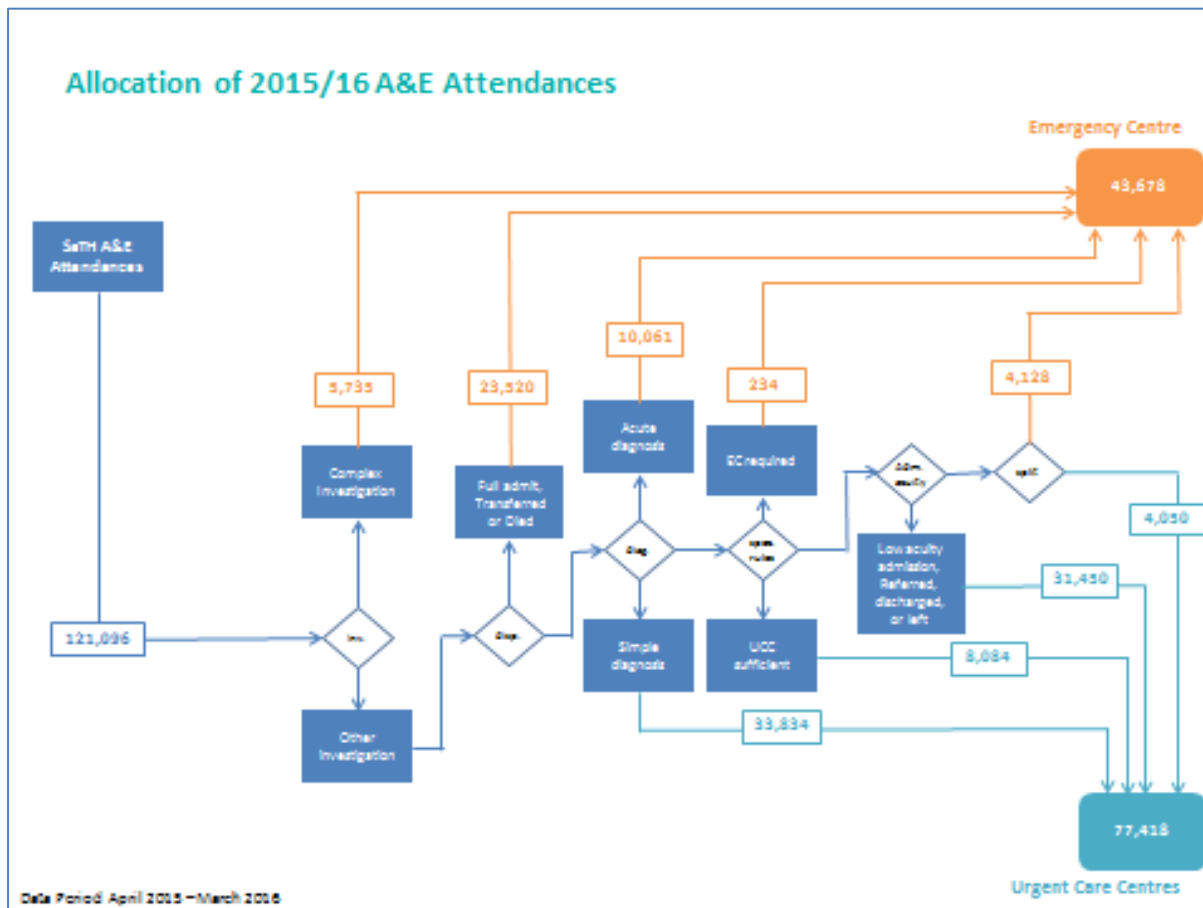


Figure 6: Allocation of A&E attendances between Emergency Centre and Urgent Care Centre

Thus, around 77,400 of patients seen in A&E during the twelve months from April 2015 to March 2016 didn't need emergency care and under the new model would be seen in the Urgent Care Service at whichever site they arrived. In other words, approximately 80% of patients requiring urgent or emergency care will receive treatment in the same place as now.

7.2.2 Urgent Care

The Urgent Care Service (UCS) will be provided on each hospital site and, where co-located alongside the Emergency Department, will be accessed through a single front door, though patient flows will be managed separately from the ED. Patients will access the service as a 'walk-in' or via ambulance if it is considered by paramedical staff to be clinically appropriate. There will be dedicated facilities for children to ensure that they wait and are treated away from adult areas.

The UCS will have access to diagnostics and, where appropriate, staff can draw upon the knowledge and expertise of specialist clinicians within the ED and other departments in order to provide patients with an efficient and seamless service. The UCS will be open 24 hours a day, 7 days a week.

The UCS will be provided by highly skilled Advanced Practitioners specifically trained in the delivery of emergency care. As well as the advanced practitioners it is envisaged that a General Practitioner with a specialist interest in emergency medicine will support the service. In the unlikely event that a patient becomes critically unwell in the UCS the patient will be stabilised by skilled staff prior to transfer to the Emergency Site.

People with mental ill health are much more likely to require emergency care; recent analysis has shown mental ill health patients having 3 times more A&E attendances and 5 times more emergency inpatient admissions in comparison to patients without mental health conditions. Conversely people

with mental ill health had 3.6 times more potentially preventable emergency admissions than those without mental ill health, these patients presenting with ambulatory care sensitive (ACS) conditions that could be treated in more appropriate settings.²

Mental Health presentations can account for at least 20% of primary care attendances. The UCS requires 24/7 direct access to the psychiatric liaison team. Local psychiatric liaison teams (RAID) will be responsible for ensuring consistent levels of cover for the SaTH UCS and to the Mental Health Crisis Team. Both UCS's will have access to a Mental Health assessment rooms that are compliant with the relevant Royal College of Psychiatrists safety standards.³

An important operational principle will be the need to maximise the proportion of UCC patients to be seen and treated within 2 hours, in line with *Transforming urgent and emergency care services in England*, NHS England, August 2015. The capacity requirements in the UCC have been modelled on this recommendation.

7.2.3 Emergency Department (ED)

The ED will be fully equipped and staffed to deliver high quality emergency medical and surgical care 24 hours a day, 7 days a week, 365 days a year. Patients who are acutely ill with potential life or limb threatening injuries and require immediate diagnosis and treatment will be taken directly to the ED. Access to the ED will be gained only via transfer from an UCS or Ambulance. The ED will also serve as a Trauma Unit and will be co-located with a single Adult Critical Care Unit.

There will be full and immediate access to diagnostics (Radiology, Pathology), Haematology (Blood Bank) and Pharmacy. Children and Adults will be managed in separate areas within the ED. Within Resuscitation the facility will be designed to manage both the critically ill adult and child with provision for some division should a child be in resus. Capacity has been planned to manage all ED patients within three hours of their arrival, with the majority of patients having no waiting time for assessment.

Patients with mental ill health needs will have access to local psychiatric liaison teams such as the Rapid Assessment Intervention and Discharge (RAID) team who will be able to assess appropriate care requirements as part of the ED clinical team. Facilities will be collocated and shared with the adjacent UCS and will provide a safe environment that will support the patients assessment.

The Clinical Decision Unit (CDU) will be co-located alongside the ED providing dedicated clinical space for those patients that require further assessment and monitoring prior to a clinical decision being made. The 8 bedded CDU will be incorporated within the Ambulatory Emergency Care Unit to provide greater flexibility in space and response in times of increased demand on services and have the ability to provide single sex accommodation.

7.2.4 Ambulatory Emergency Care (AEC)

The Ambulatory Emergency Care (AEC) Unit located adjacent to the ED will be operational for 12 hours per day, and will allow effective implementation of the best practice tariff for AEC. The AEC will support unscheduled care activity for those patients that require admission for no more than twelve hours (both planned and unplanned). The AEC will also support a shift in activity flows for

² Dorning, Davies & Blunt (2015)

³ Central London Commissioning Group. Service Specification St. Mary's Hospital Urgent Care Service 2015.

patients who currently stay between 13 and 72 hours through the successful implementation of Best Practice Tariff (BPT) for example the treatment of DVTs.

7.2.5 Critical Care

The Critical Care Unit will bring together all adult critical care capacity for the Trust, with level 1, 2 and 3 patients being managed in the same unit. The planned capacity of 30 beds has been future-proofed for the next decade to allow for projected increases in demand. This unit will support the consolidation of emergency activity and high risk elective inpatient procedures onto one site.

Critical Care Outreach will support the wards on the Emergency Site and the Planned Care Site. The risk of patients requiring Critical Care Outreach on the Planned Care Site will be minimised through the appropriate clinical streaming of patients and early identification of the deteriorating patient.

For those patients that unexpectedly deteriorate on the Planned Care Site, for example, post-surgery, the admitting consultant in conjunction with anaesthetic and ODP support will liaise with the consultant intensivist on the Emergency Site to discuss treatment plan, stabilisation and if appropriate transfer.

7.2.6 Unplanned Medicine

Wherever possible, unplanned medical patients will be assessed and treated in the AEC/CDU, with those with additional healthcare needs requiring a stay of more than twelve hours being admitted to the Short Stay Medical wards, with an indicative maximum stay in this setting of 72 hours.

Patients requiring on-going or specialist care will be transferred into the appropriate specialty ward. The introduction of seven day working and enhanced recovery pathways will promote proactive management of patients throughout the week, supporting timely discharge once the acute care episode has been completed. On this basis, it is envisaged that internal patient transfers and outliers can be minimised, and that a reduction in delayed transfers of care can be achieved.

For those patients that have on-going acute care needs but do not require specialist input such as Cardiology and live nearer the Planned Care Site can be transferred to receive on-going care in an appropriate environment that meets their clinical needs. This model of care is demonstrated in the patient stories below.

Patient Story 1: Emergency Admission

Gwyneth is a 78 year old lady living on her own with Dementia. She has had a fall at home and her neighbour calls 999 for assistance. When the paramedics arrive Gwyneth is found at the bottom of the stairs, she has a laceration to her hand and head. She is confused and appears to have a left sided weakness. The paramedics decide to take her to the Emergency Department on the Emergency Site as they suspect she has had a TIA.

Existing model of care: On arrival to the A&E department Gwyneth is asked to wait on the trolley in the corridor of 'majors' as there are no spare cubicles. Gwyneth waits some time to see a doctor at which point it is decided she needs to have an x-ray and a CT scan. Following this she returns to her 'space' on the corridor where she is advised that she has fractured her hip and will need surgery. The department is very busy and noisy and Gwyneth is becoming increasingly anxious.

Due to a shortage of beds Gwyneth has to wait for 5 hours in the A&E department before she can be transferred on to the Surgical Ward. On the ward she is advised that they will try and operate as soon as possible, this takes up to 48 hours. During this time Gwyneth is unable to mobilise and is on a busy surgical ward. She has no window to look out on and starts to become more confused. Her pain levels are high and she starts to show signs of depression and anxiety.

Following surgery she has rehabilitation and mobilises well. However Gwyneth is struggling to sleep due to the noise levels and is not eating as well as she normally does. The family speak to the nursing team and express their concerns that Gwyneth has lost her confidence and they feel that she may struggle when she gets discharged home. Gwyneth's on-going care needs are discussed and it is agreed that her dementia has advanced and that she is unlikely to be safe at home. It is agreed that Gwyneth needs to be placed in residential care. Due to there being no beds available in a care home she spends a further 2 weeks in the acute hospital even though she has no medical needs. During this time she becomes more disorientated and distressed and has a fall whilst trying to get out of bed. This requires a further hip operation which results in a longer recovery time. By this point Gwyneth has been in the acute Trust for 4.5 weeks before a bed becomes available in a residential home.

Gwyneth is now receiving medication to lower the risk of future TIAs and a potential Stroke and has had a double hip replacement. However, her dementia has advanced considerably and she is now unable to safely return to her home.

Future model of care: On arrival to the Emergency Department, Gwyneth is assessed in the Rapid Assessment Area; she is referred for a CT scan and x-ray of her hips. She is diagnosed as having suffered a TIA and has a fractured neck of femur. Gwyneth is transferred to the Orthopaedic ward where she undergoes surgery on her hip that same day. Following surgery Gwyneth receives a period of intense rehabilitation and on day three of her admission is recovering well. Due to her frailty and dementia and her need for further rehabilitation to ensure she is stable on her feet, it is decided that it is more suitable for her to receive her on-going care on the Planned Care Site. Gwyneth and her family live between the two hospital sites but she opts to move to the Planned Care Site as the wards are quieter and she will be able to recuperate with specialist support in a quieter environment.

Gwyneth is discharged home on day 6 into her home with a full care package. She is delighted to have been able to remain at home.

Patient Story 2: Ambulatory Emergency Care

Stanley is a 65 year old man who is fit and well. He has just returned from visiting his daughter and grandchildren in Australia. He has visited his GP as he is concerned that he has a painful lower leg.

Existing model of care: Stanley is examined by his GP who suspects he has developed a DVT. An ambulance is arranged to transport him to the AMU but due to bed capacity pressures Stanley is diverted to A&E. He is examined by the Emergency Doctor and a D-Dimer blood test confirms the DVT diagnosis. Stanley is then referred to the Medical Team and a medical bed requested; on arrival Stanley is seen by the junior medic, cannulated and IV Heparin is prescribed and administered by the staff nurse. Daily INR blood tests are performed to ensure that the correct dose of Heparin is being prescribed and after 3 days Stanley is converted to sub-cutaneous injections of Tinzaparin. After a further 48 hours once Stanley had mastered the technique of self-administering these 'blood thinning' injections and he is discharged home.

Future model of care: His GP suspects that Stanley has a DVT and asks him to attend the Ambulatory Emergency Care (AEC) Unit on the Emergency Site. The GP explains to Stanley that the AEC provides same day emergency care to patients, where he can be assessed, diagnosed, treated and go home the same day.

Stanley's son drives him to the AEC and hands the receptionist a letter from his GP. Stanley is asked to sit in a recliner chair where the nurse 'admits' him into the unit. Stanley then begins the DVT pathway. The nurse administers an immediate dose of Enoxaparin followed by Doppler ultrasound scan which confirms he has a DVT. Before Stanley is discharged home, he is given a patient information and community Enoxaparin sheet which details his requirement to have 10 days course of Enoxaparin, along with a letter for his GP. This was all completed within 5 hours. Following which; Stanley returns home for his evening meal.

7.2.7 Unplanned Surgery

Unplanned surgical patients (excluding oncology and haematology) requiring admission will be seen at the Emergency Site, with anyone with an anticipated length of stay of under 72 hours being admitted to the Surgical Admissions Unit (SAU). Unplanned surgical patients requiring a stay of longer than 72 hours will be admitted to the appropriate specialty ward. As with medicine the introduction of enhanced recovery pathways will promote proactive management of unplanned surgical patients, supporting timely discharge once the acute care episode has been completed.

For unplanned surgical patients who do not require admission to the Emergency Site, the Planned Care Site will have a short stay surgical unit.

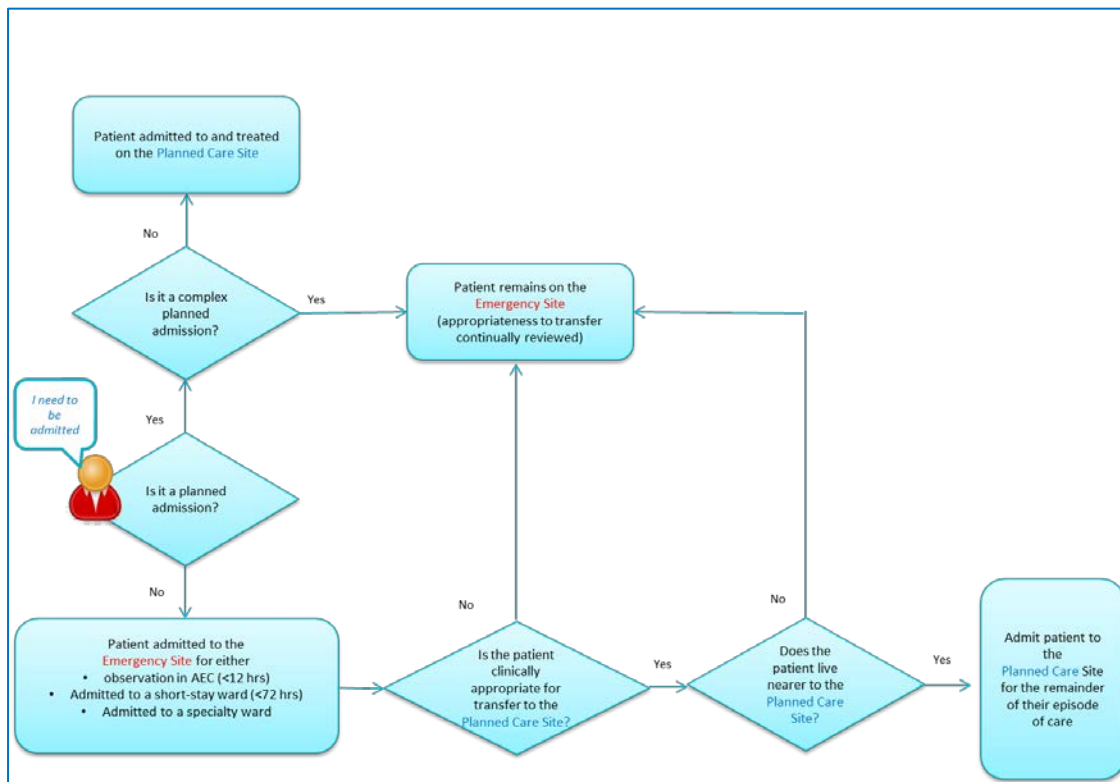


Figure 7: Pathway for the admitted patient

7.2.8 Planned Care

Planned care where clinically appropriate will be provided on the Planned Care Site, including the majority of day case and short stay surgery. Most planned care admissions will take place between Monday and Friday, with the exception of orthopaedics where there are Saturday morning lists. Only major or complex planned care, including some cancer surgery where there is potential for the patient to require critical care input will be provided on the Emergency Site. Enhance recovery pathways will facilitate proactive management and timely discharge.

Outpatients and outpatient procedures will be undertaken at both sites.

Patient Story 3: Planned Surgery

Current Model of Care: Maciej is a retired 67 year old man who cares for his wife who has dementia. He's been suffering from hip pain for the past 2 years and referred to an orthopaedic surgeon by his GP. At his outpatient appointment the surgeon recommended a total hip replacement to which Maciej agreed.

Three weeks later Maciej received a letter offering him an appointment to see the Pre-operative assessment nurse. During the Pre-Op assessment Maciej explained that he was on Warfarin for Atrial Fibrillation so the nurse told him to stop taking this 5 days before his operation.

Maciej received a letter a few weeks later inviting him to come in for his operation. He arranged for his daughter to come down from Scotland to look after him whilst he was recovering and arranged for his wife to go into respite care.

On the morning of surgery, Maciej's daughter took him to hospital where he was told his operation had been cancelled due to emergency admissions overnight taking priority over planned admissions. The hospital staff informed Maciej that he would be brought back in for surgery within the next 28 days.

Maciej's wife came out of respite care until he was due to go back in for surgery and his daughter went back to Scotland where she had to arrange for additional leave when Maciej finally went in for surgery.

Future Model of Care: Routine orthopaedic surgery is carried out on the planned care site where orthopaedic beds are 'ring fenced' against all non-orthopaedic admissions. Following his appointment with the consultant and pre-operative assessment nurse, Maciej was deemed suitable for surgery on the planned care site and told to stop taking his warfarin 5 days prior to surgery. Maciej received a letter 5 weeks later with a date for his operation. He arranged for his daughter to come down from Scotland to look after him whilst he was recovering and arranged for his wife to go into respite care. His daughter took him in to hospital on the appointed day and his surgery went ahead without any problems.

7.2.9 Women and Children

The model for Women and Children's services is based on that recently developed and effectively implemented as part of the consolidation of services at PRH in 2014. Essential clinical adjacencies have been identified between maternity, neonatology and paediatrics, and between women and children's services and the ED and critical care.

7.3 Centres of Excellence

Clinical specialties including Bariatric, Breast and Cardiology have proposed sustainable strategies to centralise their services on a given site. They aspire to create and develop Centres of Excellence which will improve and protect services for patients in Shropshire, Telford & Wrekin and Powys. The example set by the recent reconfiguration of Women & Children's services to a single site has proved to be successful in attracting a sustainable workforce and improving patient experience.

By following this model of service development, activity that is currently provided outside of our county would be repatriated back to our local health economy.

7.3.1 Breast Service

Currently Breast activity at SaTH is required simultaneously across both sites which is proving increasingly difficult to sustain in terms of personal and diagnostic support. Currently not all patients with a suspected cancer who require an image guided biopsy can have it on the same day. This has resulted in an inequitable service for some patients which is now unable to meet the latest 2016 NICE guidelines that stipulate that all biopsies should be carried out at the same appointment.

Anticipated increases in annual activity combined with capacity constraints necessitate the need for redesign. The Breast Team's vision for improving the Breast Service on one site will result in a more effective and timely treatment of breast patients. This will also result in a more cost effective use of resources with rationalisation of imaging equipment and reduction in servicing costs. Having a single centre of excellence will improve patient experience, preserve the service and be attractive for recruitment and retention of high quality staff.

7.3.2 Bariatric Service

The Bariatric service consists of a dedicated team committed to providing a quality service for their patients. The demand for this particular speciality is predicted to rise significantly in the coming years. This is an opportunity to develop further, improve patient experience and by offering an attractive service and increase local market share. The team supports the centre being located at the Planned Care site and propose that dedicated facilities are available for all facets of the patient's treatment.

Privacy and dignity is paramount in considering the patients' needs, this includes appropriate facilities and environment to enable the delivery of psychological and physical care.

7.3.3 Cardiology Service

The Trust currently provides a mirrored Cardiology in-patient services on both hospital sites. The creation of an acute site through which all unscheduled admissions would be routed would allow the Trust's Cardiology services to be concentrated on one site. This would in turn unlock local access to rapid diagnostic testing, therapeutic procedures and the creation of a Centre of Excellence for Cardiology. The service would offer patients access to a local non-primary percutaneous coronary intervention (PCI) service which would treat all but the most serious forms of heart attack. This model whereby patients receive urgent revascularisation with PCI and urgent access to permanent pacemaker implantation is a service development repatriating care closer to home.

These early and more definitive interventions would save lives, reduce morbidity and length of stay. A shift from inpatient to day case activity will improve patient experience and expectation. Admission avoidance with the creation of an Ambulatory Care facility would for example care for

heart failure patients requiring a few hours in hospital to receive intra-venous diuretics and CT coronary angiography patients who require beta-blocker administration prior to their scan.

This cohort of patients would experience a dramatic improvement in their flow through the hospital as a result of rapid access to several appropriate Cardiology diagnostic/therapeutic procedures, all available in close proximity to the single point of emergency admission. Repatriation of some PCI activity from other regional centres will mean fewer bed days and transfers for patients out of county.

7.4 Integrated Care

7.4.1 Implications for Other Services

For the models of care described above to work properly and to achieve maximum benefit, the aspiration should be that all health and social care sectors are performing at 'gold standard' and that appropriate investment is made in appropriate alternative service provision to acute hospital care.

It will be crucially important to avoid a situation occurring whereby gaps and shortfalls in service provision in primary, community and social care sectors may be resulting in significantly greater demand on acute hospital services, attributable to demographic and epidemiological change alone. Thus, as identified in the activity modelling in support of the development of the Future Fit Clinical Model, there are certain key service pre-requisites without which the changes described above will not achieve maximum impact:

Public health related strategies, for example:

- Obesity management initiatives
- Smoking cessation initiatives
- Alcohol reduction initiatives
- Maximising immunisation and vaccination rates
- Initiatives to minimise risk of falls-related admissions

Strategies are dependent on provision of alternative providers, for example:

- Proactive management of ambulatory care sensitive conditions
- Frailty management
- Risk stratification / virtual wards
- Provision of specific step-down pathways e.g. community stroke rehabilitation
- Community rehabilitation and re-ablement services
- Comprehensive social care and domiciliary care support services
- Discharge-to-assess packages for domiciliary or care home discharge
- Provision of mental health and dementia support services etc.
- Urgent care management in primary care

Provider or commissioner management strategies or operational policies, for example:

- Procedures of limited clinical value policy
- Ambulatory emergency care protocols in primary and community care
- Best practice day case and short stay surgery protocols
- Best practice enhanced procedure pathways
- Policies on Pre-Op length of stay

7.5 Improving patient outcomes

Central to the plans for the delivery of a revised clinical model are the improved outcomes for patients. Research has been undertaken to understand improvements, recommendations and evidence from elsewhere and the opportunities for the Sustainable Services Programme, specifically around Urgent and Emergency, Ambulatory and Planned Care.

7.5.1 Outcome evidence

The core element of the proposed clinical model is the Trust's plan that all patients are seen in the right place, at the right time by the right person. If the right place for the patient is the acute setting, then the services that patient's access need to be suitable for their needs.

Under the current model of care, patient pathways are not clearly defined and often patients are seen in an inappropriate setting with poor facilities. Furthermore, the current duplication of services has introduced a level of confusion and 'chaos risk' for patients, their families and staff alike. The diagram below has been widely shared in the discussions and development of this OBC and is recognised by staff and patients as a reflection of current patient flow:

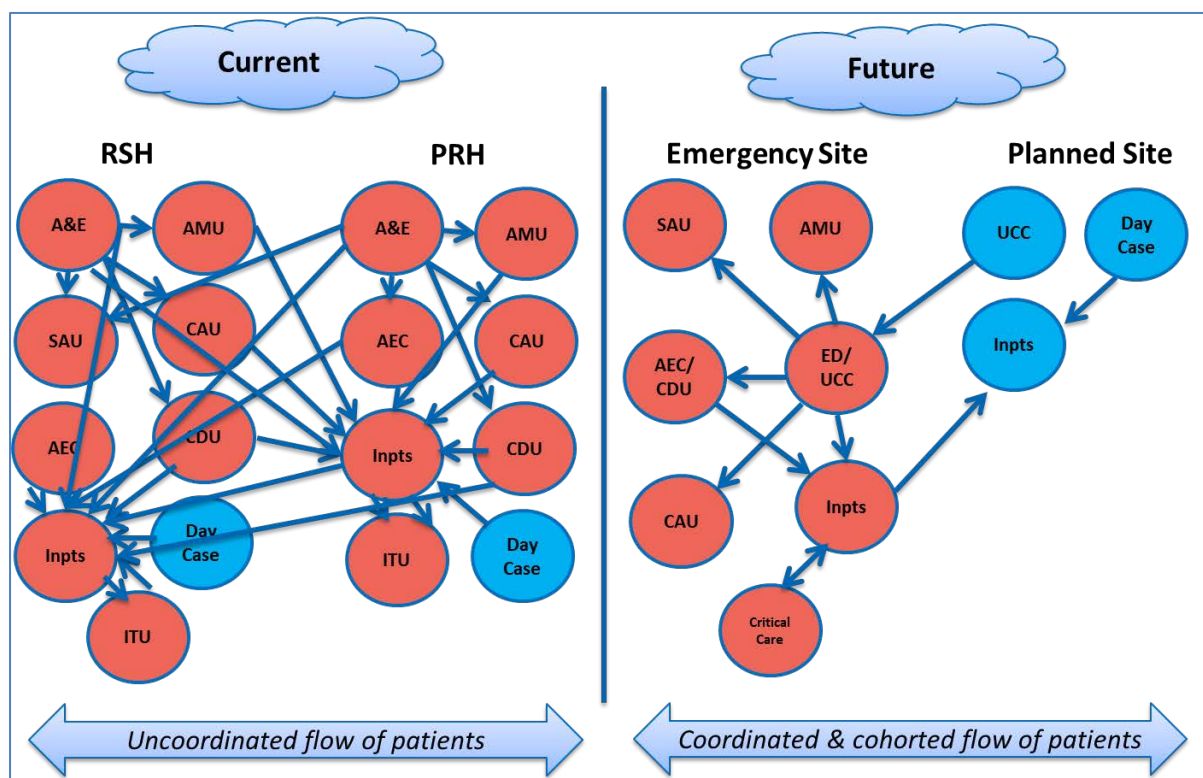


Figure 8: Current and future patient experience and flow

This section will describe the new clinical model in terms of the benefits for patients in relation to available evidence.

7.5.2 What will the clinical model offer patients?

In recognition of the need to design a service that meets the needs of patients and delivers best practice, the model will ensure that:

- When clinically appropriate patients will be seen and treated in ambulatory or day case settings with no overnight admission
- If an overnight admission is required, patients are seen, treated and discharged without delay

The diagram below illustrates the services that will be provided based on the patient’s clinical need:

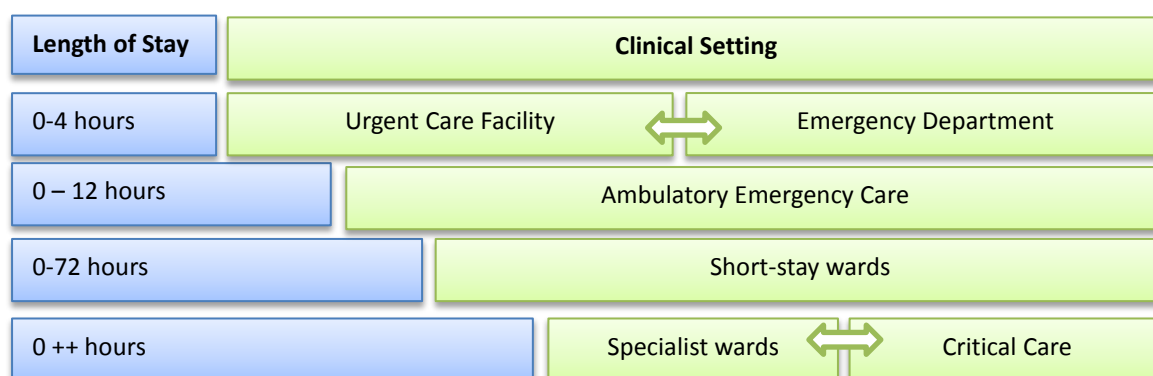


Figure 9: Clinical setting and length of stay

7.5.3 What does the evidence show?

There are many benefits for patients in minimising the amount of time they spend in hospital with a large body of supporting evidence. This section will explore the latest evidence in the organisation of patient care.

Seeing patients in the right place

Ambulatory Emergency Care: Enables around a third of admitted patients to be seen, diagnosed, treated and discharged within the same day to continue their treatment at home or in a community setting⁴. A case study showed that 50 per cent of GP referrals for emergency admissions at Nottingham University Hospitals Trust are now being rapidly treated and discharged on the same day⁵, similarly SaTH activity shows that the opportunities for patients being treated without staying overnight is also achievable.

Urgent and Emergency Care: the requirement for distinct pathways for patients with urgent care or emergency care needs is supported by the plan to have a system that is safe and sustainable. This is through the provision of an urgent care service that is highly responsive and delivers care as close to home as possible. For those patients that have more life threatening illness or injury, it is essential that they are treated in centres that have the right expertise, processes and facilities to maximise prospects of survival⁶.

The current arrangement of the existing A&E departments has a combined workforce and facilities. This, in conjunction with the facilities and hospital flow, creates a scenario where patients are waiting longer than they should for their definitive care potentially having an adverse effect on their clinical outcome; patients run a 43% increased risk of death after 10 days if they are admitted through a

⁴ Directory of Ambulatory Emergency Care for Adults, Version 5, NHS Elect, 2014/2015

⁵ Dr Jack Hawkins (2013)

⁶ NHS England, Transforming urgent and emergency care services in England, 2015

crowded accident and emergency (A&E) department⁷. Waiting for admission in A&E is also associated with significantly longer hospital length of stay⁸

Planned Care and Emergency Care: currently planned care and unplanned care are provided across both hospital sites. Pressures within unplanned services impact daily upon planned care activity. This means medical patients can be cared for within the 'wrong' ward for their needs and that planned episodes of care are cancelled. Both or which have an adverse effect on the patient.

Patients that are being cared for in an area of the hospital that is not related to the speciality to which they should be admitted, are classified as 'boarded' patients. There is a direct correlation between an increased length of stay and the number of intra-ward transfers⁹. Boarding patients makes it difficult to ensure they are seen by the right person at the right time as they are in the wrong place. As well as an impact on length of stay, boarding has a statistically significant impact on adjusted rates of mortality, emergency readmission and inpatient discharge timing¹⁰.

Multiple patient moves within the hospital, particularly if it is an older patient, can increase length of stay and stall patient flow. Research has found that patients can be moved four or five times during a hospital stay, often with incomplete notes and no formal handover¹¹.

From November 2015 to October 2016, SaTH cancelled 514 (25% of all cancelled operations)¹² surgical procedures due to the unavailability of beds. Cancelling a patients operation often has a negative impact on them and their family. Research has shown cancelled operations result in significantly more complications and a lower quality of life in the long run. The most common complications are depression, urinary tract infection, wound infection, and myocardial infarction¹³. Furthermore, cancelling patients also challenges the organisations delivery of nationally defined access targets.

The Royal College of Surgeons (RCS) recommends separating elective surgical admissions from emergency flows through the use of dedicated beds. Separating the elective flow can result in a separate culture around the unit focused on improving the elective stream, a more predictable workflow, increased senior supervision, earlier investigation, earlier definitive treatment and better continuity of care¹⁴.

⁷ Richardson (2006)

⁸ Liew & Kennedy (2003)

⁹ Blay et al (2002)

¹⁰ Boarding (2014)

¹¹ Cornwell et al (2012)

¹² Theatre cancelled operations database, SaTH

¹³ Magnusson et al (2011)

¹⁴ Royal College of Surgeons of England (2007)

Seeing patients at the right time

One of the main challenges in seeing patients are at the right time within the Trust, in line with many organisations within the NHS, is the flow of patients through the hospitals, patients being admitted unnecessarily and delayed discharges. All of which contribute to poor flow.

A delay in prolongation of hospital stay after patients are deemed to be discharged from internal medical departments is associated with increased morbidity and mortality, mainly during the first surplus days of in-hospital stay. Efforts should be made to shorten such hospital stays as much as possible¹⁵.

As well as patient flow improving access to theatres and wards, appropriate access to care for the critically ill patient is vital. Current flow means on occasions patients that are appropriate to be on a ward remain within the Critical Care Unit as there are no available beds for them. This reduction in available capacity for acutely unwell patients may cause a delay; failure to admit to Critical Care in a timely manner is associated with an increase in morbidity and mortality¹⁶.

Intensive Care National standards advise discharge from Critical Care should take place within 4 hours of patients being declared medically fit to return to the ward¹⁷. In SaTH between April and Nov 2016 over 330 patients have had to wait beyond the 4 hours to secure a transfer to a more appropriate ward bed, 190 of this cohort had to wait over 24 hours to progress. This exposes the recovering patient to greater physical and psychological harm, potential compromised same sex accommodation standards and delays in their rehabilitation.

Patients being seen by the right person

As described in section 6 the current workforce model creates challenges in making sure patients are seen at the right time by the right person for their clinical need. There is a strong body of evidence to support that early review of patients by a senior decision maker can avoid unnecessary overnight stays.

A key part of supporting the clinical model and the delivery of a medical service where patients have access to the right person is the introduction a 7day medical workforce. Evidence shows that the length of stay of patients admitted on a Monday or Tuesday is, on average, around 2 days shorter than the length of stay of those admitted on Friday or at the weekend. Several of the factors that contribute to unnecessarily prolonged lengths of stay are more pronounced at weekends, such as variable staffing and service levels in hospitals and variable access to community services¹⁸.

¹⁵ Rosman et al (2015)

¹⁶ NHS Wales (2013)

¹⁷ Care Standards for Intensive Care Units, 2013

¹⁸ Keogh (2013)

What's wrong with being in hospital?

Much of the evidence supporting the clinical model acknowledges admission avoidance and reduced lengths of stay. Whilst this benefits the health care system, minimising hospital admissions is of great benefit to patients and their clinical outcomes. Hospitalisation can cause various problems for patients including:

- hospital-acquired infections (HAI'S)
- confusion, depression and decline in mental function
- poor nutrition
- incontinence
- inability to urinate
- lack of sleep
- pressure sores
- falls

Health care-associated infections (HAIs) cause considerable morbidity and mortality and also have resource implications for the NHS. Prevalence studies indicate that about 20 per cent of patients in hospital have infections and that nine per cent have acquired the infection during their hospital stay¹⁹. HAIs have been estimated to kill about 5,000 patients a year²⁰ and in the UK it has been estimated to cost the health service £1,000m per annum²¹.

Preventing falls: Older patients are at a greater risk of falling in hospital, and those that have fallen once are at a higher risk of falling again. Although there are known approaches to reduce the risk of falls in hospitals, there is variable implementation and changes in practices between and within hospitals.²²

Reducing immobility: Bed rest was identified as being harmful to patient care and their ability to recover as early as 1947²³. Patients that are supported in staying mobile and repositioning are less likely to have extended hospital stays and reductions in their independence.²⁴

Reducing hospital-acquired infections: Healthcare-acquired infections (HAIs) can dramatically lengthen a patient's stay by an average of 9 to 10 days in hospital²⁵.

Preventing urinary tract infections: Older people are more likely to be incontinent and develop a urinary tract infection (UTI) in hospital from having a catheter inserted. Sixty per cent of UTIs relate

19 National Audit Office(2000)

20 NAO (2000)

21 Plowman et al (1998)

22 National Patient Safety Agency (2007)

23 Asher (1947)

24 Knight et al (2009)

25 Hassan et al (2010)

to catheter insertion and catheter-associated UTIs extend length of stay by six days, increase mortality²⁶, and increase the risk of developing pressure ulcers²⁷.

Preventing pressure ulcers: Having a pressure ulcer can result in an increase of hospital length of stay by 4.31 days.²⁸

Improving nutrition and hydration: Patients malnourished on admission or who become malnourished and/or dehydrated during their hospital stay have longer lengths of stay and are more likely to be readmitted²⁹;

Some patients are admitted to the hospital with a diagnosis not directly leading to functional deterioration (e.g. pneumonia, urinary tract infection), yet they demonstrate a general decline in function after a hospital stay. Recent literature reviews show that functional decline is one of the most common negative outcomes of hospitalisation, with far-reaching consequences for the patient, family, and health care system. More recent studies support these early findings, showing that patients aged 65 and older often suffer from functional decline during and after hospitalisation. Post-hospitalisation functional decline has been shown to be sustained up to one year following discharge, and non-recovery to baseline functional status has been associated with increased risk of institutionalisation, prolonged disability, and death (up to three years).³⁰

A hospital stay can often precipitate or exacerbate dementia and episodes of delirium³¹. Patients who develop delirium have high mortality, institutionalisation and complication rates, longer lengths of stay and are also at increased risk of institutional placement after hospital admission compared to non-delirious patients³². Similarly, patients with dementia also have longer stays in hospital compared to people without dementia admitted with the same medical condition, and are also at high risk of decompensating³³.

How can improved facilities enhance patient outcomes?

There is now widespread consensus that a hospital's physical environment can have a big effect on patient outcomes and recovery times. Factors such as space, lighting, use of colour, acoustics, noise levels, smells and the degree of control a patient has over their environment can all have an impact on the wellbeing and mood of the individual³⁴,

A patient's environment, especially in Critical Care can have a negative impact on patient outcomes. Intensive care unit nurses must actively consider and manage the environment in which nursing

26 Rothfeld et al (2010)

27 All Party Parliamentary Group For Continence Care (2011)

28 Graves et al (2005)

29 Agarwal et al (2013)

30 Oliver et al (2014)

31 Tamara et al, 2009

32 Royal College of Physicians and British Geriatric Society (2006)

33 Alzheimer's Society (2009)

34 Race (2012)

occurs to facilitate the best patient outcomes. Critical Care design should incorporate access to natural light and the outside environment to aid patient recovery and experience³⁵.

A research review on the evidence based health care design confirmed the importance of improving the healthcare outcomes associated with a range of design characteristics or interventions, such as single-bed rooms rather than multi-bed rooms, effective ventilation systems, a good acoustic environment, appropriate lighting, better ergonomic design, improved floor layouts and work settings. It is now widely recognised that well-designed physical settings play an important role in making hospitals less risky and stressful, promoting more healing for patients, and providing better places for staff to work.³⁶

8 Capacity Modelling

8.1 Activity and Capacity Modelling - Introduction

The activity and capacity modelling to support the development of the Sustainable Services Programme has built on that undertaken for the Future Fit Programme.

Within the Future Fit Programme, the Central Midlands Commissioning Support Unit (CSU) supported the health system to develop a range of models to estimate future activity levels. This modelling considered a widespread and inter-dependent programme of change across all sectors of the health economy. As already outlined, many of the acute sector changes are heavily inter-dependent on initiatives and changes to models of care in primary and community health and social care sectors. For this reason, a summary of key aspects of the Future Fit modelling process is given here.

Phase 1 of the Future Fit modelling estimated the levels of activity that the acute Trust and Shropshire Community Trust might be expected to manage in 2018/19 taking into account demographic change together with a range of commissioner activity avoidance and provider efficiency schemes. Aspects of demographic change were also considered and modelled.

The range of commissioner activity avoidance strategies that were considered was based on subsets of acute activity that commonly form the basis of commissioner Quality, Innovation, Productivity and Prevention (QIPP) plans. The range of provider efficiency strategies considered was based on the Trust's and other acute providers' Cost Improvement Plans (CIPs) in both elective care and urgent care; the aim was to reduce the bed usage, as well as controlling the resource impact on outpatient and A&E services.

8.2 Sustainable Service Activity and Capacity Modelling and Assumptions

The Trust's projected future activity levels have been closely aligned to the Future Fit principles, with the following significant modifications:

- The baseline has been amended from a 2012/13 out-turn to 2015/16 out-turn;

³⁵ Minton (2016)

³⁶ Ulrich et al (2008)

- It has been assumed that the Future Fit Phase 1 model of care changes in respect of commissioner activity avoidance and provider efficiency have been realised and included in the 2015/16 baseline;
- Demographic growth of 1.25% per year has been modelled to reflect current and expected future trends across inpatients and outpatients however, 5% per year has been modelled across Accident & Emergency activity in line with the levels of growth the Trust has experienced over the past three years;
- The mapping of activity to specific care settings reflects the Future Fit Phase 2 modelling.

The table below summarises the baseline and projected future activity for the Trust. Further detail can be found in Appendix 8a.

	2015/16 Outturn	Projected	Demography	projected less demography
Elective day cases	43,777	46,582	2,805	43,777
Elective inpatients	6,494	6,926	416	6,510
	50,271	53,508	3,221	50,287
Non-elective inpatients	49,456	48,389	3,169	45,220
Non-elective other	8,829	9,399	566	8,833
	58,285	57,788	3,735	54,053
Outpatient first attendances	115,338	110,036	7,391	102,645
Outpatient follow-up attendances	197,491	195,621	12,656	182,965
Outpatient procedures	99,626	106,010	6,384	99,626
	412,455	411,667	26,431	385,236
A&E attendances	121,096	154,553	33,457	121,096

	2015/16 Outturn	Projected	Demography	projected less demography
Elective inpatients	0	17	0	17
	0	17	0	17
Non-elective inpatients	0	-37,629	0	-37,629
Non-elective other	0	0	0	0
	0	-37,629	0	-37,629

Table 13: Current and future activity projections

Future capacity requirements were determined by applying a series of throughput and utilisation assumptions to the projected future activity levels. A key principle has been the optimisation of occupancy levels for each ward or bed pool to maximise throughput and efficiency while minimising disruption and inconvenience at times of peak demand. The major throughput and utilisation assumptions for each of the main areas are summarised below:

8.2.1 Urgent Care Service

- UCS capacity required at both sites under all options;
- Separate facilities for adult and paediatric patients including clinical space and waiting areas;
- Target > 98% see and treat within 2 hours;
- Average length of time a patient will require access to a cubicle is 45 minutes;

- Waiting area capacity for adult and paediatric patients based on an average of 1.15 hours wait;
- Allowance for 2 visitors per patient.

8.2.2 Emergency Department

- Separate facilities for adult and paediatric patients including clinical space and waiting areas;
- Target immediate capacity for > 99% arrivals;
- Target maximum treatment time 3 hours;
- Resuscitation average stay of 3 hours with 0% unavailability.

8.2.3 Ambulatory Emergency Care (AEC) / Clinical Decision Unit (CDU)

- Best practice tariff pathways applied;
- Average length of stay of 7.37 hours based on analysis of 15/16 activity data;
- CDU, AEC and Unscheduled Care Day Case to operate as combined unit;
- Mix of beds (8), trolleys and chairs;
- AEC operational 12 hours a day over 365 days
- CDU operational 24 hours a day over 365 days

8.2.4 Unscheduled Care beds

Short Stay Medical

- 72% occupancy for the short stay medical unit;
- Up to 72 hours length of stay;

All other wards

- 89% occupancy;
- A 50% reduction in DTOCs;
- A reduction of 0.5 days in average length of stay due to the introduction of 7-day working;
- Beds available 365 days per year;
- Specialty allocation based on HRG-level casemix analysis;
- 80% of patients from the Emergency Site with a planned length of stay greater than 72 hours that are clinically appropriate can transfer to Planned Care, of which 20% remain on the Emergency Site to receive care closer to home.

8.2.5 Scheduled Care beds

Short Stay Surgical

- 65% occupancy, 365 days per year for the short stay surgical unit on the Emergency Site;
- 89% occupancy, 260 days per year for the short stay surgical unit on the Planned Care site;
- Up to 72 hours length of stay;
- Excludes oncology and haematology patients;
- Best practice tariff pathways applied.

All other wards

- 89% occupancy;
- operational 5 days a week;
- specialty allocation based on Treatment Function Code;
- 80% of patients from the Emergency Site with a planned length of stay greater than 72 hours that are clinically appropriate can transfer to Planned Care, of which 20% remain on the Emergency Site to receive care closer to home.

8.2.6 Women and Children's beds

Based on reconfiguration of Women and Children's services in 2014;

Postnatal capacity includes increase in transitional care beds in line with guidance.

8.2.7 Critical Care

Adult Critical Care

- Level 1, 2 & 3 pts managed flexibly within the bed pool;
- 60% occupancy based on a <1% turn away rate;
- Demographic growth of 1.25% applied over 10 years.

Neonatal Critical Care

- Based on 2014 reconfiguration of Women and Children's services.

In response to the issues set out previously; Trust clinicians have also been considering the optimum balance of specialties and services between the Emergency Site and Planned Care Sites.

Through a review of the predicted acuity of patients, critical care activity and the application of the single unplanned admission route, a bed base was established.

These modelling assumptions were tested through an audit of all medical patients within the Trust on a particular day. The key audit findings showed that of the almost 300 medical patients audited, 84% required on-going care and were not planning to be discharged in the immediate future. The overall percentage of patients that were suitable to receive their on-going care on the Planned Care Site was 54% (n=162 patients).

	RSH	PRH	Both sites
% of pts not for imminent discharge	81	88	84
% of pts not for discharge that can transfer care to PCS	68	61	65
Overall % of pts that can transfer to PCS	55	53	54

Table 14: Audit of admitted medical patients August 2016

From this, it is clear that a very considerable proportion of the overall activity can be managed from the Planned Care site.

8.3 Capacity Requirements

The table below summarises the projected UCS capacity requirements based on the assumptions set out above:

	RSH	PRH	Total
UCC Adult cubicles	7	7	14
UCC Children's cubicles	4	4	8
UCC Adult waiting places	30	30	60
UCC Children's waiting places	15	15	30

Table 15: UCC capacity requirement

The table below summarises the projected ED capacity requirements based on the assumptions set out above:

	Total
ED Adult cubicles	27
ED Children's cubicles	7
ED Resuscitation trolleys	8

Table 16: ED capacity requirements

The table below summarises the projected future bed capacity requirements based on the assumptions set out above:

	Emergency Site	Planned Care Site	Total
Short stay medical beds	43	0	43
AEC/CDU beds/trolleys/chairs	49	0	49
Other medical beds	254	147	401
Adult critical care beds	30	0	30
Short stay surgical beds	29	18	47
Other surgical beds	98	80	178
Day surgery and cardiology places	0	105	105
Women & children's beds	96	0	96
Neonatology cots	22	0	22
Total	621	350	971

Table 17: Bed requirements

Thus it is projected that the optimum model of care for the future results in 64% of the total beds being required on the emergency site, with 36% on the planned care site (though as summarised above the balance of activity results in a very significant proportion of the overall activity remaining on the planned care site).

All capacity modelling has been carried out in consultation with the clinical teams.

8.4 Better Care Better Value Indicators

The Better Care Better Value indicators are produced quarterly by NHS Elect to inform planning and to inform views on the scale of potential quality improvements and efficiency savings in different aspects of care. The indicator *Reducing Length of Stay* summarises the opportunity to reduce inpatient length of stay over the median value for each casemix group by 25%.

As a measure of the scope for improving length of stay the indicator looks at the number of bed days beyond the average length of stay for each of combination of Healthcare Resource Group, age, sex and social deprivation. It assumes that a quarter of this figure should be an achievable level of improvement, and expresses this as a percentage of all the Payment by Results bed days at the trust with an associated productivity volume opportunity expressed in bed days.

The Trust has been performing well in recent years against this indicator as shown below (the indicator value here is expressed as the percentage of all PbR bed days that could be saved):

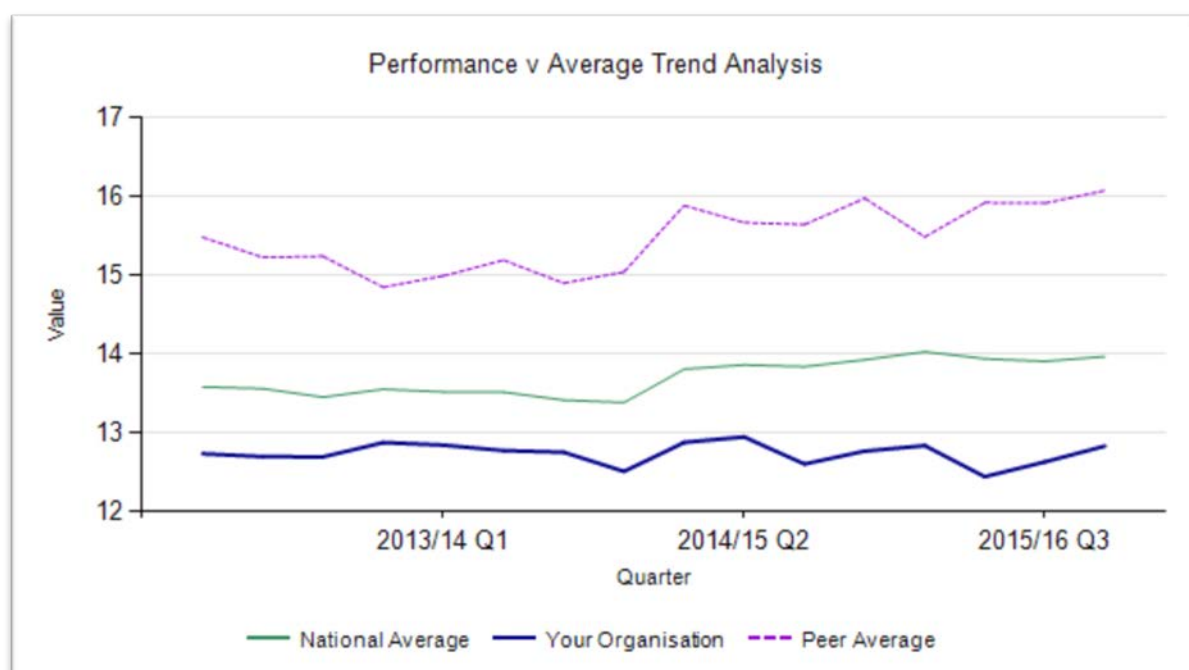


Figure 10: Performance v average trend analysis

The chart above shows that the Trust consistently has an 'opportunity' value of below 13%. This compares with a national average of between 13.5% and 14%, while the peer group average (of other local Trusts) has been at or around 16% in the last two years.

Despite the apparently more limited opportunity for SaTH for further bed day reduction suggested by the national indicators, the Sustainable Services Programme has demonstrated that the proposed model of care changes offer considerable further potential.

8.4.1 Sustainable Services Programme Activity Projections

The Sustainable Services activity and capacity modelling included the following steps:

- Baseline activity for 2015/16;
- Future Fit phase 1, amended to assume demographic growth of 1.25% per year;
- Future Fit phase 2: model of care changes, including significant developments in integrated primary and community care services, long-term conditions admission avoidance programmes in the community, and other improvements to the way community hospital and healthcare services are provided;
- Estimated impact of 7-day working;
- 50% reduction in delayed transfers of care (DTOCs).

The projected inpatient bed days and the bed day impact arising from each of the above steps are set out below:

	Bed day Impact	Total Projected Bed days once this step is applied
Baseline bed days (2015/16)		260,647
Phase 1 projected bed days: Demographic change (i.e. the 'do nothing' position)	+16,703	277,350
Phase 2 projected bed days Future Fit model of care changes	-16,599	260,752
7 day working	-1,930	258,822
DTOC reduction: Reduction of 50% of DTOCs	-12,658	246,164
Total projected bed day reduction as compared with Phase 1 projected levels		-31,187
Total % bed day reduction (compared with Phase 1 projected bed days)		-11%

Table 18: Projected bed day

Thus the Sustainable Services Programme is projecting that a total of 31,187 inpatient bed days could be saved.

(NB Women & Children's specialties, clinical haematology and oncology are excluded from the above as separate assumptions have been made about these specialties).

8.4.2 Comparison of SSP Bed day Impact with Better Care Better Value Indicators

The Better Care Better Value indicator for reducing length of stay Q4 2015/16, converted to an annual rate, suggests that there is opportunity for SaTH to reduce bed days by 28,963 (excluding Women and Children's specialties, clinical haematology and oncology).

Therefore the projected net outcome of the SSP programme in terms of reduced bed days would more than realise the total saving opportunity identified by current performance indicators. The specialties offering the most significant opportunity are summarised in the table below:

Specialty	Phase 2 Bed day Reduction	7 Day Working Bed day Reduction	DTOC Bed day Reduction	Total SSP Bed day Reduction	BCBV Volume Opportunity	SSP Bed day Reduction as % of BCBV Volume Opportunity
Acute & General Medicine	13,034	1,930		14,964	14,831	101%
Cardiology	1,168			1,168	1,617	72%
Gastroenterology	601			601	1,176	51%
General Surgery	722			722	2,380	30%
Trauma & Orthopaedics	544			544	2,371	23%
Other Specialties	530			530	6,588	8%
DTOC (not specialty-specific)			12,658	12,658		
Total	16,599	1,930	12,658	31,187	28,963	108%

Table 19: Bed day opportunity

8.4.3 Theatre capacity

A sensitivity testing exercise was also undertaken to confirm theatre capacity requirements in relation to existing provision across the two sites. This was based on a detailed analysis of data from the Trust's theatre management system combined with the Sustainable Services future activity projections. Two scenarios were tested, based on 80% and 85% theatre utilisation respectively. The analysis for both scenarios confirmed that projected theatre activity for each site can be managed within existing capacity, with opportunities to increase throughput and extend operating hours at some stage in the future if required.

8.5 Sensitivity Analysis

The acute plans are designed to manage future capacity on the assumption that patients that are currently being seen in the acute trust will in the future receive care within the community setting.

Should the expected shift in activity not take place the size of the acute trust will need to increase to accommodate the additional patients? The diagram below details the expected reduction in beds as a result of the development of the community model.

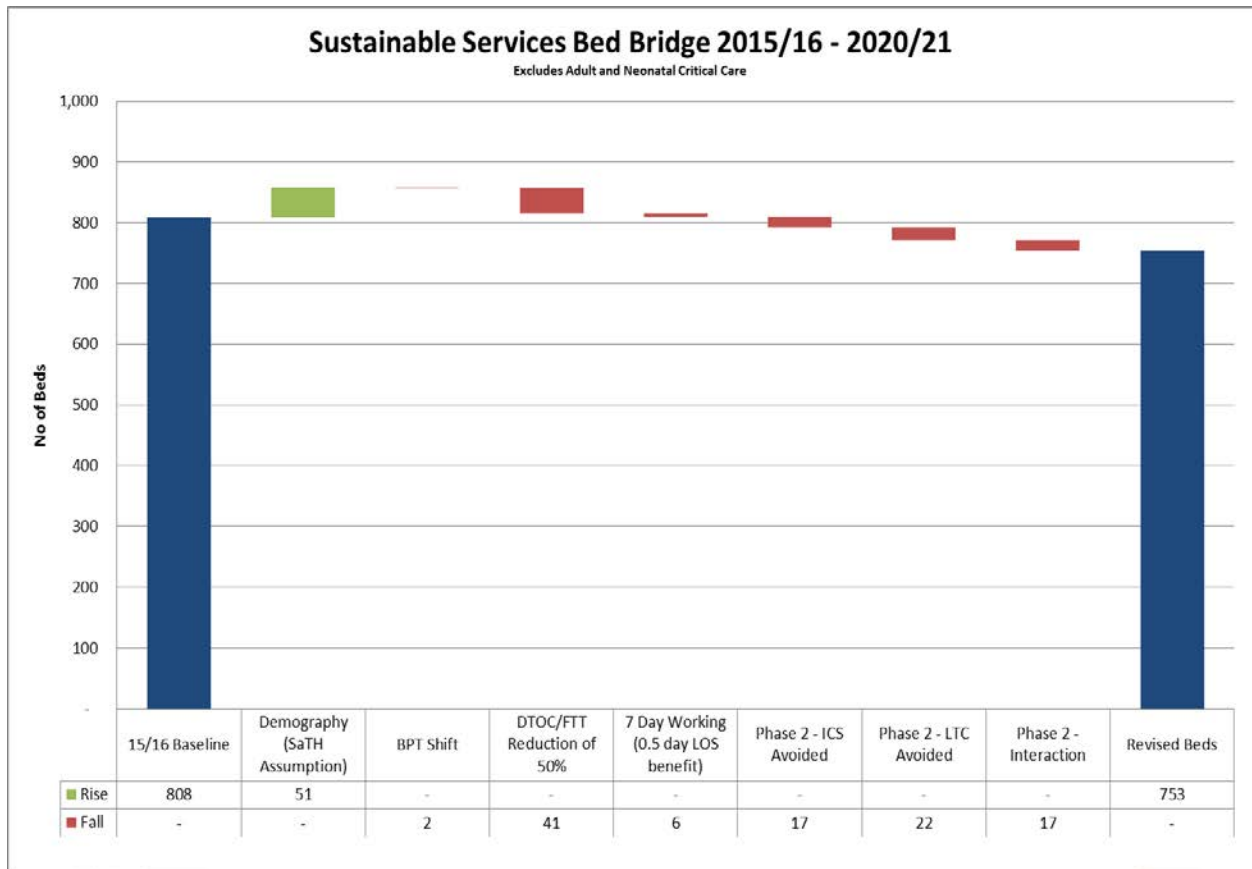


Figure 11: Bed Bridge 2015/16 – 220/21

The 2015/16 baseline of 808 beds is calculated by applying the existing actual number of adult patients with in the general bed base (excludes Adult Critical Care) at the future planned occupancy of 89%. In reality these patients are being cared for in day case wards, treatment rooms and not in designated bed spaces.

As well as the shift in activity to the community there are internal efficiencies that SaTH will be implementing. This relates to in the impact of 7 day working and the shift in activity from inpatient beds to the Ambulatory Emergency Care setting. Is this is embedded within the SSP and future operational plans it is fully anticipated that these changed will be delivered.

The table below quantifies the number of additional beds that will need to be provided with in the acute trust if the community initiatives do not deliver the expected activity shift.

Future Fit Assumptions	No of beds
Reduction of DTOC by 50%	41
Intermediate Care Service	17
Long term conditions	22
Health Prevention Interaction	17
Total	97

Table 20: Future Fit activity converted to inpatient beds

The capacity calculations to date have identified the need to provide 765 adult general beds. The 97 beds required to accommodate the additional activity not delivered in the community will need to be provided as an additional 3 wards.

The table below details the costs associated with this increase in bed provision.

Investment	Cost
Cost of new ward	6.5 m
Staffing of new ward	2 m
x 3 wards	25.5 m

Table 21: Investment required to accommodate additional capacity

8.5.1 Mitigating actions

In order to accommodate the additional activity the following mitigating actions could be considered by the Trust:

Hotel Ward

At any one time there are a considerable number of patients with in the Trust that do not have a clinical need to be with in the hospital but are waiting for their care to be transferred to another provider, i.e. community care. It was assumed that due to the investment in community services the number of patients that will be classed as Delayed Transfers of Care (DTC) will reduce by 50%. Should this not be the case, due to the nature of the patients care needs they could be appropriately cared for within a different environment to that of an acute trust?

Their needs could be successfully met within a ‘Hotel ward’ where staffing ratios are reduced to reflect the reduced level of dependency of these patients. This would enable patients to be safely cared for until they can be discharged in an environment more suited to their needs and at a less of a cost to the health economy.

To reflect the clinical model it would be proposed that provision of this facility is provided on both sites to support the clinical models commitment to where clinically possible care being provided closest to the patient’s home. There will be areas of vacated estate on both sites within all options where this specification of service could be delivered with a degree of refurbishment.

Community Hospitals

Those patients within close proximity to both acute sites do not have the ability to transfer care to a Community Hospital, likewise other areas within the county do not have access to a Community Hospital bed care due to lack of capacity. The Trust could consider their role in providing this ‘step down’ care. Options are available to the Trust within their existing estates as to where a new build to provide this model of care could be delivered.

Virtual ward

This model has been piloted previously by the Community Trust. Additional beds are commissioned within existing residential and nursing home facilities. This would provide a service that is responsive to the geographical needs of the patients. As the facility and staffing would be delivered by another provider it can be implemented by the Trust with minimal initial investment and the capacity provided can be easier adjusted to meet reduction in demand as community services develop.

9 Neighbourhoods

9.1 Principles

Since its inception, the Future Fit programme has consistently identified a 'shift' of activity away from the Trust. Originally modelled on 2012/13 activity, this shift was based on a reducing the demand for acute services through the delivery of alternatives to hospital care or the prevention of admissions. As described in section 08 Capacity Modelling, the future activity shift described above has formed the basis for the future capacity requirements of the Trust in terms of beds, services and workforce.

This work has been, and continues to be led and delivered by the Future Fit Programme Team in partnership with the CCGs and the Community Trust. The Trust is committed to supporting and responding to this work as it continues to develop.

9.2 Neighbourhood approach

Since the original Future Fit work and the concept of Community Fit, the STP process has emerged and absorbed the Community Fit workstream creating three Neighbourhood workstreams (Shropshire, Telford & Wrekin and Powys).

As one of the STP priorities, the plan to develop and implement a model for Neighbourhood working is in response to evidence that the causes of poor health are rooted within communities. Therefore, the solutions need to be community based. The programme of work being taken forward through the Neighbourhood workstreams focuses on:

- Supporting individual communities to become more resilient
- Supporting people to stay healthy
- Developing Neighbourhood Care Teams
- The community bed review

This work programme uses the Buurtzorg model as its foundation. The principles of Buurtzorg are focused around a need to:

- Build social value
- Encourage innovation
- Deliver services and care that are person centred
- Co-produce and adapt
- Enable and support

The Shropshire Community Trust is developing a long term plan to modify community service delivery that reflects this new way of working.

The development of the community model and governance structure is represented in the diagram below.

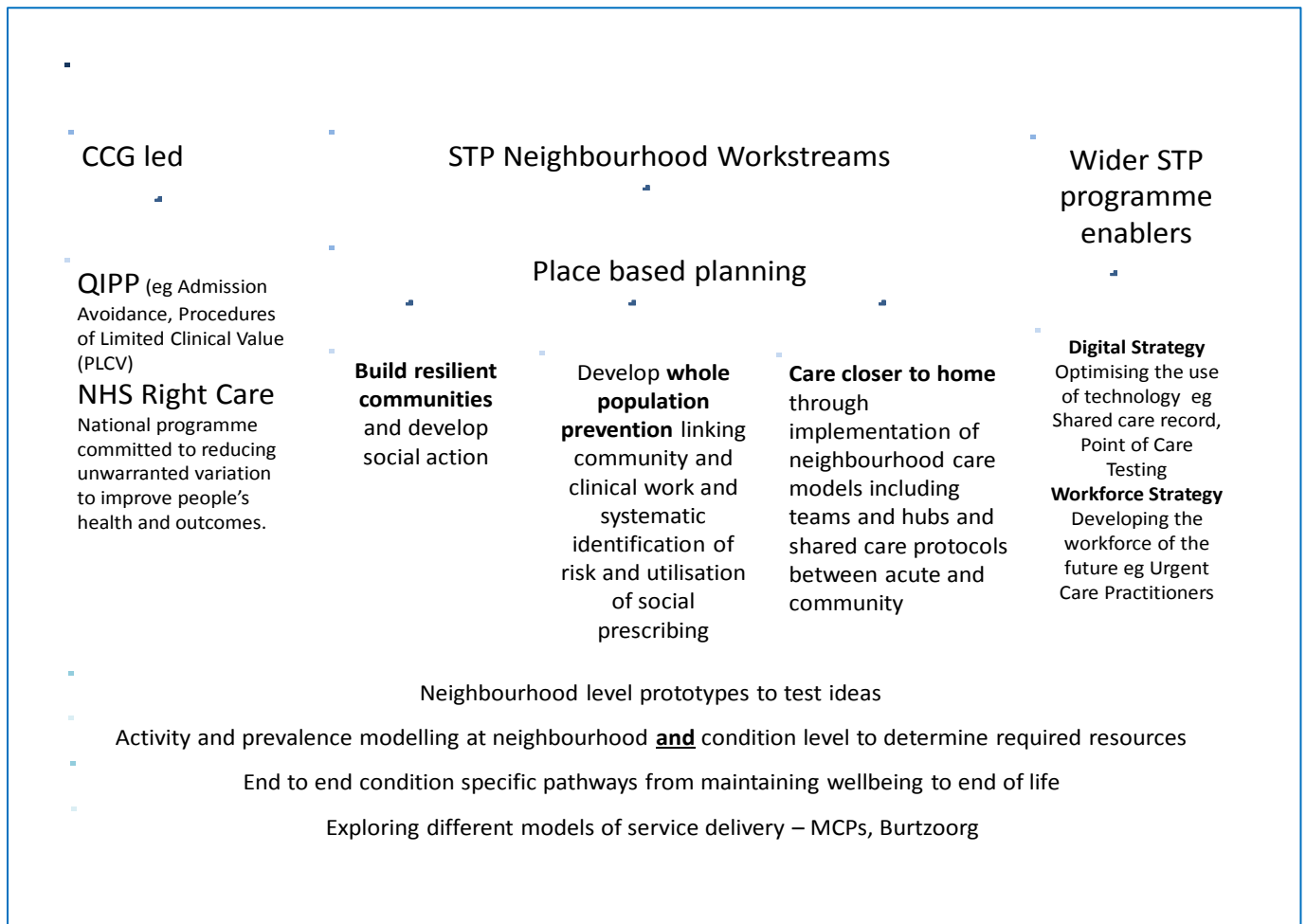


Figure 12: Developing the new community model

9.3 Neighbourhood vision

The STP describes the vision for the Neighbourhood workstreams and is detailed in the extract below. The detailed progress and position of each workstream is included in Appendix 9.

Neighbourhood Workstream – extract from STP

The Health and Wellbeing (HWB) Strategy provides the vision: to be the healthiest, most fulfilled people in the country. To achieve this goal we need to replace the ill health paradigm with wellness and deliver place-based integrated health, care and community models that support independence into older age for the majority of our population. Integrated technology and data moving freely across our system will support the placed-based delivery models, backed up by an asset based approach and a one public estate philosophy which maximises the use of community and public assets to the full.

These transformational changes will not only deliver better health outcomes for our communities but will support an investment shift into prevention, maintenance, early detection and treatment and reduce demand for secondary care provision, releasing hospital specialists' capacity to focus on the acutely unwell.

This will only be achievable by working closely with our communities; by helping people take control of their own health and supporting communities to develop social action and resilience. The rural nature of Shropshire provides a potentially positive environment for the wellbeing of the people living and working in Shropshire. This needs to be better valued and harnessed. Equally the rural nature of the county presents challenges of access and delivery that are a significantly influencing factor on the development of the Neighbourhood's strategy and delivery.

There are already many services in place across Shropshire that are working towards the Neighbourhood ambition. In particular, the Better Care Fund has seen closer working between the NHS and councils. However, we think that we can go much further towards an integrated patient centred service.

Together, we have recognised the opportunities for creating new ways of delivering care and front line services and also joining up social action, prevention activities and the currently fragmented care system to develop a wellness focussed and person centred system for our local population. We are now developing effective, collaborative relationships around this shared purpose that will enable us to move at scale and pace to deliver fundamental change.

Our neighbourhood care model will remove existing barriers to integration and bring together primary, community and mental health services and learning disabilities with local authority, voluntary and the independent care sector to deliver the right care in the right place and maximise the efficiency and effectiveness of local services. Our vision puts the needs of patients at the centre of our Neighbourhood model. This will operate in a more efficient, focused manner, steering away from bed based services to a more community centred style of care.

With the patient at the centre, together we will replace the transactional nature of care provision across multiple teams and providers with integrated, flexible, responsive health and care teams, focussed on locality priorities and needs, providing our communities with the optimal outcome in the best value care setting. Our objective is to break down traditional boundaries between primary care, community and mental health services through the development of the Multi-Specialty Community Provider (MCP) model of care within our Neighbourhoods.

We will focus on prevention and wellbeing by promoting shared management and self-care, allowing patients to continue living independently at home. We aim to move care out of hospitals to the community, wherever possible, and enable better access to, and continuity of care by aligning primary, community, mental health and care teams, breaking down the existing barriers and providing integrated solutions to deliver improved health outcomes for our population. This will enhance clinical and service quality allowing more patients to be managed in the community. These expanded multi-disciplinary and multi sector community-based team will be complemented by the development of new clinical roles to coordinate care for people with frailty and long-term conditions.

9.4 Neighbourhood Workstream priorities

9.4.1 Shropshire

The Shropshire Neighbourhoods programme will aim to reduce demand on acute and social care services by:

1. Building resilient communities and develop social action
2. Developing whole population prevention by linking community and clinical work – involving identification of risk and social prescribing
3. Designing and delivering neighbourhood care models that provide alternatives to admission to hospital through care closer to home

The Shropshire Neighbourhood model of care is shown below. This will deliver:

- Seamless service delivery across both place based and whole pathways of care with a focus on prevention, early intervention and improved outcomes.
- Integrated health and care teams to support a flexible response to our communities' health and care needs and ensure local service sustainability.
- Extended healthcare teams offering rotational opportunities for staff to work across patient pathways and traditional service and organisational boundaries. This not only supports recruitment, retention and career development for staff but also ensures clinical service sustainability through a flexible workforce that can respond to variation in demand and capacity.
- Frailty management through cross-system mechanisms to support the frail to remain independent and out of hospital including specialists integrated with out of hospital teams to optimise patient care and ensure that patients are looked after in the most appropriate setting including the community.

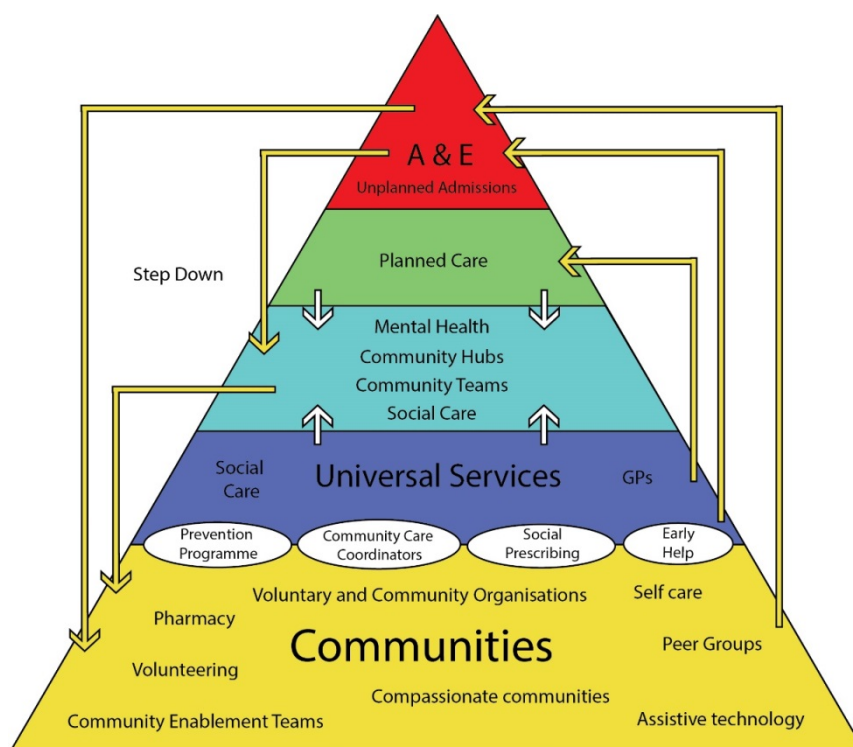


Figure 13: Shropshire Neighbourhood model of care

9.4.2 Telford and Wrekin

The Telford and Wrekin Model of Care is shown in the diagram below and aims to promote:

1. Community resilience
2. Teams working around the patient
3. Intermediate care



Figure 14: Telford and Wrekin Neighbourhood model of care

The approach to building neighbourhoods in Telford and Wrekin is through:

- Building some prototypes around natural neighbourhoods
- Optimising the total resource in the neighbourhood
- A community centred approach that increases access to community resources to meet health needs and increase social participation
- Supporting the development of strong neighbourhoods that can work collaboratively to take action together on health and the social determinants of health
- Needs to be locally determined and accept there are a variety of drivers for change and starting positions
- Incremental and organic change

- Support people properly to make the change (from front line staff to senior teams)
- Empower a broader spectrum of people to support the transformation, rather than the ‘usual suspects’
- Ensure we are embedding the principle of improved patient experience as one of our improved quality expectations

9.4.3 Powys

The Powys Neighbourhood workstream is based on three key achievements:

Radical realignment of resources to support community working already achieved.

Health Board resources now equally split between primary care, community and secondary care.

Secondary care activity at Shrewsbury reduced by 10% in 12 months

The Unscheduled Care programme is shown in the diagram below:

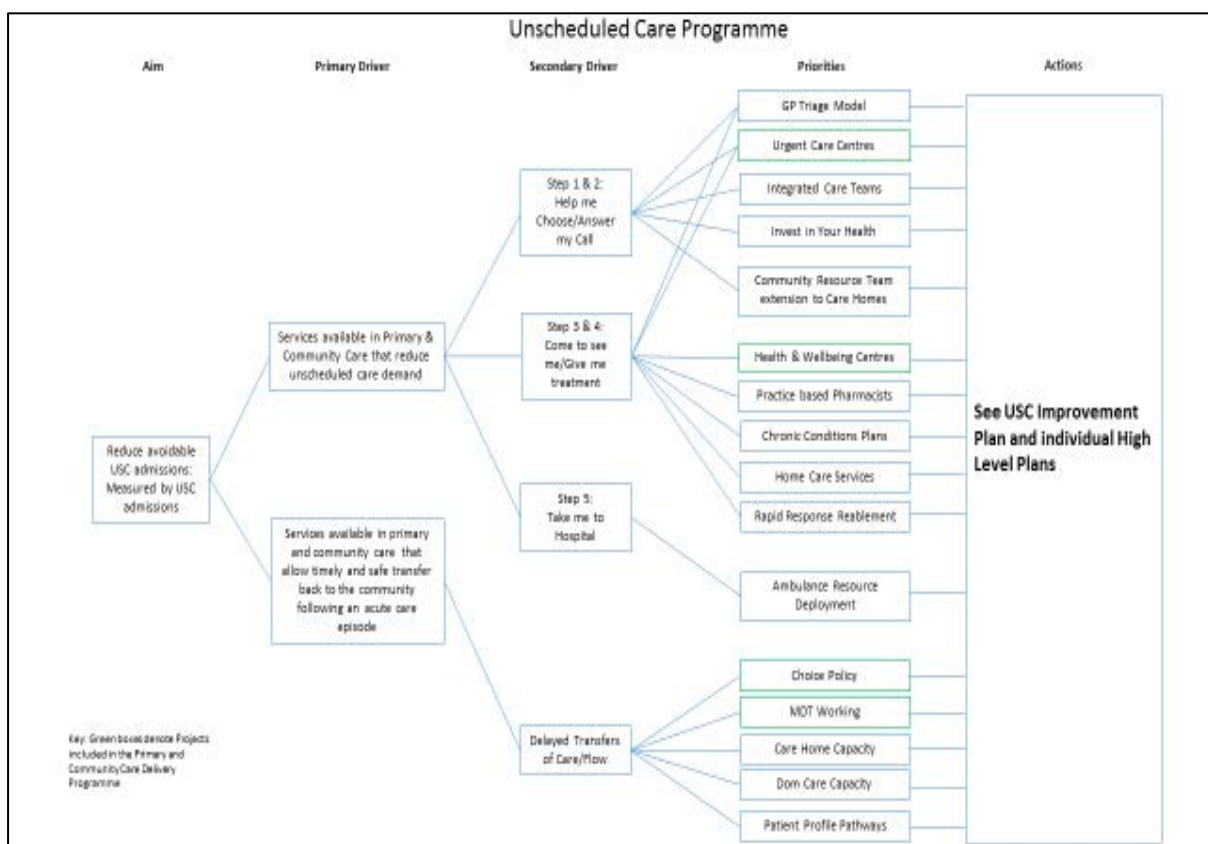


Figure 15: Powys Neighbourhood unsheduled care programme

9.5 Supporting Primary Care

General Practice provides the building block for Neighbourhood Teams. Providing support is a fundamental part of the model.

a) Objectives

- To ensure that patients have the knowledge, skills and confidence to manage their own health and health care
- To develop active Patient Participation Groups (PPGs) to support practices to deliver the Primary Care Strategic Priorities

- To support new models for sustainable Primary Care - addressing inequalities by attracting a multidisciplinary skilled workforce via a workforce strategy, to increase patient access, supported by excellent IT infrastructure and Estate
- To ensure that Primary Care is resourced to identify and manage those health conditions highlighted as a priority by public health and the increasing number of patients with complex health conditions
- Promote and develop a culture of continuous improvement and shared outstanding practise
- Develop a formal stakeholder communication and engagement plan to support the delivery of the Primary Care Strategic priorities
- Develop a long term financial plan to support the delivery of the Primary Care Strategic priorities.

b) Progress to-date

- Formal quarterly reporting to Primary Care Committees
- Primary Care Needs Assessment Undertaken
- Review of all PPGs across the County
- Shropshire wide Primary Care Workforce audit process commenced
- Primary Care Estates Plan being progressed
- Primary Care IT Roadmap approved
- Transformation bids submitted to NHSE to resource IT and Estates projects – outcome expected early September 2016
- 12/17 practices in Telford and Wrekin are now working in 3 clusters/localities to secure sustainability (5/17 practices are being offered individual practice support)
- The development of Practice clusters are being progressed in Shropshire
- National Practice resilience programme underway with the support of NHSE
- Practices have attended training sessions to understand their referral data better (via the Aristotle system)
- Shared learning from Care Quality Visits has commenced
- New Quality and Improvement assurance process has commenced
- Primary Care Communication and Engagement Plan submitted for approval to Primary Care Committee
- Primary Care Financial plan approved by Primary Care Committee
- Pilot for Social Prescribing outlined for approval
- Review of Primary Care Access in and out of hours has commenced

9.6 End to End Clinical Pathways

Six condition specific pathway multi-stakeholder task and finish groups have been developing 'end to end' pathways from prevention through treatment to end of life (where appropriate).

The 6 agreed pathways are Respiratory (including Paediatric Asthma), Chronic Kidney Disease (CKD), Diabetes, Heart Failure, Preventing Falls and Fractures and Frailty. As can be seen from the diagram

below the pathways will describe the interventions to be delivered at each stage of illness progression and where the responsibility for delivering those interventions will reside.

The pathway design is being framed around a set of guiding principles agreed by the Future Fit Clinical Design Work stream as follows:-

End to end from prevention to treatment

Do only what is needed, no more, no less; and do no harm

Professionals routinely providing only the service which requires their level of clinical ability or expertise

Put patients in control of their conditions, with a focus on preventing deterioration and complications, avoiding crisis and preventing referral to more acute services

“Home is best”

Maximise the opportunities for innovation through use of technology

Support partnership care arrangements and smooth transitions for patients between clinicians, settings and organisations

All clinical activity that does not absolutely need to be carried out in a hospital will take place in the community

Funding will follow the patient to ensure that resource is in the optimal delivery setting

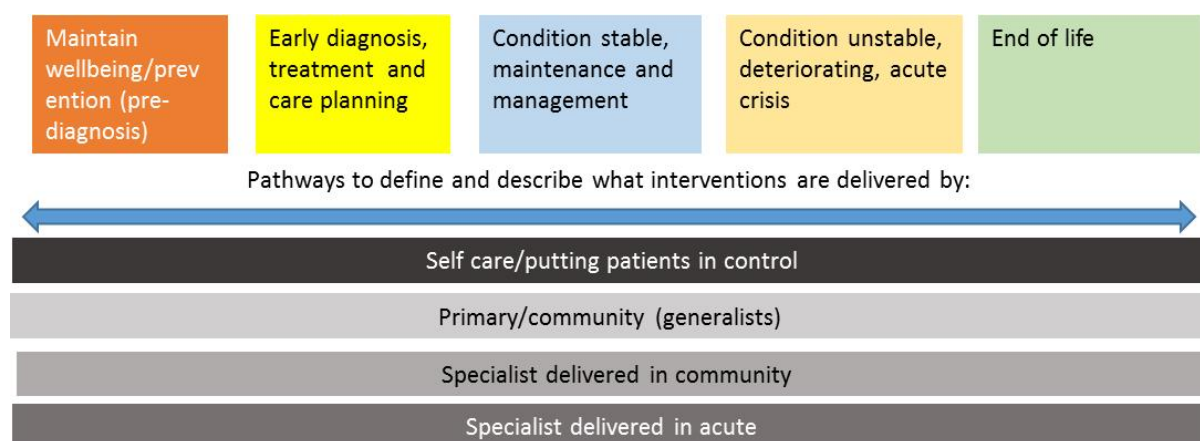


Figure 16: End to End Pathway

10 Building Requirements

10.1 Service Planning Assumptions

In planning the facility requirements, certain key service planning principles have been established by the Sustainable Services Programme. These include:

- The emergency route in to the Emergency Site (UCS & ED) will be via a single door;
- Emergency and planned care activity to be separated from each other;
- Ambulatory Emergency Care is provided on the Emergency Site only
- The balance of services across the Emergency and Planned Care sites has been agreed in detail through ongoing dialogue with Trust clinicians. Some specialties, such as breast surgery and bariatric surgery, are exploring how to develop their services on the Planned Care site as Centres of Excellence; Cardiology is exploring the development of a Centre of Excellence on the Emergency Site.
- Critical Care – physical capacity will be provided for 30 spaces; work is being undertaken to establish the staffed capacity to be provided from day 1 of the new unit opening;
- Any proposed solution must be affordable and deliverable

The proposed solution is being developed flexibly, and in line with the agreed Development Control Plans for both RSH and PRH. This ensures that any new development will not compromise future development, and the overall flow and movement of patients and staff through the hospital is considered and improved.

The development is designed in a 'modular' way to allow the build to be delivered in phases to align with the agreed delivery plan; and also to allow the Trust the option of procuring elements of the scheme through alternative procurement methods and timeframes should this be required.

All of the new accommodation is being designed flexibly. This will allow for any potential changes to service delivery in the future.

The building and estates solutions are included in the Trust-wide Estates Strategy (Appendix 2c) and the Estates Annexe.

10.2 Facility Requirements

The definition of the Sustainable Services Programme baseline scope of work considers three specific issues:

- Firstly, the Service Drivers and their specific geographic disposition by defining what services are to be delivered via the Emergency Care site and the Planned Care site;
- Secondly, the impact of specific 'Estates Drivers' - where pragmatic decisions have been taken about retaining existing good quality facilities that can be managed via specific operational solutions, and;
- Finally, the need to integrate specific backlog concerns and case for change programmes

10.3 Patient Area Standards

It is not considered that there will be any derogation at the level of OBC. It is anticipated that there will be the potential development of some more specific derogations as the detailed designs are developed which will be discussed and agreed with clinical and operational teams, at the time. In principle, standard guidance will be followed as deemed applicable to the engineering requirements of the project.

Natural light and ventilation - The design of the building will incorporate window designs to provide good natural daylight with large glazing areas which will also provide external views to all occupied areas.

Window sizes will be chosen to enhance the level of daylight achieved in the rooms and will incorporate a combination of solar control glazing and solar shading techniques to control heat gains and glare to the space within the building. Careful attention will be given to window openings to ensure effective air movement where rooms rely on natural ventilation for the introduction of fresh air into the space.

Research has shown that access to fresh air and control of ventilation and the room environmental conditions has a therapeutic benefit to patients, enhances the working environment for staff and contributes to the wellbeing of all occupants. Thermal simulations will be carried out during the design of the building to establish that adequate temperature control can be achieved using natural ventilation. The simulations will also inform the window design in determining the openings required to achieve the necessary levels of ventilation.

Computerised fluid dynamic simulations may be utilised in specialist areas to model the air flow achievable through opening windows.

Areas where rooms are shown to overheat will be provided with mechanical ventilation and cooling as appropriate to their use but where possible access to fresh air through opening windows will be utilised, in some cases in support of the mechanical ventilation systems in a mixed mode arrangement.

The benefit of introducing natural daylight and external views into clinical spaces such as Operating Theatres and Critical Care should not be overlooked however windows will be sealed and incorporate solar control to minimise cooling along with appropriate blinds to control glare

Zero discomfort from solar gain - where windows are provided which introduce good levels of natural daylight there is a potential risk of the occupants suffering the ill effects of glare and solar gains resulting in overheating and general discomfort. Solar gains will be controlled by a combination of measures including;

Solar control glazing – This will be achieved through:

- Natural shading from recessed windows and overhanging eaves
- Building orientation
- External shading above the windows
- Internal, or interstitial, blinds
- External planting of trees

Thermal simulations will be carried out to establish the efficacy of the various solar control measures as applicable to each room type and orientation and the optimum combination of measures selected.

Where the thermal simulations demonstrate that acceptable internal environmental conditions cannot be achieved solely by natural ventilation and passive solar control further consideration will be given to mechanical ventilation and cooling. Cooling may be achieved via the mechanical ventilation system or in the case of high solar or internal gains from occupants and equipment the use of local cooling will be considered. Local cooling will be selected as appropriate to clinical and infection control considerations within each space.

It is recognised, as with natural ventilation, control of solar gain by occupants enhances the feeling of comfort and it is important to recognise the need for blinds to control the thermal comfort but more

particularly the incidence of glare with the space. In clinically sensitive areas interstitial blinds may be required.

Building Information Modelling (BIM) - In accordance with the Government Construction Strategy, the project will be delivered to BIM Level 2, and will benefit from the collaborative behaviours and efficiencies in production that result from this method of design and delivery.

Fire code - All buildings within the scheme will be designed and constructed in accordance with the principles and provisions of the suite of HTM documents which form the Firecode Series.

Building regulations - All buildings within the scope of the project will be designed and constructed to meet the requirements of all sections of the Building Regulations.

10.3.1 Clinical Quality Aspects

Privacy and dignity - The building will be designed to maintain privacy and dignity for patients through all stages of their visit to hospital. The principles of 50% single room provision and gender separation are embedded in the brief and functional content for the scheme, and the design team will consider innovative solutions, such as those developed by the Design Council in their 'Design for Patient Dignity' Study to further reduce potential areas of distress for patients. Engagement with patient user groups will be used to identify areas of concern and test proposed solutions.

Adaptability- The building design recognises the challenges that the NHS faces in meeting the evolving needs of its patient groups and flexibility and adaptability are at the heart of the design, enabling the building to flex in use throughout the day and adapt easily to different uses over a period of time. Methods of achieving this include:

- A zonal design strategy
- Repeatable nursing clusters
- Modular approach to design
- Structural grid which supports the future re-assignment of space
- Sufficient Floor to floor heights to accommodate flexible servicing
- Soft Space around capital-intensive departments
- Standardised, multi-use rooms

Security -The design will integrate security design elements and considerations that address the delivery of patient care services in a safe and secure environment. The design of individual elements of the scheme will consider the recommendations of recognised standards such as the Park Mark safer parking scheme and the Secured by Design Guidance for Healthcare Premises. The scheme will meet the Regulatory and licencing requirements for Storage of Control drugs etc. and will work the user teams and IT workstreams to develop proposals which do not compromise security of information and data. The Security policies and brief will be developed in conjunction with the Trust's Security Adviser.

Access to the facility for patients, staff and visitors - Improving Accessibility to the hospital has been a key element of the Trust's brief for the Sustainable Services Programme. The design proposals address the site wide transportation and infrastructure challenges, and rationalise circulation internally and externally within the hospital sites. The design proposals create a more compact and integrated three-dimensional movement strategy, developing an 'on-stage'/ 'off-stage' separation of FM, visitors and patients where possible. Wayfinding and signage will be improved and central public spaces will aid orientation and rationalise movement patterns.

Patient space standards - New Build areas of the scheme will be designed to align with HBN Standards, supported by Best Practice captured from successful schemes delivered elsewhere, and complemented by the efficiencies offered by the use of the Repeatable Room templates.

Impact of clinical and non-clinical adjacencies on the scheme - Through the Clinical Working Groups and Task and Finish groups, the design team developed adjacency matrices and adjacency diagrams. These adjacencies identified a hot core of existing clinically intensive space which became the heart of the scheme, with the related and dependant departments wrapping around as a mix new build and refurbished accommodation.

10.3.2 Accommodation

Family accommodation - The inpatient wards have been designed to enable family members to stay overnight in the room with patients, if required. Relative's rooms with lounges and shower facilities are available on the Neonatal Unit and Adult Critical Care Unit. New food and beverage offers will be introduced to meet the needs of staff and visitors throughout the day and night.

Meeting the needs of patients and staff - All areas of the scheme will be developed in close collaboration with clinical teams to ensure that the design reflects and supports the operational model and clinical pathways. The designs will be based on lean principles and will have staff well-being as a key consideration within the brief. The Clinical needs of patients will be met by a solution which has been rigorously challenged by the clinical teams and the emotional and practical needs of the patients will be identified through sensitive engagement with patient groups. These needs of these groups are complex and varied and can be influenced by factors such as Artwork and Interior Design selections through to Wi-Fi provision and good quality catering. The extent to which the design proposals meet the needs of staff and patients will be tested throughout the design development through the Stakeholder Engagement process.

10.3.3 Design of the Care Environment

Patient experience-aiding recovery - The design team will use evidence-based design to propose design enhancements which can genuinely contribute to improved recovery rates, for example the design will consider views, control of the internal environment, access to good quality external space, opportunities to integrate loved ones into patient care etc.

Quality of the environment -The designs will support the NHS and Trust values and will provide a clear indication to patients and visitors of the high quality care they will receive. The selection and specification of materials and fittings will be appropriate for the high volume of usage to ensure that the quality of the facility is safeguarded for many years to come.

Patient involvement - The Trust has a vibrant Critical Friends Group that has contributed to discussions on design. This will continue as the project develops. The Trust also has a successful Communication Strategy which includes extensive engagement with patients past, present and future. Furthermore, the design and model will look to respond to the concerns raised during public consultation.

Infection control - The design proposals will support the principles of infection prevention and will be designed in accordance with the recommendations of Health Building Note 00-09. As the project progresses the IPC team will be involved in the development, review and sign off of the plans.

P21+ repeatable rooms - Wherever possible the scheme will utilise the P21+ repeatable rooms e.g. 4 Bed Bay, Single inpatient room, Emergency Department Treatment Bays.

P21+ standardised components - Wherever possible the scheme will utilise P21+ Standardised Components.

External design review - An Aedet Review will be undertaken for the scheme. The Project team would welcome the opportunity to be involved in any initiatives which the NHSI team are considering to develop an effective design quality assessment tool.

Planning permission - Full planning permission will be applied for during the FBC process. The design team have presented the design proposals to the Planning Department for each site which were positively received; no adverse comments have been received.

DH consumerism- gender specific day rooms - Where appropriate, new build in-patient areas will incorporate Gender-Specific day rooms.

High specification fabric and finishes to reduce lifecycle costs - Lifecycle analysis will be undertaken at key stages of the project to ensure that appropriate decisions are being made in component and material specification to balance budget with longevity.

Dedicated Storage Space - Appropriate dedicated storage spaces will be provided, incorporating the outputs from the VMI storage workstream.

10.3.4 Option Drivers

It is important to recognise that beyond the baseline considerations noted above, the shaping of the Options proposed might identify value-for-money (VFM) solutions that require works to other services that are outside the scope of the Sustainable Services Programme. For example if the location of an existing department is preventing an otherwise robust solution from being developed, then the VFM decision may require that facility to be relocated. These circumstances are referenced as Option Drivers and do not appear in the baseline target schedules

10.3.5 Service Drivers

For the baseline picture, which is a theoretical model, all options are the same in terms of the target areas as the Service Drivers need to apply equally - the only divergence in respect of geographical disposition occurs when the definition of what constitutes an Emergency Care site as distinct from a Planned Care site is altered, as is the case with the variant option

10.3.6 Estates Drivers

For some services, the Trust has made a series of pragmatic decisions to retain certain facilities as existing and these are scheduled and referred to as 'Estates Drivers'. These are shown in the table below:

Clinical service examples	Support service examples
Operating Theatres	Corporate Administration
Imaging (excl. equipment replacement)	Medical Illustration
Generic Outpatients	Pathology
Renal Dialysis	Pharmacy (incl. Aseptic)
Breast Screening	Mortuary (incl. Post Mortem)

Nuclear Medicine	EBME
Therapies (excl. Inpatients)	
Fertility Service	
Radiotherapy	

Table 22: Retention of facilities

10.3.7 Other Change Programmes

In addition, a range of parallel business cases and changes in working practice have been considered to ensure that other Trust planned facilities and service changes are aligned with the Sustainable Services Programme and the requirements of the Carter Review. This includes:

- Pharmacy Robotics
- Transport Policy
- Catering
- Mail Room
- IM&T
- Receipt and Distribution / Central Stores
- Security

10.3.8 Spatial Assumptions

The principle objective has been to ascertain a benchmark standard to provide a reference point for assessing option benefits. The Trust has therefore started by:

- Establishing exactly which service elements are within the scope of the Sustainable Services programme, and;
- To ascertain a spatial provision that aligns with the Trust’s long-term operational requirements

The baseline position, as described under Facility Requirements, provides a series of benchmarked spatial requirements that is evidence based – for example like-for-like re-provision where the Trust already has acceptable and workable solutions, or space standards that are comparable with similar NHS projects, HBN guidance where appropriate, or other standards validated by the Transformation Team.

As part of the transition from OBC to FBC it is recognised that some of these space standards may benefit from being ‘mocked-up’ in order to undertake scenario and role-play appraisals involving users. Securing these evidenced potential benefits needs to be considered under next steps.

The same will be true for the correct application of [P22] Repeatable Room standards – insofar as the design options inherent in that study package need to be aligned with the Trust’s intended operational policies and requirements.

The baseline position deliberately adopts a relatively conservative approach to innovative opportunities when considering new build space standards, as it recognises that when viewed across the combined Estate, all options result in a degree of mixed specifications - where existing facilities and contemporaneous benchmarks will sit alongside new build; this will inevitably require careful consideration in terms of overall Estate mitigation and derogation measures that the Trust needs to consider.

10.3.9 Evidence

The Schedules of Accommodation (SOA) include reference to source and evidenced standards, both at a room-by-room level and also departmentally where high-level metrics have been applied. The Departmental Summary sheet provides the high-level evidence, whereas the room schedules utilise a 'pick list' of agreed space standards for which there is a separate directory outlining the basis for the Trust's selection

10.4 Schedules of Accommodation

The Trust has created a set of baseline Schedules of Accommodation that further develop the illustrative space standards set out in the SOC into full generic Departmental Schedules. These baseline schedules represent a target to be achieved as far as is practicable and indicate how the services and functional units are required to be split across the Emergency Care Site and the Planned Care site. Designed solutions are a response to this and will take account of structural grids and modular solutions as the design develops.

The design proposals include the introduction of zonal hubs for both staff welfare and facilities management functions which maximising flexibility and efficiency by identifying facilities that are replicated but could be shared between units if provided in a central location which is easily accessible to each area. The quantum and configuration of these will be dependent upon the detailed planning of each department.

The target areas for Women & Children's Services are based on the recently completed scheme at PRH and has been accepted as an operational standard which the Trust would wish to see replicated if re-provided, while introducing the zonal hub approach to maximise flexibility and space planning efficiencies.

Opportunities to drive efficiency from non-clinical space are proposed for further development during the FBC, for examples shared waiting areas in central atrium areas reducing the requirement for large waiting areas for individual departments.

As a consequence of the differences between the options, it is necessary to define the Emergency Care and Planned Care component parts via two sets of baselines.

The baseline schedules provide an Output Specification against which the Trust may evaluate corresponding Input Specification via proposal schedules for each option; once the preferred Option is defined, the objective moving forward through the procurement process is to 'build it or better it'. At this stage the baseline position may still have a value if the Trust is presented with more radical or innovative solutions.

Clinical teams have worked with the Technical and Transformation Teams to assess future flows of patients, visitors and staff. This thinking was developed through a series of workshops to shape the actual facility layout and design. Examples of working flows and diagram are shown below.

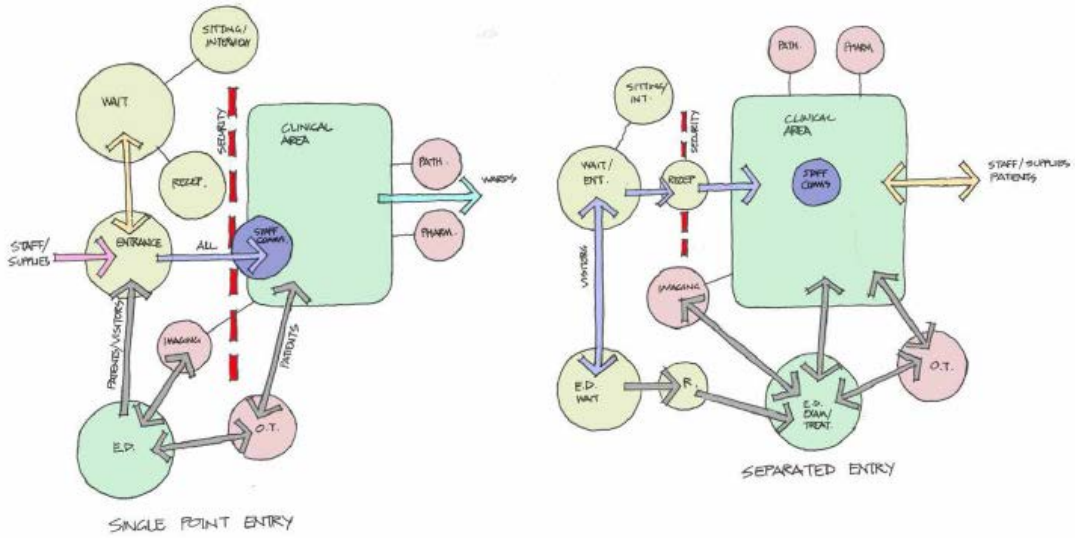


Figure 17: Adult Critical Care Unit - Department entrance sequence

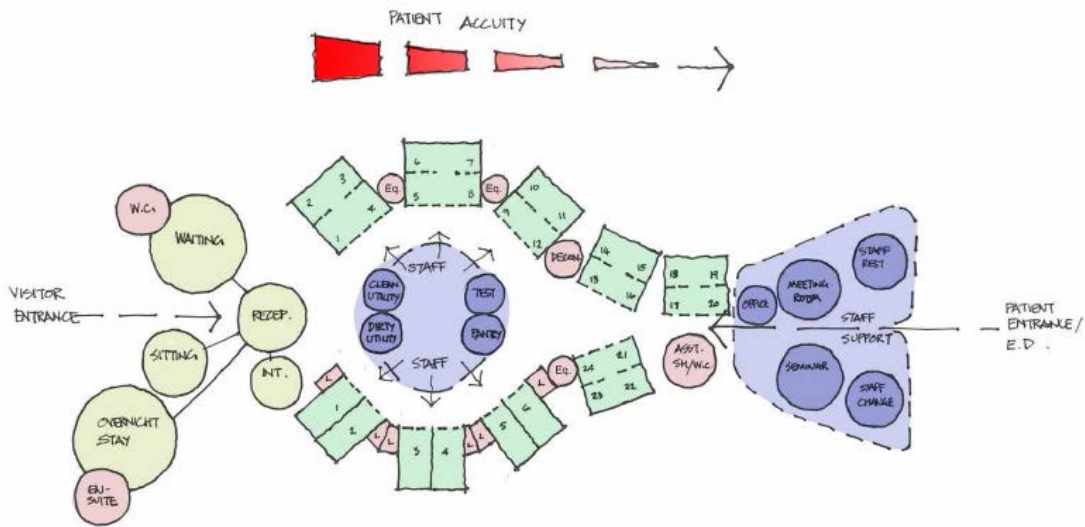


Figure 18: Adult Critical Care Unit - Department Entrance Sequence

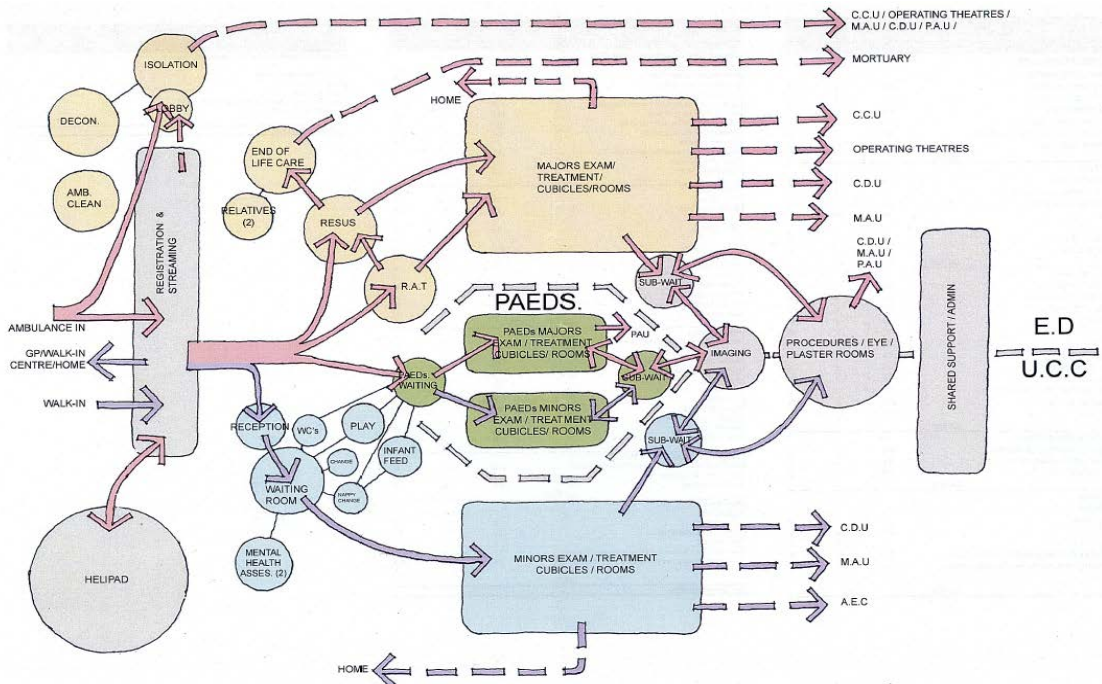


Figure 19: ED and UCC Activity Diagram

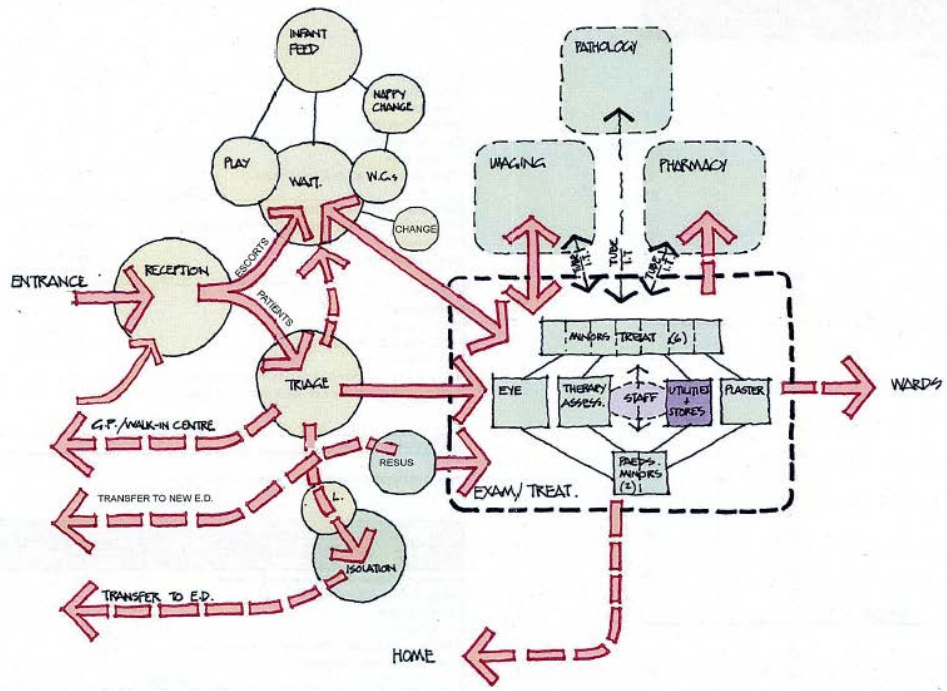


Figure 20: Urgent Care Centre - Planned Care site Activity Diagram

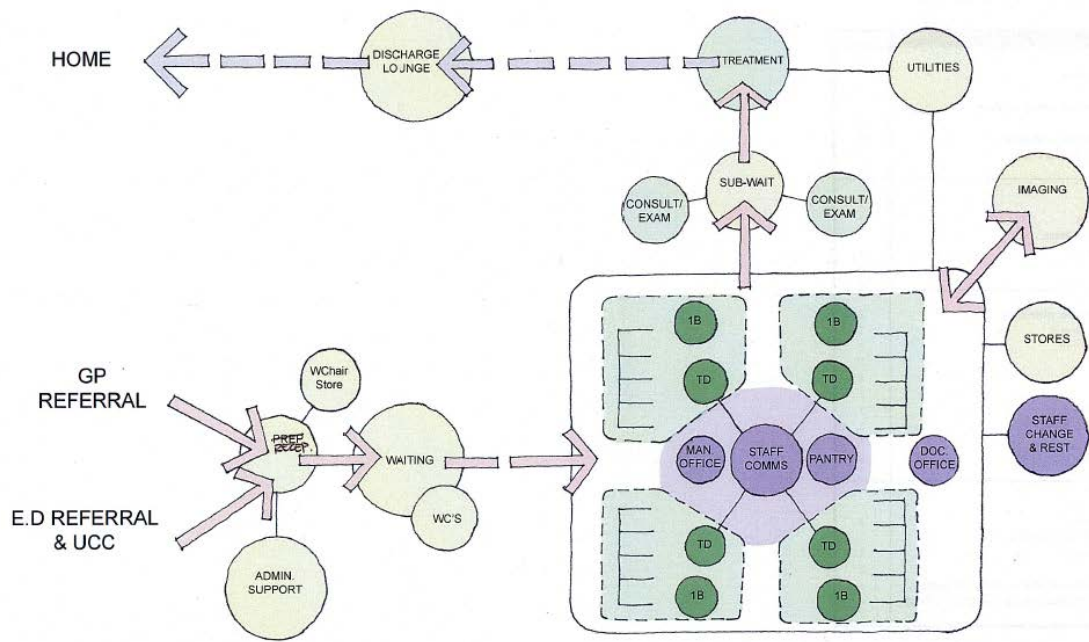


Figure 21: Ambulatory Emergency Care (AEC)

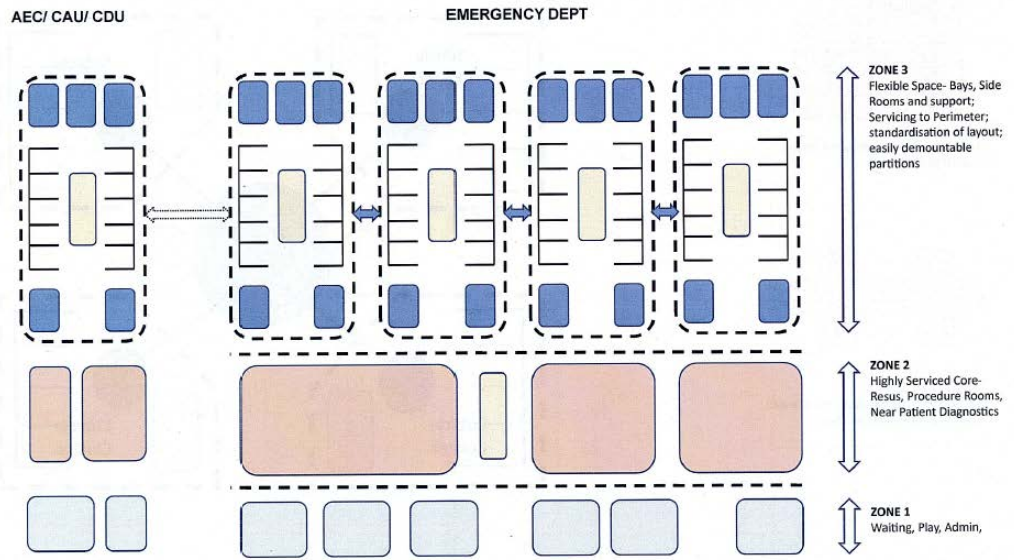


Figure 22: ED and AEC Flexible Solution

11 Workforce

11.1 Strategic Context

Running duplicate services on two sites presents many workforce challenges and can result in a poor employee experience for some of the Trust's medical and non-medical teams across multiple specialities. This compounds an already challenging recruitment environment and leads to difficulty in recruiting the right substantive workforce to provide high quality safe care.

With the medical workforce the current service configuration and the requirement for consultants and other specialist staff to cover both hospital sites can at times limit their ability to provide senior patient reviews. In addition, the Trust is unable to achieve Royal College guidance standards in many areas. For non –medical workforce the challenges are similar, senior expertise is split across two sites, the learning environment and provision of workforce development challenging.

With the current staffing configuration, it will prove extremely difficult to achieve adequate staffing levels to provide 7-day working across both sites. Furthermore, because teams are spread so thinly services are vulnerable to unexpected absences and the non-availability of staff.

Current configuration continues to create cost pressures for premium rate working, poor economies of scale and duplication of rotas as well as exacerbating the Trust's ability to resource 'hard to fill' posts.

11.2 Workforce Plans

The Trust workforce plan incorporates the guidance within the recent publication from the National Quality Board (July 2016) in 'Supporting NHS providers to deliver the right staff, with the right skills, in the right place at the right time'. This ensures all opportunities to maximise the contribution of our multi-disciplinary teams and the number of care hours per patient per day have been considered.

SSP will result in Whole Time Equivalent (WTE) reductions of between 225 – 371 dependent on option; in addition the plan is to also achieve a reduction in paybill relating to non WTE reduction of £4.1m

To reduce the paybill the key drivers are:

- Activity and pathway driven changes in workforce e.g. acute intake on one site, strengthened elective provision, improved rota management and removal of duplication, reducing reliance on high cost temporary staffing
- Productivity driven reductions in workforce, leading to fewer WTE to deliver a given quantity of activity e.g. use of technology and improved processes
- Reduction in the cost per WTE of the future establishment e.g. ensuring that staff spend a greater proportion of their time conducting tasks appropriate to their grade through role re-design and the introduction of more junior roles

Workforce plans have assumed that workforce establishment in terms of WTE is reduced but also the average cost per WTE (although this would be focussed rather than universally applied).

The savings/costs and their breakdown for each option are detailed below:

(Savings)/Costs	Option A	Option B	Option C1	Option C2
	£000s	£000s	£000s	£000s
Sustainable Services WTE (Savings)/Costs	4,600	(10,425)	(10,039)	(8,041)
Sustainable Services - New Working Practices		(4,164)	(4,164)	(3,335)
Sustainable Services Project Savings	4,600	(14,589)	(14,203)	(11,377)

Table 23: Workforce savings/costs

The total workforce demand is detailed in the table below:

Staff group	Est 31/03/16	Demand B	Demand C1	Demand C2
Non-Medical				
Registered nursing and midwifery	1415.62	1299.86	1307.86	1323.51
Qualified ST and T	262.97	208.90	208.90	208.90
Other ST and T	345.81	326.75	326.75	369.91
Support to clinical	1396.02	1311.39	1314.39	1347.39
Non clinical	964.48	874.48	874.48	879.48
Medical				
Consultant	282	290.5	290.5	306
Career/Training grades	366	350	350	372
Total	5032.9	4661.88	4672.88	4807.19

Table 24: Total workforce numbers

11.3 Workforce Transformation Programme

In order to deliver the clinical model within SSP the workforce will increasingly be:

- Treating higher acuity patients on the Emergency Site as a matter of routine
- Working more autonomously and delivering a more complex case load
- Working in more flexible ways across traditional professional groups
- Developed to support new roles required
- Up-skilled to take on extended roles
- Required to use new technology to deliver clinical care and non-clinical services
- More routine working new patterns of employment e.g. 24/7 on site presence, 7-day working and delivering routine services in the evening and at weekends

As such a phased workforce change programme will commence from year 1 Appendix 11a.

11.4 Workforce change programme

Service model	Key service change driving workforce change	Workforce changes
Emergency Dept/UCS/AEC/ CDU & Critical Care	<p>Increased use of urgent care and out of hours services alternatives will mean that more of those patients attending the Emergency Department and the Acute Medicine Services (SAU/AMU/AEC) could have higher acuity as a result of major illness/life threatening conditions or exacerbation of an acute episode of a long term condition that cannot be managed within the community environment</p>	<ul style="list-style-type: none"> ▪ New models of working. e.g. 7-day on site consultant presence in ED & Acute Medicine and 7-day working models ▪ Requirement for rapid access to specialist and technical assessments, diagnosis and treatment across 2 UCS and ED ▪ Shared workforce through ED/AEC/CDU ▪ Increased demand for multi-disciplinary advance clinical practice roles and increase in Emergency Nurse Practitioners ▪ Increased utilisation of new roles e.g. AHP roles, pharmacy ED practitioners, GpWSI ▪ Efficient ancillary and administration systems – workforce practices driven by technology
Medical and Surgical bed rebalancing	<p>Greater focus on 7 day working to deliver consistent standards of emergency and IP services 24hrs ,7 days per week</p> <p>Concentration on provision of Emergency Inpatient services and intense focus on safe acute inpatient care</p> <p>Enhanced rehab /frailty/discharge to assess model on warm site</p> <p>Reduction in admissions and LOS associated with long term condition</p>	<ul style="list-style-type: none"> ▪ Enhancing and developing our new models of working ▪ Increase in day case provision ▪ Workforce will become less generalist and increasingly specialist within more than one specialised care area to meet the demand and enable workforce productivity ▪ Development of new roles crossing professional boundaries at advanced and support level ▪ Introduction of a ‘cluster ‘approach to working such that surgical/medical workforce cross cover at sub specialty level ▪ Efficient ancillary and administration systems – workforce practices driven by technology
Outpatient transformation	<p>Outpatients: reductions in outpatient activity and Improved outpatients efficiency, highest impact changes are assumed to be with follow up attendances.</p> <p>Increased utilisation of virtual service models for OP appointments</p> <p>Service users with long term conditions will be managed, within integrated care models that cross over between health primary , secondary and social care models</p>	<ul style="list-style-type: none"> ▪ A reduction in medical) and non-medical clinical and non-clinical practitioners aligned to OPD acute outpatient services i.e. nursing staff (WTE/Pas) ▪ Conversion of a number medical led OP follow up clinics becoming non-medical led clinics, will occur an increase in demand for advanced and highly competent practitioners i.e. nurses, AHP ▪ Increase in a number of our staff becoming more autonomous workers and therefore becoming increasingly knowledgeable in working within high safety governance models ▪ Increased use of technology- self check-in , further development and roll out of tele med app ▪ Efficient ancillary and administration systems – workforce practices driven by technology
Day case	<p>Increased volume of day surgery</p>	<ul style="list-style-type: none"> ▪ Scheduling /PAs ▪ Increase in demand in advance assistant roles i.e. specialist nurses, physician associates - delivering and or supporting the delivery of minor surgery ▪ Increase use of technology – telemetry, telescopic instruments

11.5 Training Impact and Implications

The training and learning experience of staff is fundamental in ensuring the Trust continues to develop a high quality workforce. All workforce changes will align with deanery guidance on training environment and rota requirements and innovations within workforce best practice and role developments will be used as a basis for the organisations transformation journey.

A phased approach to the development of the existing workforce will be required to ensure alignment of educational lead in time required to ensure that staff are qualified, confident and competent to deliver the care required. The proposed Education Programme is attached at Appendix 11b.

12 Health Informatics

The ICT Strategy concentrates on providing solutions to meet the clinical and business requirements of the reconfigured services. This service change provides a fantastic opportunity to further the IT development from previous reconfigurations and aid the roll out of a modern, resilient and integrated IT solution that is beneficial to staff and service users.

The main aims of the IT strategy are:

- Identifying what patients, clinicians and managers want
- Satisfying national drivers and priorities
- Building a system that is focused on Collaboration, Integration and Safety

The Trust is currently reviewing the clinical and patient facing electronic systems that are in place to evaluate the best of domain systems and remove any duplication or redundant systems. This process will then form the baseline for the Trust to move forward with the 2020 ambition of operating paper free at the point of care. The Trust has officially rolled out a patient facing app for its cancer patients allowing the patients to be effective members of their own care teams as laid out in the Lord Carter of Coles report (2016). The service changes outlined in this business case will provide the springboard for further development of patient facing apps that allow for integration across the wider health economy. A copy of the Trust's IM&T Strategy can be found in Appendix 12a.

The Trust has commissioned IT specialists, Channel 3 Consulting, to help with the development of technology solutions to aid future healthcare proposals. The full Channel 3 report can be found in Appendix 12b.

The SSP will be a major catalyst for change within the Trust but will also be a key initiator for the local and national initiatives driving the need for change in the use of health informatics, such as:

- Delivering the NHS Five Year Forward View
- Changes to deliver the above designed by the regions STP
- Implementation of health economy wide integration and the Local Digital Roadmap
- Increase demand for automation and efficiencies specified in the Carter review
- Identifying opportunities and implementing recommendations in the Watcher report

The Trust has established a Paper Light Group that is responsible for the delivery of the health informatics solutions for the SSP but also a wider remit to ensure that any proposals compliment the solutions required for the wider health economy initiatives. The Terms of Reference for the Paper Light Group can be found in Appendix 12c.

The aim of the work undertaken by Channel 3 was to provide:

- An overview of health informatics and its potential role in the reconfiguration of services
- A new vision for health informatics and the impact of the new service
- High level information around potential technology solutions to support the proposed Emergency Department, Critical Care and Urgent Care configuration
- The next steps required to further develop the vision and solutions

The scope of Channel 3's remit is illustrated below.

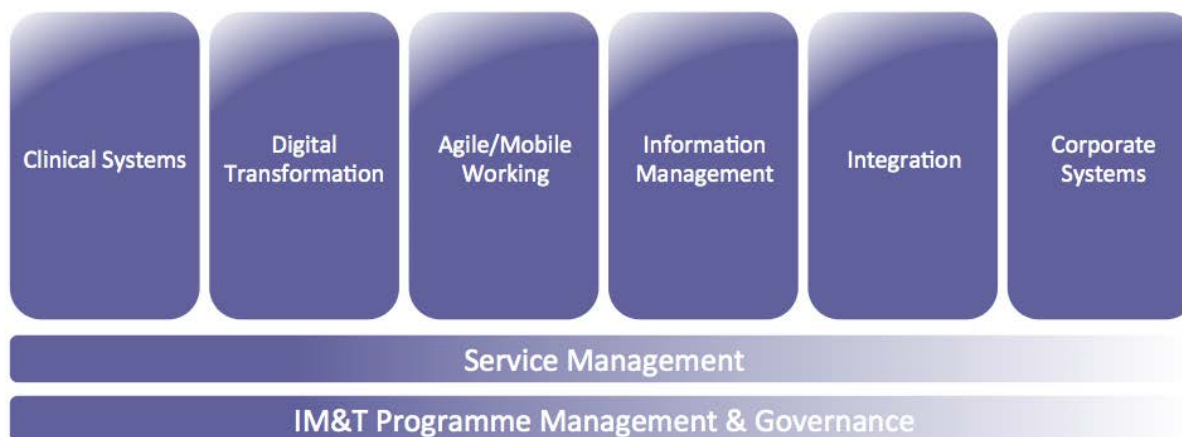


Figure 23: Health Informatics Scope

Elements of the above scope include:

- Clinical Systems: Electronic Patient Record, Clinical Decision Support, e-Prescribing
- Digital Technologies: Tele-Health, Video Conferencing, Remote Patient Monitoring
- Agile / Mobile Working: Community nursing solutions, Tablets, Collaboration Tools
- Information Management: Messaging between systems, cross-organisation data sharing

The service reconfiguration proposed under the SSP offers significant benefits to patients, clinicians and the wider health economy. It may also present some challenges to overcome and will require changes in working practices to ensure the reconfiguration is a success. Following on from a series of clinical and non-clinical workshops it is evident that some of the current practices undertaken by the Trust will not be transferrable to the new configuration. However, this is a positive change, and provides the opportunity to introduce new ways of working that are more effective and ultimately deliver a better level of care to patients. Many of these new ways of working will be enabled by technology. Particular areas which have been identified are:

- Introducing better processes
- Paperless and efficient administration
- Reduce travel between the two hospital sites
- Agile access to clinical expertise

Whilst all the areas identified are important for a new approach to patient healthcare it cannot be underestimated the degree of flexibility and innovation required to achieve these changes.

Building further on the 4 areas mentioned previously the key attributes and outcomes of the healthcare informatics required to support the SPP are illustrated below:



Figure 24: Required Health Informatics attributes

Key Attribute	How it will benefit the Trust and its patients
Holistic Patient Records	<ul style="list-style-type: none"> Enables the Trust to use information more effectively Supports multi-disciplinary team and cross-site working, which is not possible with paper Eliminates the need for and costs of paper movement and storage Better use of resources
Effective Workflow Management	<ul style="list-style-type: none"> Standardisation in the delivery of care models More effective use of resources Reduce variation Reduction of unnecessary cross-site transfers Support for efficient and effective diagnostic and other support services
Streamline Administrative Processes	<ul style="list-style-type: none"> Effective administration functions and better use of resources No paper processes or storage Fewer communication issues with patients and DNA's resulting in a better experience
Enhance Collaboration	<ul style="list-style-type: none"> Enables colleagues to work together across the two sites Facilitates access specialist support and advice regardless of location Prevents teams from becoming disjointed Reduces unnecessary cross-site travel
Agile Workforce	<ul style="list-style-type: none"> Enables Clinicians and allied professionals to work flexibly across the two sites whilst remaining available to their colleagues Ensures that mobility does not result in a disadvantages, in terms of access to information, systems and colleagues
Connected Patients	<ul style="list-style-type: none"> To sites working as one – staff will collaborate effectively together and support each other in diagnoses and clinical decision making Better use if resources, especially clinical specialists working in critical care Ability to provision ICU/HDU beds on planned care site Modernisation of Critical Care facility using leading edge monitoring solutions Maximises the use of acute care to those that truly need it
Partner Integration	<ul style="list-style-type: none"> Shared records across different care settings (GP, Community) Better coordination of care amongst partners, supports prevention and out of hospital care Non acute care can be managed and coordinated in the community, supported by the Trust but alongside partner providers.
Resilient Infrastructure	<ul style="list-style-type: none"> Enables cross-site working and reduction in patient transfers Support for new technologies Better use of resources Secure patient and corporate information Closer integration of remote sites and partner organisations

Table 25: Key attributes and benefits of Health Informatics

Informatics for Emergency Department, Urgent Care and Critical Care.

Channel 3 held a number of workshops with clinicians and members of the Trust to look at the patient pathway scenarios that would arise from the development of the proposed clinical model. It is important that the Trust, through cultural and health informatics changes, can assure patients and the public that the proposals are safe, efficient and robust. The workshops also assessed what the Trust has now in terms of health informatics, what works well, what doesn't work well and what would need to be present in the reconfigured service. The Trust acknowledges that while a one system fits all approach may help contribute to the long term sustainability of health informatics within the Trust it could also be limiting and abortive to the work that has been done to date around health informatics. Therefore, it is important that on the health informatics journey the Trust decides whether a best of domain or one system fits all approach is best.

The full possibilities of health informatics solutions for ED, UCS and Critical Care can be found on page 12 and a full set of scenarios can be found from 14 of Appendix 12b. The high level solutions provided by Channel 3 will be worked up in more detail as the programme progresses onto the Full Business Case (FBC) Stage.

13 Development of Options

13.1 Developing the Options

During the development of the Strategic Outline Case the Trust considered how services could best be configured across the two sites (PRH and RSH) based on the need to provide:

- one Emergency Department(ED);
- one Critical Care (CC) Unit, to be co-located with the ED;
- two Urgent Care Services (UCS), one at each site;
- a clinically optimum balance of activity across the two sites (PRH and RSH).

The site which accommodates the ED, CC Unit and a UCS would then become the Emergency Site. The site which accommodates the stand-alone UCS becomes the Planned Care site. Whilst not directly required to address the Trust's emergency workforce challenges, this configuration also has the potential to provide the services within a Diagnostic and Treatment Centre at the Planned Care site.

This OBC describes two potential solutions:

- Emergency Care at PRH and Planned Care at RSH (Option B)
- Emergency Care at RSH and Planned Care at PRH (Option C1)

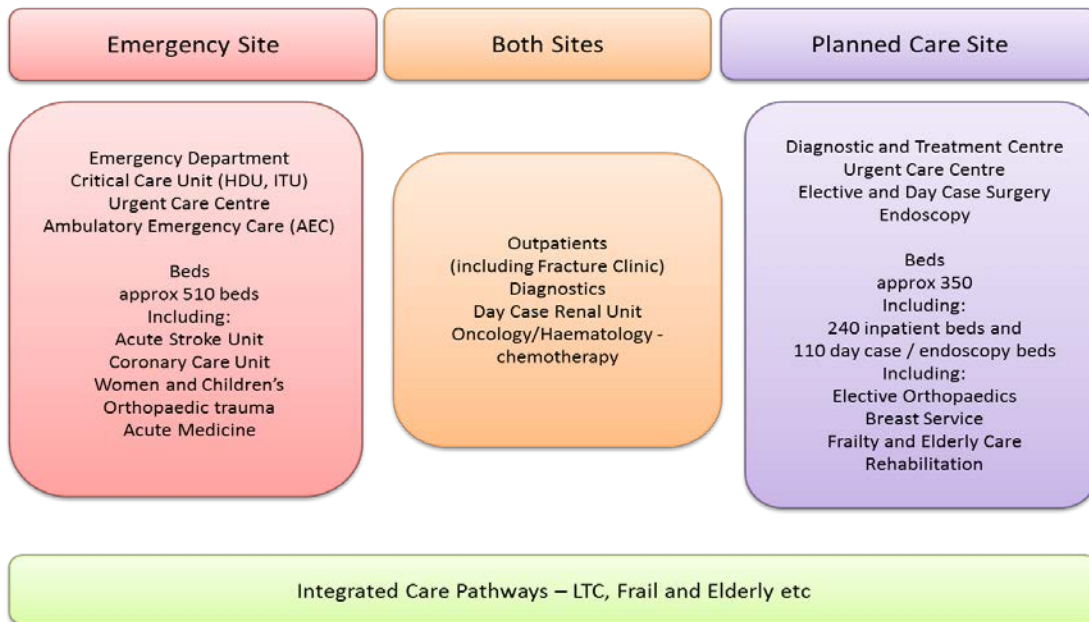
As referenced earlier in this OBC, and in the context of Future Fit, a further variation of the Emergency Care at RSH and Planned Care at PRH is the location of the Women & Children's Services. This option, Option C2 will be discussed in section 13.2.3 below.

Much of the detailed work in developing the OBC has focussed on identifying those services that have a clinical and workforce interdependency with the two services at the centre of the need for change – ED and Critical Care. Based on this, a detailed assessment has been carried out to determine the optimum balance of services across an Emergency Site and a Planned Care Site configuration as set out in section 10 above.

Building on the proposed options detailed in the SOC, in addition to do nothing (Option A), are detailed below.

The Potential OBC Solution - Essential Service Change (Options B and C1)

Service balance based on clinical adjacency needs and resolving workforce issues



NB Inpatient bed base does not include Neonatology and Critical Care numbers

Figure 25: Emergency and Planned Care Site configuration

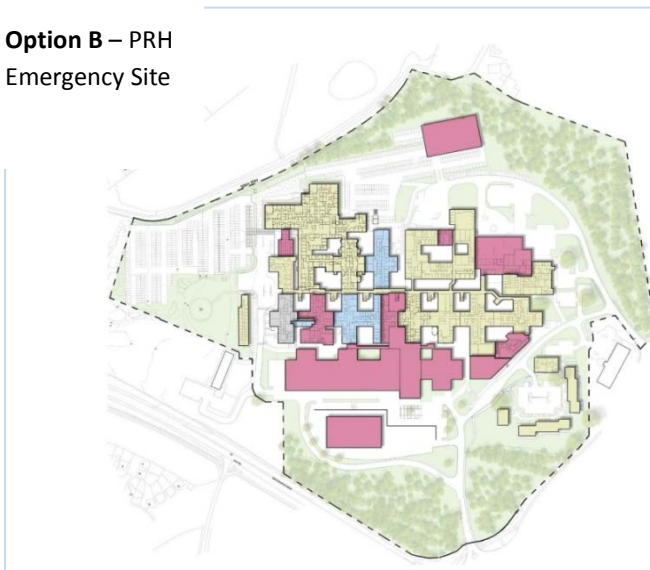
13.2 Shortlisted options

Based on the required configuration of services, shortlist options have been worked up in more detail as follows:

13.2.1 Option B (Emergency Care at PRH)

- ED and Critical Care at PRH
- Majority of planned care at RSH
- Urgent Care Services, Outpatients, Diagnostics at both PRH and RSH

Option B – PRH
Emergency Site



Option B – RSH
Planned Care Site

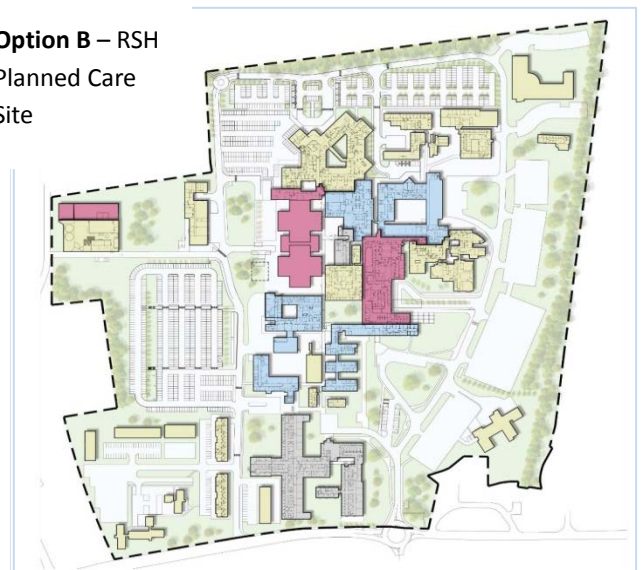
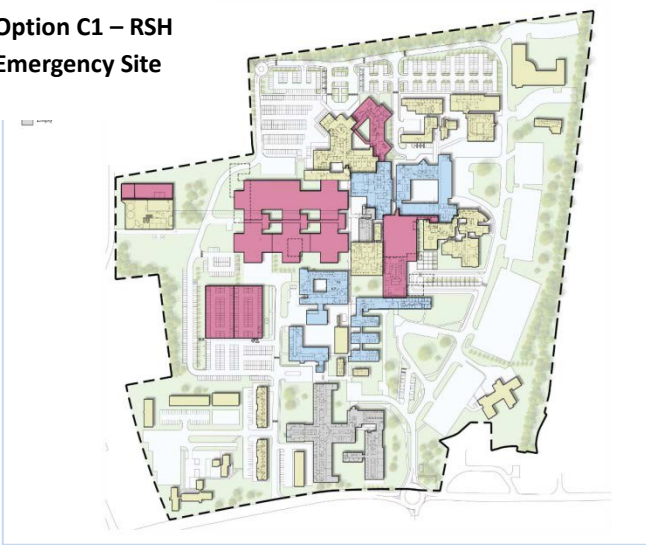


Figure 26: Option B - Site plans

13.2.2 Option C1 (Emergency Care at RSH)

- ED and Critical Care at RSH
- Majority of planned care at PRH
- Urgent Care Centre, Outpatients, Diagnostics at both RSH and PRH

**Option C1 – RSH
Emergency Site**



**Option C1 – PRH
Planned Care Site**

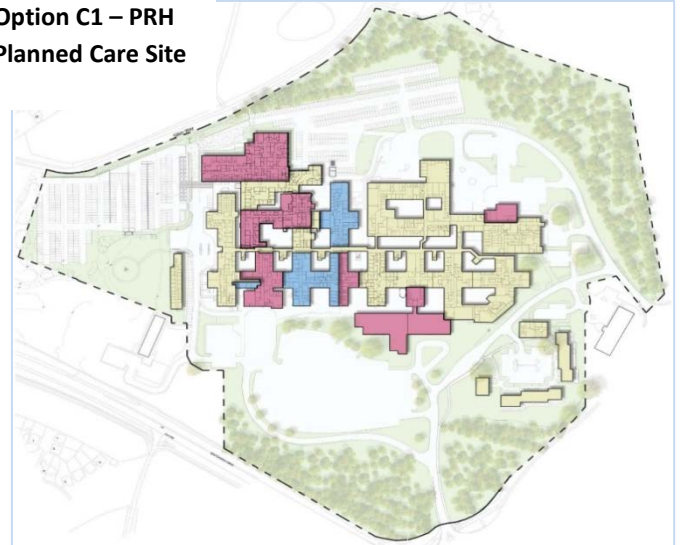
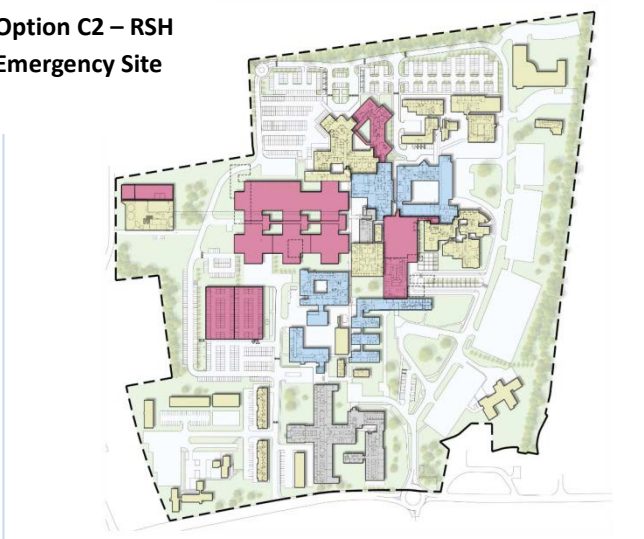


Figure 27: Option C1 - Site plans

13.2.3 Option C2 (Emergency Care at RSH/W&C at PRH)

- ED and Critical Care at RSH
- Women and Children's at PRH
- Majority of planned care at PRH
- Urgent Care Centre, Outpatients, Diagnostics at both RSH and PRH

**Option C2 – RSH
Emergency Site**



**Option C2 – PRH
Planned Care Site
with W&C's**

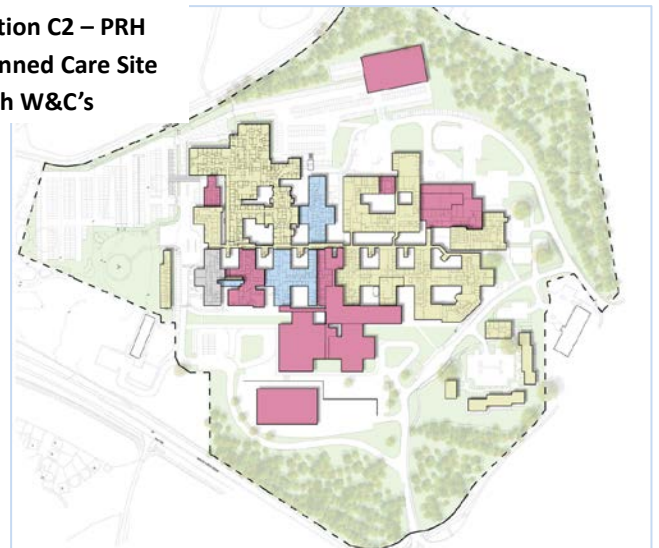


Figure 28: Option C2 - Site plans

Given the essential clinical adjacency of Women and Children's services with Emergency and Critical Care services, Option C2 is not seen as desirable as it does not respond effectively to the optimum potential service solution defined above.

The Trust's clinical teams reviewed Option C2 in detail, considering what would need to be in place to safely deliver this option. The Trust's Option C2 paper is at Appendix 13a. The clinical body concluded that Option C2 is not deliverable, safe or sustainable.

Following receipt of this paper, the CCGs commissioned an external review of Option C2. This was undertaken by the Manchester CSU Clinical Review Group. This review concluded that:

To make Option C2 safe and sustainable both sites would require:

- Level 3 Adult Critical Care Unit
- Anaesthetics (resident) with capability in both adults and children
- Full suite of Imaging
- Blood transfusion
- Acute medicine
- Access to (acute) surgery
- Resuscitation services
- Paediatrics

Evidence suggests that the probability of achieving and sustaining a clinical workforce to support Option C2 would be very challenging. Furthermore, Option C2 would not meet the necessary standards of the Royal Colleges and Care Quality Commission (CQC) issues would be raised.

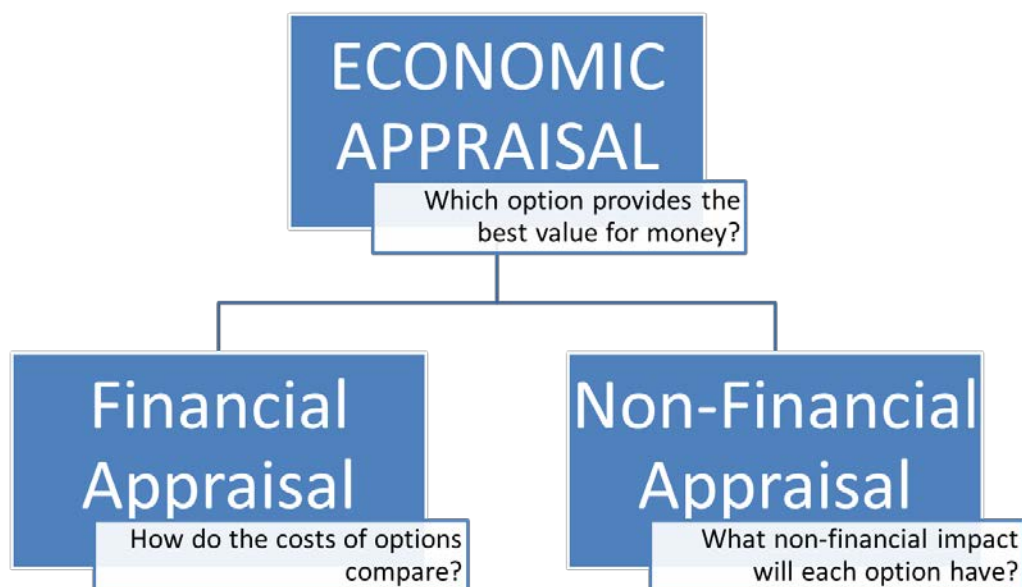
The evidence base from other health communities/ systems indicates that a single Emergency Centre receiving undifferentiated case mix should have all services including Women and Children's services on the same site. The Manchester CSU Clinical Review Group report is included as at Appendix 13b.

14 Economic Case

14.1 Appraisal Process

The appraisal process consists of three parts as reflected in the guidance set out in the DH Capital Investment Manual and HM Treasury's *The Green Book: Appraisal and Evaluation in Central Government*.

The appraisal process was developed and designed by the Future Fit Programme, originally endorsed by the Future Fit Programme Board in April 2015 and again in April 2016 (with some minor enhancements). The sections below describe the appraisal process as undertaken in September 2016.



Financial Appraisal

The financial appraisal covers capital, lifecycle and revenue costs and is summarised in terms of:

- Net Present Cost (NPC) - the total future costs of the project over a number of years expressed in terms of today's prices,
- Equivalent Annual Cost (EAC) - the average annual impact at today's prices.

The analysis considers periods of both 30 years and 60 years.

Non-financial Appraisal

The non-financial appraisal criterion covers accessibility, quality, workforce and deliverability.

Full descriptions of the options were developed which addressed all four criteria. The criteria were weighted for importance.

Economic Appraisal

This final appraisal combines the outputs of the financial and non-financial appraisals in order to assess the overall value for money offered by each option.

There are a number of standard methodologies recommended by HM Treasury which can be used at that stage, alone or in combination. The Future Fit appraisal process covers two approaches:

a) Weighting financial and non-financial scores

A non-financial score for each option is derived from the weighted total of the score for each non-financial criterion, giving a maximum of 100 'benefit points'. A financial score is derived from awarding 100 points to the option with the lowest EAC. More costly options are awarded points in inverse proportion to this. The two scores for each option are then combined and the impact of different financial and non-financial weightings can be tested. Weightings used in this analysis are 25:75, 50:50 and 75:25.

b) Calculating the cost of each non-financial benefit point

Here, the NPC is converted into an EAC for each option and a cost per benefit point is calculated. The option with the lowest cost per benefit point would be the preferred option.

14.1.1 Options

In delivering the clinical model, clinicians and public representatives originally identified over 40 ideas of how services could be changed and reconfigured. A panel in 2014 grouped these ideas into 13 scenarios (for detail of this process please access nhsfuturefit.org)

In 2015, those scenarios were appraised and a recommendation was made to the Future Fit Programme Board which reflected the five options which had scored most highly. At this time the Future Fit Programme Board accepted this recommendation and in addition:

- Accepted that the 'do minimum' also needed to be included on the shortlist as required by national guidance; and
- Agreed that two 'obstetric variants' should also remain under consideration pending further clarity being gained about the relative location of consultant-led obstetrics services and the proposed Emergency Centre.

Eight options were then taken forward and developed into physical solutions with associated revenue and capital costs.

In August 2015, the Future Fit Programme Board was advised that:

- a) The options involving a new site (D, E1, E2, F) were not affordable, and;
- b) The remaining options (B, C1, C2)³⁷ were potentially affordable in that they would cover their own costs and contribute to the Trust's underlying financial position.

The Future Fit Programme Board therefore agreed to recommend to Sponsor Organisation Boards that the new site options be excluded from further consideration.

At the same time, work was undertaken to test previously excluded options. The Future Fit Programme Board accepted the conclusion that the result of the shortlisting process had been robust. As a result, the revised shortlist was reduced to four options. This recommendation was approved by all Sponsor Organisation Boards.

³⁷ Option B – Emergency Site at PRH, Option C1 – Emergency Site at RSH, Option C2 – Emergency Site at RSH with Women & Children's at PRH

In September 2015, the Future Fit Programme was unable to move forward due to the wider financial position in the local health economy. As a result, the Trust was then asked to develop solutions which addressed its most pressing workforce challenges and to do so within the resource available locally. This appraisal undertaken in September 2016 addresses the same four options but has considered them in terms of the revised delivery solutions developed by the organisation.

	Princess Royal Telford	Royal Shrewsbury Hospital
A	No change	No change
B	EC UCC LPC W&C	DTC UCC LPC
C₁	DTC UCC LPC	EC UCC LPC W&C
C₂	DTC UCC LPC W&C	EC UCC LPC

EC Emergency Centre	DTC Diagnostic & Treatment Centre
UCC Urgent Care Centre	LPC Local Planned Care
	W&C Women & Children's Services

Figure 29: Revised delivery solutions

14.2 Non-Financial Appraisal

14.2.1 Panel

Future Fit Programme Board in 2015 that the non-financial appraisal should be undertaken by a larger group than used for the original shortlisting to enable a wider and more balanced representation. It maintained the approach of asking for nominations from those bodies which are sponsor or stakeholder members of the Programme (except those conflicted by a subsequent scrutiny role).

The full panel was convened again on 23 September 2016 at Shrewsbury Town Football Club, and fifty members were in attendance, along with technical advisors, members of the programme team and observers from the Joint HOSC and Powys Community Health Council. The names of panel members are listed in the non-financial appraisal report (Appendix 14a).

	SPONSOR/STAKEHOLDER MEMBERS	REPRESENTATION
1.	Shropshire Clinical Commissioning Group	2 clinicians, 1 manager
2.	Telford & Wrekin Clinical Commissioning Group	2 clinicians, 1 manager
3.	Powys Teaching Health Board	2 clinicians, 1 manager
4.	Shrewsbury and Telford Hospital NHS Trust	8 clinicians, 4 managers
5.	Shropshire Community Health NHS Trust	2 clinicians, 1 manager
6.	Shropshire Patient Group	3 patients <i>(1 had to leave early before scoring)</i>
7.	Telford & Wrekin Health Round Table	3 patients
8.	Healthwatch Shropshire	3 patients
9.	Healthwatch Telford & Wrekin	3 patients
10.	Powys Patients (via PtHB)	3 patients
11.	Powys Council	1 social care
12.	Shropshire Council	1 social care 1 public health
13.	Telford and Wrekin Council	1 social care 1 public health
14.	West Midlands Ambulance Service NHS FT	1 clinician
15.	Welsh Ambulance Services NHS Trust	1 clinician
16.	Robert Jones & Agnes Hunt Hospital NHS FT	1 clinician
17.	South Staffs & Shropshire Healthcare NHS FT	1 clinician
18.	LMC/GP Federation	1 clinician
19.	Shropshire Doctors' Cooperative Ltd	1 clinician <i>(not nominated)</i>
20.	NHS England	1 commissioner

Table 26: Non-financial appraisal panel members

14.2.2 Evidence

The panel was supplied with evidence which addressed the four non-financial criteria. This was supplied to the panel in advance of the appraisal (both electronically and in hard copy), and presentations of the evidence were made on the day. Substantial time was also set aside to enable panel members to seek clarification about the evidence provided.

Accessibility

The travel time analysis for this criterion was based on actual activity levels at SaTH during 2015-16. This enabled an assessment to be made of the travel time from each full postcode to each hospital site.

It models the impact of each option in terms of that historic activity, to show what the impact would have been were the configurations described in each option to have been in place. It is broken down into the following categories:

- Urgent Care
- Emergency Care
- Complex Planned Care
- Non-complex Planned Care
- Outpatients
- Women and Children's Services.

For attendances at the Emergency Department, road travel times only are presented since admission is expected to be by ambulance only; for Planned Care Site, road and public transport times are presented. Both reflect off-peak conditions (9a.m. to 4 p.m.) when the bulk of activity takes place.

The focus of this analysis is on the differential impact of each option - that is, the marginal change that would result from implementing Options B, C1 and C2³⁸ by comparison with Option A (the 'do minimum').

This impact is further broken down in terms of nine geographic localities and, so far as has been possible from the available data, of groups with protected characteristics (e.g. gender, ethnicity, age and deprivation).

A narrative summary of the analysis was provided in the option templates, including detailed data tables and maps.

Maps show the differential effects of assuming all activity continues to take place on a SaTH site. To reflect patient choice, data tables also show the impact of travelling to a nearer alternative provider.

Shaded areas on the maps reflect the average travel time for each Lower Super Output Area (LSOA), each of which has a population of between 1,000 and 3,000. It is important that panel members are mindful of the relative geographic size of LSOAs since there is no material difference between a large red rural area and a small red urban area.

Quality

There were two main components in relation to the quality criterion. The first concerned the impact of the options on time critical journeys to EC; the second summarised the impact of each option on the three quality domains of safety, effectiveness and patient experience.

³⁸ Option B – Emergency Site at PRH, Option C1 – Emergency Site at RSH, Option C2 – Emergency Site at RSH with Women & Children's at PRH

a) Care of patients with time-critical conditions

Data is provided on time-critical ambulance conveyance times by locality. This information relates to 'Red 1' (West Midlands Ambulance Service) and 'Category A' (Welsh Ambulance Service) with a handful of additional incidents where the chief complaint was recorded as Red 1, Cardiac Arrest or Life Threatening Illness. These are considered, at point of triage, as being the most time critical episodes of ambulatory care.

b) Other clinical quality considerations

Summary tables providing an indication of the potential impact of each option in terms of the three quality domains were developed. The key considerations addressed were the favourable and adverse impacts of:

- i) Consolidating emergency and planned services on single sites;
- ii) Whether or not Women and Children's activity is located on the Emergency Site; and
- iii) The extent of new or significantly refurbished facilities, and the physical disposition of services within each site, which might also be considered to have an impact on both patient and staff experience.

Workforce

Clinical workforce shortages are an increasingly critical element of the programme's case for change.

The impact of these shortages were set out in relation to Option A. For the other options, the potential of each option to improve recruitment and retention was summarised.

Deliverability

For this criterion, the estates work required to deliver each option was summarised, drawing on work undertaken by external technical advisors. Outline plans and timescales were presented to the panel workshop.

Beyond physical deliverability, there are also differential issues in terms of the acceptability of each option to the public and other stakeholders, with supporting evidence from a stratified telephone survey.

The assurance success factors are detailed in the table below:

Criteria	Benefits	Implementation	Outcome Measure
Access	<ul style="list-style-type: none"> Offer comprehensive access to all surgical and medical sub-specialties within the county To provide a flexible range of services based on clinical need Repatriation of clinical activity to within the county 	<ul style="list-style-type: none"> Creation of centres of excellence e.g. Cardiology, Bariatric and Breast services Consolidation of services Same day admission Protected elective bed base Scheduling and theatre utilisation Ambulatory care 23 hour stay facility 	<ul style="list-style-type: none"> Care closer to home where possible Increased activity levels Increase in Day surgery versus Inpatient activity ratios Reduction in out of county transfers Speciality Centres of Excellence
Quality	<ul style="list-style-type: none"> To continually improve clinical outcomes as a result of higher volumes of patients through a consolidated service To be able to provide an urgent response for emergency, surgery and critical care 	<ul style="list-style-type: none"> Consolidated services increase volumes which improves outcomes All patients managed through a standardised recovery system Co-location of skills and expertise 	<ul style="list-style-type: none"> Improved standard mortality rate Reduced length of stay Reduction in Re-admission rates
Workforce	<ul style="list-style-type: none"> To maintain expertise and skills with high levels of recruitment and retention in the county Improved working environment attracting health professionals to county 	<ul style="list-style-type: none"> Out of hours theatre teams Improving workforce recruitment and retention Robust and shared teaching 	<ul style="list-style-type: none"> Levels of recruitment Staff turn-over Access to training Compliance with national staffing standards
Deliverability	<ul style="list-style-type: none"> To deliver a sustainable 18 week RTT across the surgical sub-specialities Sustainable future for the Trust and acute services for the county 	<ul style="list-style-type: none"> Sustainable financial position for the Trust Estates maintenance backlog addressed Modernisation of facilities and services 	<ul style="list-style-type: none"> Financial performance Ability to generate internal capital for reinvestment

Table 27: Assurance Success Factors

Weighting Criteria

The panel was asked to assign a relative weighting to each criterion. To inform this, the panel was presented with the weightings agreed in the shortlisting process and in the 2015 appraisal, and with a weighting derived from the public telephone survey.

Panel members agreed to use the same weighting used in the 2015 appraisal as shown in the table below (taken from the Appraisal Report).

Evaluation Criteria	<i>Shortlisting 2015</i>	<i>Appraisal 2015</i>	<i>Public Survey 2015</i>	<i>Public Survey 2016</i>	agreed weighting
ACCESSIBILITY	29.0% (2)	25.1% (3)	26.4% (2)	25.8% (3)	25.1%
QUALITY	32.3% (1)	31.2% (1)	27.5% (1)	27.1% (1)	31.2%
WORKFORCE	27.4% (3)	27.3% (2)	26.4% (2)	27.0% (2)	27.3%
DELIVERABILITY	11.3% (4)	16.3% (4)	19.7% (4)	20.1% (4)	16.3%
					100.0%

Table 28: Agreed Non-financial weightings (Source: Non-Financial Appraisal Report, Future Fit)

Additional weightings were used to test the sensitivity of the results, and these are set out in Appendix 14a.

14.2.3 Scoring Options

Panel members were asked to score each of the four options against each of the four criteria using a range of 1-7, where a higher number indicated a stronger performance against a criterion.

Panel members recorded their own scores initially, and these were then combined and weighted to produce initial weighted totals. The totals were presented back to the panel which was then invited to discuss any areas of particular divergence in scores.

Following discussion, panel members were given the opportunity to revise any of their scores if they wished to; however the panel felt their scores did not need revising.

14.2.4 Non-Financial Results

The following table (taken from the Appraisal Report) summarises the results of the non-financial appraisal. Detailed results can be found in Appendix 14a.

TOTALS	<i>Agreed Weighting</i>	Total Weighted Scores			
		Option A	Option B	Option C1	Option C2
ACCESSIBILITY	25.1%	59.8	45.2	65.1	47.7
QUALITY	31.2%	39.0	65.0	91.5	24.7
WORKFORCE	27.3%	26.0	67.0	76.8	26.2
DELIVERABILITY	16.3%	19.6	40.5	42.4	22.2
	100.0%	144.4	217.6	275.8	120.8
	RANK	3	2	1	4
	<i>DIFFERENCE</i>	47.7%	21.1%	0.0%	56.2%

Table 29: Summary of Non-financial scores (Source: Non-Financial Appraisal Report, Future Fit)

A number of sensitivity analyses were undertaken to test the validity of the results. This included breaking down weighted scores in terms of the following groupings:

- Clinicians and non-clinicians (where the former includes social care and public health professionals);
- Geographic groupings (those whose organisations are solely focused on Shropshire, Telford & Wrekin or Powys plus other non-geographic organisations), and
- The type of body represented (commissioners, SaTH, other providers and public or patient representatives which included Local Authority representatives).

The following table (taken from the Appraisal Report) summarises the scores from these groupings.

Scoring Analysis	Total Weighted Scores			
	Option A	Option B	Option C1	Option C2
OVERALL	144.4	217.6	275.8	120.8
Clinicians	69.2	103.4	138.6	59.4
Non-clinicians	75.2	114.2	137.2	61.4
Shropshire	26.1	41.2	57.8	22.4
Telford & Wrekin	33.5	67.8	49.1	31.6
Powys	28.9	24.1	48.6	18.1
Non-geographic	55.9	84.5	120.2	48.8
Commissioners	32.5	46.6	51.9	25.7
SaTH	33.6	49.2	72.4	26.7
Other Providers	36.2	59.7	73.7	32.7
Public/Patient	42.1	62.1	77.8	35.7

Table 30: Summary of Non-financial Sensitivity Analysis

The colour coding highlights the highest scoring options (deep green) through to the lowest scoring options (deep red). It enables an at-a-glance assessment of any areas of significant divergence between groups.

a) Weightings

- i) Applying equal weightings to all criteria resulted in the same ranking though with a slightly reduced margin of 19.4% between Options C1 and B.
- ii) Applying the weightings derived from the public telephone survey also resulted in the same ranking though with a reduced margin of 20.2% between Options C1 and B.
- iii) Since Option C1 outperformed Option B against all criteria, no change in the weightings could switch the ranking. If the only criterion was Deliverability (a test applied in the previous appraisal) awarding a 100% weighting to deliverability would therefore still result in Option C1 coming first, albeit by a reduced margin of 4.6%.

b) Scoring

- i) The most significant difference in scoring between the leading options relates to the accessibility and quality criteria under which Option C1 scored 43.9% and 40.9%, respectively, higher than Option B.
- ii) Adding in scores for the Shropshire patient representative who had to leave early (using the average of other Shropshire patient representatives) very marginally increases

Option C1's leading margin to 21.2%.

- iii) Adding in scores for the missing GP Federation representative (using the average of other GP panel members) very marginally reduces Option C1's leading margin to 21.0%.
- iv) Option C2 scored lowest across all groupings, followed by Option A (except in the case of Powys members where Option A was ranked 2nd and Option B 3rd).
- v) If the only scores counted are those of the CCG representatives, the outcome switches with Option B leading Option C1 by a margin of 5.2%.
- vi) If options are assessed in terms of the maximum scores awarded against each criterion, Options B and C1 are equal 1st.
- vii) If options are assessed in terms of the minimum scores awarded against each criterion, Option C1 comes 1st by a very substantial margin, indicating that the panel regarded it as the 'least worst' option as well as the best.
- viii) Finally, to test the impact of extreme scores, scores of zero and 1 were raised to 2 and scores of 7 were reduced to 6. Again, no change of ranking resulted, although Option C1's margin reduced to 16.8%

The 2015 appraisal, in recording the same preference for Option C1 over other options, noted that the panel appeared to have a concern about increasing the disadvantage of those who already have to travel further, especially for emergency care.

In the present appraisal, it was further noted that some of the disadvantages of the change options (B, C1 and C2) had been mitigated through the more balance site model offered in the revised delivery solutions.

The significant change in scoring for Option C2, resulting in it moving from 3rd to 4th ranking, reflects the new clinical evidence that had become available since last year, therefore precluding on clinical grounds the potential for Women and Children's services to remain at PRH under where the preferred site for Emergency Care is RSH.

14.3 Financial Appraisal

14.3.1 Introduction

The shortlisted options have been fully evaluated in line with the requirements of Department of Health Business Case Guidance and the HM Treasury *Green Book* to assess which option represents potentially the best value for money (VfM).

The economic analysis thus:

- Covers an appraisal period that ensures a full 60-year operational use of new facilities is reflected, using a discount rate of 3.5%;
- Excludes VAT from all cash flows;
- Reflects capital cash flows at current cost levels calculated by discounting outturn cash flows by 2.5% GDP deflator;
- Makes provision where appropriate for a residual asset value to be included at the end of the appraisal period;
- No provision is made for any potential Opportunity Costs;

- Includes lifecycle costs for building and engineering elements based on standard NHS asset lives and replacement cycles, and lifecycle of equipment, with replacement occurring between 5-15 years depending upon the classification of the asset;
- Incorporates cash flows for all revenue costs;
- A quantified assessment of risk has not been undertaken;
- Assumes a price base of 2016/17.

All these cost inputs have been modelled to establish, for each option:

- The Net Present Cost (NPC) of the discounted annual cash flows over the whole appraisal period;
- The Equivalent Annual Cost (EAC), being an annualised equivalent of the NPC.

14.4 Cost Inputs

14.4.1 Capital

A capital cost assessment of the short listed options has been undertaken by Rider Hunt based on NHS Departmental Cost Allowances (DCAGs), applied to the proposed schedules of accommodation.

The costing has been undertaken in accordance with Department of Health guidance for the costing of capital schemes. Separate costs forms have been produced for the individual sites and options with levels of optimism bias, VAT recovery and inflation assessed individually to provide more realistic costings.

Costs	Option A	Option B	Option C1	Option C2
	£000s	£000s	£000s	£000s
Works		123,554	153,837	145,450
Fees		16,062	19,999	18,908
Non-Works		400	400	400
Equipment		12,867	14,797	13,862
Contingencies		12,355	15,384	14,545
Optimism Bias		28,090	36,795	34,770
VAT		34,048	42,668	40,335
Total at PUBSEC 195 Reporting Level		227,376	283,878	268,270
Total at Outturn (at PUBSEC 214)		249,613	311,636	294,497

Table 31: Capital Costs of Options

Key assumptions are:

- The completion on site of each option has been separately identified;
- The Cost Index at Reporting Level is defined by the Department of Health to provide a consistent means of comparison between different projects: the current PUBSEC Index level is 195 with the costs being updated to the latest index, PUBSEC 214;
- Formal indices are no longer published in respect of equipment costs therefore, the costs are based on relative percentage requirements within new build, refurbishments and backlog areas;
- Professional fees have been included at 13% across all options;
- Planning Contingencies have been incorporated at 10% across all options;
- Optimism Bias has been calculated utilising HM Treasury's and Department of Health standard template and the percentage additions reflect the relative nature of each project. For each option the optimism bias has been assessed for each site separately to make it more appropriate to the works within each site;

VAT is potentially recoverable on all construction projects and is generally related to the amount of refurbishment work but can also be recoverable against some elements of new build. For all options, recovery has been included at 100% against all fees and this is shown in the cost forms as zero VAT in accordance with the standard NHS forms.

14.4.2 Revenue

Baseline 2016/17 revenue costs and forecasts for each option have been provided by SaTH as part of the analysis supporting the affordability assessment. The economic appraisal uses these figures, with

the exception of the provision for inflation, in order to provide a consistent 2016/17 price base. Capital charges are also excluded from the Value for Money (VfM) analysis.

Baseline revenue costs for 2016/17 are shown below.

Expenditure	Revenue Expenditure £000s
Pay	233,691
Non Pay	102,699
Total VfM	336,390

Table 32: Baseline Revenue Costs 2016/17

Sustainable services project changes represent:

- Additional staffing (£4.6m under Option A only);
- Workforce reductions comprise of three separate elements, new ways of working and new roles, efficiencies and savings directly related to service change and pathway redesign
- Further reductions in workforce relate to activity changes, duplicate costs and IT;
- Savings are site and option specific;
- Within the development options, there is a net savings range of some £3.2m, between Option C2 (lowest) at £11.4m and Option B (highest) at £14.6m.

The clinical model described within the Sustainable Services Programme is consistent across Options B and C1 with a variation relating to Women and Children’s in Option C2. Therefore, there are only two true variables to be considered across each of the options which are:

- Workforce
- Capital

The workforce savings/costs associated with each option are shown in the table below:

(Savings)/Costs	Option A £000s	Option B £000s	Option C1 £000s	Option C2 £000s
Sustainable Services Project Savings	4,600	(14,589)	(14,203)	(11,377)

Table 33: Revenue Cost (Savings) - in 2020/21 at 2016/17 price base

14.4.3 Opportunity Costs and Residual Values

No specific provision has been made for Opportunity Costs since:

- Full lifecycle provision has been made for all facilities including elements refurbished on a light touch basis and those simply retained as they are, as well as New Build and Major Refurbished facilities.
- In respect of Residual Values, provision reflects the assumption that New Build and Major refurbished elements will be maintained to their as built standard and therefore the residual value remains.

14.5 Financial Analysis Outputs

14.5.1 Summary of VfM analysis – 60 Year Appraisal Period

Details of the economic model are attached in Appendix 14a. The economic impact of the cash flows is described in the table below.

	Option A	Option B	Option C1	Option C2
	£000s	£000s	£000s	£000s
Net Present Cost	9,356,590	8,555,517	8,659,431	8,705,510
Equivalent Annual Cost	351,473	321,381	324,070	325,794
Economic Value	4	1	2	3
Marginal EAC over 1st Ranked	30,092	0	2,689	4,413
% over Option First Ranked	9.4%	0.0%	0.8%	1.4%

Table 34 Economic Costs of Options - 60 year appraisal period

The table below provides a summary of the marginal EAC of each option, over that for Option B, split between Capital and Revenue elements:

Option	Rank	Capital Variance	EAC £000s	Revenue Variance	EAC £000s	Total Variance	EAC £000s
Option C1	2		2,734		315		2,689
Option C2	3		1,674		2,739		4,413
Option A	0		(10,413)		40,505		30,092

Table 35 Summary of marginal EAC of each option

From the analysis that has been undertaken it is evident that, in economic terms:

- The cost of each of the development options (excluding Option A) falls within a relatively tight band range of just 1.4%;
- Option B is preferred by a margin of 0.8% (EAC £2.689m) over Option C1;
- The Do Nothing (Option A) is least preferred, by a margin of 9.4% (EAC £30.092m).

14.5.2 Sensitivity Analysis – Appraisal Period

In order to test the robustness of the economic analysis, an appraisal has also been undertaken to assess the VfM position over a 30-year appraisal period.

Cost inputs and assumptions mirror those detailed above with the exception of Residual Value, where it is assumed that 50% of the value of new/major refurbished facilities would be retained at the end of the 30-year period.

A summary of the outcome of this sensitivity is shown in the table below:

	Option A	Option B	Option C1	Option C2
	£000s	£000s	£000s	£000s
Net Present Cost	7,478,605	6,889,470	7,039,144	7,072,871
Equivalent Annual Cost	351,265	323,594	326,332	327,895
Economic Value	4	1	2	3
Marginal EAC over 1st Ranked	27,671	0	2,738	4,301
% over Option First Ranked	8.6%	0.0%	0.8%	1.3%

Table 36: Economic Costs of Options – 30 Year Appraisal Period

This analysis confirms that under a shorter appraisal period:

- Whilst there is less net annual revenue cost impact under Option A, it remains least preferred by a margin of 8.6%;
- Option B again remains preferred by a margin of 0.8%;

14.5.3 Sensitivity Analysis – Income and Expenditure

A sensitivity analysis has been undertaken relating to demography, QIPP, CIP, repatriation and sustainable services workforce reductions. It has compared initial assumptions and the percentage move required for there to be an impact on affordability on each option; this is detailed in the table below:

Element of Sensitivity	Assumptions within Model	Option B	Option C1	Option C2
Demography	2% pa	58%	85%	89%
QIPP	Net QIPP Loss £10.5m over 4 years	168%	125%	118%
CIP	£31.0m over 4 years (2.1%)	77%	92%	94%
Repatriation	Net gain of £6.0m over 4 years	-19%	57%	68%
SSP Workforce	Option B Saving of £14.4m Option C1 Saving of £14.2m Option C2 Saving of £11.4m	66%	88%	89%

Table 37: Sensitivity Analysis

14.6 Financial Conclusions

On the basis of the analysis undertaken:

- Option B is preferred from a financial perspective on the basis of the figures provided;
- The Value for Money margin between all the development options is relatively close with the exception of option A. This is the case even though there are substantial differences in the initial capital requirements of each of the change option. Once viewed from the perspective of whole life costs (as required by guidance), however, these differences become minimal. For example, although Option B has a capital requirement of £250m and Option C1 of £312m (c.25% more), the final difference in terms of equivalent annual cost is just £2.7m (0.8%)

14.7 Overall Conclusion

As noted in Section 14.1, two alternative methods have been used to combine the results of the Non-Financial and Financial Appraisals in order to test for robustness. The outcomes for this form the basis for discussions within the Future Fit Programme Board. The outcomes from the Appraisals are outlined below:

Option B and Option C1 are deliverable and affordable for the Trust and the wider health system.

- Option B scored the highest in the financial appraisal
- Option C1 scored the highest in the non-financial appraisal
- Option C2 scored the lowest of all options in the non-financial appraisal and third in the financial appraisal

15 The Preferred Option

15.1 Preferred Option

The Future Fit Programme Board will meet to review the Report on the Appraisal of Options (Appendix 14a) on 30 November 2016. The outcome of this meeting will determine the basis of the formal consultation with the public.

15.2 Design Strategy

The drivers behind the design strategy are consistent across both sites and evident through each of the options:

- Providing high-quality patient focused spaces
- Improving flows internally and externally and reducing conflicts and cross flows between service, patient and public movements
- Creating a more compact building footprint
- Embedding Lean Principles from the outset
- Separating Public, Blue Light and Service Traffic
- Improving departmental adjacencies
- Rationalising entrances and improving wayfinding

15.3 Engineering Strategy

The engineering services will be adapted, and where necessary system capacities increased, at each site to suit the proposed new developments and in line with the proposed phasing. The implications on each primary service have been considered and have been discussed with the Trust's Estates personnel for each option and are set out in detail in the Engineering Strategy Reports in Volume 3 of the Technical Design Proposals section of the Estates Annexee.

15.4 Equipment Strategy

The equipment requirements for each option are being established. These requirements will be assessed and a capital cost assigned based on clinical need and priority. Further detailed refinement will be undertaken as part of the Room Data Sheet development.

The Trust will establish an equipment matrix that details which party is responsible for all facets of equipment, e.g. procurement, maintaining and replacement. Product assemblies will also be produced in line appointed contractors to aid standardisation across the Trust.

The transfer of existing hospital equipment will be utilised where possible although a process of evaluation will be carried out during the Room Data Sheet development. Where two departments are amalgamating, a process of standardisation will take place.

The following criteria will be used to assess the existing equipment nearer the time of transfer:

- Equipment complies with Infection Prevention and Control (IPC) standards and requirements
- Costs associated with all transfers are tested for value for money against the purchase of a new replacement

- Consumables, durables, spare parts and service will be available for the remaining life expectancy of the item
- Items comply with the most up to today regulations and is considered safe
- Compatibility with other equipment (new and existing) and future ways of working
- Equipment replacement programme for each area
- Item can be physically accommodated within the new facilities

The Trust is committed to maintaining the agreed investment in the equipment replacement programme to ensure that equipment is available at the time of transfer. If the equipment condition degrades from the initial assessment to the point of transfer a priority process will be undertaken to establish the feasibility of replacement equipment and/or alternative options.

As with all Capital schemes; the Trust is fully aware of the need to ensure access to new developments prior to practical completion to enable the completion of Trust commissioning activities in advance of handover from the primary contractor. Beneficial access rights will need to be considered and will be set out in the contract documentation.

15.5 Phasing & Decanting

The Phasing Strategy ensures that operational delivery of safe patient services are provided through minimising the construction programme and limiting the amount of temporary accommodation and departmental decants.

On each site an enabling package will construct the base supporting infrastructure for the new scheme, and provide accommodation for the departments and services currently occupying the footprint of the new build. Where the new construction is built on existing car parking areas these spaces will need to be re-provided before the major phases of work are commenced.

The construction and departmental decants on each site are interrelated and the phasing strategy for each site has been developed holistically for each option.

Planning will take place with clinical and operational teams along with the builders to ensure services are maintained with as little disruption as possible whilst protecting the privacy and dignity of patients.

When the new-build elements of the major phases are complete and occupied there are subsequent phases of construction where vacated spaces are refurbished and remodelled to suit their new uses.

The Phasing and Decant Strategy is described in detail in Appendix 15a

15.6 Estates Strategy and Alignment

The Estates Strategy has been developed in parallel to the Outline Business Case. The conclusions of the 6 Facet surveys, that were commissioned earlier this year (2016), have formed the basis of the Estates Strategy and informed the detail around backlog maintenance within this OBC. The strategy has taken into consideration the impact each option has upon the estate in terms of infrastructure and reduction in backlog.

As the Estates Strategy (Appendix 2c) considers all the options proposed in the SSP it will need to be amended to reflect the preferred option and position of the Trust Board once the Full Business Case (FBC) process commences.

16 Commercial Case

16.1 Goods and services to be procured

In order to achieve the objectives of the Sustainable Services Programme as set out in this OBC, a number of goods and services need to be procured, which include:

- Professional services
- Construction and associated works
- Temporary facilities
- Equipment

It is currently assumed that there is no requirement for land purchase, legal advice, or specialist medical equipment (e.g. CT/ MRI) to be procured to deliver the SSP programme.

16.2 Professional Services

As set out in The Management Case (section 18), the Trust has an experienced and capable in-house project team 'The Transformation Team', which ensures that ownership and co-ordination of the project at both a strategic and a detailed level remains within the Trust. This also limits the need for the Trust to purchase extensive external support, as the in-house team is able, for instance, to lead on business case production, clinical planning, and the procurement of furniture and equipment.

The Trust does however still require specialist advice and does not have all of the required capability within the in-house team. This additional support is therefore procured separately by the Trust.

The following professional services have been commissioned to date:

- Architect- AHR (Lead appointment)
- M&E Engineer- DSSR
- C&S Engineer- Capita
- Technical Project Manager- Rider Hunt
- Quantity Surveyor / Cost Advisor- Rider Hunt
- Specialist Healthcare Planner- SHP
- Design / Technical Advisors and Surveys (Environmental, Ecology, BREEAM, Transport, Highways, Planning, Helipad etc.)

All of the above comprise design and technical services, and are procured through the NHS Shared Business Services (SBS) Framework, with AHR Architects as the lead appointment.

If any further specialist advice is required, then this will be purchased either through the SBS Framework, or via direct appointment in line with the Trust's standing financial instructions.

As mention earlier in section 4; an external review of this OBC has been undertaken by Deloitte. The full report can be found in Appendix 4f.

16.3 Procurement Strategy

It is assumed at this stage that the project will be capially funded, using a Public Dividend Capital (PDC) route. The Trust is however aware of the potential shortage of availability of capital, and as such would explore alternative funding routes should sufficient capital not be available. Alternative

sources to be considered would include private loans, a PFI solution, property-led funding solutions e.g. Joint Ventures, and/or property development solutions.

The Trust is also considering a number of commercial opportunities to reduce the overall capital cost of the project, including revenue-led solutions for the construction of new multi-storey car parks, and energy supply contracts to fund new energy plant and buildings; as well as enabling increased revenue opportunities through cafes, restaurants, and retail.

16.3.1 Procurement of Construction Works

Assuming the required capital is able to be obtained, the Trust will procure the construction work using the Department of Health's ProCure22 (P22) procurement route, which is the default option for NHS construction projects. The Trust has had a good recent experience of using ProCure21+ for the Future Configuration of Hospital Services (FCHS) project, and one of the key lessons learnt from the Post Project Evaluation was that *'the use of ProCure21+ as a procurement route allowed the scheme to be delivered to the required quality within the budget'*.

The working assumption for the OBC is that the works will be let as an overall 'Scheme' to a single Principal Supply Chain Partner (PSCP) under P22, with separate 'Projects' being let as they are ready to be procured, which is likely to involve multiple major projects and multiple minor projects. This allows the overall SSP project to be procured as a single project, including the work at both the RSH and PRH sites being procured through a single ProCure22 appointment. This ensures a single point of responsibility for the delivery of the project and means the PSCP needs to manage any interdependencies.

It is however likely that some of the more minor projects which are not on the critical path, and/or some of the early enabling works, may be procured directly by the Trust using a traditional procurement route rather than through P22.

The Trust's advisors (Rider Hunt) have discussed the suitability of the SSP project being procured through the ProCure22 Framework with the DH's P22 Implementation Advisor for Midlands and East (Andrew Mitchell). Andrew has confirmed that the project falls within the remit of the ProCure22 Framework, has supported the use of the framework and that it fits with our projected scale of work and timescales, and that a full call off for the project is possible under the new framework.

16.3.2 ProCure22 Framework Selection Process

The Trust will follow the approved ProCure22 selection process as set out in the ProCure22 Guide, to maintain a robust and fair process which ensures the Trust select the correct PSCP, and mitigate the risk of any challenge to the outcome. The Trust will fully engage with the P22 Implementation Advisor at all stages in line with best practice. The selection process will be run by the Trust's in-house Transformation Team, supported by Rider Hunt. Rider Hunt have extensive experience of using the P21/P21+ framework (including the previous SaTH FCHS project), and have supported Trusts with many selection processes under the framework.

16.3.3 Commercial and Legal Issues

It is not envisaged that there will be any significant procurement-related commercial or legal issues arising, due to the Trust utilising the ProCure22 Framework, which is the default option for NHS construction projects.

The Trust will fully comply with all required procurement legislation, as well as the Trust's own standing financial instructions (SFIs).

16.3.4 Procurement process and Milestones

Assuming that the project remains capially funded, the procurement process is relatively simple, due to the use of the ProCure22 framework.

The Trust will undertake the selection of the ProCure22 partner (Principal Supply Chain Partner (PSCP)) during the development of the FBC. The timescales for the selection are currently under review, due to the need to verify that a capially funded route is possible, and to allow the new P22 framework to be fully established, prior to any selection being commenced.

It is anticipated that the procurement process will commence early in 2017, and will then proceed in line with the recommended timescales specified within the framework.

16.3.5 Market Interest

It is envisaged that there will be significant interest in the SSP scheme due to its size, and also due to the fact that the ProCure22 framework is relatively new.

It is also anticipated that there will be significant interest from the supplier and sub-contract market at both a local level and from the nearby areas of Manchester, Birmingham, and Stoke, due to the scheme's size and location.

16.3.6 Contract Structure and Terms

The Trust will adopt the standard ProCure22 contract (Engineering and Construction Contract- NEC3) for both the 'Scheme' and any 'projects' drawn down from the scheme, complemented by the specific project details.

Any direct works procured outside of P22 will use standard forms of contract, such as JCT or NEC.

16.3.7 Benefits of ProCure22

Both P21 and P21+ provided the NHS with the tools to deliver improved estate performance while lowering construction and maintenance costs. ProCure22 is built upon the successes of these frameworks and will continue to support the NHS to masterplan their estate reconfigurations, carry out extensive maintenance and refurbishment programmes and deliver small and major capital construction work, with the following benefits:

- Speed – Access to advice and Estate Development expertise very quickly with PSCP appointment within a very short timescale.
- Cost certainty- Ability to control cost and get cost certainty by agreement to a Guaranteed Maximum Price (GMP).
- Quality – Close integration of the supply chain and client ensuring agreed quality standards are achieved.
- Value – Agreed rates and profit and overheads set at Framework level. Savings generated from package re-tendering after agreed Guaranteed Maximum Price is returned 100% to the Client, assuming no specification changes. Free VAT recovery service. Free Training to NHS and Social Care clients.
- Resource – The ability to use various funding methods to support the development of a scheme.
- Supported – Free support from the Department of Health from a dedicated team of Implementation Advisors (IA); also including free training, guidance documentation, template contracts and other tools. The IA will have an on-going monitoring role to ensure project success.
- Assured – PSCPs and supply chains are pre-vetted on appointment to Framework which complies with current government standards for construction procurement.

- Strategic – NHS Clients can aligning the delivery of their estate strategies with their P21+work and so create relationships with suppliers. As and when a project is initiated by a client, a supply chain is already on-site to provide feasibility, planning, costing and design advice.

The Client does not provide a long-term guarantee of work, but approves work to be done (initially identified in the scheme selection High Level Information Pack) as and when they need to, when funding is available, and if they are content that their PSCP is performing well. This arrangement is compliant with the Public Contract Regulations and provides maximum flexibility for Clients.

16.3.8 Ability of ProCure22 to contribute to DH initiatives

The ProCure22 will help the Trust deliver the following strands of work:

- Cost Efficiency Savings enabling the NHS to deliver the cost efficiency savings required through best use of the financial resources available for capital investment.
- Implementation of Building Information Modelling software on all P22 schemes.
- The development of standardised products, designs and repeatable rooms with bulk buying solutions. Sharing of designs and other design information through a centralised database under the NHS Royalty-Free Licence.
- Through collaboration with the NHS and Supply Chains (PSCPs and Supply Chain Members) further develop the P21+ Repeatable Rooms and Standard Components.
- Include access by Social Care Clients in line with DH Policy.

16.3.9 Value for Money from ProCure22

The ProCure22 Framework offers excellent value for money for the Trust, through:

- Ability to respond to the emerging Clinical Pathway design requirements, be future ready & provide for flexible service models (briefing tool available)
- Efficient & economical management control of change mid-process.
- Fast track start without OJEU or legal fees being incurred.
- Ability to achieve programme delivery to schedule.
- Cost certainty in advance of construction (and contract engrossed).
- Reduced risk of clinical incident & minimal clinical impact.
- Reduced risk of H&S failures impacting on Patients, Visitors, Staff or Contractors.
- No litigation on P21 or P21+.
- Access to earlier design (Royalty-free access).
- Competitively tendered rates and margins as agreed at the outset of the P22 Framework, covering rates and margins as agreed at the outset of the P22 Framework covering:
- Free VAT Recovery service
- Mandatory DH supported selection process for appointment of PSCPs and risk management
- Gateway authorisation at each stage controlling exposure, without termination penalty
- Structured approach to cost management:
 - Monthly updates on forecast out-turn throughout
 - Target cost for each stage (stages 1–3 pre-construction and stage 4 construction)
 - Restrictions to the schedule of cost components

- Well drafted contract enabling clear approach to disallowable cost
- Procurement strategy agreed with NHS PM
- Client PM and CA involved to the extent they require
- Open Book process and Robust Audit and Governance
- On-going training to the Client and stakeholders covering
- Monthly Monitoring System in place enabling early identification of difficulties.
- Defect free delivery (contract change enabling defect free delivery).
- PSCP post GMP re-tendering without change in specification, 100% benefit to the employer
- Expenses limited to DH/NHS levels (i.e. travel and accommodation).
- Anti-apathy and anti-dithering clauses
- DH support to project conclusion

16.3.10 Incentivisation

The ProCure22 Framework incentivises the PSCP to make further savings once the Guaranteed Maximum Price (GMP) has been agreed, through a process of offering 50% of any post-GMP savings made through increased efficiency (but not buying gain) back to the PSCP as a 'gainshare'- up to a limit of 95%. The PSCP takes all the risk of exceeding the GMP.

16.3.11 Risk Allocation

The allocation of risk is a key area within the ProCure22 contract. The project risks will be managed by the Trust and ProCure22 PSCP jointly and on an open book basis. Regular formal Risk Reviews will be held between the Trust and PSCP, and the standard P22 risk register will be used as a basis for risk identification and management, which takes into account Trust risks as well as construction risks, and will then be bound into the Trust's contract with the chosen PSCP. This risk managed approach is supported by the NEC3 'early warning' system which requires risks to be identified, formally reviewed and agreed actions implemented.

An in-depth risk review will be carried out prior to submission of the GMP, and a fully costed P22 Risk Register will be included within the Trust's 'Stage 4' contract with the PSCP.

16.3.12 Accounting Treatment

The accounting treatment of the Sustainable Services project proposal will be undertaken by applying the current accounting guidance as laid out in the HM Treasury Green Book. Currently the Trust recognises that the assets will be recognised on the Trust's balance sheet along with the corresponding PDC funding.

16.3.13 Personnel Implications

Personnel implications are described in more depth in the Workforce section. The Trust is not anticipating any Transfer of Undertaking Protection of Employment (TUPE) at this stage of staff although as plans develop in relation to the FBC and the wider system changes this position may change.

16.3.14 Commercial Feasibility and Deliverability

The Trust considers that Options B and C1 are commercially feasible and deliverable.

16.4 IM&T Procurement

IM&T procurement for the Trust will be wider than the Sustainable Services Programme (SSP) however it is recognised that IT development is a key enabler to the programme. The detailed behind the IM&T strategy can be found in section 12.

16.5 Equipment Procurement

The Trust understands that a significant amount of new furniture, fittings, and equipment needs to be procured as part of delivering the SSP project. The equipment is deemed to be general equipment and furniture, as no specialist medical equipment (such as CT, MRI etc.) is required.

The current assumption is that the project will procure all new furniture and equipment, except for any specialist items, or any items which have been recently purchased. The exception to this is the relocation of the Women and Children's Unit, which has a full set of new equipment which will transfer with the service.

The Trust is intending purchasing the majority of the new furniture and equipment itself, using existing buying arrangements; but will review if alternative options offer better value (e.g.- is it cheaper to procure pendants through the P22 PSCP?). The Trust will also review if any commercial deals could be done for any more specialist equipment.

The Trust will develop a detailed equipment strategy as part of the FBC, which will set out what equipment will be procured and when.

The Trust's Transformation Team have recent experience of procuring furniture and equipment for a major capital project, through the Future Configuration of Hospital Services (FCHS) Project. The Transformation Team will therefore lead and manage this process, with detailed support from clinical and non-clinical teams, Medical Engineering and Procurement.

A specific Equipment Workgroup, which reports into the Project Steering Group has already been established to manage this process.

16.6 Temporary Facilities

The Trust has identified that a number of temporary facilities are likely to be required to facilitate the implementation and phasing of the SSP project.

Wherever possible the requirement for temporary accommodation will be mitigated through the phasing strategy. If temporary accommodation is still required, the preference is for this to be incorporated within the proposed new building footprint (e.g. temporary stores located within the new multi-storey car park), or to be provided within the existing buildings (e.g. the Estates Offices relocating to the existing Copthorne Building).

There will however inevitably be a need to provide some additional temporary accommodation (such as additional outpatients capacity at RSH, and additional theatre capacity at both RSH and PRH, during the refurbishment of these areas).

The specific requirements for this additional temporary accommodation will be developed during the FBC, which will be procured through a capital or revenue route, based on best value, which is likely to be a competitive tender, or by utilising existing Trust arrangements.

16.7 Travel and Transport

The Trust's Travel and Transport vision can be found within the Framework Travel Plan that was developed in 2014 and is located within Appendix 16a. Site specific opportunities associated with the Travel and Transport aspirations will be developed further during the Full Business Case (FBC).

AHR architects commissioned travel consultants, JMP, to inform the proposals regarding road access and car parking. The full JMP report can be located within the Estates Annexe.

16.8 Commercial Opportunities

The Trust will look to benefit from potential commercial opportunities which will arise as a result of delivering the SSP project. This is likely to include:

- Further developing the in-house 'Caffe Bistro' catering offering, which has been a hugely successful part of the new Women and Children's Building at PRH across both sites
- Reviewing whether further in-house retail or catering opportunities could be realised- particularly within the new feature atria areas at both sites
- Potential for outsourcing retail or catering to other public or private sector organisations
- Reviewing the sale of any potentially surplus land to developers
- Outsourcing the construction and operation of the new multi-storey car parks to a private firm; or reviewing alternative pricing structures and keeping the operation of these in-house
- Outsourcing the new energy centres to a private firm under an 'energy supply agreement', similar to the current arrangements the Trust has in place
- Seeking opportunities to work with other public sector or charitable organisations (e.g. provision of a new cancer centre at PRH with Lingen Davies)
- Other commercial opportunities, such as private patients, training facilities etc.
- All of this will be developed further at FBC stage.

16.9 Charitable Funding

The Trust will look to explore possible charitable funding routes to fund aspects of the project, which will be developed further at FBC stage.

16.10 Commercial Design Issues

The proposed design will take full advantage of latest best practice in relation to:

- Design review
- Government Construction Strategy
- HBN/ HTM requirements, BREEAM, Infection Control, and single rooms
- DH energy and sustainability targets

In addition, the proposed scheme utilises best practice from the P21+ repeatable room initiative and the P21+ standard components, which will be developed further at FBC stage. This is all set out in more detail in Section 10 of this OBC and in the Estates Annexe.

17 The Financial Case

17.1 Capital

A capital cost estimate for each of the shortlisted Options, B, C1 and C2, has been undertaken by Cost Advisors Rider Hunt. These estimates follow best practice and the guidance within the NHS Capital Investment Manual and are presented on OB forms in the standard format. The work has been split into SSP Baseline works, Estates Implications and Backlog works, and into new build departments and refurbished departments.

The works costs for new build departments are built up using the Healthcare Premises Cost Guides rates per m² (HPCGs) applied to the building areas shown within AHR schedules, plus appropriate on-costs. The HPCG rates have been adjusted accordingly for number of storeys, and the areas have been adjusted by the addition of 30% to allow for main plant rooms. Communication space is shown separately on the AHR Architects (AHR) schedules and has been priced separately within the cost estimates.

For the refurbishment areas, a percentage of the new build rate has been taken based on the level of refurbishment indicated on the AHR schedules. There has been no adjustment to the areas of refurbishment for plant space.

Demolitions have been calculated on a volumetric basis using a typical demolition rate from previous similar projects.

External works are included based on the areas shown on AHR's schedules, with splits between hard and soft landscaping taken as a percentage.

Drainage has been priced separately to the buildings based on the total area of new build, and to the external areas based on the total area from AHR's schedules. Additions have been included for attenuation from the Capita (Civil and Structural Engineers) schedules.

Allowances for items such as ground conditions, retaining walls and cut and fill have been taken from Capita's report and priced using rates from similar previous schemes.

Prices in the estimates for vertical circulation are for the lifts and escalators only as itemised on AHR's schedules, as the space requirement has already been included in the communication space above.

Allowances highlighted in the DSSR (Mechanical and Electrical Engineers) reports have been included for services buildings, abnormal services, diversions and connections.

The capital cost of boilers, boiler houses, energy centres and the like has been excluded from the estimates, as the assumption for OBC is that the new energy centres will be outsourced to a private firm under an "energy supply agreement", similar to the current arrangements the Trust has in place.

The capital costs of multi-storey car parks have been excluded from the estimates as the assumption for OBC is that the construction and operation of the new multi-storey car parks will be outsourced to a private firm or the Trust will review alternative pricing structures and keep the operation in house.

The capital cost for the Chemotherapy Day Case Centre at PRH in all options is excluded from the estimate as this is anticipated to be funded through other Public Sector or Charitable organisations.

The capital cost for the Midwifery-led Unit (MLU) and any other associated legacy Women and Children's accommodation at RSH in all options has been excluded from this estimate as this is

funded from the Public Dividend Capital (PDC) obtained from the previous Future Configuration of Hospital Services (FCHS) scheme.

Numerical references in the side margin are to AHR's drawings and schedules.

Work has initially been priced at PUBSEC 195, which is the current Department of Health Reporting Level and then updated to PUBSEC 214 which is the current index value for 4th quarter 2016 (present)

Inflation beyond 2016 has not been included in the estimates or on the Business Case forms.

The works costs have been adjusted for working in Shropshire based on the BCIS Location Study, 2000 boundaries, currently 0.98.

Additional costs have then been added to the above works costs to include for:

- Fees, which are based on 13% of the works costs, as advised by the Trust
- Non-works costs, which are an allowance based on similar recent developments
- Equipment, which is included at either 12% for Option B or 11% for Options C1 and C2, as advised by the Trust, based on recent experience of similar projects. Equipment costs are deemed to include for all general equipment, and general IT infrastructure, but exclude any specialist medical equipment (such as CT, MRI etc.), and any specialist IT requirements (such as EPR or iPads, etc.).
- Planning contingency, which is based on 10% of the works cost
- Optimism Bias, which is set out below
- VAT at the current rate of 20%
- VAT Recovery, at an assumed level of recovery based on 100% recovery for fees, and a rate of 20% for refurbishment works.

It is currently assumed that there is no requirement for land purchase.

It is currently assumed that there is no requirement for legal advice to deliver the SSP programme.

No specialist medical equipment (e.g. CT/ MRI) has been included.

Other exclusions are listed with the High Level Cost Estimates.

The level of Optimism Bias has been calculated based on the approved guidance, and based on the level of development and confidence in the scheme at OBC stage. This calculation is included in Appendix 17a.

The costs are shown on Business Case forms 1-4 for each option, included in Appendix 17b, with a separate set of High Level Cost Estimates giving more detail, included in Appendix 17c.

Costs	Option A	Option B	Option C1	Option C2
	£000s	£000s	£000s	£000s
Works		123,554	153,837	145,450
Fees		16,062	19,999	18,908
Non-Works		400	400	400
Equipment		12,867	14,797	13,862
Contingencies		12,355	15,384	14,545
Optimism Bias		28,090	36,795	34,770
VAT		34,048	42,668	40,335
Total at PUBSEC 195 Reporting Level		227,376	283,878	268,270
Total at Outturn (at PUBSEC 214)		249,613	311,636	294,497

Table 38: High level cost estimates

17.2 Overall Affordability and Key Planning Assumptions

In developing the strategy for an affordable option, the Trust has taken into account the following:

Projections of income based on the Future Fit Phase 2 modelling including a forecast on demographic changes

- Efficiencies arising from the removal of duplicate rotas, reduction in Junior Doctor intensity payments, co-location of services and the co-horting of surgical specialities
- Increased facilities and ward costs associated with modern and national standards for new wards
- Application of inflation
- Net additional cost of capital
- Repatriation of activity currently being performed for local residents in organisations outside the local health economy
- Increase of tariff payments in line with the current Sustainability and Transformational fund allocation
- Continued CIP delivery

A summary of the analysis can be found in Table 36 with a detailed analysis showing the impact on the Trust's Income & Expenditure in Table 37 and the key planning assumptions detailed in Table 38 below:

	Baseline	Option A	Option B	Option C1	Option C2
	£000s	£000s	£000s	£000s	£000s
Recurrent 2016/17 Baseline Position	(16,553)	(16,553)	(16,553)	(16,553)	(16,553)
Less SSP Incremental Finance Costs	2,000		2,000	2,000	2,000
Recurrent 2016/17 Baseline Position	(14,553)	(16,553)	(14,553)	(14,553)	(14,553)
Revenue Impact					
Demographic Growth	28,584	28,584	28,584	28,584	28,584
Increased Cost of Demography	(11,501)	(28,584)	(11,501)	(11,501)	(11,501)
QIPP	(17,295)		(17,295)	(17,295)	(17,295)
QIPP Savings	6,800		6,800	6,800	6,800
Inflation	(38,790)	(38,790)	(38,790)	(38,790)	(38,790)
Tariff Uplift	8,221	8,221	8,221	8,221	8,221
CIP	30,978	30,978	30,978	30,978	30,978
Repatriation Income Gain	10,000	10,000	10,000	10,000	10,000
Repatriation Increased Cost	(4,000)	(4,000)	(4,000)	(4,000)	(4,000)
Other Recurring	4,630	4,630	4,630	4,630	4,630
SSP Workforce	14,589	(4,600)	14,589	14,203	11,377
SSP Additional Non Pay	0		0	0	0
SSP Incremental Finance Costs	(6,000)		(6,000)	(6,000)	(6,000)
SSP Finance Costs	(6,000)		(5,433)	(8,684)	(7,867)
Recurrent 2020/21 Position	5,664	(10,114)	6,231	2,594	584

Table 39: Affordability and key planning assumptions

The table above demonstrates the affordability of the options at both RSH and PRH to the Trust resulting in recurrent financial surplus for Options B, C1 and C2.

Option C1 however enables the Trust to maximise the potential for repatriation of activity currently being performed for local residents in provider organisations out of the county. The income and expenditure analysis for the Trust is shown in the table below:

	Baseline	Option A	Option B	Option C1	Option C2
	£000s	£000s	£000s	£000s	£000s
Income					
Baseline	336,026	336,026	336,026	336,026	336,026
Tariff Uplift		8,221	8,221	8,221	8,221
Demography		28,584	28,584	28,584	28,584
QIPP		0	(17,295)	(17,295)	(17,295)
Repatriation		10,000	10,000	10,000	10,000
Developments		4,120	4,120	4,120	4,120
Total Income	336,026	386,951	369,656	369,656	369,656
Pay					
Baseline	(232,302)	(232,302)	(232,302)	(232,302)	(232,302)
Inflation		(18,252)	(18,252)	(18,252)	(18,252)
Cost of Demography		(20,009)	(8,050)	(8,050)	(8,050)
Savings of QIPP		0	4,760	4,760	4,760
Cost of Repatriation		(2,800)	(2,800)	(2,800)	(2,800)
Developments		510	510	510	510
CIP		21,685	21,685	21,685	21,685
SSP		(4,600)	14,589	14,203	11,377
Total Pay	(232,302)	(255,769)	(219,861)	(220,247)	(223,074)
Non Pay					
Baseline	(104,088)	(104,088)	(104,088)	(104,088)	(104,088)
Inflation		(17,378)	(17,378)	(17,378)	(17,378)
Cost of Demography		(8,575)	(3,450)	(3,450)	(3,450)
Savings of QIPP		0	2,040	2,040	2,040
Cost of Repatriation		(1,200)	(1,200)	(1,200)	(1,200)
Developments		0	0	0	0
CIP		9,293	9,293	9,293	9,293
SSP					
Total Non Pay	(104,088)	(121,947)	(114,782)	(114,782)	(114,782)
Finance Costs					
Baseline	(16,189)	(16,189)	(16,189)	(16,189)	(16,189)
Inflation		(3,160)	(3,160)	(3,160)	(3,160)
SSP			(9,433)	(12,684)	(11,867)
Total Finance Costs	(16,189)	(19,349)	(28,782)	(32,033)	(31,216)
Total Expenditure	(352,579)	(397,065)	(363,425)	(367,063)	(369,072)
Total Income and Expenditure	(16,553)	(10,114)	6,231	2,594	584

Table 40: Trust's income and expenditure

	2017/18	2018/19	2019/20	2020/21
Tariff Uplift	0.3%	0%	0%	0.9%
Inflation (blended)	2.8%	2.2%	2.2%	3.1%
Efficiency Factor	2.0%	2.0%	2.0%	2.0%
Growth	2.6%	2.9%	2.6%	2.7%

Table 41: Planning Assumptions

The planning assumptions outlined above as based on those within national guidance and are aligned to those within the Sustainability and Transformation Programme (STP).

Local Health Economy Position

The affordability of the Sustainable Services Programme should also be considered within the wider context of the overall health system's financial sustainability, which is contained within the STP

The table below sets out the key financial elements of the STP in terms of commissioner and provider sustainability.

	Commissioners	Providers	Total
Structural Deficit	(18.7)	(17.0)	(35.7)
Inflation/Demography cost pressures	(54.8)	(41.0)	(95.8)
Local Health System Deficit	(73.5)	(58.0)	(131.4)
QIPP savings LHE Providers	32.1	(32.1)	0.0
QIPP savings (other)	45.4	0.0	45.4
Provider Trust Efficiency Programme		45.2	45.2
Carter Review Savings		8.8	8.8
Transformation	4.0	(36.0)	(32.0)
Use of Transformation savings		6.5	6.5
Reconfiguration		15.1	15.1
Community Hospitals		3.8	3.8
Orthopaedic Rebasing		3.9	3.9
Repatriation		6.0	6.0
Rationalisation of services		4.0	4.0
External Transfer	1.5		1.5
	5.5	3.2	8.7

Table 42: Key financial elements of STP

18 Management Case

18.1 SSP Project Management Arrangements

The Trust recognises that the successful delivery of the Sustainable Services Programme (SSP) is a significant task, which will require robust project management and a real commitment from everyone involved to ensure its success. The Trust has thorough arrangements in place for the on-going management of the project, and is committed to ensuring its successful outcome.

The Trust has successfully managed the project to date, and has delivered a SOC approval and this OBC within a clear management and governance structure. The post-OBC management therefore builds on these arrangements which have worked well to date, making suitable provision for the shift in emphasis to a more detailed stage of the project, with more detailed planning required.

The Trust is managing the Sustainable Services Programme as a single project. It is being managed internally, complemented by external advisors where appropriate.

A governance structure is in place with defined roles for individuals; and a series of groups, teams and boards. This is ensuring all team members understand their role and responsibilities, and is providing a clear and auditable route for decision making and the escalation of risks and issues.

Risks, issues, and progress against the key milestones, are managed and monitored by the Transformation Team, which are reviewed each month within the Steering Group meeting, and any corrective action taken if required.

A budget for each stage of the project is established at the outset of the stage, and the on-going costs are controlled and monitored by the Transformation Team, including fees for external consultants. An overall capital and revenue budget has been established for each of the shortlisted option as part of this OBC, as set out in the Financial Case.

The proposed benefits of the project have been defined during the OBC, and a benefits management process has been established to ensure these are achieved.

A robust project brief is continuing to be developed, and the design will be managed and controlled by the Transformation Team and the Technical Project Manager, to ensure it complies with the brief and will meet all relevant statutory requirements and guidance, with any derogations agreed and documented.

Appropriate contract administration will be established as the project progresses.

The management of the project is based on Prince2 and best practice, amended to suit the needs of the Trust and the project.

A commissioning, completion, and post-completion process will be established, which will include a Post-Project Evaluation, in line with best practice and embracing the principle of 'soft landings'.

The Trust has recently undertaken a major reconfiguration programme, the Future Configuration of Hospital Services (FCHS). In addition to retaining a number of key internal and external project team members from this project, a detailed lessons learnt process was carried out, both of which are helping inform the Sustainable Services Programme and ensuring knowledge transfer.

All of these project management arrangements are set out in more detail below.

The Trust confirms that adequate time, resource, and expertise is being allocated to the project to ensure its successful delivery.

18.2 Lessons learnt from previous projects

The Trust undertook a thorough post-project evaluation for the recent Future Configuration of Services Project (FCHS). This proved to be an interesting and helpful experience for the Trust, and resulted in a detailed report being produced, which included a number of lessons learnt.

The Trust has already been using this to help inform the SSP project, and will continue to ensure the lessons learnt are reviewed at key project stages to provide the benefit of these for the SSP project.

Some of the key lessons learnt from the FCHS project, as identified within the formal Post Project Evaluation were;

- A major project can be successfully delivered within SaTH with the right team, appropriate planning and resource, and full support from an Executive level
- The level of dedicated Project Team resource to manage such a complex scheme is enormous and should not be underestimated
- Managing the project internally with a dedicated project team, supported by external advisors who knew the site worked well- as it ensured complementary skills and resource, but ownership stayed with the internal team
- Requirements and demands on both the Clinical teams and existing Trust support services (e.g. Estates, FM, IT) is extensive and requires exceptionally large amounts of input and resource from them, which is in addition to the day job
- Clear governance and decision making throughout is essential, and needs to include excellent record keeping and ensuring that key decisions are not lost if personnel change
- Extensive planning is required for transition, and requires significant resource from the project team and clinical teams to deliver the actual move of services

All of these lessons have been implemented in the planning for the SSP project.

18.2.1 Transformation Team

The Trust has a dedicated project team to deliver major capital projects, the 'Transformation Team'. This was established in 2011 as the 'Future Team' to manage the Future Configuration of Hospital Services (FCHS) Project, and has been developed and enhanced to deliver the SSP project.

This team is led by the Trust's Associate Director for Service Transformation, and comprises management staff, clinical staff who have been seconded into the team, project managers, and administrators- all of whom are full time dedicated resource to the SSP project. This team successfully delivered the FCHS project, and had extensive experience of the clinical functions affected by the SSP project.

18.3 Project Governance, Meetings, Management, and Reporting

The project is resourced from within the Trust, complemented by external specialist consultants. The governance of the project is carefully structured with clearly defined roles for individuals; and the establishment of a series of groups, teams and boards. This ensures all team members understand their role and responsibilities, and provides a clear and auditable route for decision making and the escalation of risks and issues.

In order to achieve the successful delivery of this OBC, there has been considerable work undertaken by a number of groups and individuals to date, and there are therefore already a robust set of programme structure and governance arrangements in place. These have been developed in discussion with the relevant Centre Chiefs and Business Managers, and reflect the need to support

and maintain the clinical leadership of the programme. These arrangements have all been agreed and signed off by the Trust Board.

The governance arrangements are regularly reviewed and updated where required to reflect the development of the project, and to allow for the increase in activity and detail which will be required through the FBC and then beyond.

Structured and productive meetings are held in order to discuss project issues, to seek input from stakeholders, to report on and assess progress, and to make key decisions. A number of different types of meetings are required at different levels. Broadly, these follow the agreed governance structure, complemented by detailed support meetings (e.g. clinical or design), and other ad-hoc groups as required.

The current SSP Governance Structure (rev 6 of 19 May 16) is shown in the Figure below:

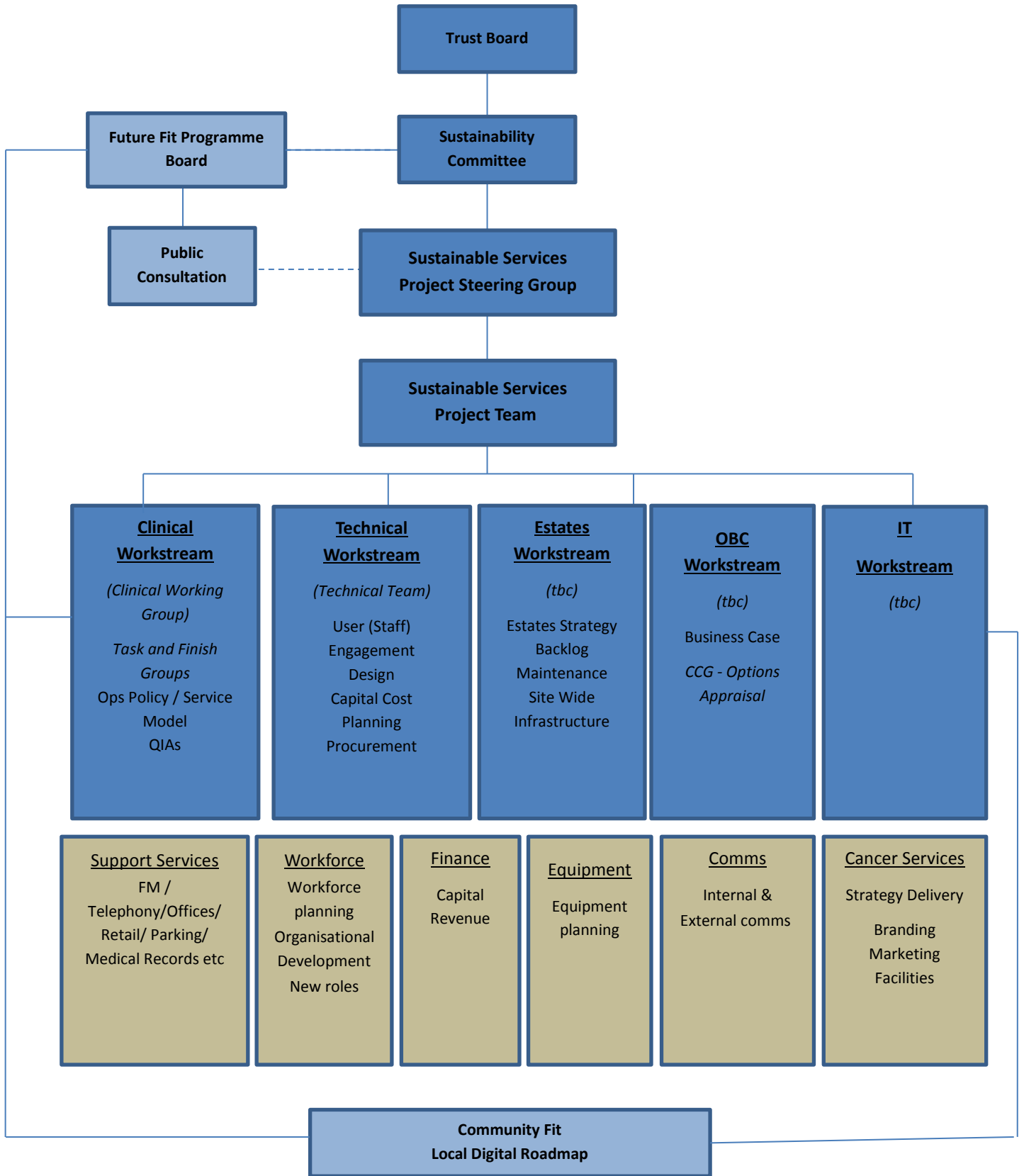


Figure 30: SSP Governance Structure v6 19 May 16

The **Trust Board** is ultimately responsible for the delivery of the project within SaTH. The Board receive regular project updates, and formally approve major documents at key milestones, including the SOC, OBC, and FBC.

The Trust's **Sustainability Committee** is a sub-group of the Trust Board, responsible for objective scrutiny of the Trust's financial plans, major investment decisions and performance. The committee is chaired by a Non-Executive Director and is attended by a number of Executives, Non-Executives, and Care Group Leads. The SSP project forms a significant part of the Sustainability Committee's agenda, as it is responsible for reviewing all capital expenditure and business cases. This committee acts as the senior objective reviewing body for the project on behalf of the Board.

The **Sustainable Services Project Steering Group** is the decision making group for the Sustainable Services Programme comprising members of the Executive Team, Clinical Directors, Care Group Managers, and Senior Nurse representation. It provides direction to the Project Team and oversees the whole of the SSP. The Steering Group meet monthly, to review progress and programme, risks and issues, and to receive written and verbal reports from each workstream. The Steering Group is the main escalation point for key decisions, approves all key items of work, and manages the project's budget. The Steering Group reports into the Sustainability Committee.

The **Sustainable Services Project Team** is the main 'doing group' for the SSP project, and co-ordinates the work being undertaken by the workstreams. It is chaired by the Finance Director (Project Director) and is attended by the leads of each of the workstreams. The Project Team meets fortnightly, or more often at key stages of the project.

The key elements of the project are managed by 5 No. **Primary Workstreams** (Clinical, Technical, Estates, IT, and OBC), supported by 6 No. **Support Workstreams** (Finance, Workforce, Support Services, Equipment, Comms, and Cancer Services). Each workstream is wholly responsible for the delivery of their element of the SSP project, and has a dedicated workstream lead. Each of the workstream leads attends the Project Team and Steering Group meetings, and provide a formal update report each month. Each of the workstreams meet as required (e.g. Clinical Working Groups, or Technical Team meetings), and have their own terms of reference and agreed deliverables. A number of the workstreams are large undertakings in their own right, and also comprise various sub-groups and committees.

All meetings are minuted as required, with all actions collated on rolling action logs and added to the Issues Register as required. The Transformation Team maintain overall control and co-ordinate all project meetings.

Regular reporting of key project issues is undertaken at all levels to ensure the project remains on course for successful completion, and to allow corrective action to be taken if required.

The Transformation Team lead on the production of all update reports and presentations required for the various meetings, and ensure all meetings take place as required.

18.3.1 External Advisors

Wherever possible the Trust is resourcing the project internally from within the Trust, however it recognises that some external support, advice, and expertise is required to complement the in-house teams and provide additional capability and/or capacity. These external roles predominantly relate to technical items (e.g. design, cost advice, technical project management) and IT (IT advisors).

Further details of these appointments are set out in the Commercial Case (section 16).

18.3.2 Commitment of Resource

The Trust is committed to the delivery of the Sustainable Services Programme (SSP) and will resource the development and transformation as required.

18.4 Links and Interdependencies

As with all major change programmes there are a number of links and interdependencies that can influence the successful outcome of delivery. These are outlined in the table below:

Constraints	Dependencies
Security of funding to deliver the full model of care and therefore benefit from the efficiency gains.	Development of the STP in particular integrated pathways with: <ul style="list-style-type: none"> ▪ Social Services ▪ Voluntary Sector ▪ Neighbourhoods ▪ GP Practices ▪ Community Services
Recruitment of workforce with necessary skill sets to deliver model of care	Supporting new ways of working and role development as part of the workforce STP plan
Uptake of funded development course e.g. Advanced Clinical Practitioners, Nurse Associates.	Local and Specialised commissioner support and consistency in the delivery of agreed commissioning intentions, I
Public understanding and uptake of re-designed services e.g. going to the right place at the right time	Delivery of the Operational Delivery Plan to deliver internal efficiencies
Change in local and national political landscape	Delivery of 7 day working within unscheduled care
Instability of current clinical model forces the escalation of contingency plans being implemented in a compressed timescale that may be inconsistent with the proposed clinical model.	Resource, capacity and resilience within organisations to deliver the change
Unforeseen events influencing future national priorities	Delivery of the IT agenda across the health economy to support delivery of the integrated pathway.
Public opposition to change creating negative perception of model of care, creating anxiety and confusion for staff and patients	Media support to deliver the right public message

Table 43: Links and Interdependencies

18.5 Programme, Key Dates, and Phasing

The proposed timetable for the next stages of the SSP project up to the completion of the FBC and commencement of work on site is shown in the table below. These proposed dates provide the fastest possible route to delivering the SSP benefits, balanced with the need to ensure adequate

planning, engagement, approvals, and due diligence are undertaken; as well as allowing sufficient periods for the Trust to obtain the necessary approvals from NHS Improvement, Department of Health, and HM Treasury as appropriate.

Milestone	Start	Finish
Trust Board formally approve SOC	-	31 Mar 16
Shropshire and Telford & Wrekin CCG's approve SOC	10 May 16	29 Jun 16
NHSI site visits to PRH and RSH	-	7 Sep 16
Shropshire/ T&W STP Non-Financial Options Appraisal	-	23 Sep 16
DRAFT OBC, inc finance and affordability completed	-	28 Sep 16
Trust Board review DRAFT OBC, inc finance and affordability (Private) & Warm-up Presentation (Public)	-	29 Sep 16
West Midlands Clinical Senate Review	17 Oct 16	31 Oct 16
Future Fit Programme Board	-	30 Nov 16
Submission of Pre-Consultation Business Case to NHS England	-	30 Nov 16
Trust Board formally approve final OBC	-	01 Dec 16
Submit OBC to NHSI for approval (inc all Appendices)	-	5 Dec 16
NHSI OBC approval period (local and national, inc DH and HMT)	5 Dec 16	31 May 17
Public Consultation (12 weeks)	No later than 5 Jan 17	
Develop FBC (in parallel with OBC review and Public Consultation)	5 Jan 17	Sep 17
Decision Making Business Case (DMBC)	mid Mar 17	mid Jun 17
Full Planning Application (allow 16 weeks) (Enabling works will require separate application)	13 Mar 17	30 Jun 17
Commence Enabling Works at PRH / RSH (assumed date, subject to Trust)	-	3 Apr 17
Final Commissioner Decision	30 Jun 17	30 Jun 17
Procurement process (assuming P22 route)	1 Apr 17	30 Jun 17
NHSI FBC approval period (local and national, inc DH and HMT)	Oct 17	Mar 18

Table 44: Milestone Dates for SSP

The detailed construction and delivery phase programme and dates vary depending on which option is chosen. All of the options however comprise:

- An initial programme of site clearance, service diversions, and enabling works
- A main new build stage, followed by initial transition and implementation (including new clinical and workforce models)

- A refurbishment and reconfiguration stage, followed by further transition and implementation (including new clinical and workforce models)

An initial detailed review of the phasing and sequencing has taken place during the OBC, which shows that all 3 options are deliverable.

The overall duration of the delivery and implementation stage for each option is:

- All Options: Obtain all approvals and undertake site enabling works to create a clear site-approximately 2 years

Followed by:

- Option B- 4.5 years, with SSP benefits delivered after 2.5 years
- Option C1- 5 years with SSP benefits delivered after 3 years
- Option C2- 5 years with SSP benefits delivered after 3 years

This results in the implementation of the new clinical model and the associated benefits of SSP being delivered **by the end of the 2020/21 financial year**, with all remaining backlog delivered **by the end of 2022/23**.

All of these dates are deemed to include construction, fit-out, and decanting. The ability of undertaking the enabling work in parallel with the FBC approval requires agreement with the Trust and the ability to obtain sufficient capital funding. All dates remain outline at this stage and require further work and verification.

Time management is required to ensure that the project's required outcomes are achieved in a timely manner, and that the project meets all of its required deadlines.

The Trust retains overall control of the programme and delivery dates for the project, as well as the overall phasing and sequencing. These are managed on a day to day basis by the Transformation Team, who produce and update the Master Programme and Phasing Plan for the project. The Master Programme will be fully developed for the preferred option during the FBC to fully identify all milestones, gateways, and interdependencies; including the critical path activities; which will be developed in conjunction with a detailed Phasing Plan.

The Master Programme is reviewed and approved by the SSP Steering Group. Any significant changes to the Master Programme must be implemented through the formal change management process and approved by the Steering Group.

The Project Manager reports all progress against the key activities as part of the monthly progress report; and will also report when slippage against key dates (particularly those on the critical path) occurs. If slippage against key dates occurs, the Project Manager will seek suitable solutions and mitigation; and escalate to the Project Team and Steering Group if required. Any key programme risks are recorded on the risk register.

18.6 Management of Risk

The Trust needs to be confident that the project's aims and objectives are able to be delivered within the defined constraints. There is therefore a need to closely manage the financial, strategic, clinical, and technical risks associated with the project, to ensure that these do not jeopardise its successful delivery.

There are a number of significant risks associated with the planning and delivery of the Sustainable Services Programme. All risks are identified within the individual workstreams and in dialogue with all relevant stakeholders. These risks, their mitigation, and supporting actions are reviewed and managed by the Transformation Team and through the governance structure in place; which aligns

with the normal Trust operational risk management processes and procedures. All identified risks are documented in a project risk register and assessed for likelihood and potential impact and given a RAG rating.

The Programme Risk Register is reviewed at each Project Team meeting, and formally reviewed and updated on a monthly basis by the Project Steering Group, including specifically reviewing all Red rated risks. A copy of the latest Risk Register is in Appendix 18a.

The management of risk is important, as it allows early identification of potential risk items, which can then be managed, rather than just being covered by contingency; which maximises confidence in achieving the desired outcomes and the business benefits. Management of risk also allows the Trust the confidence to take greater risks which can potentially improve the project outcome. The Risk Management process will help to:

- Improve the certainty of project delivery in terms of cost, time, quality and stakeholder expectations
- Highlight the important issues and focus the team's efforts on these
- Put the team in control of the risks;
- Encourage improved communication and understanding of the project amongst the team and the project stakeholders by articulating the stakeholder requirements;
- Enable better, informed decisions
- Assess the appropriate level of contingency funds required to manage the various risks so that funds may be released for other project areas

Risk management will be carried out throughout the course of the project. This will include risk workshops to suit the project stage, enabling identification, management and mitigation of the risks; and establishment of a contingency fund within the cost plan. Risk identification has commenced at an early stage, and risk reduction analysis will be encouraged throughout the duration of the project.

The Transformation Team manage the overall programme-level risks using the agreed Trust risk management process for the SSP programme, including strategic, financial, business, and clinical risk- which is documented in the SSP programme risk register.

In addition, the Technical Project Manager manages the technical risks, including design, site, planning and the like- which is documented within a Technical Risk Register. Once the ProCure22 partner is appointed, this will become the NEC contractual risk register within the P22 contract.

The Trust has allocated a suitable contingency within the capital and revenue costs to cover the risks identified.

18.6.1 Control of Change

All projects are subject to change throughout the course of the project. Change management is required to ensure the impact of the change on the project's quality, cost, and time do not outweigh the advantages gained. The project scope and brief is still being developed, but will become increasingly fixed during the FBC.

All key project documentation, including the Trust Brief, Clinical Model, Workforce Plans, IT Strategy, Approved Design, Master Programme, Revenue Cost Model, Capital Cost Plan, Phasing, and Transition Plans will all be approved and formally signed off at the appropriate points by the appropriate party. This will be the SSP Steering Group or the Sustainability Committee/ Trust Board. The approval process will be led by the Transformation Team.

Once these documents have been signed off, any proposed changes need to be carefully considered, including the potential impact, and if required taken back to the appropriate party for the change to be authorised. The Project Manager will own the change control process, and administer a project change register and change approval form, which will document all significant proposed changes, the impact of the change, and who needs to authorise. They will then seek appropriate sign-off for the change, and ensure that the change is implemented, and appropriate documentation is updated as required.

Any potential change which may have an impact on the project is included on the risk register.

In relation to the design and build elements, once the Trust is in contract with a ProCure22 partner the NEC3 Contract has a robust management process for dealing with change, using the early warning and compensation event process. This will be administered by the Technical Project Manager, with any changes which have a significant impact on programme, cost, or quality escalated to the Project Team or Steering Group for approval as required.

Management of Transition

The Trust has recent experience of implementing a major change programme, and will be able to use this experience to the benefit of the SSP project.

The reconfiguration will be implemented in a staged and systematic way that causes the least amount of disruption to services. The implementation will be carried out on a phased basis, to align with the completion of the various stages of the work.

The Clinical Working Groups will oversee the transition required within each Clinical Centre. Within each clinical area (e.g. ED, Critical Care, Women and Children's) a number of Clinical Implementation Teams will progress change within each clinical specialty.

Implementation will be driven within each Clinical Centre, led by the Centre Chief and Centre Manager but with full support from the Transformation Team and corporate Operational Leads. Implementation plans with a detailed critical path will be developed for each service. These will be based on the phasing and decanting plans identified by the construction times. Each Implementation Plan will be used as the basis for the formal management of change process and the communication and engagement activities within each service area.

New ways of working and the implementation of new care pathways will be phased and appropriately project managed. The Trust has also engaged with other Trusts who have undertaken similar major configuration process to seek lessons learnt and best practice from elsewhere.

Communication and engagement internally within the Trust, with partners and stakeholders and with patients and the public will be managed by the Transformation Team working closely with the Clinical Centres. As progress is made towards key changes, focussed and targeted communications activities will be completed. This is likely to include the planning for and identification of VIPs (Very Important Patients) who need to access services at a time of change. A Task and Finish Group will be set up within each Centre, and with the support from the Director of Quality and Safety/Chief Nurse and the Transformation Team will be responsible for the safe and appropriate management of the VIPs across both sites.

The workforce section (Section 11) describes in more detail the planning work that is being undertaken to ensure the Trust's clinical teams and staff are ready for the implementation of the new ways of working.

The Health Informatics section (Section 12) describes in more detail the work that will be undertaken to ensure the Trust's clinical and IT teams are able to implement the new IT systems and processes.

Quality Impact Assessment (QIA)

As part of the plan to put patients first and continually drive up quality, the Trust has implemented the widespread use of Quality Impact Assessments (QIA) for all service developments and plans. QIAs assess the impact any change will have on the quality of care patients receive and also aid the identification of risks within each clinical area. These impacts and risks are then assessed and scored and form the basis of action plans and areas for further work. The Chief Nurse/ Director of Quality and Safety receive a copy of each QIA when completed. The risks at service level are recorded on the Centre Risk Registers or escalated to the Corporate Risk Register where they rate 15 or above. The on-going monitoring of the QIAs is part of the Centre's and Trust's governance and risk management process.

Project-specific Quality Impact Assessments (QIAs) are currently being developed within each Centre and will continue to be updated and used as the basis for measuring impact and supporting the management of risk. These reviews have already identified key issues such as:

- Acutely ill patients arrive at the Planned Care Site requiring Emergency Care
- The Trust's ability to maintain safe Emergency Services on both sites could be compromised whilst the sustainability plan is implemented
- The Trust may not be able to recruit sufficient nursing and medical staff

The production and implementation of the QIAs are the responsibility of the Clinical Workstream, who will ensure these are produced, adequately reviewed and consulted on and are then implemented. Any key issues or risks which are identified within the QIAs (further detailed in Appendix 18b) will also be reflected within the project risk register and issues log as the programme progresses.

Business continuity plans are in place with the Trust for safe, on-going delivery of patients.

18.7 Benefits Management and Realisation

It is essential that the Trust identify the benefits of the proposed change and how these will be made real, so that there is a tangible improvement for patients that can be seen, felt and measured. The Trust has therefore established a practical and achievable benefits realisation management approach as an integral element to the SSP project.

Benefits are the measurable improvements that result from an improved outcome, realised through the reconfiguration programme. The benefits management process therefore identifies, defines, tracks, realises and optimises these benefits.

The Economic Case sets out the desired benefits which the Trust aims to realise, and then shows how the chosen proposed solution will optimise these benefits. In summary the benefits the SSP project aims to realise are:

- To be able to offer comprehensive access to all surgical and medical sub-specialties within the county
- To continually improve clinical outcomes as a result of higher volumes of patients through a consolidated service
- To be able to provide an urgent response for emergency, surgery and critical care
- To deliver a sustainable 18 week RTT across the surgical sub-specialities
- To maintain expertise and skills with high levels of recruitment and retention in the county
- To provide a flexible range of services based on clinical need

- Repatriation of clinical activity to within the county
- Sustainable future for the Trust and acute services for the county

These benefits are captured in a benefit management plan, which is included in Appendix 18c.

The detailed understanding of the benefits and how these link to the service specific benefits will be captured on a Benefits Map. The Benefits Map will show the relationship between the end benefits, and a series of deliverables and outcomes. This ensures that the project's deliverables and benefits have been correctly identified and that the dependencies are clearly understood.

The Benefits Realisation Plan is a stand-alone document and will be developed and amended as the programme progresses. Progress will be monitored by the Transformation Team, and reviewed at the SSP Steering Group.

Quantifying, Measuring and Tracking Benefits Measurement effort will be focussed on the key benefit which will deliver the greatest impact. Full sensitivity analysis will be carried out for benefits that are assessed as critical to the programme and the associated key assumptions will be tested at agreed intervals with significant variation in achievement requiring action. Where benefits are straightforward and predictable a high level of confidence can be attached to the measures and estimated result. Benefits derived from changing attitudes or behaviour will have a lower level of confidence and will require almost continual testing. The SSP Steering Group will be responsible for determining what and when to measure to ensure the focus is maintained on what really matters.

18.8 Engagement

As work within the Sustainable Services Programme is aligned to the health economy's Future Fit Programme, communication and engagement with patients, the public and wider stakeholders is within the Future Fit Programme and managed accordingly.

Involvement and support from the Clinical Commissioning Groups and liaison with NHS Improvement has been held throughout the OBC process. Monthly project updates have been provided to the Future Fit Programme Board.

Plans for the Public Consultation have been developed, in partnership with the Future Fit Programme Team.

The on-going engagement plans are discussed in further detail within Section 5 of this OBC.

18.9 Assurance

The project will undergo all required internal and external assurance, including formal review by the West Midlands Clinical Senate as part of Stage 2 NHSE Assurance, and regular reporting to the Joint Overview and Scrutiny Committee. It is also envisaged that the project will undergo a 'Gateway' Review.

The on-going assurance plans are discussed in further detail within Section 4 of this OBC.

18.10 Completion, Handover, and Defects

The Trust recognises that there is a series of post-project activities which it needs to undertake following completion of the main build elements, include ongoing defects management, managing in-use issues, and undertaking appropriate post-project review and analysis.

Due to the phased nature of the SSP project, this post-project management and evaluation will take place after all main stages of the projects, and will be used to inform future stages.

The preparation for completion and handover will follow 'soft landings' principles.

Although ProCure22 works on the principle of 'no defects at completion', there may still be defects present. Any defects noted at completion will be recorded on the Supervisor's Notice of Defects at Completion. These defects will be closed out in a timely manner, and managed by the Estates and Facilities Team, supported by the Technical Project Manager and the Transformation Team.

The Trust will put in place a system for managing the recording of any on-going issues and defects, which will need to be closed out by the PSCP according to the periods specified in the contract.

The final agreed Guaranteed Maximum Price for each of the projects called off from the programme of works (amended in line with any post-contract variations) will be agreed as the project progresses.

The final amount of actual cost to be paid to the PSCP (the 'Final Account') will be provided by the PSCP and certified by the Technical Project Manager within 3 months of completion, which will include any gainshare under the contract.

There is no retention on ProCure22.

The Trust will also ensure that all VAT reclaims are processed.

The final account of any non-P22 works will be managed by the Technical Project Manager, using the procedures set out in the contract (e.g. JCT).

18.11 In-Use Monitoring and Evaluation

Once the facilities are operational the Trust will monitor the usage of the new facilities to ensure that they are operating as intended, and the benefits are being realised. This will be formally recorded via the post-project evaluation and benefits realisation processes.

Again, this process will be undertaken after all key stages to help inform future phases of the project.

18.12 Post Project Evaluation

The Trust is committed to undertaking a post-project evaluation after all key SSP stages through a formal evaluation methodology, with involvement from all appropriate internal and external stakeholders.

These Post Project Evaluations will be undertaken as an integral part of the monitoring of benefits realisation and ProCure22 requirements, and will follow best practice. The process is in 4 stages:

Initial documentation issued to all parties to re-state the initial project objectives and what was intended to be achieved and then what was actually achieved;

Evaluation and feedback session with all key staff, including lessons learnt (typically held within 6 months of completion)- to comprise a walk-round of the new facilities and then a series of structured sit-down workshops

Formal post-project evaluation report, including lessons learnt, formal KPI recording, and benefits realisation

Follow up session (typically held within 2 years of completion)

The evaluation will cover all aspects of the project, including the end product and the process, reviewing what was actually achieved against the original aims and objectives, recording actual performance (benefits, KPIs etc.), discussing what went well and what didn't go well, and ensuring any lessons can be learnt for future phases of the SSP project and for future Trust projects.

18.13 Change Management

Service change and organisational development are integral features of the Trust as we improve the services we provide to our patients, communities and the quality of working life for our staff.

The Trust has a robust communication and engagement plan (Appendix 18d) detailing staff engagement. In addition, change in the Trust is managed under the Trust's Management of Organisational Change policy (Appendix 18e) which sets out a framework and principles for the management of organisational change within the Trust and aims to provide a positive and transparent approach that will facilitate the timely and successful implementation of change.

18.14 Final Account

The final agreed Guaranteed Maximum Price for each of the projects called off from the programme of works (amended in line with any post-contract variations) will be agreed as the project progresses.

The final amount of actual cost to be paid to the PSCP (the 'Final Account') will be provided by the PSCP and certified by the Technical Project Manager within 3 months of completion, which will include any gainshare under the contract.

There is no retention on ProCure22.

The Trust will also ensure that all VAT reclaims are processed.

The final account of any non-P22 works will be managed by the Technical Project Manager, using the procedures set out in the contract (e.g. JCT).

19 Conclusion and Recommendation

This document presents the Outline Business Case for the Trust's Sustainable Services Programme. It details the Trust's solutions to sustainably address the significant challenges to the safety and quality of patient services.

The OBC describes the organisation's commitment to the creation of two balanced hospitals. Each site will continue to provide essential services for the population served including: Urgent Care, Outpatients, Diagnostics and Midwifery Led Care. In addition to this; one site will provide Emergency Care (which will include the single ED and Critical Care Unit) and the other site will provide Planned Care (which will include the Diagnostic Treatment Centre).

The OBC identifies the high-level capital costs associated with the required new build and refurbishments to enable this vital service change. The workforce and revenue impact of the proposed changes are also identified. The financial impact is described within the context of the Trust and local health systems long term financial sustainability and deficit reduction plans.

Option B and Option C1 are deliverable and affordable for the Trust and the wider health system.

- Option B scored the highest in the financial appraisal
- Option C1 scored the highest in the non-financial appraisal
- Option C2 scored the lowest of all options in the non-financial appraisal and third in the financial appraisal

The OBC has been developed in accordance with the requirements of NHSI and the DH Capital Investment Manual and HM Treasury's *The Green Book: Appraisal and Evaluation in Central Government*.

The Trust Board is asked to:

- Review the Outline Business Case for the Trust's Sustainable Services Programme.
- Approve the Outline Business Case for submission to Commissioners and NHSI for the on-going progression of the programme and public consultation.

(Trust Board minute to follow)

APPENDIX 1a – Strategic Outline Case (SOC)

Sustainable Services Programme

A part of the NHS Future Fit Programme

FINAL Strategic Outline Case

**Approved at The Shrewsbury and Telford Hospital Trust Board
on 31 March 2016**

22 March 2016

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- 1b Full analysis of SaTH patient activity
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- 1d/e Existing site plans RSH and PRH

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Trust Board approval minute

INTRODUCTION

This document represents the Strategic Outline Case for the acute service elements of the Future Fit Programme; known internally as Sustainable Services, it describes the Trust's plans to address the significant challenges to the safety and sustainability of patient services specifically in emergency and critical care.

This work builds on the discussion and feedback from staff, patients and the public within the Future Fit Programme to address the most significant of workforce challenges. The Trust was requested to progress this work by the Future Fit Programme Board in October 2015.

This Strategic Outline Case demonstrates that there are potential solutions which address the Trust's workforce challenges in A&E, Critical Care and Acute Medicine by developing a single Emergency Centre, a single Critical Care Unit and a Diagnostic and Treatment Centre with Urgent and Planned Care service provision at both PRH and RSH. This is in line with the Future Fit Clinical Model and the options developed in partnership with clinicians, staff, patients and the public.

The Strategic Outline Case also describes the 'backlog maintenance' of the estate at both PRH and RSH.

The proposed solutions describe an alternative way of implementing the options previously identified within Future Fit. Previous solutions proved unaffordable. They were also viewed as being too stark in terms of the differences between the two hospital sites; with one very large and busy and one much smaller with lots of redundant space. The revised solutions therefore move away from the 'hot' and 'cold' site solution to a much more evenly balanced distribution of services which would deliver recognisable, vibrant hospital sites 24/7 within the communities served.

The workforce opportunities and impact of the potential solutions is included, with an emphasis on new ways of working and new and expanded roles. The capital costs associated with each solution and the revenue impact is also identified along with the interdependency with the health systems sustainability and deficit reduction plans.

This Strategic Outline Case also introduces the opportunities these service changes may have for addressing the Trust's historical backlog maintenance challenges. Detailed surveys concluded in Autumn 2015 found that areas of the Trust's estate are failing and significant investment is required.

Reconfiguration of services also offers the opportunity to develop the concept of Clinical Centres of Excellence.

We acknowledge and recognise the impact these changes will have on patients and the public and are committed to working hard to understand and mitigate this impact where possible over the coming months. However, we believe we have identified solutions that could address our most significant workforce challenges, be affordable and maintain and improve patient experience in vibrant hospital services in both Shrewsbury and Telford.

THE PROBLEM WE ARE TRYING TO SOLVE

NHS services within Shropshire face an increasing challenge of delivering high quality, safe and sustainable acute services. This is within a climate of rising demand, reducing levels of funding and on-going changes within the workforce.

Like all hospitals, the greatest asset of Shrewsbury and Telford NHS Trust (SaTH) is its workforce. This workforce is skilled and well trained; striving to deliver high quality patient centred care, all day, every day. However, the Trust does not have all the staff it needs in the right locations. The organisation is faced with difficulties in recruiting to essential medical and nursing clinical roles; within the Emergency Departments, Critical Care services and other areas across the Trust. This means a heavy reliance on temporary staff and increased pressure on teams. Continued and innovative solutions to address this recruitment challenge have been explored: recruitment drives nationally and overseas; sharing posts and rotas with neighbouring Trusts; and creating new roles such as fellowships and advanced practice have all failed to provide a sustainable solution. Day to day operational plans are in place to ensure the care and safety of patients within the Trust's clinical services but a long term solution is urgently needed.

This need for a long lasting, sustainable solution is being addressed through a process of health economy wide transformational change. In line with the aspirations of the Future Fit Programme and its clinically-led models of care, the Trust has worked to address the urgent workforce challenges in A&E and Critical Care.

Guidance from the Trust Development Authority (TDA) has been used in the development of this Strategic Outline Case (SOC). It is based on three core principles for service reconfigurations:

- The Options are developed with people, not for them
- Its focus is redesign, not relocation; and
- A whole systems view is taken, with genuine integration and joint planning

The SOC has six sections:

Section 1: details the strategic context

Section 2: describes the health service need, the case for change that is the foundation of the SOC

Section 3: outlines the options being considered

Section 4: details the potential solutions for delivery of the options

Section 5: sets out the affordability of those solutions

Section 6: describes a timetable and outline for deliverability

1. STRATEGIC CONTEXT

The local health system faces a combination of challenges to deliver sustainable and high quality services for the populations it serves.

These challenges and their potential solutions have been debated within the county for many, many years. This has predominantly focussed on the provision of acute hospital services in Shrewsbury and Telford and at times, has also included the community hospitals in Whitchurch, Bishops Castle, Ludlow and Bridgnorth.

In 2013, SaTH alongside the two Clinical Commissioning Groups (CCGs), Shropshire Community Healthcare NHS Trust (ShropComm) and Powys Teaching Health Board (PTHB) all committed to work collaboratively as partners within the Future Fit Programme. All organisations agreed to engage fully with their patient populations and work with their health, social care and voluntary sector partners to shape the future of local healthcare services in order to secure the long-term sustainability of high quality patient care.

During 2014, this work produced an overarching clinical model. Activity and capacity modelling was undertaken to reflect the implications of the clinical model and a short list of site options was developed.

In September 2015, the short list of options was subject to a full options appraisal. At this time, the Future Fit Programme Board agreed to defer reaching any conclusion about recommending a 'preferred option' to the Future Fit Programme's Sponsor Boards, until it was assured that there was an approvable case for investment.

In October 2015, therefore, the Future Fit Programme Board identified two key pieces of work that needed to be undertaken:

- A system wide financial deficit reduction plan
- Business case development to address the Trust's immediate workforce challenges within A&E and Critical Care

Both these pieces of work have been progressed in parallel.

1.1 Shropshire and Telford and Wrekin Health Economy

Shropshire Clinical Commissioning Group (CCG) covers a large geography with issues of physical isolation and low population density within a mix of rural and urban ageing populations. Telford & Wrekin CCG has a large, younger urban population within areas of rurality; Telford is also ranked amongst the 30% of most deprived populations in England.

Both CCGs are dependent on services provided by the Trust and those provided by Shropshire Community Healthcare NHS Trust (ShropComm) for the majority of their populations hospital care. Both commissioners are also aware of the needs of some of the Powys population who also use services from the Trust.

1.2 Commissioner Support

To follow following CCG Board meetings in March 2016 (Appendix 1a).

1.3 The Shrewsbury and Telford Hospital NHS Trust

SaTH is the main provider of district general hospital services for around half a million people in Shropshire, Telford & Wrekin and mid Wales.

1.4 Services and Activities

The majority of the Trust's services are provided at the Princess Royal Hospital (PRH) in Telford and the Royal Shrewsbury Hospital (RSH) in Shrewsbury; providing 99% of Trust activity. Both hospitals provide a wide range of acute hospital services including accident & emergency, outpatients, daycases, diagnostics, inpatient medicine and critical care. Following recent service reconfigurations, inpatient adult Surgery (excluding breast) is provided at RSH, with Women and Children's Services (consultant-led

obstetrics, neonatology, inpatient and daycase paediatrics and inpatient Women’s Services), head and neck and acute stroke care being provided at PRH.

In line with many organisations where the delivery of services is across multiple sites, the Trust is challenged with duplicate costs and inefficiencies inherent in many service structures.

Services	PRH	RSH
A&E	✓	✓
Outpatients	✓	✓
Diagnostics	✓	✓
Inpatient Medical Care	✓	✓
Critical Care	✓	✓
Inpatient head & neck surgery	✓	
Inpatient acute and elective surgery		✓
Surgical Assessment Unit		✓
Ambulatory Care	✓	✓
Inpatient women & children	✓	
Outpatient children	✓	✓
Children’s Assessment Unit	✓	✓
Inpatient Oncology Care		✓
Midwife-led maternity services	✓	✓
Daycase surgery and procedures	✓	✓
Elective Orthopaedics	✓	*✓
Orthopaedic Trauma	✓	✓
Breast Surgery	✓	

Table 1: Services provided at PRH and RSH

*RSH activity is provided by Robert Jones and Agnes Hunt Orthopaedic Hospital NHS Foundation Trust

Alongside services at PRH and RSH the SaTH provides community and outreach services including:

- Consultant-led outreach clinics (held in Community Hospitals and the Wrekin Community Clinic at Euston House, Telford)
- Midwife-led units at Ludlow, Bridgnorth Community Hospital and RJAH in Oswestry
- Renal dialysis outreach services at Ludlow Hospital
- Community services including midwifery, audiology and therapies

During 2014/15 the Trust saw:

- 47,431 elective and daycase spells (1.2% increase on 2013/14)
- 47,151 non-elective inpatient spells (2.4% increase on 2013/14)
- 7,143 maternity and transfer spells (19.0% decrease on 2013/14)
- 401,806 outpatient appointments (due to counting and coding methods changing in year a meaningful comparison to prior years is not possible)
- 109,360 accident and emergency attendances (2.5% increase)

A full analysis of SaTH’s patient activity is provided at Appendix 1b.

1.5 Workforce

The Trust employs approximately 5,000 staff as summarised by staff group in table 2 below:

Workforce Category	WTE
Medical and Dental	544
Administration and Estates	996
Healthcare assistants and other support staff	1235
Nursing, midwifery and health visiting staff	1466
Nursing, midwifery and health visiting learners	40
Scientific, therapeutic and technical staff	819
Total	5100

Table 2: Summary of 2013/14 Workforce Whole Time Equivalents (WTEs) by Staff Group including internal bank excluding agency and locums

The Trust has an ageing workforce profile with >50% of nursing and midwifery registered staff, >20% medical and dental staff, > 25% Healthcare scientists, >33% of admin and clerical and >50% estates and ancillary staff able to retire within 10 years.

1.6 Finances

SaTH turnover for 2014/15 was £316.8m of which income from patient care accounted for £295.7m. The majority of the clinical income came from the following three largest volume commissioning bodies:

- Shropshire CCG (Income £126.7m, 43%)
- Telford and Wrekin CCG (Income £88.5m, 30%)
- NHS England (Income £47.8m, 16%)

Of the remainder of clinical income:

- 10% came from other commissioning organisations, including Welsh commissioners
- 1% came from “other clinical income” which consists of income from private patients, overseas visitors and the NHS Injury Cost Recovery Scheme

A summary of the Income & Expenditure (I&E) position is shown in Table 3 below.

Heading	£m
Income:	
Patient Care	295.7
Education, training & research	11.2
Other revenue	9.9
Total Operating Income	316.8
Expenditure:	
Pay	216.9
Non-Pay	88.6
Depreciation & Amortisation	10.5
Clinical Negligence	6.5
Impairments	8.4
Total Operating Expenses	331.2
Surplus/(deficit) for the financial year	(14.5)
PDC payable	6.1
Retained surplus/(deficit) for the year	(20.633)

Table 3: SaTH Income and Expenditure 2014/15

Table note: For reporting purposes the following are excluded:

▪ Impairments relating to plant, property and equipment	8.363
▪ Adjustment in relation to donated asset elimination	0.140
▪ Surplus/(deficit) at year end	(12.130)

1.7 The Estate

Full details of SaTH's estate are contained within the Trust's Estate Strategy, which is in the process of being updated to reflect the findings of the six facet estate surveys, completed in the latter part of 2015 by Property Surveyors Oakleaf and NIFES. This was a scheduled refresh of the survey and the panel which appraised the options in 2015 was made aware that a new survey was due.

A summary of the survey outcomes and the approach to deliver a new estates strategy is attached in Appendix 1c.

As previously detailed, patient care services are primarily delivered from the two main hospital sites in Shrewsbury and Telford. The buildings on the Royal Shrewsbury Hospital (RSH) site comprise several separate developments, ranging in age from 1966 to the current day:

- the Maternity and Paediatric development at the south of the site adjacent to the main entrance roadway was built in 1967
- the central development of Wards, Outpatients, A&E, Imaging and Support services, which forms the main spine of the site and came into use between 1976 to 1978
- the Cobalt Unit that includes Linear accelerators and Oncology services dating from 1982
- the Renal unit at the north of the site, which was built in 1991 and extended in 2003
- the Treatment Centre opened in 2005 also at the north end of the site
- medical and nursing educational facilities in the north east corner of the site, built in 2002

- residential accommodation in the south west corner of the site, built in 1974 and extended in 1982
- Rooftops accommodation in replace of some of the old residential accommodation in the south west corner of the site, completed in phases from August 2009 to December 2010
- The Boiler House and Estate Department in the north-west corner of the site, built in 1966 and 1977 respectively
- the new and extended Cancer Centre opened in 2013

The buildings on the Princess Royal Hospital (PRH) site essentially comprise a 2 storey nucleus hospital opened in 1988 with some additions, as follows:

- extension in 1999 to provide a purpose designed Rehabilitation Unit
- the Management Suite was refurbished in 2013 to create a 28 bed inpatient short stay medical ward
- a new Women's and Children's Centre was opened in 2014
- staff residential blocks and a small private outpatient clinic in the south east corner of the site built in 1989
- a number of underutilised residential blocks were refurbished in 2013 to provide office accommodation

Existing Site Plans for RSH and PRH are included in Appendix 1d and Appendix 1e.

1.8 Estate Condition

Six facet estate surveys were completed in the latter part of 2015 by Property Surveyors Oakleaf and NIFES. They were commissioned to undertake assessments of respectively the Royal Shrewsbury (RSH) and Princess Royal (PRH) Hospitals to establish the condition and performance of the existing estate. The six estate facets assessed were:

- Physical Condition
- Functional Suitability
- Space Utilisation
- Quality
- Statutory Compliance (Fire and Health & Safety requirements)
- Environmental Management

Each facet was broken down into building systems and fabric elements, plus comments included in the reports about any significant issues noted within each block to give context to the backlog findings. Each element was then given a grade of A (as new) to D (life expired and/or serious risk of imminent failure). Where assets had a remaining life assessed at less than five years then a cost estimate was provided to either repair or replace the item (backlog).

As part of the surveys the backlog maintenance cost to bring the estate assets that were below condition B in terms of their physical condition and/or compliance with mandatory fire safety requirements and statutory safety legislation up to condition B (sound and operationally safe) were identified. All of the backlog condition surveys were based on the approach described in the Department of Health's 'A risk-based methodology for establishing and managing backlog' (2004).

Costs to replace, remove or upgrade assets that already met condition A or B criteria, for example for modernisation or best practice purposes have not been classified as backlog.

A summary of the key estate asset information is shown below in Table 4:

Estates Criteria	PRH	RSH	Offsite ¹	Total
Gross Internal Area (m ²)	46,765	61,400	1,477	109,642
Net Book Value (£m)	82.0	78.2	4.0	164.2
Capital Charges Relating to Buildings (£m)	5.7	5.5	0.3	11.5
Total Backlog (Years 0-5) (£m)	20.3	83.2	0.4	103.9
Functional Suitability Backlog (£m)	7.0	62.3		69.3

Table 4: Summary of SaTH Estates Data – September 2015

Table Notes: 1. Offsite area comprises the Queensway Decontamination Unit and some Business Support Departmental space within the Shrewsbury Business Park. 2. All backlog costs (unless otherwise state) are expressed as ‘gross’ works costs (that is the base cost to undertake the works, plus a 50% uplift to cover costs such as VAT, Consultants fees, decanting and temporary services. 3. NBV and Capital Charges as at 1st April 2015.

Tables 5 and 6 provide a summary of the proportion of the facilities (at each of the main sites) graded between condition ‘A’ (excellent/new) and condition ‘D’ (life expired/unacceptable), with condition ‘B’ generally acknowledged to be a satisfactory standard.

RSH	Rating and % of Total GIA				
	A	B	B/C	C	D
Estates Facet					
Physical Condition (%)	17	14	0	29	40
Statutory Compliance (%)	2	27	0	23	48
Quality – Environmental (%)	0	0	0	100	0
Quality – Amenity (%)	13	21	0	36	30

Table 5: RSH Facilities – Summary of Six Facet Estates Survey Assessment by Grade as a % of GIA

PRH	Rating and % of Total GIA				
	A	B	B/C	C	D
Estates Facet					
Physical Condition (%)	4	64	9	23	0
Statutory Compliance (%)	0	99	0	1	0
Quality – Environmental (%)	0	100	0	0	0
Quality – Amenity (%)	0	86	0	14	0

Table 6: PRH Facilities – Summary of Six Facet Estates Survey Assessment by Grade as a % of GIA

Table Notes: The data has been derived from the Oakleaf surveys completed in September 2015.

Over a five year investment horizon the total backlog gross cost across both main hospital sites is estimated at £103.5m, which includes £50.3m of items assessed as ‘high’ or ‘significant’ risk.

2. HEALTH SERVICE NEED

Acute hospital services provided by SaTH are of a good standard, recognised in the Care Quality Commission report published in 2015. Most services have developed over many years, with clinicians, managers and staff trying to keep pace with changes in demand, improvements in medicine and technology and increased expectations of the populations served. Nevertheless, it is recognised the current hospital configuration is not sustainable due to the healthcare and workforce issues including:

- Changing healthcare needs of the population now and into the future
- Quality standards that are required and that individuals and organisations aspire to deliver
- A need for improved productivity and a reduction in inefficiencies (in line with the Carter Review and the Trust's work with the Virginia Mason Institute)
- On-going developments in medicine and technology
- Workforce changes in terms of skills, availability and training

In addition, there are a number of estates issues, including:

- Level of backlog maintenance
- Poor quality existing facilities

All of this is underpinned by the economic climate in which the NHS must operate.

2.1 Healthcare and Workforce Need

A high level assessment of the health economy's service need against the health-service need criteria identified within the NHS Trust Development Authority Capital Regime and Investment Business Case Approvals Guidance for NHS Trusts is attached at Appendix 2a.

2.1.1 The Call to Action

Discussions and debate involving local clinicians, staff and many members of the public regarding the current service provision was developed during the major consultation exercise undertaken in November 2013 in response to the national Call to Action for the NHS. At this time, people started to accept that there was a case for making significant change provided there was no predetermination and that there was full engagement in thinking through the options. The outputs from Call to Action can be found on the Future Fit website (www.nhsfuturefit.org). This marked a turning point in terms of progressing a programme of works that would review and develop a new service configuration.

2.1.2 The Case for Change

Local clinicians, patients and members of the public who participated in the Call to Action recognised the need to tackle two things: the real and pressing local service issues and challenges faced by health services nationally that have an impact locally with the key challenge locally being workforce. The issues and challenges identified in the Call to Action include:

- Changes within the medical workforce
- Staffing within the key acute services (A&E; Critical Care; Acute Medicine)
- Changes in the populations profile and patterns of illness
- Higher expectations
- Clinical standards and developments in medical technology
- Economic challenges
- Opportunity cost in quality of service
- Impact of accessing services

- The quality of the patient facilities and the Trust's estate

Medical workforce challenges

Running duplicate services on two sites presents many workforce challenges and can result in a poor employee experience for some of the Trust's medical teams. This compounds an already challenging recruitment environment and leads to difficulty in recruiting the right substantive workforce.

The current service configuration and the requirement for consultants and other specialist staff to cover both hospital sites can at times limit their ability to provide senior patient reviews. In addition, the Trust is unable to achieve Royal College guidance standards in many areas. With the current staffing configuration, it will prove extremely difficult to achieve adequate staffing levels to provide 7-day working across both sites. Furthermore, because teams are spread so thinly services are vulnerable to unexpected absences and the non-availability of staff.

Emergency Department Staffing

The Trust does not currently meet staffing levels recommended by the College of Emergency Medicine across all medical roles including Consultant, Middle and Training grades. Research demonstrates a greater consultant presence in A&E reduces admissions, reduces inappropriate discharges, improves clinical outcomes and reduces risk to patients.

With this minimal workforce and the impact of unforeseen short-term staff absences, A&E staff are finding it increasingly difficult to cope with the increased numbers of attendances, the nature of the patients presenting and increasing numbers of attendances out-of-hours. The Trust is regularly hampered in the ability to provide rapid senior review to patients and this is causing significant numbers of breaches of the 4 hour A&E target at such times. These pressures in A&E; the growing age and acuity of those patients presenting, and the continued bed capacity deficit which routinely prevents timely patient flow, combine to significantly elevate risks in both the immediate term and for the foreseeable future.

Critical Care Staffing

In Critical Care, the Trust's staffing levels are again below the recommended standards. The core standards require:

- Care must be led by a consultant in Intensive Care Medicine
- Consultant work patterns must deliver continuity of care
- In general, the consultant/patient ratio must not exceed a range between 1:8 to 1:15 and the ICU resident/patient ratio should not exceed 1:8.
- A consultant in Intensive Care Medicine must be immediately available 24/7, be able to attend within 30 minutes and must undertake twice daily ward rounds
- Consultant intensivist led multi-disciplinary clinical ward rounds within Critical Care must occur every day (including weekends and national bank holidays)

Critical Care is covered with a mix of general anaesthetists and the small number of Intensivists available, but consultant presence is still well below recommended levels. The Trust is one of very few nationally that have not been able to split its Anaesthetics and Critical Care rotas. The Anaesthetic and Critical Care team face daily challenges, in particular on call, during which the on call consultant could be required in up to four different places.

The Trust has continuously attempted to recruit additional Intensivists; however potential candidates consider the absence of formal split rotas and very onerous on-call arrangements deeply unattractive.

The workforce challenges mean that the service and the team are highly vulnerable to further vacancies or unexpected absences.

Acute Medicine

In 2004, the Royal College of Physicians recommended that there should be a minimum of 3 acute physicians per hospital by 2008. In the 2012 Acute Care Toolkit, it is recommended that hospitals have at

least 1.5 wte acute physicians available for 12 hours per day for an Acute Medical Unit (with exact numbers based on the anticipated number of patient contacts during the core hours of service).

‘Involvement of a minimum of 10 consultants in the weekend rota should ensure a sustainable frequency of weekend working, even if the weekend working arrangements are shared between two consultants. For smaller units, it may be possible to operate a rota with fewer than 10 consultants if there is a comprehensive arrangement in place to provide days off in lieu.’¹

The Trust does not meet the recommended staffing levels; this again limits the ability to provide the levels of senior review needed to ensure timely patient assessment and treatment, and move towards more 7 day working.

Non-medical challenges

The Trust continues to experience recruitment difficulties across a number of non-medical professions such as nursing, operating department practitioners, diagnostic radiographers, domestics and healthcare scientists. These staff groups have historically experienced recruitment challenges in attaining establishment levels, and this has only been compounded by the recent national demand for such roles. Supply and demand data from Heath Education West Midlands suggests that this will not be improved in the short term.

Duplication of services on both sites reduces the ability to support favourable on call rotas which would improve employee experience and the ability for the Trust to be an employer of choice and improve recruitment. In addition there is limited scope to provide cost effective and efficient 7 day working.

Currently it is difficult to support the development of advancing and extending practice for non-medical staff as the ability of medical colleagues to mentor, support and clinically sign off training logs is compromised by the need for them to partake in intensive rotas.

Changes in the population profile

The welcome improvement in the life expectancy of older people experienced across the UK in recent years is particularly pronounced in Shropshire. The population over 65 has increased by 25% in just 10 years. This growth is forecast to continue over the next decade and more. As a result the pattern of demand for services has shifted, with greater need for the type of services that can support frailer people, often with multiple long-term conditions, to continue to live with dignity and independence at home and in the community.

Changing patterns of illness

Long-term conditions are increasing due to changing lifestyles. This means health services need to move the emphasis away from services that support short-term, episodic illness and infections towards services that support earlier interventions to improve health and deliver sustained continuing support, again in the community with consistent support for self-management and care. The increase in the elderly population and the number of people living with long-term conditions coupled with the reduction in funding in the voluntary sector and Social Services results in an increased pressure on acute services such as A&E and acute medicine.

Higher expectations

Quite rightly, the population demands the highest quality of care and also a greater convenience of care, designed around the realities of their daily lives. For both reasons, there is a push nationally towards 7-day provision or extended hours of some services and both of these require a redesign of how health services work given the inevitability of resource constraints.

¹ Royal College of Physicians (2012)

Clinical standards and developments in medical technology

Specialisation in medical and other clinical training has brought with it significant advances as medical technology and capability have increased over the years. But it also brings challenges. It is no longer acceptable nor possible to staff services with generalists or juniors and the evidence shows, that for particularly serious conditions, to do so risks poorer outcomes. Staff are of course, aware of this. If they are working in services that, for whatever reason, cannot meet accepted professional standards, morale falls and staff may seek to move somewhere that can offer these standards. It is also far more difficult to attract new staff to work in such a service. Clinicians are a scarce and valuable resource. Every effort must be made to seek to deploy them to greatest effect.

Economic challenges

The NHS budget has grown year on year for the first 60 years of its life. In one decade across the turn of the 21st century its budget doubled in real terms however, the UK economy is now in a different place. The NHS will at best have a static budget going forward and yet the rising costs of services, energy and supplies along with innovations and technological breakthroughs that require more investment mean that without changing the basic pattern of services, costs will rapidly outstrip available resources and services will face the chaos that always arises from deficit crises.

It is estimated that without radical changes to the way the system works, the NHS will become unsustainable with huge financial pressures and debts. Current trends in funding and demand will create a gap which projections suggest could grow to £30 billion a year by 2021 if nothing is done to address it.

Locally the Shropshire health economy is challenged and has a history of deferring the resolution of structural issues. This has resulted in short-term or one-off fixes rather than making difficult decisions in order to reach sustainable long-term solutions. As a result significant change to provide services that are clinically and financially sustainable is required through innovative solutions.

Opportunity costs in quality of service

In Shropshire and Telford and Wrekin the inherited pattern of services, especially hospital services, across multiple sites means that services are struggling to avoid fragmentation and are incurring additional costs of duplication and additional pressures in funding. The clinical and financial sustainability of acute hospital services has been a concern for more than a decade. Shropshire has a large enough population to support a full range of acute general hospital services, but splitting these services over two sites in their current configuration is increasingly difficult to maintain without compromising the quality and safety of services.

Impact on accessing services

In Shropshire, Telford and Wrekin there are distinctive populations. Particular factors include a responsibility for meeting the health needs of sparsely populated rural areas in the county, and that services provided in our geography can also be essential to people in parts of Wales. Improved and timely access to services is a very real issue and one which the public sees as a high priority. A network of provision already exists across Community Hospitals that can be part of the redesign of services to increase local care.

2.2 Estates Constraints and Drivers

In addition to the direct clinical need, there is also a need to address a number of issues with the existing estate. As described in Section 1.8 (above), there is residual backlog maintenance of over £100m across the 2 sites, which needs addressing, and a significant amount of the existing estate, particularly at RSH, does not conform to modern standards.

Any development at either RSH or PRH will have to fit in with and link to the existing hospital. There are also a number of constraints to development at either site, which are set out below.

2.2.1 Royal Shrewsbury Hospital

The RSH hospital buildings were predominantly built in the 1960s and 1970s, with over 75% of the site constructed between 1965 and 1984. Although there have been new developments (such as the new cancer centre) a lot of the core healthcare provision is still being provided from old buildings. Although

the service is able to be delivered safely, the areas in which some services are provided are challenged in relation to space, conformity to modern building standards and development opportunities.

Historic development at RSH has been largely uncoordinated as the Trust has responded to individual service needs. This has resulted in a site with few potential development zones as it is surrounded by urban housing development on two sides.

Any development at RSH therefore needs to be contained within the site constraints. There is very little spare land to develop on, and that which is present is currently utilised for car parking which would need to be re-provided. The site is also split level which presents challenges for new development. The existing buildings do not lend themselves to reuse or re-designation, and it is difficult to find areas for new buildings which are able to link into the existing core healthcare areas of the site.

2.2.2 Princess Royal Hospital

The Princess Royal Hospital comprises a 2 storey nucleus hospital opened in 1988. The building was extended in 1999 to provide a new rehabilitation unit, and again in 2014 to provide a new purpose built Women's and Children's Centre.

The age profile of the building is therefore generally acceptable and the building is designed as a purpose-built hospital, albeit the original template design is to a different set of space standards to new buildings.

The condition of the PRH hospital is generally fair, although there are a number of backlog items which need addressing.

At the PRH site the nucleus arrangement lends itself to further development with the potential to expand the buildings in a number of arrangements. Areas of the existing building also lend themselves to redevelopment and re-designation.

Any new development at the PRH site therefore needs to work within these constraints.

2.3 Determination of Trust Requirements for a Potential Solution

In order to develop a potential solution that addresses the challenges within A&E and Critical Care and responds to the issues with the existing estate, the Trust established the Sustainable Services Programme within the health economy wide Future Fit Programme.

2.3.1 Future Fit Clinical Model

As part of the Future Fit Programme a Clinical Reference Group (CRG) comprising fifty senior clinicians and leads from health and social care patient representatives, met in November 2013 which began the discussions and debate around the whole system design principles. The CRG agreed that there were three main areas of health care delivery. These are:

- Acute and episodic care
- Long-term conditions
- Planned care

In taking the work forward to address the Trust's immediate workforce challenges and the identification and development of a potential solution for Sustainable Services, senior clinical leaders within the individual Care Groups have come together within a structure of Clinical Working Groups (CWG). A series of CWG meetings have been held which included the Trust's key senior clinicians (medical and non-medical; nursing; therapies etc.) and senior operational managers. The CWG discussed the application of the Future Fit model of care to the immediate workforce challenges faced by the Trust.

2.3.2 Sustainable Services Clinical Working Group Outputs

Building on from the work of the Clinical Reference Group (CRG) and progressing discussions around the immediate workforce challenges, the Sustainable Services Programme potential solution remains in line with the service principles set out within Future Fit:

Acute and Episodic Care

Nearly 65% of the patients that currently attend the Trust's A&E departments do not have life or limb threatening illness or injury and could therefore potentially be seen and treated in an Urgent Care Centre.

The remaining 35% of patients could be treated within the Trust’s single Emergency Centre (EC) as shown in the figure below.

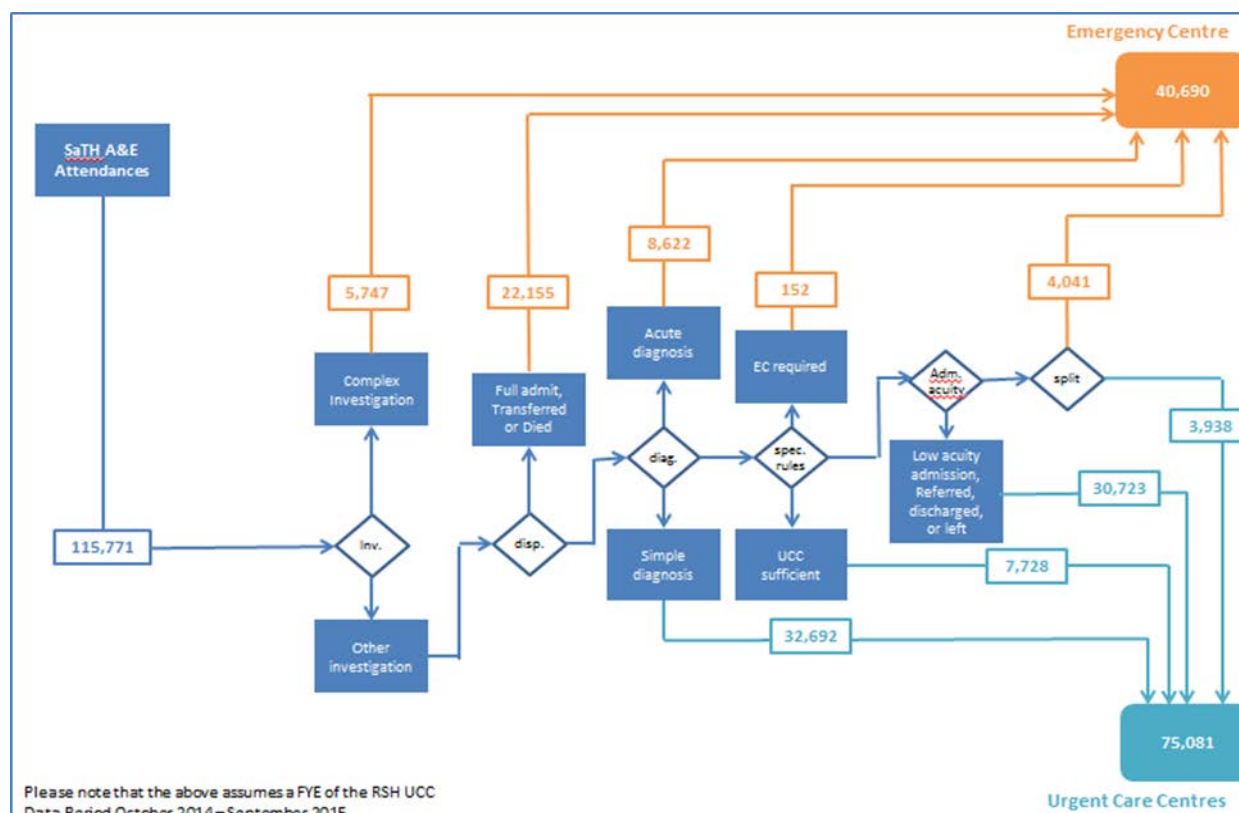


Figure 1: Emergency and Urgent Care Centre Patient Activity Numbers

Urgent Care Centres

The Urban Urgent Care service will be provided on each hospital site and where co-located alongside the Emergency Department will be accessed through a single front door. Patients will access the service as a ‘walk-in’ or via ambulance if it is considered to be clinically appropriate by the paramedic. The UCCs will have access to diagnostics and where appropriate, staff can draw upon the knowledge and expertise of specialist clinicians within the ED and other specialties in order to provide patients with an efficient and seamless service. The Urban UCCs will be open 24/7. A draft service outline is attached at Appendix 2b.

The Future Fit model for the delivery of rural urgent care continues to progress and is due to be finalised at the end of March 2016. This will enable patients, where clinically appropriate, to be seen and treated in a facility that is more local to them than the UCCs in either Shrewsbury or Telford. A network approach to urgent care with real-time communication and support for staff will be key to its deliverability.

Emergency Centre and Critical Care

For patients that are acutely ill with life or limb threatening injuries and require immediate diagnosis and treatment, they would be taken to the EC. The EC will be fully equipped and staffed to deliver high quality emergency medical and surgical care 24 hours a day, 7 days a week, 365 days a year. Access to the EC will be gained only via transfer from a UCC or Ambulance.

The EC will also serve as a Trauma Unit and will be co-located with a single Critical Care Unit (subject to discussion and approval by the Trauma Network). There will also be full and immediate access to diagnostics (Radiology, Pathology), Haematology (Blood Bank) and Pharmacy.

Planned Care

Outpatients and outpatient procedures will be undertaken at both sites. The majority of day case surgery and care would be delivered on the non-EC site via the Diagnosis and Treatment Centre (DTC).

2.3.3 Future Fit Activity Modelling

Within the Future Fit Programme, NHS Midlands & Lancashire Commissioning Support Unit (CSU) was commissioned to support the health system to develop a range of models to estimate future activity levels. Details of this process are included within Appendix 2c.

Phase 1 modelling estimated the levels of activity that the Trust and Shropshire Community Trust might be expected to manage in 2018/19 taking into account demographic change, a range of commissioner activity avoidance schemes and provider efficiency schemes. Aspects of demographic change were also considered and modelled.

A range of commissioner activity avoidance strategies was then analysed and considered based on the subsets of acute activity that commonly form the basis of commissioner Quality, Innovation, Productivity and Prevention (QIPP) plans. These included areas such as: Conditions amenable to ambulatory care; fall related admissions; Patients who left A&E without being treated; Obesity related admissions etc. A full list is provided in Appendix 2d.

The provider efficiency strategies considered during the modelling utilised the Trust's and other acute providers Cost Improvement Plans (CIPs) in both elective care and urgent care. The aim being to reduce the bed usage for admitted patients or the resource impact of outpatient and A&E activity. This included areas such as: enhanced recovery; frail elderly step-down care; A&E number of investigations etc.

The outputs of the first phase of activity modelling were summarised in two documents;

- Modelling Future Activity Levels Shrewsbury & Telford Hospital NHS Trust, May 2014;
- Modelling Future Community Hospital Provision in Shropshire and Telford, February 2014.

Figure 2 shows the headline changes in acute activity, resource use and costs between the baseline year 2012/13 and 2018/19, under the two demographic scenarios.

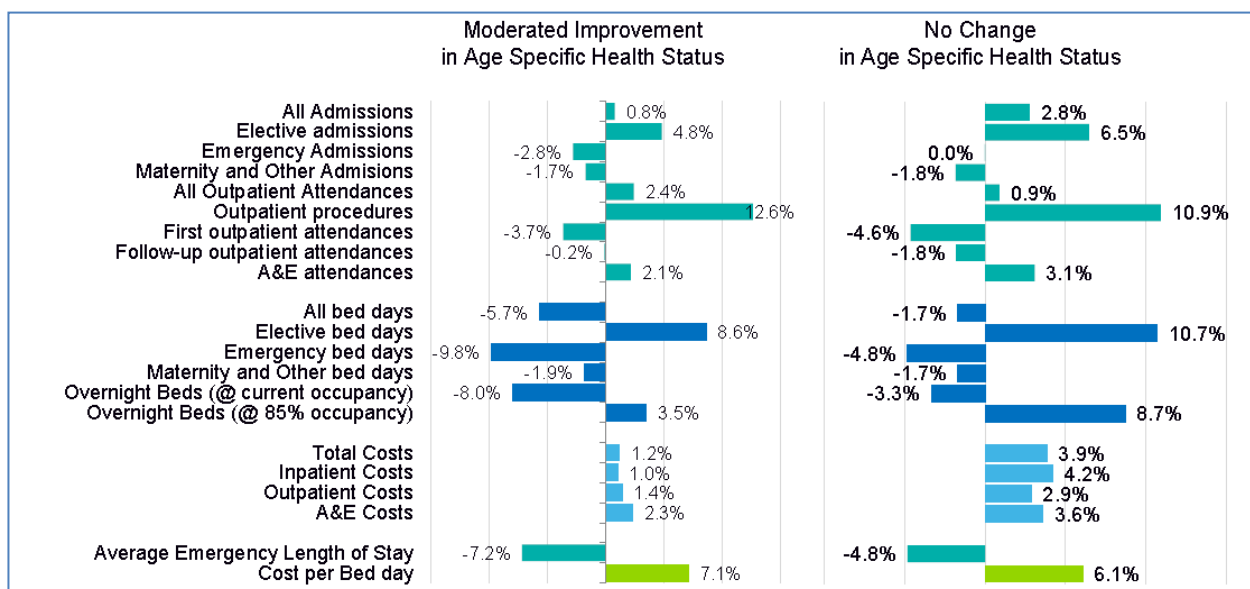


Figure 2: Headline changes in acute activity, resource and costs between 2012/13 and 2018/19

A second phase of modelling, Phase 2, was also undertaken. The outputs are summarised in the document:

- Modelling the Activity Implications of the Future Fit Clinical Model, December 2014.

This Phase 2 modelling built on the initial models to estimate the consequences of more radical redesign proposals generated by the three clinical redesign workstreams. The headline outputs are:

- 69% of front door urgent care activity incorporating activity currently in a number of different services could be managed at an Urgent Care Centre, with the remaining 31% (circa 68,000 attendances) requiring care in the Emergency Department (ED)
- 75% of the activity being managed by the Urgent Care Centres will take the form of minor injuries or ailments, 12% as Ambulatory Emergency Care, 8% as frailty management and 5% as others
- Approximately 35,000 follow-up outpatient attendances managed by the local planned care centres could take place virtually
- Of the 10,000 emergency admissions associated with either frailty or long term conditions in 2012/13, the phase 1 models suggested these admissions could fall by 8% by 2018/19 (largely as a consequence of improvements in primary care management and through better use of community hospitals)
- The Phase 2 models suggests that a further 24% could be avoided by reducing the prevalence of the key risk factors that give rise to Long Term Conditions (e.g. smoking, high cholesterol, high blood pressure) and through greater integration of community and primary care.

2.3.4 Sustainable Services Activity Modelling

The Trust's future activity is aligned to the Future Fit principles however the baseline has been amended from a 2012/13 out-turn to 2014/15 out-turn. Table 7 below shows the baseline and projected future activity for the Trust.

	2014/15 Outturn	Projected 2019/20
Elective Daycase	47,431	42,775
Elective Inpatient		6,806
Non Elective	47,151	42,902
Non Elective Other	8,137	8,647
First Attendance	401,806	91,927
Follow Up Attendance		166,862
Outpatient Procedure		109,656
A&E	109,360	112,836

Table 7: Baseline and Projected Activity

2.3.5 Capacity Modelling

The activity modelling was used to calculate the capacity requirements for the future. In doing this, the following throughput and utilisation assumptions have been made as shown in Table 8 below:

Category	Capacity Modelling Assumption
Inpatient % occupancy*	90%
Daycase turnover rate	1.5
Theatre weeks per year	52
Theatre sessions per week	10
Theatre minutes per session	210
Theatre end utilisation**	80%
Outpatient attendances per room per year: 1 st attendances	2,500
Outpatient attendances per room per year: follow-up attendances	3,500
Outpatient attendances per room per year: outpatient procedures	2,500

Table 8: Throughput and Utilisation Assumptions

* 90% inpatient occupancy rate relates to the main medicine and surgery bed pools, with remaining beds calculated at 85% occupancy.

** Theatre end utilisation takes account of multiple factors, including cancelled sessions as well as non-operating time within sessions (due to gaps between patients etc.), and logistical scheduling issues

The resulting amended capacity requirements for the future are summarised in table 9 below:

Bed Category	Projected Inpatient Bed Requirements (Sustainable Services)
General Beds (including Fit to Transfer)	649
Adult Critical Care	30
Paediatrics	38
Maternity (excluding Delivery Suite)	42
Neonatology	22
Total beds	781
Plus 55 Fit to Transfer Community Provision	

Table 9: Projected Inpatient Bed Requirements 2018/19

Work has been undertaken to quantify and plan for inpatients that no longer require acute hospital care. This cohort of patients equates to those who are classified as 'Fit to Transfer'. Within Future Fit it was agreed that care for these patients does not need to take place within the Emergency site.

Both CCGs have invested in the development of integrated health and social care services to improve the transfer of patients into community settings. Further work has also been led by the System Resilience Group to prototype a new model of Discharge to Assess for patients with complex discharge

needs. Partners across the health and social care system will continue to build on these initiatives to further reduce the numbers of patients delayed in acute hospital beds who could more appropriately receive their on-going treatment and care in their own homes or in community facilities.

2.4 Assumptions for a Potential Solution

The above work generates a number of assumptions, which need to apply to all potential solutions:

- The emergency route in to the Trust (UCC & EC) will be via a single door
- Bed numbers are based on the assumptions of Future Fit with adjustment for 2014/15 baseline as detailed above
- If existing wards are staying as wards, no works will be undertaken
- Critical Care – physical capacity will be provided for 30 spaces. More work is required to understand the staffed capacity initially
- New build wards will be 50% single occupancy and have 32 beds, unless the service requirements require a smaller bed base (e.g. paediatrics and maternity)
- Trust wide service efficiencies and improvements in space utilisation and scheduling will be delivered – focussing on Outpatients, Theatres, Diagnostics and offices

2.5 Functional Requirements

Strategic Healthcare Planning (SHP) were engaged to support the Trust using the activity modelling from Future Fit, the amended modelling to reflect the 2014/15 baseline, the capacity modelling and the assumptions all described above, SHP identified the functional requirements and developed some outline Schedules of Accommodation (Appendix 2e).

2.6 Clinical Centres of Excellence

Implicit within the discussions amongst clinicians within Future Fit and Sustainable Services is the concept of Clinical Centres of Excellence. For some services, consolidating the inpatient bed base or the majority of service delivery onto one site will support and enable the progression of this clinical vision. This work requires further discussion and planning during the development of the Outline Business Case and is something the Trust is committed to delivering in key clinical areas.

2.7 Possible Variations

Within the Future Fit Options, Obstetrics and Neonates was identified as a potential variant; that is, services that should be tested to determine whether they could be delivered on a different site to the Emergency Centre, Critical Care, Acute Surgery etc.

This variant remains under consideration and its further exploration will need to:

- be clinically led
- use best practice and national guidance to frame the discussion
- learn from other hospitals and health systems delivering similar models of care
- be tested against measures of risk, quality and safety, deliverability and sustainability.

3. DEVELOPMENT OF OPTIONS

During 2015, The Future Fit Programme Board established an Evaluation Panel to make recommendations on both the Options to be considered and the Criteria against which such judgements would be made. Each programme sponsor and stakeholder organisation was given the opportunity to nominate a member of the Evaluation Panel.

The Panel's early work included the development of a wide range of potential scenarios from which a long list was created. A number of pre-consultation public engagement events also informed the development and evaluation of options.

The Evaluation Panel was also responsible for recommending the criteria against which long listed options would be evaluated with the pre-consultation public engagement events also informing the development and weighting of the criteria.

Four criteria were proposed initially, to which the Programme Board added a fifth by separating out workforce considerations from wider quality impacts. This resulted in the following broad criteria:

- Accessibility;
- Quality;
- Workforce;
- Deliverability;
- Affordability.

The Evaluation Panel and the wider Future Fit Programme identified potential scenarios for how the approved Clinical Model could be delivered. Key assumptions, at that time, were:

- Emergency Care will be provided from a single location;
- A new "greenfield" site needs to be considered, either to provide all acute services or Emergency Care and some other services;
- It would be possible to deliver all acute services from a single location;
- Two "Urban" Urgent Care Centres will be provided, one at PRH and the other at RSH.
- On this basis the Future Fit Programme Board identified a long list of 13 options (including a Do Minimum Option 1) for consideration.

These scenarios were reduced to a manageable short list of options in line with Department of Health (DH) Capital Investment Manual and Her Majesty's (HM) Treasury Green Book guidance. The options comprise:

- A 'do minimum' option (as required by the Treasury)
- Seven options for the location of the Emergency Centre and the Diagnostic and Treatment Centre (all of which deliver the approved clinical model)
- Urgent Care Centres at both PRH and RSH sites under all options.

The potential to locate consultant-led obstetrics (and neonatal care) either at the Emergency Centre or at PRH was identified as a variant to these options for further exploration.

Option	PRH	RSH
Option A	Provider and Commissioner strategies implemented but no major service change, including A&E	
Option B	EC/Obs&Neo/UCC/LPC	DTC/UCC/LPC
Option C1	DTC/UCC/LPC	EC/Obs&Neo/UCC/LPC
Option C2	DTC/Obs&Neo/UCC/LPC	EC/UCC/LPC

Table 10: Initial Options

These options were fully developed for appraisal in September 2015. However in the light of the deficit in the Local Health System, an affordable case for investment could not be made. In response, the Future Fit Programme Board commissioned the development of a whole-system deficit reduction plan and asked the Trust identify alternative solutions to its most pressing workforce challenges.

3.1 Potential Solutions

Further to the outcome of the capacity modelling exercise and the determination of the functional requirements (as set out in Section 2 above), the Trust considered how services could be delivered across the two sites (PRH and RSH). Senior clinicians, together with operational and corporate leads and the project team, identified a number of ways services could be delivered. This was based on the need to provide:

- one Emergency Department(ED) (within a single Emergency Centre)
- one Critical Care (CC) Unit, to be co-located with the EC
- two Urgent Care Centres (UCC), one at each site
- a balance of activity across the two sites (PRH and RSH)

The site which accommodates the EC, CC Unit and a UCC would then become the **Emergency and Acute** site. The site which accommodates the DTC and stand-alone UCC would become the **Acute and Planned** site. Whilst not directly required to address the Trust’s emergency workforce challenges, this configuration also has the potential to provide the services within a Diagnostic and Treatment Centre at the Acute and Planned site.

This potential solution addresses all of the Future Fit change options:

- Emergency and Acute at PRH and Acute and Planned at RSH (Option B)
- Emergency and Acute at RSH and Acute and Planned at PRH (Option C1)

As referenced in section 2.8, and in the context of Future Fit, a further variation of the Emergency and Acute at RSH and Acute and Planned at PRH is the location of the Women & Children’s Services (**Option C2**). This variant will be discussed in section 4.2.

Based on the core requirement of one EC and CC Unit, the clinical teams identified those services that had a clinical and workforce interdependency with these two emergency services.

The development of the potential solution was progressed over time. The process and outcomes were determined by detailed considerations and discussions with the clinical and non-clinical teams within the Clinical Working Group structure.

The possible balance of services within across an Emergency and Acute and a Planned and Acute configuration has been identified. It is agreed that this will need much more discussion and work as the Trust progresses with a potential solution to its workforce challenges. The detail of this work so far is attached in Appendix 3a.

3.2 Range of Potential Solutions

A number of potential solutions were considered for delivering the Future Fit Options. In line with guidance, a ‘do nothing option’ was included. The solutions considered are shown in Figure 3 below and include:

- **Solution 1** – do nothing
- **Solution 2** – implementing the changes to create an Emergency and Acute site and an Acute and Planned site without any changes to the existing estate
- **Solution 3** – implementing the changes to create an Emergency and Acute site and an Acute and Planned site with changes to the estate for the key services listed above (new build and refurbishment) but without any other transfer and/or changes to any other services
- **Solution 4** – implementing the changes to create an Emergency and Acute site and an Acute and Planned site with changes to the estate for the key services (new build and refurbishment) and the transfer of further essential services to the Emergency and Acute site. These essential services were determined by the clinical teams as those that have a clinical pathway or workforce interdependency
- Two additional solutions were also considered, which challenged the need for an Urgent Care Centre at each site. **Solution 5** co-located a single UCC at the Emergency and Acute site and **Solution 6** co-located a single UCC at the Acute and Planned site.

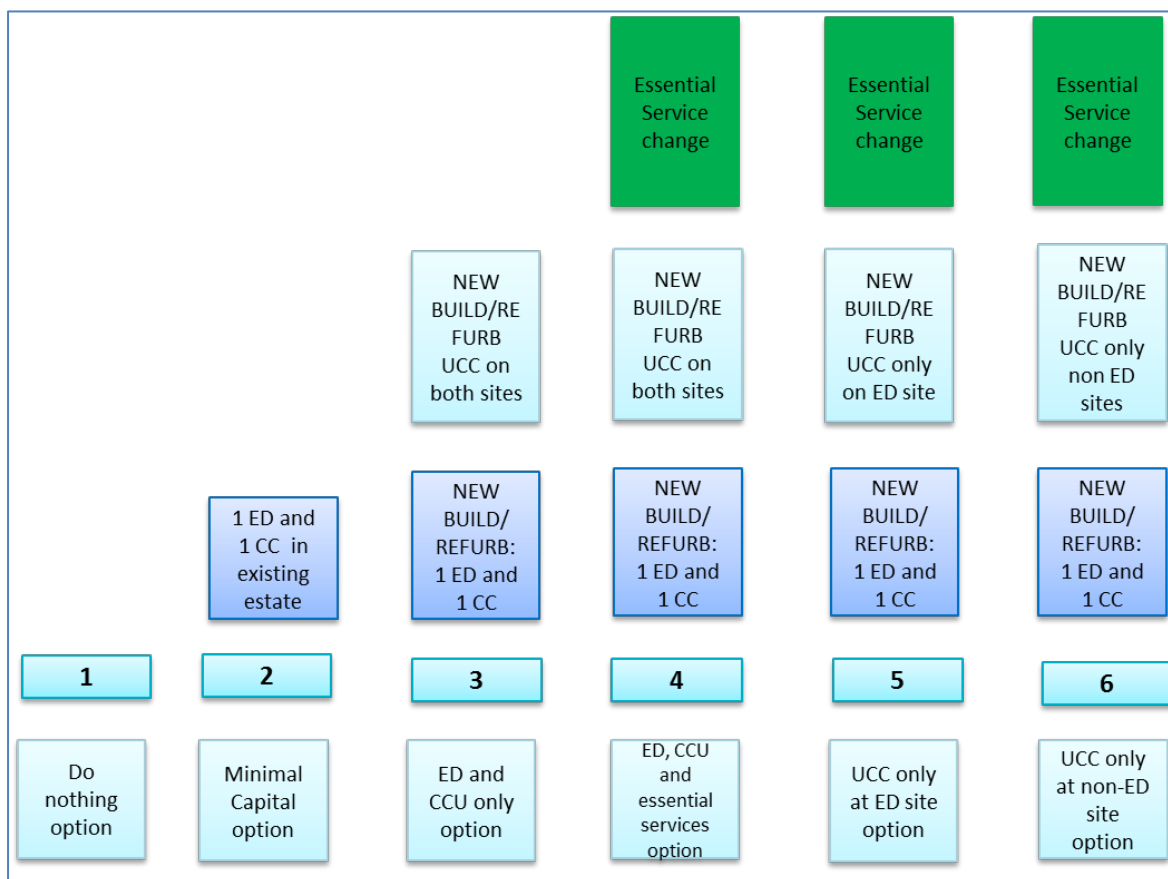


Figure 3: Potential Solutions

3.3 Evaluating the Potential Solutions

The Clinical Working Group and the Trust’s Core Group (project, technical, corporate, IT, estates and facilities leads) determined that the following considerations were key to the deliverability of these potential options:

- Quality – Improving the clinical quality of services

- Access – Maximising access to services
- Environment – Optimising the environmental quality of services
- Workforce – Meeting staff recruitment, retention, training, teaching and staff support needs
- Deliverability – Practicality and timeliness of delivery
- Resources – Making more effective use of resources
- Future-proofing – Strategic fit
- Affordability* – Is the option likely to be affordable in the short/medium term

*It was acknowledged that detailed capital costs were not available at this time however, it was agreed that the affordability criteria should be included due to its significance in the projects progression. However a sensitivity analysis has been undertaken which excludes it to understand the true non-financial scoring.

The potential solutions were evaluated by the Clinical Working Group at a dedicated meeting on 25 November 2015. Following initial discussion, **Solution 5** and **Solution 6** were immediately discounted because they do not address the needs of the public in terms of access to urgent care, would result in unnecessary travel for many and do not fit with the national strategy around emergency and urgent care delivery. These solutions were also felt not to be adequately aligned with the Future Fit clinical model.

The remaining solutions were scored as follows:

Criteria	Weight	Option 1	Option 2		Option 3		Option 4	
			PRH	RSH	PRH	RSH	PRH	RSH
Workforce	20%	2.02	2.02	2.02	4.04	4.04	12.12	10.10
Quality	19%	7.68	3.84	3.84	5.76	5.76	13.43	13.43
Affordability*	18%	3.64	5.45	1.82	7.27	3.64	14.55	10.91
Deliverability	12%	12.12	3.64	3.64	4.85	3.64	8.48	4.85
Access	10%	4.04	2.02	2.02	3.03	3.03	5.05	5.05
Resources	8%	1.62	0.81	0.81	1.62	1.62	4.85	4.04
Future-proofing	6%	0.00	0.00	0.00	0.61	0.61	3.64	3.03
Environment	6%	1.21	0.00	0.00	0.61	0.61	3.64	2.42
TOTAL	100%	32.32	17.78	14.14	27.78	22.93	65.76	53.84
Rank		3	6	7	4	5	1	2

Table 11: Solutions Scoring

The above scoring shows that **Solution 2** (implement without any change/build) and **Solution 3** (implement with change/build to ED, CC Unit and UCC only) scored lower than **Solution 1** (do nothing). Options 2 and 3 were viewed by the clinical teams as being impossible to deliver and would actually make the situation worse than if nothing were done.

Alongside Option 1 (do nothing), **Solution 4** (ED, CC Unit, UCCs and Essential Service change) was therefore concluded to be the only viable option.

Further details of the scoring and evaluation process are included in Appendix 3b.

Further to the outcome of the above Evaluation, the Trust has progressed with **Solution 4** as the remaining viable delivery solution for the Future Fit options. It is hereafter referred to as 'The Potential Solution' without prejudice to which option is finally identified for implementation.

4. THE POTENTIAL SOLUTION

4.1 Description of the Shortlisted Options

The potential solution for Options B, C1 and C2 (with the Emergency and Acute site being at either RSH or PRH (and the Planned and Acute being on the alternate site) has then been developed to an initial level of detail. At this stage, this is to understand the impact, further assess its feasibility and to calculate the capital and revenue cost impact. This has included:

- A further review of the clinical services at each of the sites in more detail
- Understanding the workforce impact
- Developing possible physical solutions and the associated design standards
- Starting to understand the estates impact, including site-wide infrastructure and backlog position
- Exploring the impact on Facilities Management
- The IT considerations
- The impact on the wider hospital sites
- Deliverability and phasing

Each of these items is set out in more detail below:

4.2 Further Review of the Clinical Services

Following the evaluation of the range of solutions, the Trust team revalidated the detail of how the services will be split across the two sites for the potential solution.

A wider Clinical Working Group discussed the service configuration in detail on 8 February 2016 and agreed areas for further discussion and that all of the work developed for the potential solution within this SOC is based on the associated inpatient bed number splits.

This detail has also been shared and discussed at a number of key meetings (Executive Away Day 13 January 2016; Trust Board 28 January 2016; Future Fit Programme Team 4 February 2016; Future Fit Programme Board 18 February 2016).

As introduced in sections 2 and 3 above, the Trust's potential solution needs to include consideration of the potential variant of the separation of Obstetrics and Neonates from the Emergency Centre (Option C2). The Future Fit Programme identified the need for further work to be undertaken on this variant, including understanding clinical evidence to support it. It was agreed that the national 'Maternity Review' that was due to conclude in December 2015, and the parallel report of the Royal College of Obstetricians and Gynaecologists would help to inform this debate.

In addition to this, the Trust has undertaken high-level scoping of the impact of all Women and Children's Services (Obstetrics, Neonatology, Paediatrics and Gynaecology) being co-located on the Acute and Planned site and not the Emergency and Acute site. At this stage, this has been from a workforce and potential estate solution only. Detailed discussions with clinical leaders and teams will need to be undertaken during the development of the OBC. This work will need to include the evidence described above.

During these clinically led discussions further variants may be identified with the potential to align services clinically and still maintain two balanced sites.

4.3 Workforce Impact

The impact of the potential solution on the Trust's workforce has been considered, including the potential impact on recruitment, requirements for relocation of staff, opportunities for workforce transformation, and the impact on the revenue position.

The workforce risks associated with emergency medicine and critical care are addressed and as such the employment offer and ability to recruit improves, due to less onerous on call within acute medicine for example. Further work with regard to role development and workforce transformation would however be an enable and the potential solution identified would be able to support further developments.

- The workforce implications of the potential solution are summarised below:
- Reduction in duplicate costs saved through consolidating some services
- More favourable recruitment in challenged specialities due to single emergency department and critical care configuration
- Minimal new build impact on soft and hard facilities management
- Able to support workforce transformation opportunities and improvements for educating and training multi-disciplinary trainees

4.4 Possible Physical Solutions

The Trust has engaged AHR Architects to develop some initial layouts as to what the possible physical solutions could look like. This piece of work has considered potential locations for development at each of the sites, and has developed some initial block plans, with variants for PRH or RSH as the Emergency and Acute site. This work has considered:

- the likely layout and physical size of each of the key components (ED, CC Unit, UCC, Wards)
- clinical adjacencies and links to the existing services being maintained at each site
- provision of a 'big front door' for the collocated ED and UCC
- the need for future flexibility and potential for further development, service change and consolidation
- an opportunity to improve the overall hospital layout and flow
- an opportunity to create a new entrance and focal point at both sites
- deliverability and the need to minimise the impact on existing hospital services

These block layouts are included in Appendix 4a.

The block plans are designed as a series of 'component parts' that provide flexibility for further consolidation and change overtime, by adding to the core requirement of the potential solution. This provides a potential longer term vision for both hospital sites within an evidence-based Development Control Plan (DCP) for each site (Appendix 4b).

The layouts create a compact and efficient solution and are that built around a 'hot core' of clinical activity (ED, imaging theatres etc.). The layouts also respond to the need to simplify patient and public routes, especially at the RSH site.

It is important to note that these layouts are only an initial view of what might be developed, to check the feasibility and relative scale of the potential solution and to inform the capital costs. The layouts require working up to the next level of detail as part of developing the OBC.

These layout plans were reviewed in detail by the Clinical Working Group at the meeting on 20 January 2016 and were unanimously supported.

The new main entrance areas at each site will contribute significantly to the experience of patients, the public and staff and improve everyone's overall impression of hospital care provided by the Trust. The use of modern, uplifting and 'non-institutional' design has the potential to create a real hub of activity (coffee shops, retail, wayfinding etc.) whilst delivering patients and visitors into the heart of the hospital.

4.5 Design Standards

All new build and refurbished accommodation (where there is a change of use) required to deliver the potential solution will comply with all applicable standards with regard to:

- modern space standards
- control of Infection
- fire
- privacy and Dignity
- accessibility

Department of Health standards, such as HTMs (Health Technical Memorandums) etc.

This will be further discussed and developed at OBC.

4.6 Estates Impact Including Site-wide Infrastructure and Backlog

The Trust Estates team have reviewed the impact of the potential solution on the existing estate both in terms of site-wide infrastructure and the backlog position.

As stated above, all of the new and refurbished accommodation will be provided to modern standards which will provide an improved patient and staff experience in these areas. It will also improve the quality of the estate and the general environment – both recognised to be important contributors to the delivery of better healthcare.

The proposed development will address some of the areas of poor estate identified by the recently completed six facet estate surveys. It will provide additional high quality accommodation in the form of new build and refurbishment and will have some small impact on the backlog position at both sites which are affected by the development.

The impact of the option on the backlog (condition and statutory compliance) position is provided within Table 12 below:

Emergency and Acute Site	Site Reduction (£m)	Acute and Planned Site	Site Reduction (£)	Total Reduction (£m)	Total Residual Gross Condition & Statutory (£m)
RSH (Option C)	15.7	PRH	0.8	16.5	87.0
PRH (Option B)	0.6	RSH	12.8	13.4	90.1

Table 12: Backlog Impact

It can be seen that the reduction in backlog associated with the potential solution ranges from £13.4m to £16.5m depending on which Option is finally selected. This results in a residual backlog position of **£87.0m** under Option C (RSH is the Emergency and Acute Site) and **£90.1m** under Option B (PRH is the Emergency and Acute Site). All figures are gross.

The Trust recognises that the majority of backlog issues will therefore not be addressed. It is acknowledged that this therefore needs to be resolved. The cost pressure associated with capital charge consequence of resolving the backlog (to category B or above) is described in Section 5.

The addition of a significant amount of new estate will create pressures on some of the existing estates services at each site and hence will require some investment in new engineering services infrastructure. A very high level initial review of this has been undertaken by the Trust's Estates team, supported by DSSR Consulting (Mechanical & Electrical) Engineers. Details of the review outcome are provided in Appendix 4d. Further work and costing of the estate and site wide infrastructure will be undertaken in the OBC.

The provision of new estate will also increase the maintenance requirements. These have been considered within the workforce modelling.

4.7 Facilities Impact

As with estates, the addition of a new and changes to the existing estate at each site will require changes to facilities management. Pressure on some existing facilities services such as catering linen/laundry, portering, security, sterile services, and telephony should be noted and will need to be progressed in the OBC.

A very high level initial review of the impact of the potential solution on the existing facilities provision has been undertaken by the Trust Facilities team. Details of this review are provided in Appendix 4c.

The provision of new and changed estate will also increase the facilities management requirements for both hard and soft facilities management, which have been considered within the workforce modelling.

4.8 Impact on the Wider Hospital Sites

The addition of new buildings and refurbishments may have a ‘knock-on’ effect to the existing clinical, non-clinical and support services at both sites including:

- Imaging, Pathology, Mortuary, Pharmacy, Therapies
- Clinical administration, Education, Research and Training
- Medical Records and Medical Engineering
- Spiritual care, staff welfare, support services, outdoor space
- Staff offices, corporate functions, residences
- Car parking

A high level review and mapping of this impact has commenced and will be developed further in the OBC.

4.9 IT Considerations

An integrated and resilient IT network and infrastructure is a vital enabler within the Sustainable Services and Future Fit programmes. The model of care is built on the premise that clinical teams are connected and are able to interact with systems, view images, data and results at the point of need.

In line with this, the Trust’s IT Strategy (Appendix 4e) focuses on sustained and incremental improvements to the organisation’s infrastructure and systems. Key to all developments within this strategy is their need to deliver tangible improvements to patient care. All developments also require a resilient infrastructure in which they can safely and securely operate.

Over time, as with much of the NHS, the IT infrastructure and capacity within the Trust has struggled to keep pace with service needs and advances in technology such as the move to mobile devices, a need for wireless connectivity and advanced system protection.

The IT developments, as an enabler to the implementation of a new model of care, will require investment from all organisations within the health economy. A Local Health Economy group is progressing this work led by David Evans (T&W CCG) and Dr Steve James (Shropshire CCG). The focus is on the integration and sharing of information as well as the challenges with the economy’s infrastructure.

IT leads within the Trust are therefore clear that an incremental and ‘best of breed’ approach is required at SaTH. The system will continue to be developed from what is in place, take the best of others experience and combine a network of different systems in such a way that the user is not aware of the complexity behind. This results in a responsive IT network with a user interface that is easy and straightforward to use. This is outlined in Appendix 4f.

There are three levels of IT development that requires investment to deliver the IT system needs of the future. For SaTH, these costs form part of the Trust's capital and affordability position:

- Level 1: Development and improvement to the network including end-points, switches, wireless capability etc.
- Level 2: Investment in the IT infrastructure including increasing processing and storage capacity within the data centres; cooling and power management in computer rooms to manage increased traffic whilst maintaining availability, confidentiality and integrity.
- Level 3: Connection and front end improvements including the clinical portal, pharmacy (e-prescribing), electronic patient records and other as yet unspecified developments that demonstrably improve workflow across clinical teams and organisations.

The potential solution will require investment, to a greater or lesser extent, in current systems to ensure they meet the 'minimum standard' required. This includes the ability for any clinician to access information from any data point, on a mobile or static device within any patient area. This minimum standard will also need to be delivered within community facilities, if staff are to be able to deliver timely and appropriate care around the needs of the patient.

4.10 Deliverability and Phasing

The phasing and deliverability of the options under the potential solution has been considered at this stage and a potential phasing plan produced. This aims to achieve the fastest possible delivery whilst attempting to minimise capital costs and impact on the existing hospitals.

Initial phasing plans are included in Appendix 4g which demonstrates the potential solution is achievable. Indicative dates and an initial programme are included in Section 6.2. This will all be developed further as part of the OBC.

5. AFFORDABILITY

5.1 Capital

A high level capital cost estimate for the potential solutions has been undertaken by Rider Hunt Cost Advisors. These estimates follow best practice and the guidance within the NHS Capital Investment Manual and are presented on OB forms in the standard format.

The works costs are built up using the Healthcare Premises Cost Guides rates per m2 (HPCGs) applied to the building areas shown within AHR Architects' block plans, plus appropriate on-costs.

The HPCG rates have been adjusted accordingly for items such as storey height, and the areas have been adjusted to allow for main plant rooms and communication between departments.

For the refurbishment areas, a percentage of the new build rate has been taken based on the type of refurbishment indicated on the schedules.

External works are included based on the items shown on AHR's block plans as well as general allowances for items such as drainage.

General allowances have been made for items such as bad ground, diversions, connections, and breakthroughs. Additional costs have then been added to the above works costs to include for:

- fees, which are based on 15% of the works costs, as the HPCG guidance
- non-works costs, which are an allowance based on similar recent developments
- equipment, which is assumed to be all new and included at 15%, as the HPCG guidance
- location adjustment, based on Shropshire
- planning contingency, which is based on 10% of the works cost
- optimism Bias, as set out below
- inflation, which is included based on the PUBSEC indices
- VAT at the current rate
- VAT Recovery, at an assumed level of recovery based on 100% recovery for fees only

All site-wide impact and infrastructure costs are excluded from these capital cost estimates, and are included separately within the SOC.

No costs for land purchase have been included as there is none deemed to be required.

Equipment costs are deemed to include for all general equipment, and general IT infrastructure, but exclude any specialist medical equipment (such as CT, MRI etc.), and any specialist IT requirements (such as EPR or iPads, etc.).

The level of Optimism Bias has been calculated based on the approved guidance, and based on the level of development and confidence in the scheme at SOC stage. This calculation is included in Appendix 5a.

The costs are shown on form OB1, supported by OB 2-4, which are included in Appendix 5b, plus a separate set of High Level Cost Estimates (for supporting information only), which are included in Appendix 5c.

5.2 Overall Affordability and Key Planning Assumptions

In developing its strategy for an affordable option, the Trust has taken into account the following:

- Projections of income based on the Future Fit Phase 2 modelling including a forecast on demographic changes
- Efficiencies arising from the removal of duplicate rotas, reduction in Junior Doctor intensity payments, co-location of services and the co-horting of surgical specialities
- Increased facilities and ward costs associated with modern and national standards for new wards
- Application of inflation
- Net additional cost of capital
- Repatriation of activity currently being performed for local residents in organisations outside the local health economy.
- Increase of tariff payments in line with the current Sustainability and Transformational fund allocation
- Continued CIP delivery

A summary of the analysis can be found in Table 13 with a detailed analysis showing the impact on the Trust's Income & Expenditure in Table 14 and the key planning assumptions detailed in Table 15 below:

	Option A	Option B	Option C
	Do Minimum	PRH Emergency	RSH Emergency
	£000	£000	£000
Capital Expenditure (Current Prices)		102,028	195,325
Remaining Backlog	103,400	90,100	87,000
Income and Expenditure			
Baseline Recurrent Position	(17,271)	(17,271)	(17,271)
Revenue Impact (reduction)/Increase			
Sustainability Fund	0	10,500	10,500
Demographic Growth	11,300	11,300	11,300
Activity Reductions	(9,600)	(9,600)	(9,600)
Repatriation	12,000	8,640	12,000
General Efficiencies	32,786	32,786	32,786
Inflation	(49,800)	(49,800)	(49,800)
Sustainable Services Case Revenue Savings and Costs			
Workforce Savings	(4,600)	21,389	21,302
Cost of Capital	0	(5,805)	(11,112)
Total Savings from Sustainable Services Case	(4,600)	15,585	10,190
Total Revenue Impact	(7,914)	19,411	17,376
Recurrent Income and Expenditure Position	(25,185)	2,140	105

Table 13: Income Expenditure Analysis

The table above demonstrates the affordability of the potential solution at both PRH and RSH to the Trust. Savings achieved as a direct result of implementing the potential solution is £15.585m in Option B and £10.190m in Option C.

Option C does however enable the Trust to maximise the potential for the repatriation of activity currently being performed for local residents in provider organisations outside the local health system.

	<i>Total 2015/16 Baseline</i>	Option A Do Minimum	Option B PRH Emergency	Option C RSH Emergency
	<i>£000</i>	<i>£000</i>	<i>£000</i>	<i>£000</i>
Income				
Baseline Income	315,859	315,859	315,859	315,859
Phase 1 and 2 Activity Reductions	0	(16,000)	(16,000)	(16,000)
Demographics	0	22,600	22,600	22,600
S&T Fund	0	0	10,500	10,500
Repatriation	0	20,000	14,400	20,000
	315,859	342,459	347,359	352,959
Expenditure				
Pay	(215,945)	(215,945)	(215,945)	(215,945)
Pay Inflation		(34,860)	(34,860)	(34,860)
Efficiency Delivered		24,746	24,746	24,746
Repatriation - Pay Implications		(5,600)	(4,032)	(5,600)
Demographic Changes - Pay Implications		(7,910)	(7,910)	(7,910)
Phase 1&2 Pay Implications		4,480	4,480	4,480
Additional Estates and Facilities Pay costs		(600)	0	0
Additional investment in Medical Staffing		(4,000)	0	0
Workforce Reductions - duplicate costs		0	10,153	10,153
Workforce Savings IT		0	2,300	2,300
Additional Workforce Savings		0	9,110	9,110
HCA Pay Costs associated with safer staffing levels		0	(174)	(261)
Total Pay	(215,945)	(239,689)	(212,132)	(213,787)
Non Pay & Inflation Reserves	(99,741)	(99,741)	(99,741)	(99,741)
Non Pay Inflation		(14,940)	(14,940)	(14,940)
Efficiency Delivered	0	8,040	8,040	8,040
Repatriation - Non Pay Implications		(2,400)	(1,728)	(2,400)
Demographic Changes - Non Pay Implications		(3,390)	(3,390)	(3,390)
Phase 1 & 2 Non Pay Implications		1,920	1,920	1,920
Total Non Pay	(99,741)	(110,511)	(109,839)	(110,511)
Finance Costs	(17,444)	(17,444)	(17,444)	(17,444)
Additional Capital Charges		0	(5,805)	(11,112)
Total Finance Costs	(17,444)	(17,444)	(23,249)	(28,556)
Total Income and Expenditure	(17,271)	(25,185)	2,140	105

Table 14: Income and Expenditure Analysis (Price base at 2020/21)

	2016/17	2017/18	2018/19	2019/20
Tariff Uplift	1.1%	0%	0%	0%
Inflation (blended)	3.1%	2.8%	2.8%	2.8%
Efficiency Factor	3.4%	2.5%	2.5%	2.5%
Growth	1.5%	1.5%	1.5%	1.5%

Table 15: Planning Assumptions

5.3 Commissioners

An analysis of the Trust's income pre and post scheme implementation can be seen in Table 16 below:

Commissioner	Current proportion of income with Commissioner		Proposed proportion of income with Commissioner post implementation		Proposed proportion of income with Commissioner post implementation	
			Option B		Option C	
			(Year 1 or base year)		(Year 1 or base year)	
	%	£000s	%	£000s	%	£000s
Local Health Economy	66.22	209,174	63.71	221,319	64.29	226,919
Others	26.41	83,429	26.09	90,620	25.67	90,620
Other Clinical	0.91	2,861	0.88	3,066	0.87	3,066
Non Clinical	6.46	20,394	6.29	21,853	6.19	21,853
Sustainability and Transformation Fund	-	0	3.02	10,500	2.97	10,500
Total		315,858		347,358		352,958

Table 16: Expected Commissioner Contributions post Phase 2 Modelling

5.4 Potential Variant (Option C2)

A financial appraisal has also been completed to illustrate the potential financial impact of the differing configuration of services where, if the Emergency and Acute site is situated at RSH site, the Women and Children's services remain on the PRH site within the Planned and Acute site.

Financial Summary as at 2020/21

	Option C2 RSH Emergency with W&C Separate £000
Capital Expenditure (Current Prices)	168,167
Remaining Backlog	87,000
Income and Expenditure	
Baseline Recurrent Position	(17,271)
Revenue Impact (reduction)/Increase	
Sustainability Fund	10,500
Demographic Growth	11,300
Activity Reductions	(9,600)
Repatriation	12,000
General Efficiencies	32,786
Inflation	(49,800)
Sustainable Services Case Revenue Savings and Costs	
Workforce Savings	17,710
Cost of Capital	(9,567)
Total Savings from Sustainable Services Case	8,143
Total Revenue Impact	15,329
Recurrent Income and Expenditure Position	(1,942)

Table 17: Financial summary of Women & Children's potential solution variant

The above table illustrates that whilst the capital cost of Option C2 is £1.5m lower than Option C1 there is a significant reduction (£3.5m) in the potential workforce savings; predominately due to the requirement to provide additional medical rotas to deliver the required emergency and cover on the non-emergency site. As a result this variant of the potential solution reduces the revenue performance for the Trust by £2m.

5.5 Wider Health Economy Position

Whilst the tables within Section 5.2 demonstrate the affordability of the potential solution to the Trust, affordability should also be considered within the wider context of the overall health system's financial sustainability.

The health system met in December 2015 to discuss and explore the likely financial challenges facing all providers and commissioners across the population served for the period 2016-2021.

The system leaders commissioned Price Waterhouse Coopers (PWC) to undertake a granular level assessment of the challenges. The conclusion of this will be available in the first week of March 2016, however given the information currently available, a draft financial summary and overview has been produced illustrating the key elements that need to be delivered to deliver financial sustainability over a 5 year period.

Local Health Economy Position

	Commissioner's Providers				
	Commissioners	SATH	RJAH / Community Trust	Other (inc Mental Health)	Total
	£000	£000	£000	£000	
Opening Deficit 2015/16	-4,900	-17,271	2,000		-20,171
Additional Pressures					
Winter Pressures		-2,800			-2,800
Additional Agency Spend		-3,500			-3,500
Opening Deficit 2016/17	-4,900	-23,571	2,000	0	-26,471
Commissioner allocation					
Shortfall	-18,100				-18,100
Community Fit	-6,000				-6,000
Sustainability and Transformation Fund		10,500			10,500
Winter Funds	-2,800	2,800			0
Inflationary Pressures		-49,800	-22,900		-72,700
Deemed Net Gain from Demographic Growth		11,300	6,500	7,400	25,200
QIPP Schemes required to Deliver CCG Business Rules	38,000	-16,000	-11,000	-11,000	0
System wide Financial Problem	6,200	-64,771	-25,400	-3,600	-87,571
Provider Solutions					
Direct Costs Savings as a result of QIPP Schemes		6,400	4,400		10,800
Repatriation of Activity Net Gain		8,640			8,640
Agency Premium - National Cap		3,500	1,000		4,500
CIP Achievable		27,286	22,900		50,186
SATH Sustainable Services Business Case		15,585			15,585
Staff Unavailability		3,000			3,000
Back office Functions		1,000	300		1,300
Review of Midwifery Service		1,500			1,500
Saving identified	0	66,911	28,600	0	95,511
Resultant Position 2020/21	6,200	2,140	3,200	-3,600	7,940

Table 18: Local Health Economy Position

The table above demonstrates the significance of the Trust's delivery of the Sustainable Services Programme on the local health system. The health system CCGs are able to deliver their required business rules and the local providers can deliver their required surpluses when the Sustainable Services Programme is one of the fundamental elements of the system's financial recovery.

5.6 Financial Impact of Addressing the Trust's Estate Backlog Issues

As highlighted in Section 4.6 it is important to note that the significant issue of the remaining backlog maintenance not fundamentally being addressed within the potential solution detailed above.

The Trust is clear that it wishes to address its backlog issues. However, this would result in an additional revenue pressure associated with the cost of capital expenditure of circa £6m.

It is therefore assumed that this cost pressure will feature in the local health system's recovery plan going forward.

6. TIMETABLE AND DELIVERABILITY

The Trust recognises that the delivery of the project is a significant task, requiring good quality project management and a real commitment from all parties involved to ensure its success. The Trust has robust arrangements in place for the on-going management of the project. This section sets out the Trust's timetable and delivery plan to ensure the successful delivery of the project, including:

- Proposed Timetable for achieving the completion of the scheme
- Potential delivery dates and phasing requirements
- Main risks identified at this stage, and arrangements for risk management
- Summary of the project management arrangements
- Confirmation of Trust commitment of time and resource, and plans for knowledge transfer
- Arrangements for consultation, engagement and communication
- Procurement
- Next steps

6.1 Proposed Timetable

The proposed timetable for the next stages of the scheme up to the completion of the FBC is shown in Table 19 below. These proposed dates provide the fastest possible route to delivering the potential solution, whilst ensuring adequate planning, engagement, approvals, and due diligence are undertaken; as well as sufficient periods for the Trust to obtain the necessary approvals from the Trust Development Authority, including HM Treasury as appropriate. An outline programme, including interdependencies and milestones will be developed with the OBC. The Trust's proposed arrangements for managing delivery are set out below.

Milestone	Start	Finish
Trust Board formally approve final draft SOC	-	25 Feb 16
Submit SOC to TDA for approval	-	11 Mar 16
TDA SOC approval period (local and national, inc DH and Treasury)	14 Mar 16	30 Oct 16
Reviews with TDA and responding to queries as required	14 Mar 16	31 May 16
Trust Board formally approve final OBC	27 Oct 16	27 Oct 16
Public consultation	1 Dec 16*	12 Mar 17*
Full Planning Application (allow 16 weeks)	13 Mar 17	30 Jun 17
TDA OBC approval period (local and national, inc DH and HMT)	1 Jun 17	31 Dec 17
Final Commissioner Decision	30 Jun 17	30 Jun 17
Procurement process (assuming D&B or P21+ route)	1 Sep 17	30 Mar 18
Full Business Case (FBC) Approval	30 Aug 18	30 Aug 18

Table 19: Proposed Milestones

* Dates for the public consultation shown are the target dates as set out within the Future Fit Critical Path and are subject to change (especially as a result of external approval processes).

6.2 Delivery Dates and Phasing Requirements

The construction and delivery phase varies according to which site is the emergency acute site. A first pass at the potential phases and associated delivery dates is shown in Tables 19 and 20 below. The outline phasing plans which correspond with these dates are included in Appendix 4g. All of this will be developed further at OBC stage.

All of these dates are deemed to include construction, fit-out, and decanting. At this stage Phase 1 at either site is deemed to commence after the FBC is approved and a short lead-in time is provided to the Contractor (say 2 months). It may be that some early work can be undertaken at risk in parallel with finalising the FBC, particularly at PRH.

NOTE: All dates are very indicative at this stage and require verification. They are for guidance only and are subject to change.

6.3 PRH as the Emergency and Acute Site

There are some initial enabling works required to deliver the potential solution at PRH, but the majority of the work is built in a single phase, with the final CC Unit refurbishment as a final phase.

	Phase	Duration
1	Enabling works and create new parking at PRH	9 months
2	Create new ED/CC Unit/UCC/AEC at PRH plus other works	24 months*
3	Refurbish CC Unit at PRH, refurbish A&E at RSH	9 months
	TOTAL	42 months (3 years 6 months)

Table 20: PRH as the Emergency Acute Site

*at the end of this phase the first part of the service becomes operational

6.4 RSH as the Emergency and Acute Site

There are a series of enabling works and sequencing required to deliver the potential solution at the RSH site. This is as a result of the need to relocate a number of existing non-core services to create the space to develop the new scheme. In addition, the need to move Women and Children's from PRH creates an additional set of phasing.

	Phase	Duration
1	Enabling works to reprovide and relocate existing services at RSH	12 months
2	Demolition of existing services at RSH	4 months
3	Create new ED/CC Unit/UCC/AEC and W&C's Unit at RSH	30 months*
4	Transfer of services from PRH to RSH, vacation at RSH and PRH, demolition at RSH	2 months
5	Reconfiguration and create new entrance at RSH; refurbishment of old W&C's unit at PRH	12 months
6	Final moves and refurbishments	9 months
	TOTAL	69 months (5 years 9 months)

Table 21: RSH as the Emergency Acute Site

**at the end of this phase the first part of the service becomes operational*

6.5 Risks and Risk Management

There are a number of risks associated with the planning and delivery of the Sustainable Services Programme. These risks, their mitigation, and supporting actions are reviewed and managed through the project team and the governance structure in place; which aligns with the normal Trust operational risk management processes and procedures. All identified risks are documented in a project risk register and assessed for likelihood and potential impact and given a RAG rating.

The Programme Risk Register is formally reviewed and updated on a monthly basis by the Project Team. Red rated risks are reported to the Programme Board each month. The current top risks (10 and above) are shown in Table 22 below, and a copy of the latest Risk Register is in Appendix 6a:

Risk	Additional Actions Identified to address risk
Lack of clarity of roles regarding Sustainable Services Programme and NHS Future Fit resulting in a failure to meet the '4 tests' and Gunning Principle required for all NHS service reconfigurations	Urgent need to clarify relationship and roles and communicate with stakeholders and the public. Meetings planned
Risk around wider NHS Future Fit progression including perceived divergence from clinical model, lack of GP support and/or because the NHS Future Fit model has not been adequately refreshed (e.g. Community Fit, the rural offer, financial sustainability) leading to CCGs not being able to approve the plans for, and lead on public consultation	Refreshed messages and mandate through NHS Future Fit Programme for an update to the clinical model required to encompass progress and any changes. Meeting of SROs and Accountable Officers/CEO with communication team to discuss and progress. Outcomes to be fed into meeting of key leads above
Capital costs of the emerging solutions in higher than anticipated leading to concerns around affordability and deliverability	Cost advisors working closely with Architecture and Technical Team. Information to be shared with Trust teams. Draft capital costs received and being worked through. Revenue impact to be mapped

Table 22: Top rated risks

6.6 Project Management Arrangements

The Trust is managing the Sustainable Services Programme as a single project. It is being managed internally, complemented by external advisors where appropriate. The Trust has successfully managed the project to date using the processes outlined within this SOC, which will be developed further as we progress through the OBC and then FBC.

A robust governance structure has been established with defined roles for individuals; and the establishment of a series of groups, teams and boards. This ensures all team members understand their role and responsibilities, and provides a clear and auditable route for decision making and the escalation of risks and issues.

Progress against the key milestones is monitored by the Project Team using an Action Tracker, which is presented each month to the Programme Board and Core Group meeting, and any corrective action taken if required.

A budget for each stage of the project is established at the outset of the stage, and the on-going costs are controlled and monitored by the Project Team, including fees for external consultants. An overall project budget will be established as part of the OBC.

The proposed benefits of the project are emerging within this SOC, which will be developed within the OBC, and a benefits management process established to ensure these are achieved.

A robust project brief will be established, and the design will be managed and controlled by the Project Team and through the Technical Project Manager, to ensure it complies with the brief and will meet all relevant statutory requirements and guidance, with any derogations agreed and documented.

Appropriate change control, issues management, and contract administration will be established as the project progresses.

A robust commissioning, completion, and post-completion process will be established, which will include a Post-Project Evaluation.

All of the project management arrangements are documented in a Project Initiation Document (PID), which is included in Appendix 6b.

6.7 Time and Resource

The Trust confirms that adequate time, resource, and expertise is being allocated to the project to ensure its successful delivery.

6.8 Lessons Learnt and Transfer of Expertise from FCHS Project

The Trust has recently undertaken a major reconfiguration programme, the Future Configuration of Hospital Services (FCHS). In addition to retaining a number of key internal and external project team members from this project, a detailed lessons learnt process was carried out, both of which have helped inform the Sustainable Services Programme and ensure knowledge transfer.

6.9 Consultation, Engagement and Communication

As work within the Sustainable Services Programme is aligned to the health economy's Future Fit Programme, communication and engagement with patients, the public and wider stakeholders is within the Future Fit Programme and managed accordingly.

Involvement and support from the Clinical Commissioning Groups and liaison with the Trust Development Authority has been held throughout the SOC process. Monthly project updates have been provided to the Future Fit Programme Board.

Plans for the Public Consultation are being developed, in partnership with the Future Fit Programme Team.

The project will undergo all required internal and external assurance, including formal review by the West Midlands Clinical Senate as part of Stage 2 NHSE Assurance, regular reporting to the Joint Overview and Scrutiny Committee. It is also envisaged that the project will undergo a 'Gateway' Review.

6.10 Procurement

The procurement options to be explored through the OBC development will include traditional funding routes (Public Dividend Capital (should this be available), DH loans) as well as potential private sources of funding (private loans, property-led funding solutions e.g. Joint Ventures, property development solutions etc.)

No allowance for land purchase has been included, as there is no new land deemed to be required and the Trust currently owns and controls all of the areas to be developed.

6.11 Next Steps

The next steps for the Sustainable Services Programme are:

- Progress this SOC through the formal approval process
- Work with the Future Fit Programme to support and enable them to lead an Appraisal and Assurance Process in the coming months
- Develop communication and engagement plans in partnership with the Future Fit Programme and CCGs to support and enable them to lead Public Consultation later in 2017
- Commence work on the OBC

CONCLUSION

This document presents the Strategic Outline Case for the Trust's Sustainable Services Programme as part of the Future Fit Programme. It describes the Trust's plans to address the significant challenges to the safety and sustainability of patient services specifically in emergency and critical care.

The SOC outlines the potential solution for the creation of balanced hospital sites. Each site will continue to provide essential services for the population served including: Urgent Care, Outpatients, Ambulatory Emergency Care, Diagnostics and Midwifery Led Care. Either site will then provide Emergency Care (the single ED and Critical Care) or the majority of Planned Care (the Diagnostic Treatment Centre). Clinically-led discussion and debate will need to continue on the best location for other essential hospital services: Women and Children's, Surgery, Cancer etc. – many of which can further develop into the Trust's ambition for Centres of Excellence.

It also introduces the Trust's backlog maintenance challenge and highlights the need for an approach to bring much of the estate at RSH back to its 'as built' standard. However, this would result in an additional revenue pressure associated with the cost of capital expenditure of circa £6m.

The SOC identifies the high-level capital costs associated with the required new build and refurbishments to enable this vital service change. The workforce and revenue impact of the proposed changes is also identified. The financial impact is described within the context of the Trust and local health systems long term financial sustainability and deficit reduction plans.

The potential solution is affordable to the Trust at both the PRH and RSH (Options B and C1).

The potential variant of the Emergency and Acute site being at RSH and Women and Children's Services being located on the Acute and Planned site at PRH (Option C2) currently appears to be marginally unaffordable.

The SOC has been developed in accordance with the requirements of the TDA. These requirements include the identification of a range of deliverable and affordable options that will address the problem that we are trying to solve. First, to resolve the workforce challenges within A&E and Critical Care and second, to address the backlog estate issues.

The Trust Board is asked to:

- Review the Strategic Outline Case for the Trust's Sustainable Services Programme
- Approve the Strategic Outline Case for submission to Commissioners and the Trust Development Authority for their support and approval

(Trust Board minute to follow)

APPENDIX 2a – Letter of Support from the Commissioners


Shropshire
Clinical Commissioning Group

Somerby Suite
William Farr House
Mytton Oak Road
Shrewsbury
SY3 8XL
Tel: 01743 277500


Telford and Wrekin
Clinical Commissioning Group

Halesfield 6
Telford
Shropshire
TF7 4BF
Tel: 01952 580300

Mr Peter Latchford
The Chairman
The Shrewsbury and Telford Hospital NHS Trust
Royal Shrewsbury Hospital
Mytton Oak Road
SHREWSBURY
SY3 8XQ

Dr Mr Latchford

Letter of Support to the Governing Body Board of SaTH in relation to the Strategic Outline Case (SOC) Sustainable Services Programme, part of NHS Future Fit

On behalf of the Governing Boards of NHS Shropshire and NHS Telford and Wrekin CCGs, we confirm that, subject to the details outlined below, we support in principle the proposals contained within the Strategic Outline Case (SOC) of the Shrewsbury and Telford Hospitals NHS Trust (SaTH).

Future Fit started in 2013 and explored the clinical models for delivering acute and community hospital care. Formal evaluation determined that the short listed delivery options for the model were unaffordable. Subsequently SATH has developed a SOC based upon a number of key assumptions which has been approved by their governing body. This includes that this can be an affordable solution within the context of a plan to reduce the system deficit and that investments in primary and community care services will enable the transfer of activity from the acute sector.

The CCG Boards give their support at this stage for submission to NHS Improvement for consideration, whilst recognising that more detailed work, in collaboration with system partners, is needed in a number of critical areas during the development of the Outline Business Case (OBC).

The CCGs' support is contingent upon all of the reservations outlined within this letter being addressed to the satisfaction of both CCGs prior to the submission of the OBC.

1. Sustainability of the clinical model

The clinical configuration proposed in the revised SOC describes a way of delivering the essential components of the clinical model previously identified within the Future Fit programme.

The CCGs recognise that the revised solution moves away from the 'hot' and 'cold' site solution to a more evenly balanced distribution of services. Whilst this solution appears to improve the workforce sustainability issues in our emergency and critical care unit, it is unclear whether it will provide a viable long term model of acute medicine. Therefore, further clarification is required to provide assurance on inter-dependencies of clinical specialities and the levels of workforce and capital investment required.

We also require further clarification around the clinical linkages on which the service re-configuration has been based, and the details of proposed repatriation including quality impact assessments.

To this end, the CCGs require full assurance from the Clinical Senate about the viability of the proposed 'hot' and 'warm' site configuration.

2. Community Fit

The SOC makes a number of assumptions about the future model of community and primary care services. Given the inter-dependencies of Future Fit and Community Fit, the CCGs need more assurance of the viability of these assumptions.

Whilst recognising that this work will take longer than the timescale of the development of the OBC, the CCGs require completion of sufficient further work to design the model of community care and to test assumptions about a) the scale of activity shifts and b) productivity improvements anticipated in the SOC.

We suggest this also needs to be presented to the Clinical Senate as part of the assurance process.

3. Activity Assumptions

The activity assumptions within the revised SOC have been based on the work of the Future Fit Activity Work Stream, which translated the ambitions of the Clinical Reference Group into anticipated demand and capacity models.

The calculations have taken into account:

- better public health and prevention interventions;
- changes in commissioning policies;
- changes in thresholds; and
- likely reductions in lengths of stay for admitted patients.

The CCGs require detailed sensitivity analysis on the assumptions used, to be completed through the OBC process.

4. Community and/or primary care alternatives to acute care

The SOC has been built upon the activity modelling and uses a set of assumptions for the proposed activity on each site, plus a level of shift in activity away from the acute sector.

These assumptions also need thorough testing through the OBC process, including the application of a sensitivity analysis. This would also need to include the potential impact on primary care and community services in a range of activity shifts, together with an analysis of the change in financial flows away from the acute sector that will enable this activity transfer to take place.

As part of this next phase of work there is also a need to quantify the impact on ambulance service provision and to further test the detail around SaTH's ambition to repatriate a level of activity from other providers.

Affordability

Affordability of the SOC needs further testing, including the assumptions around investments and efficiency savings and should be supported by robust sensitivity analysis.

Governance

For the CCG Boards to be fully assured before signing off the OBC, it is essential that progress is made simultaneously on all four areas discussed above.

To that end it is essential that the existing Future Fit programme governance processes are refocussed on providing regular reports to the CCG governing bodies on progress towards providing them with assurance on the areas of concern outlined in this letter of support.

During the development of the detailed OBC the programme team will report to the Programme Board and to each organisation's governing body on a monthly basis on progress of work to clarify the areas of concern outlined in this letter, with escalation to each organisation's governing body for review, where assurance cannot be provided for:

- The viability of the proposed acute clinical model from the Clinical Senate.
- The viability of the proposed and corresponding Community Fit proposal from the Clinical Senate.
- Reliability of assumptions about the anticipated demand and capacity levels; and anticipated activity shifts via the sensitivity analysis.
- Reliability of assumptions that the proposed models for acute and community services are financially sustainable via sensitivity testing.

Finally, the CCGs give their commitment to work in an open and transparent way with SaTH and the other main commissioners of services of the Trust, to ensure that the critical issues detailed above are fully addressed to enable future decisions to be sufficiently informed.

Based upon the above requirements and our expectation that they will all be addressed through the OBC development process, the CCGs support Shrewsbury and Telford Hospital NHS Trust's submission of the Future Fit SOC for further consideration.

Yours sincerely



Julian Povey
Chair
NHS Shropshire CCG



Jo Leahy
Chair
NHS Telford & Wrekin CCG



David Evans
Accountable Officer
NHS Shropshire CCG
NHS Telford & Wrekin
CCG



APPENDIX 2b – SaTH Patient Activity 2015/16

Appendix 2b: 2015/16 Patient Activity Data

Centre	A&E	Elective Inpatients	Non-Elective Inpatients	Outpatients
Diagnostics	0	0	0	610
Emergency Care	107,946	0	998	3,826
Head and Neck & Ophthalmology	0	7,006	785	96,401
Medicine	0	3,217	25,511	104,562
Musculoskeletal	0	3,253	3,481	51,818
Surgical, Oncology & Haematology	0	32,745	8,941	97,467
Theatres, Anaesthetics & Critical Care	0	0	1	293
Therapies	0	0	0	11,046
Women and Children's	0	3,062	17,210	46,364
Grand Total	107,946	49,283	56,927	412,387

APPENDIX 3a – Key Clinical Leads

Key clinical leads involved in the Sustainable Services Programme

<i>Unscheduled Care Group</i>	<i>Scheduled Care Group</i>
 <p>Care Group Medical Director – Dr. Kevin Eardley Assistant Medical Director – Saskia Jones-Perrott</p> <p>Emergency Clinical Director – Subramanian Kumaran Emergency Medicine Clinical Lead – Adrian Marsh Matron PRH – Vanessa Roberts Matron RSH – Clare Walsgrove</p>	 <p>Care Group Medical Director – Mr. Mark Cheetham Deputy Care group Medical Director – Joe McCloud Head of Nursing – Louise Gill</p> <p>Clinical Director for Anaesthetics, Theatres and Critical Care – Dr. Louise Sykes and Mr. Simon Hester Theatres Matron – Katy Moynihan ITU Matron – Gary Caton ITU Ward Managers – Stephanie Young (RSH) and Debbie Chidlow (PRH)</p> <p>Oncology and Haematology Clinical Director – Stephen McKew Oncology Clinical Lead – Sheena Khanduri</p>

Key clinical leads involved in the Sustainable Services Programme

Women and Children's Care Group



Care Group Medical Director – Mr. Andrew Tapp
 Lead Nurse – Lynn Atkin
 Paediatric Matron – Emma Dodson
 Deputy Head of Midwifery – Anthea Gregory-Page
 Clinical Director for Maternity – Mr. Adam Gornall
 Clinical Director for Paediatrics – Dr. Andrew Cowley and Dr. Tabitha Parsons
 Clinical Director for Gynaecology – Mr. Andrew Sizer and
 Mr. Martyn Underwood
 Clinical Director for Neonatology – Dr. Sanjeev Deshpande and
 Dr. Wendy Tyler
 Lead Midwife for Acute and Outpatient Services – Maggie Kennerley
 Lead Midwife for MLUs and Community – Wendy Cutchie

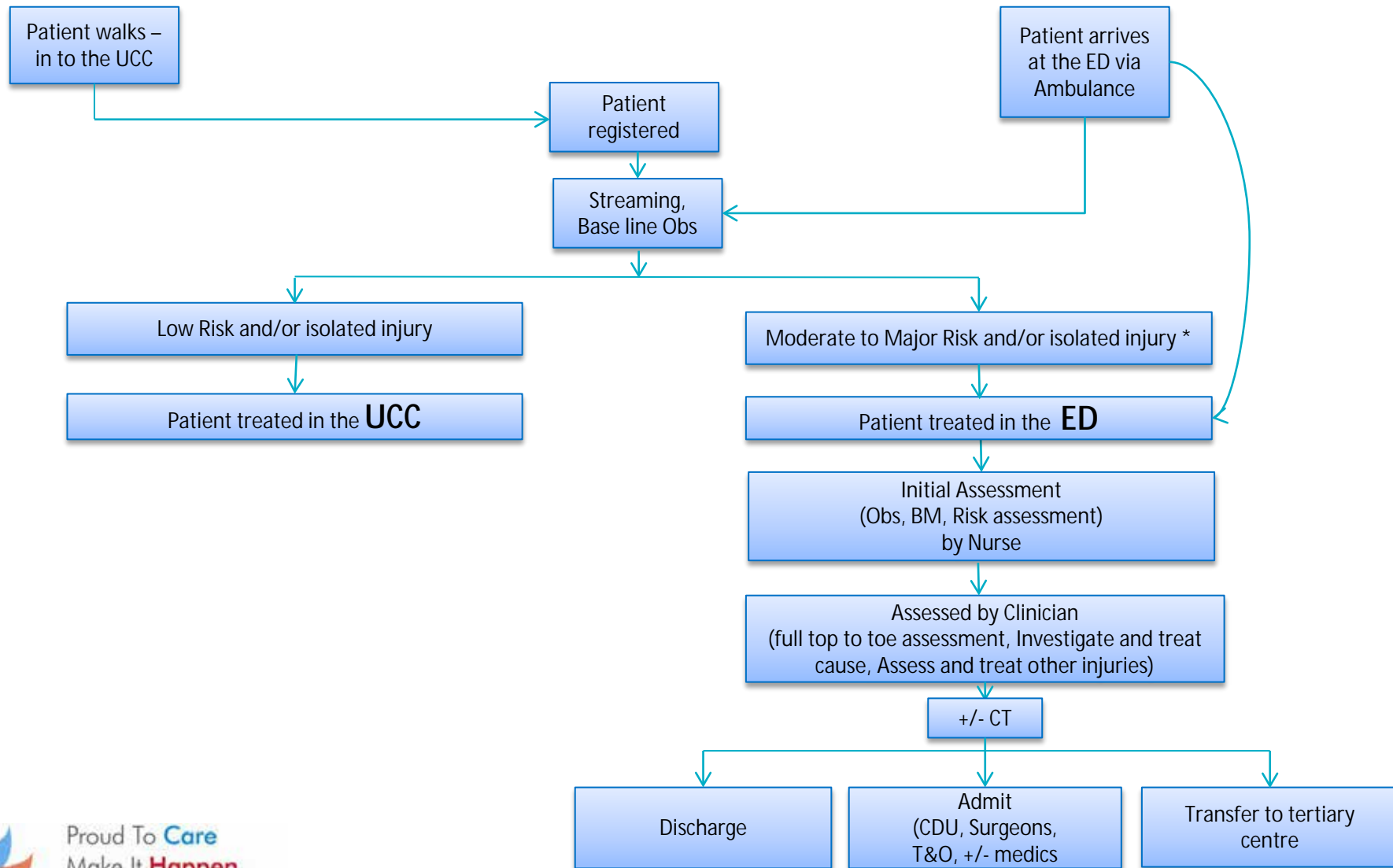
Support Services Care Group



Care Group Director – Debbie Jones
 Care Group Medical Director – Mr. Andrew Tapp
 Head of Physiotherapy and Unscheduled Care Centre Manager –
 Jill Dale and Amanda Taylor
 Head of Occupational Therapy and Scheduled Care Centre Manager –
 Amanda Walshaw

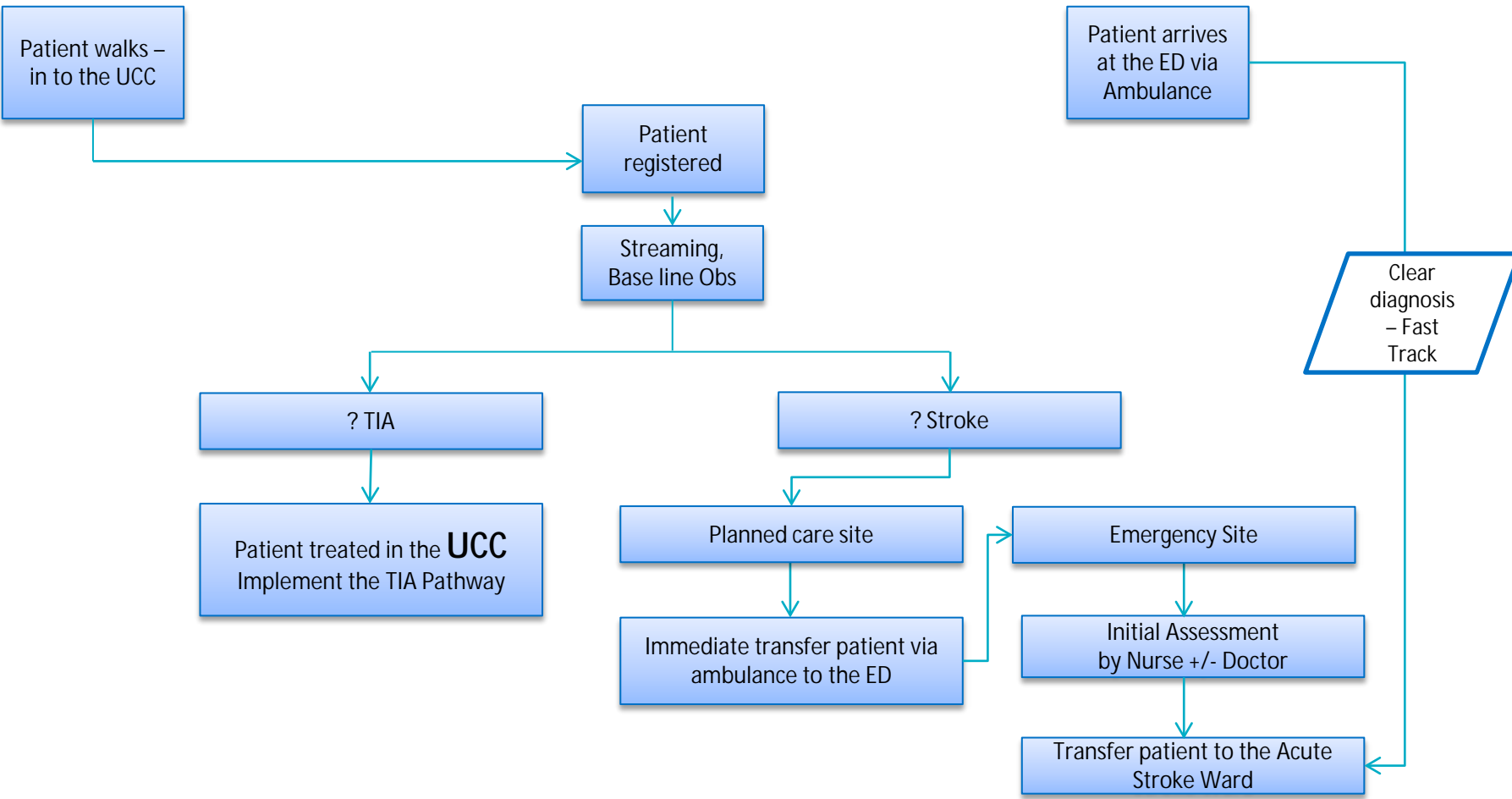
APPENDIX 3b – Patient Pathways

Patient presenting to ED/UCC with a Head Injury - DRAFT



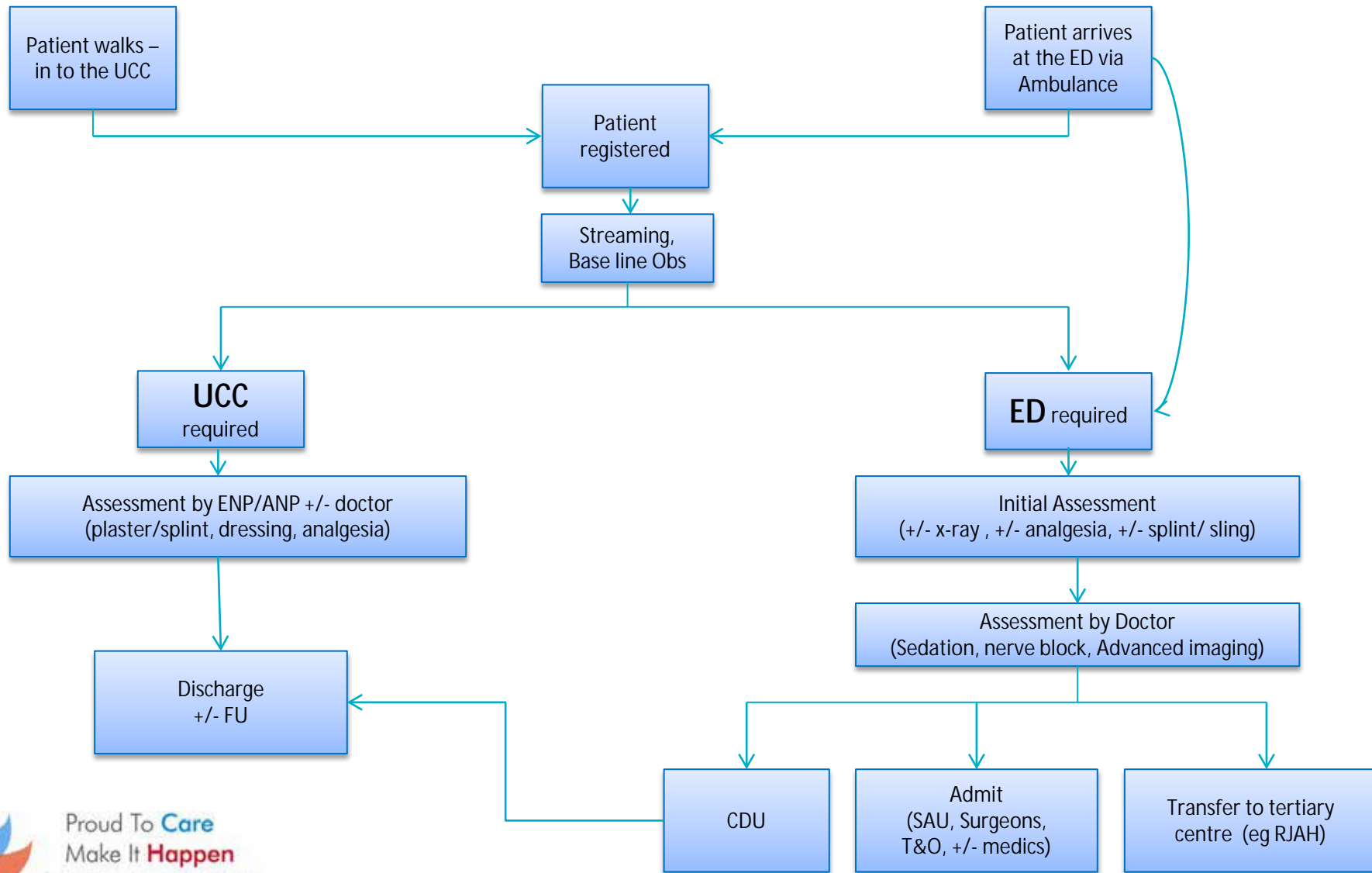
* Ambulance transfer if patient presents on the planned care site.

Patient presenting to ED/UCC with a Cerebro-vascular condition - DRAFT

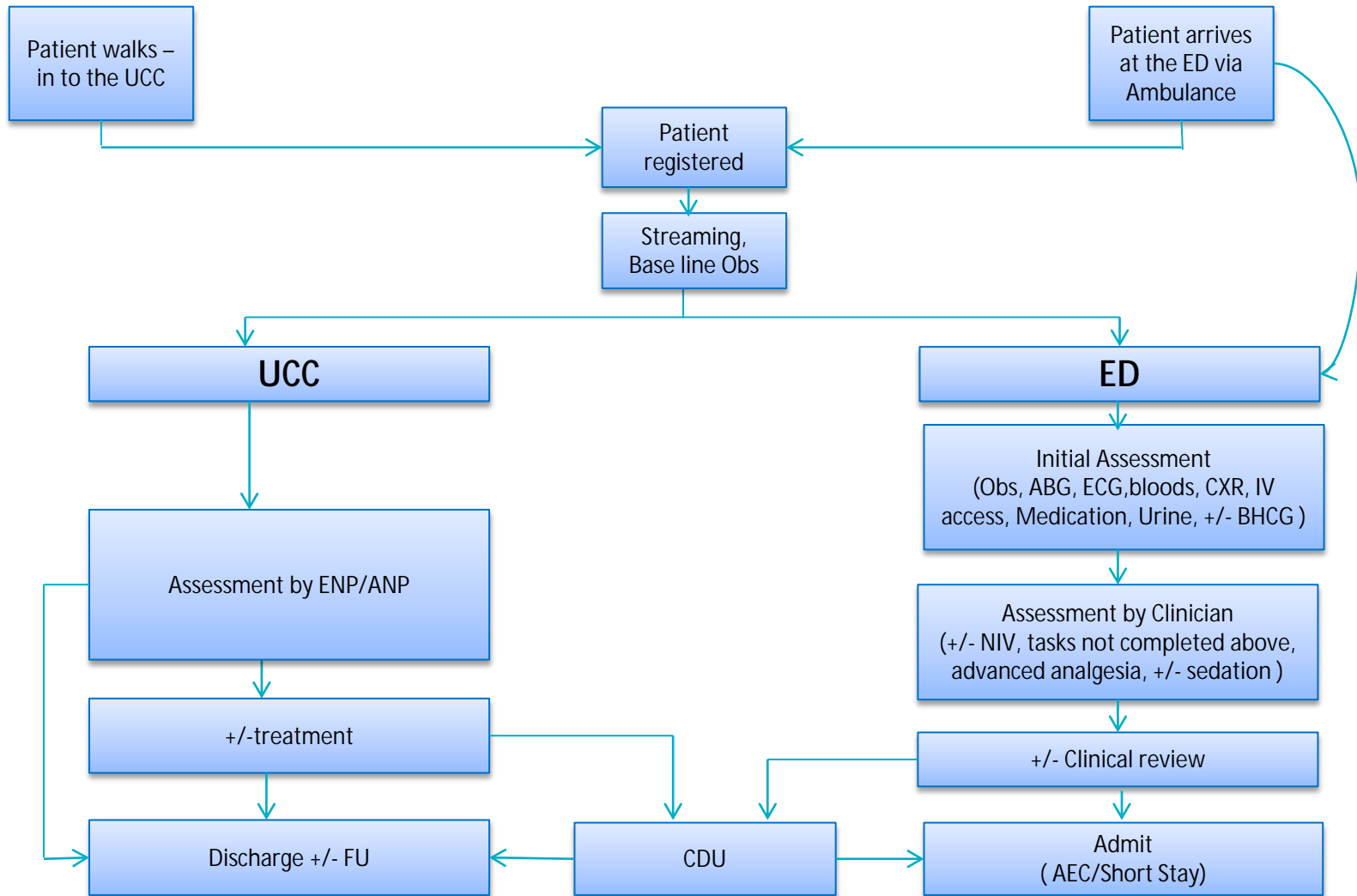


* Ambulance transfer if patient presents on the planned care site.

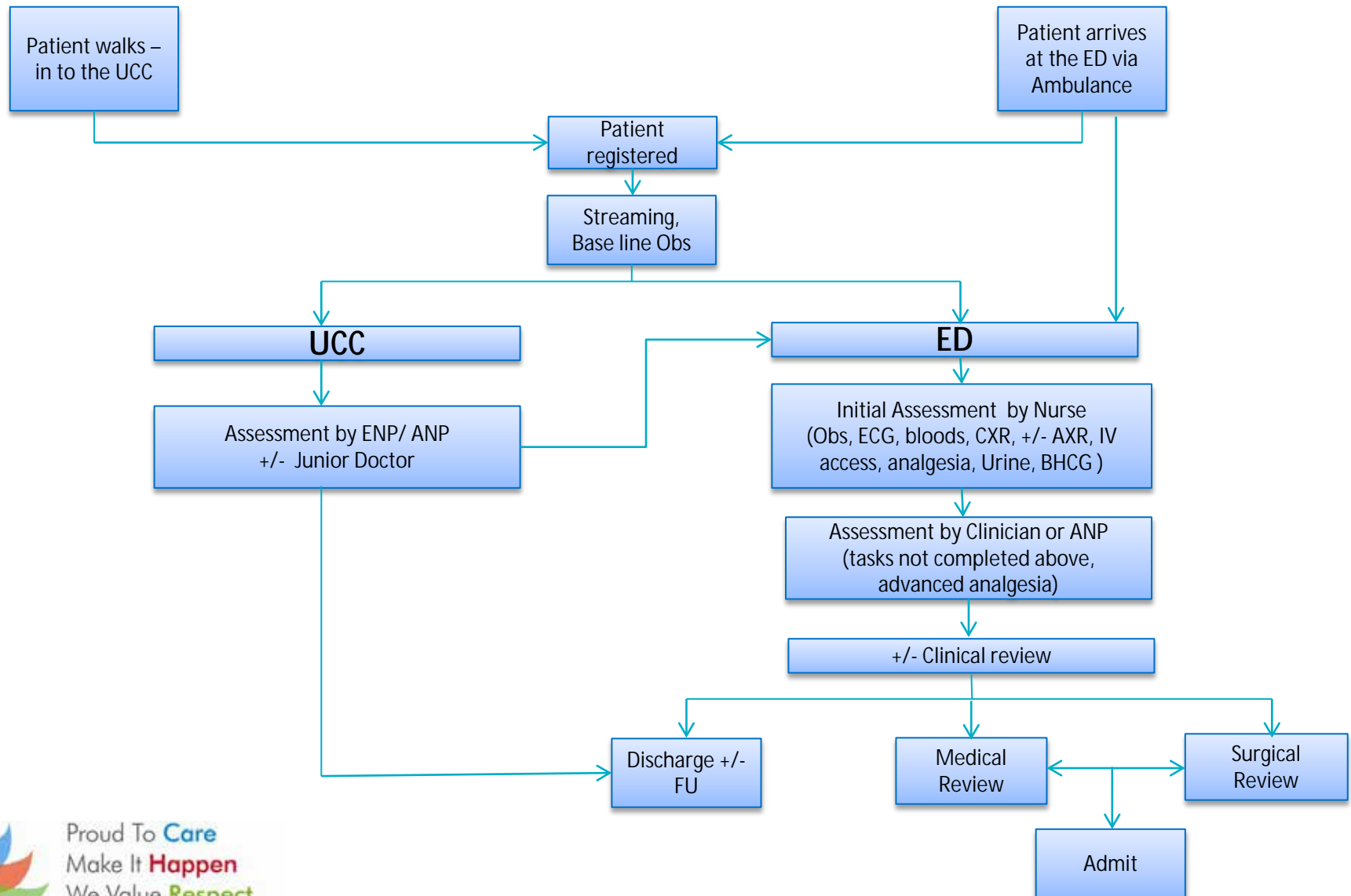
Patient presenting to ED/ UCC with Dislocation/ Fracture/ joint injury / amputation - DRAFT



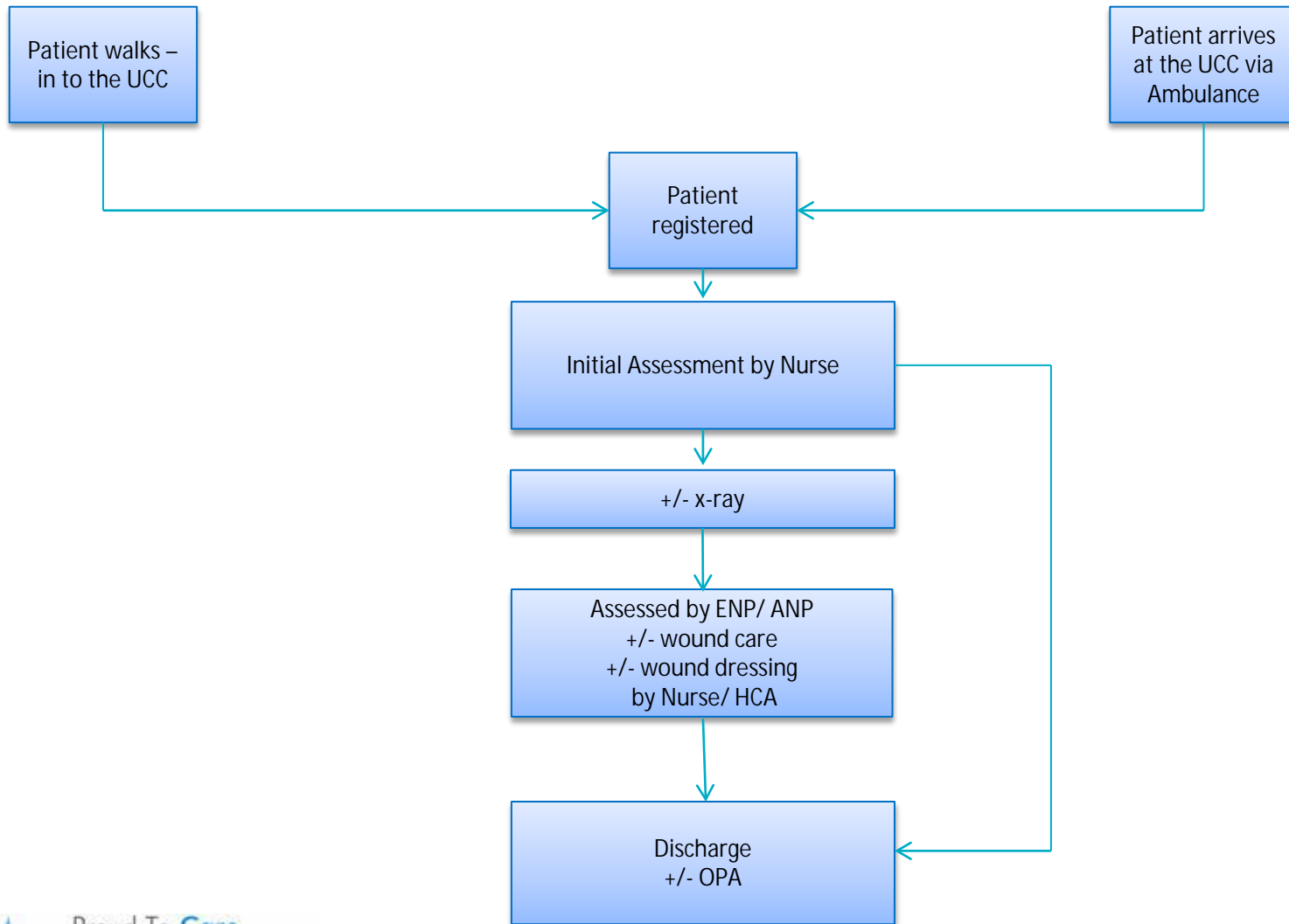
Patient presenting to ED/ UCC with Respiratory Condition - DRAFT



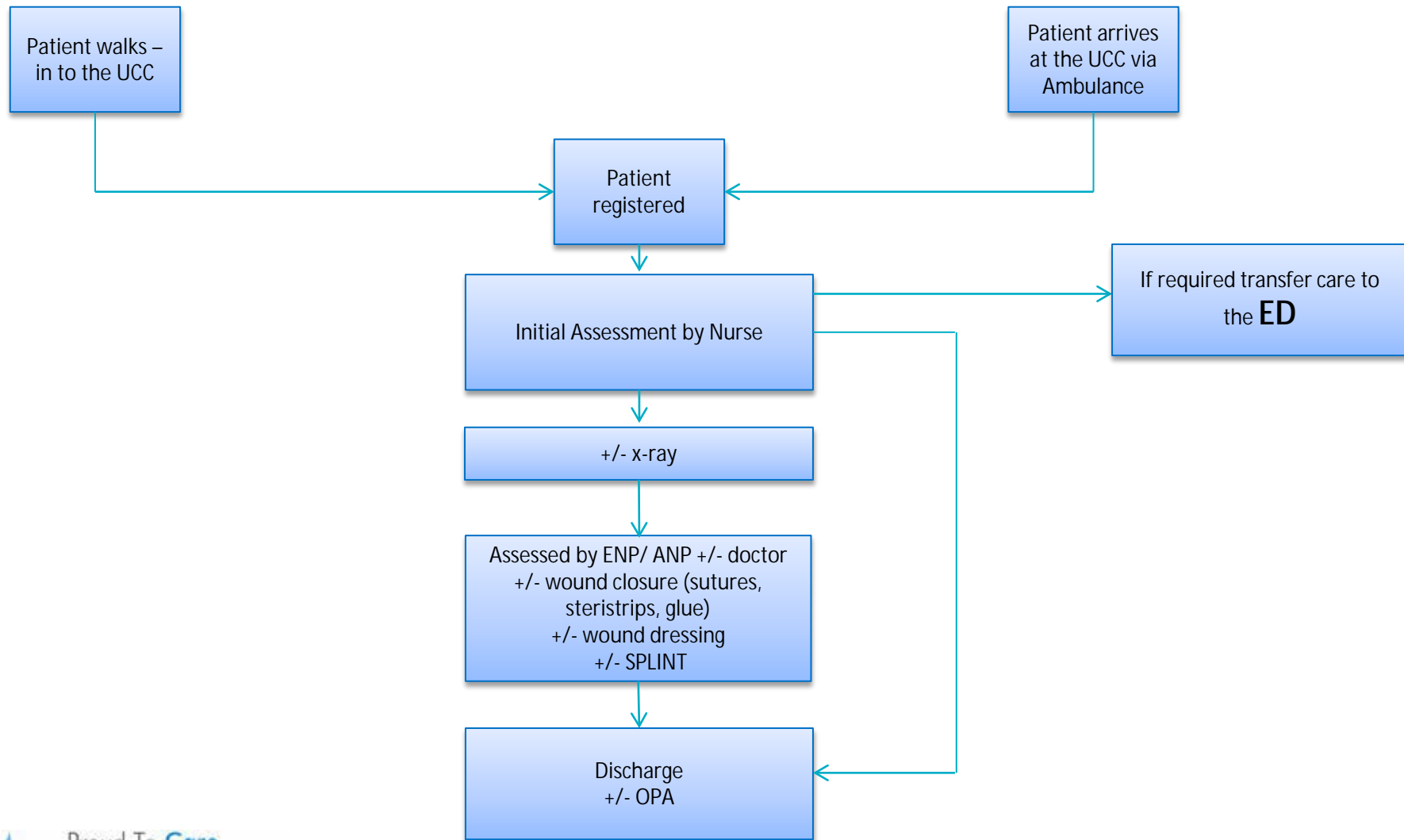
Patient presenting to ED/ UCC with GI condition - DRAFT



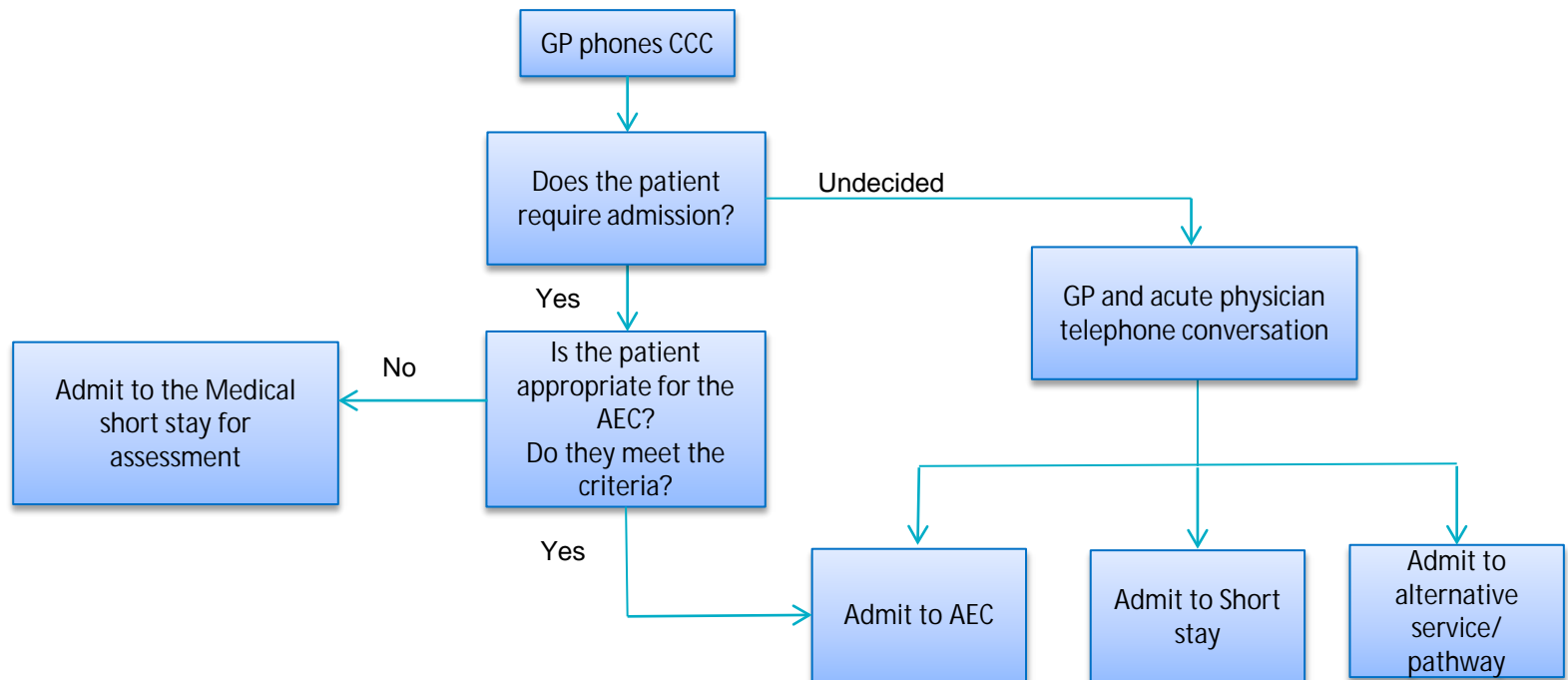
Patient presenting to UCC with Contusion and Abrasion - DRAFT



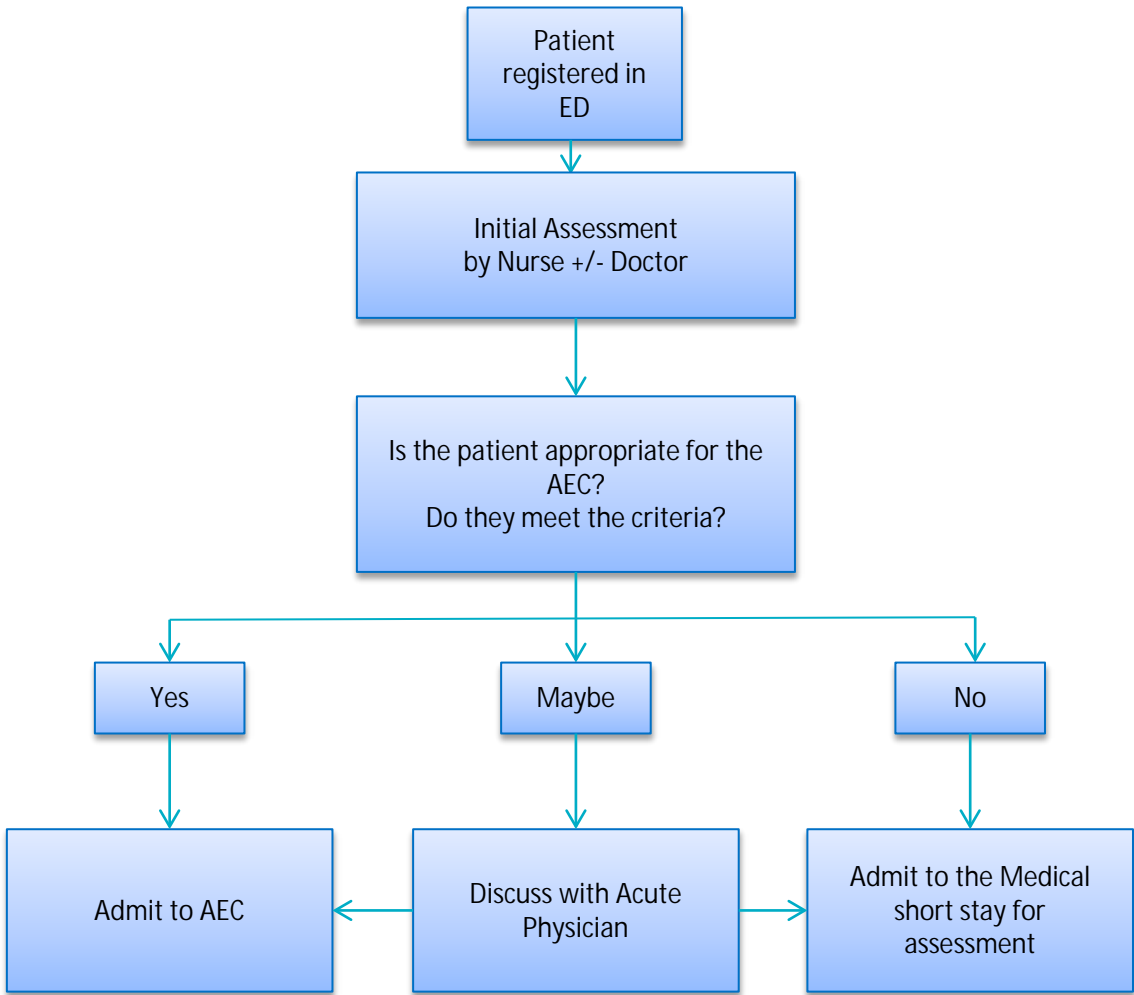
Patient presenting to UCC with Laceration - DRAFT



GP Direct admission for the acutely unwell adult - DRAFT



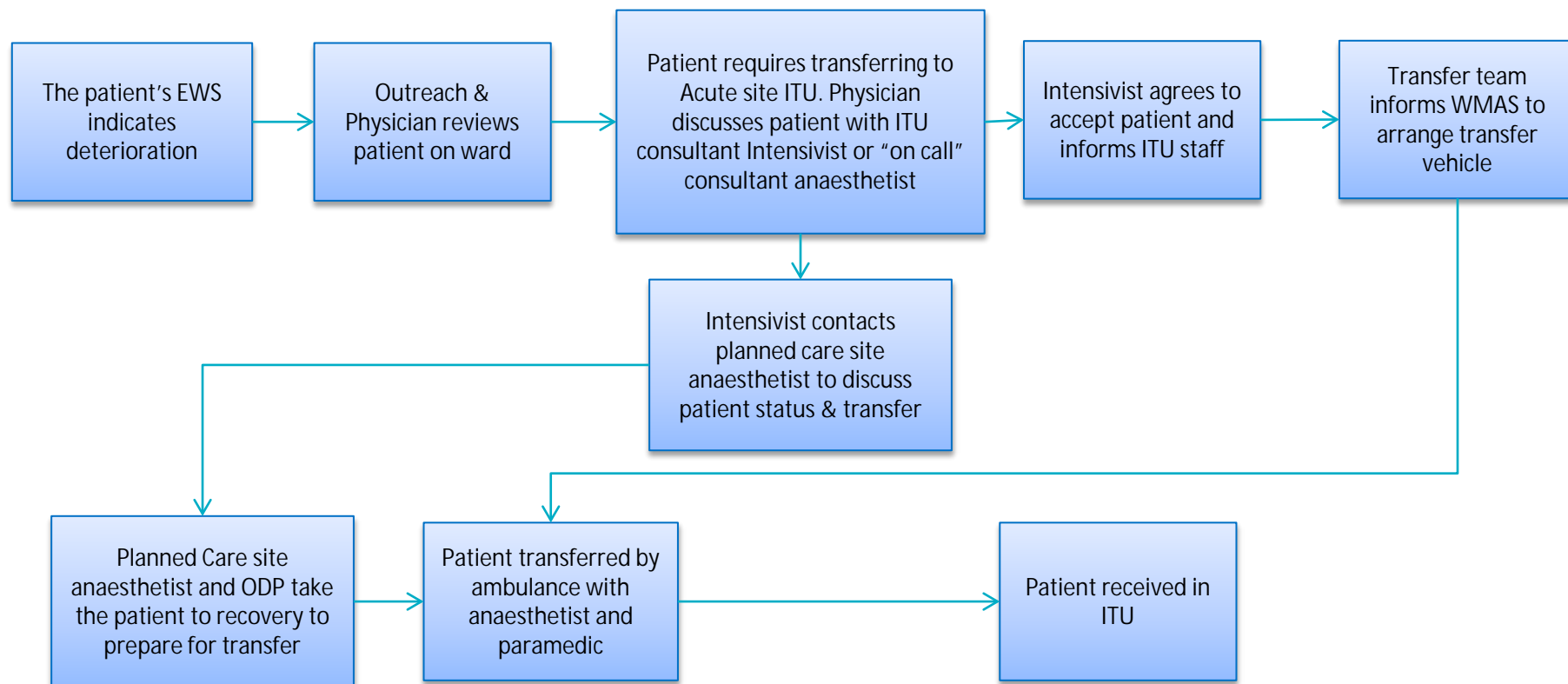
Pathway for the acutely unwell adult requiring admission presenting to the ED - DRAFT



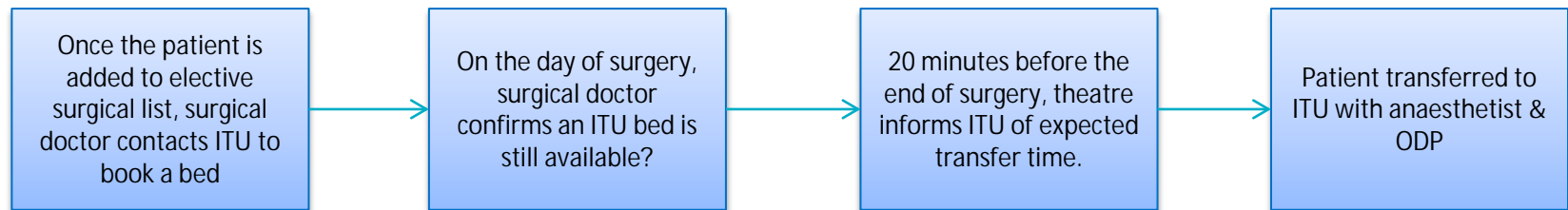
Critical Care Pathways

- Transferring a patient from a planned care site ward to ITU
- An elective surgical admission from theatre on acute care site to ITU
- Transferring a patient from ED to ITU
- Transferring a patient from planned care site theatre to ITU

Transferring a patient from a planned care site ward to ITU



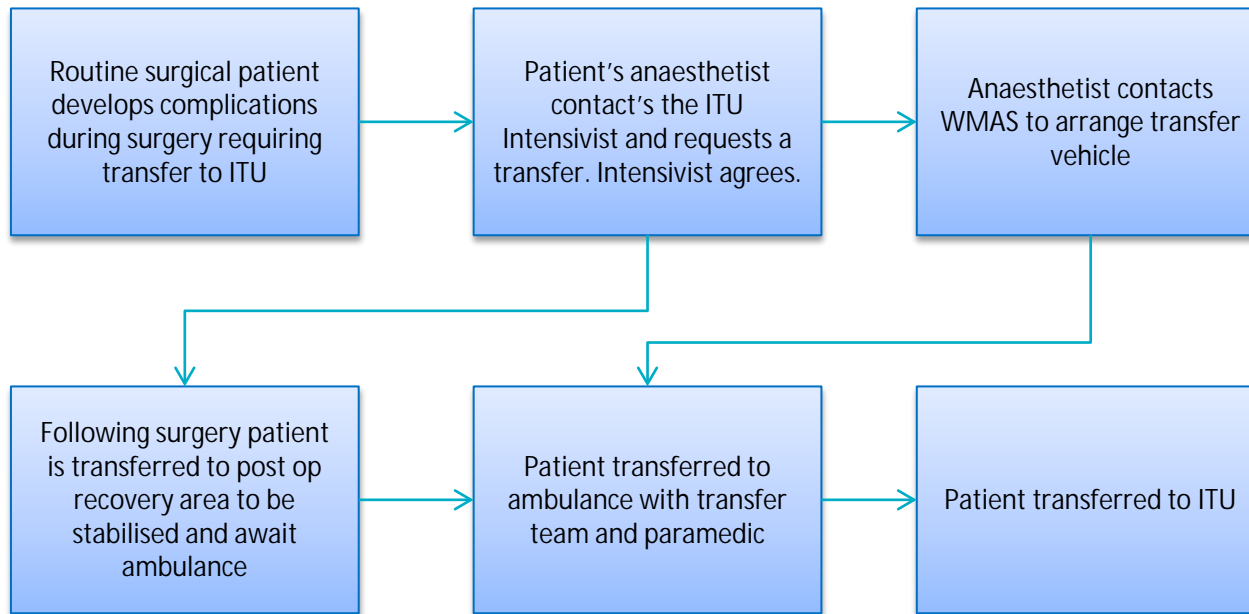
An elective surgical admission from acute care site theatres to ITU



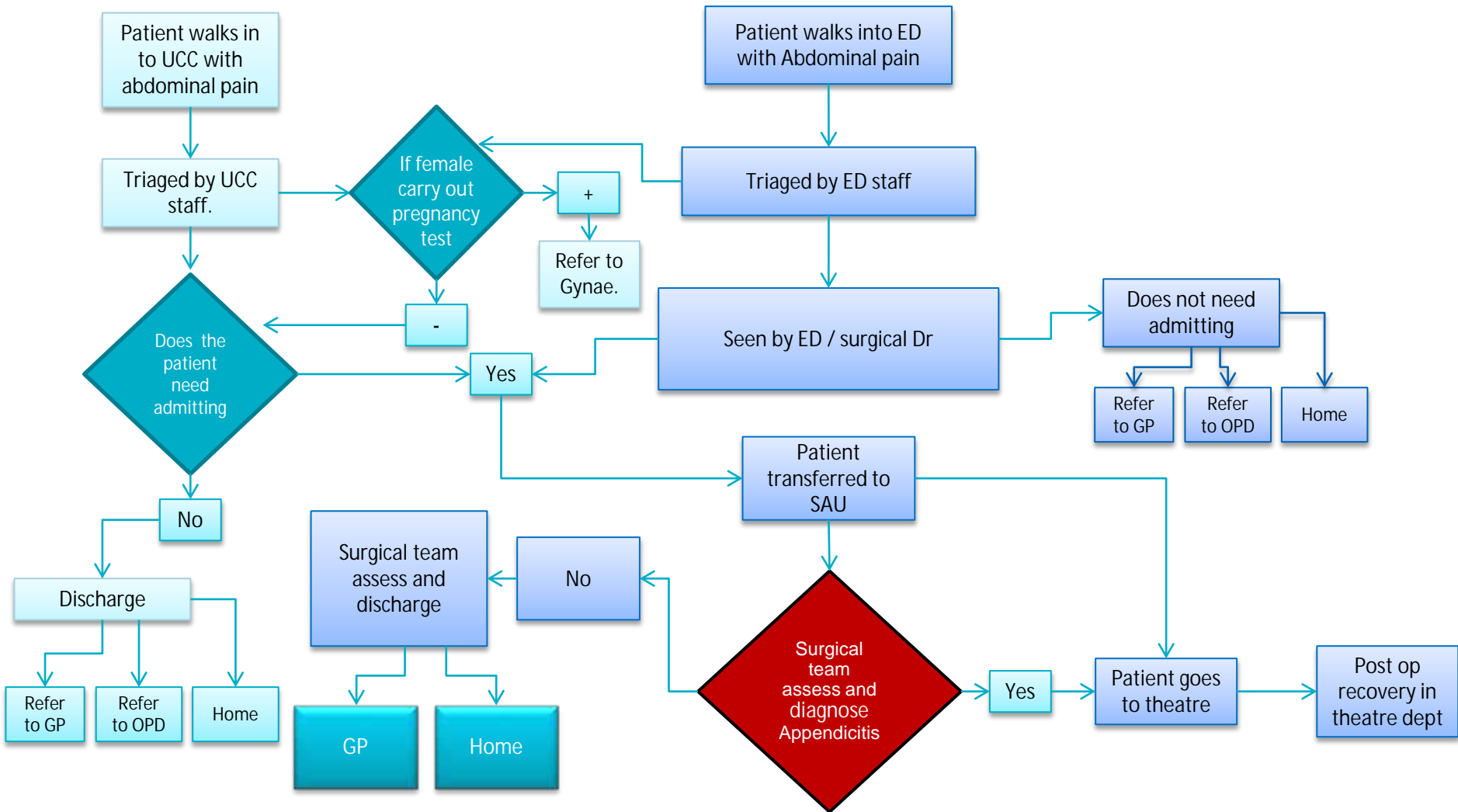
Transferring a patient from ED to ITU



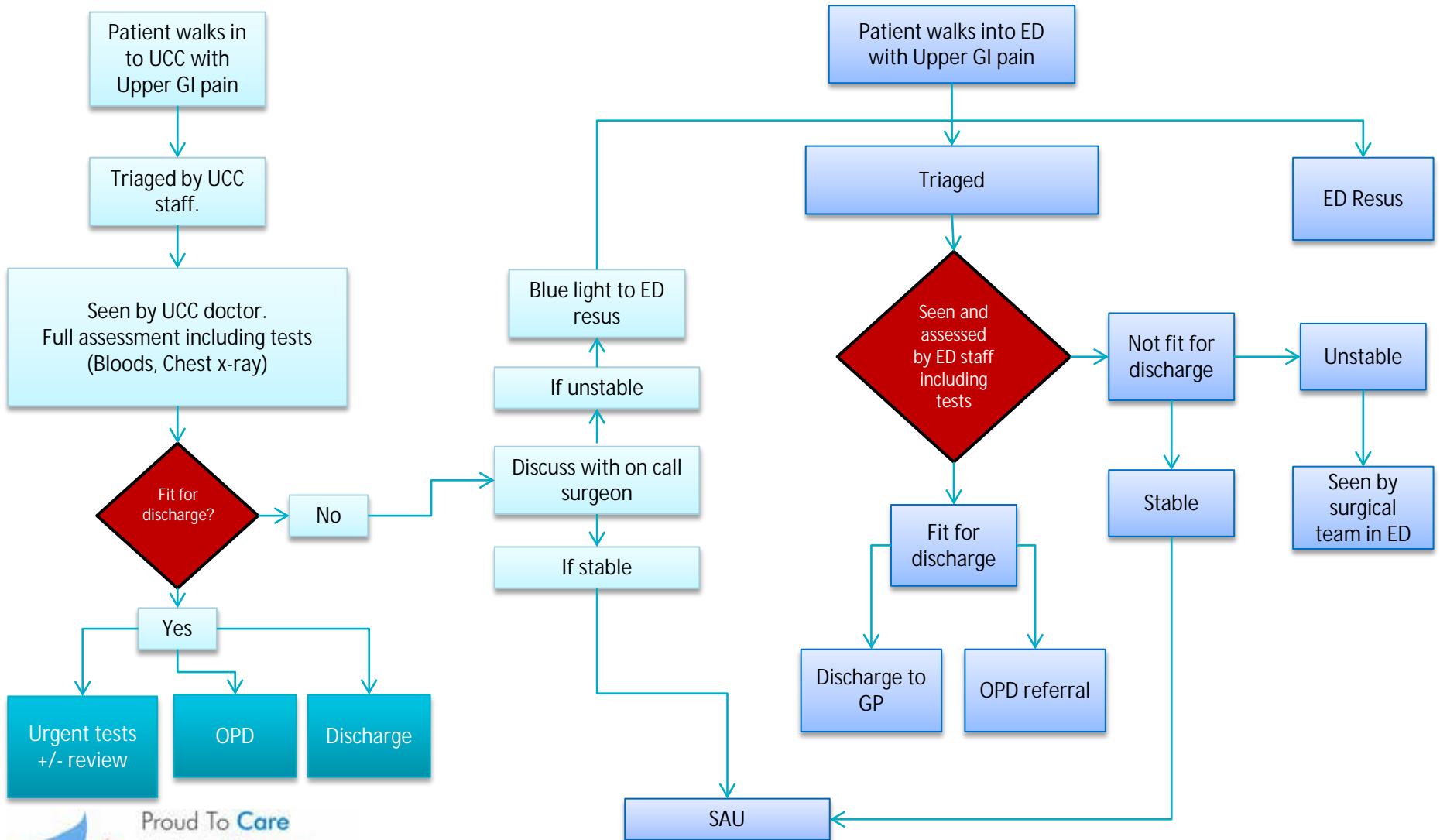
Transferring a patient from planned care site theatre to acute site ITU



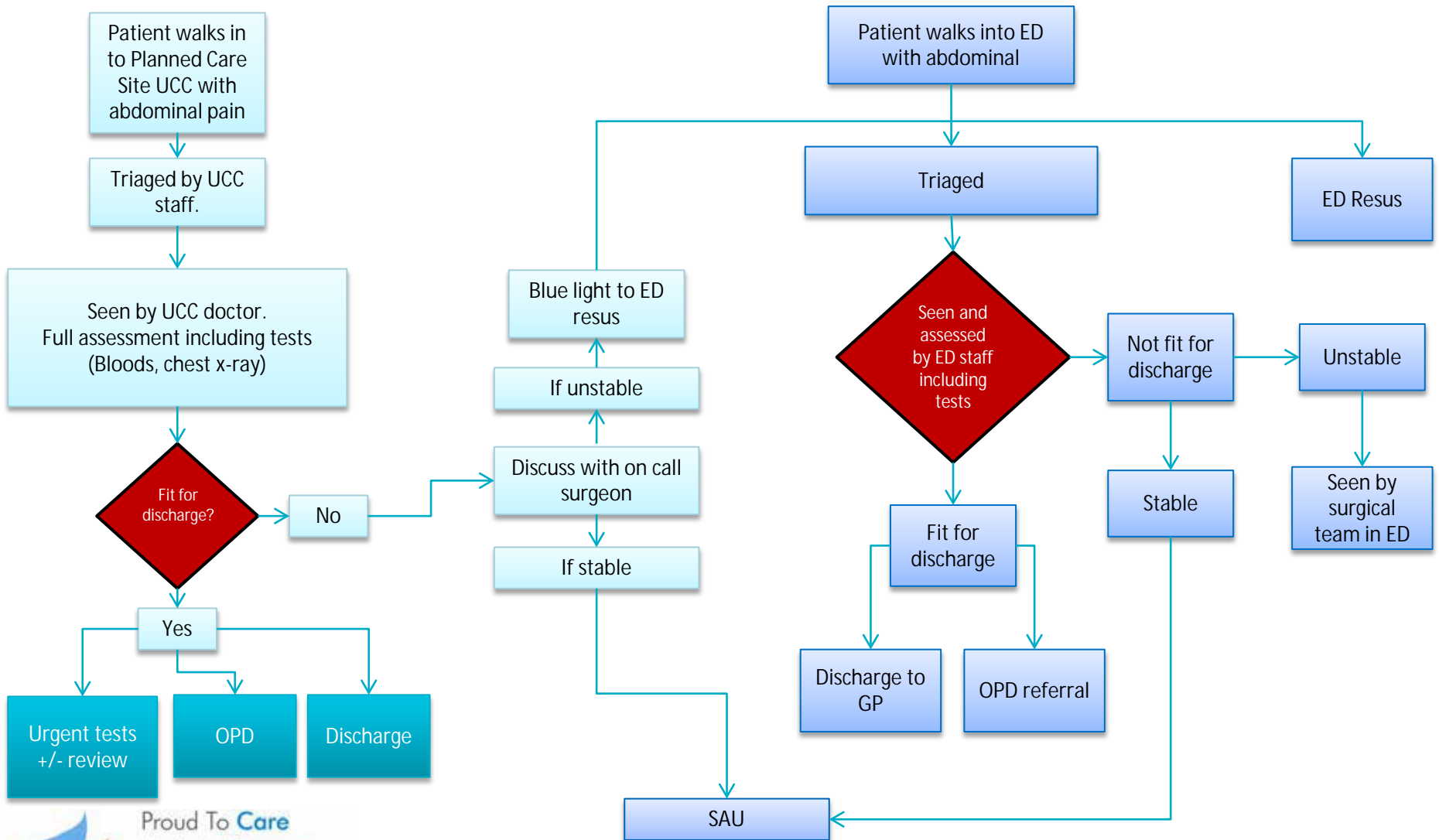
Patient presenting at UCC or ED with acute appendicitis - DRAFT



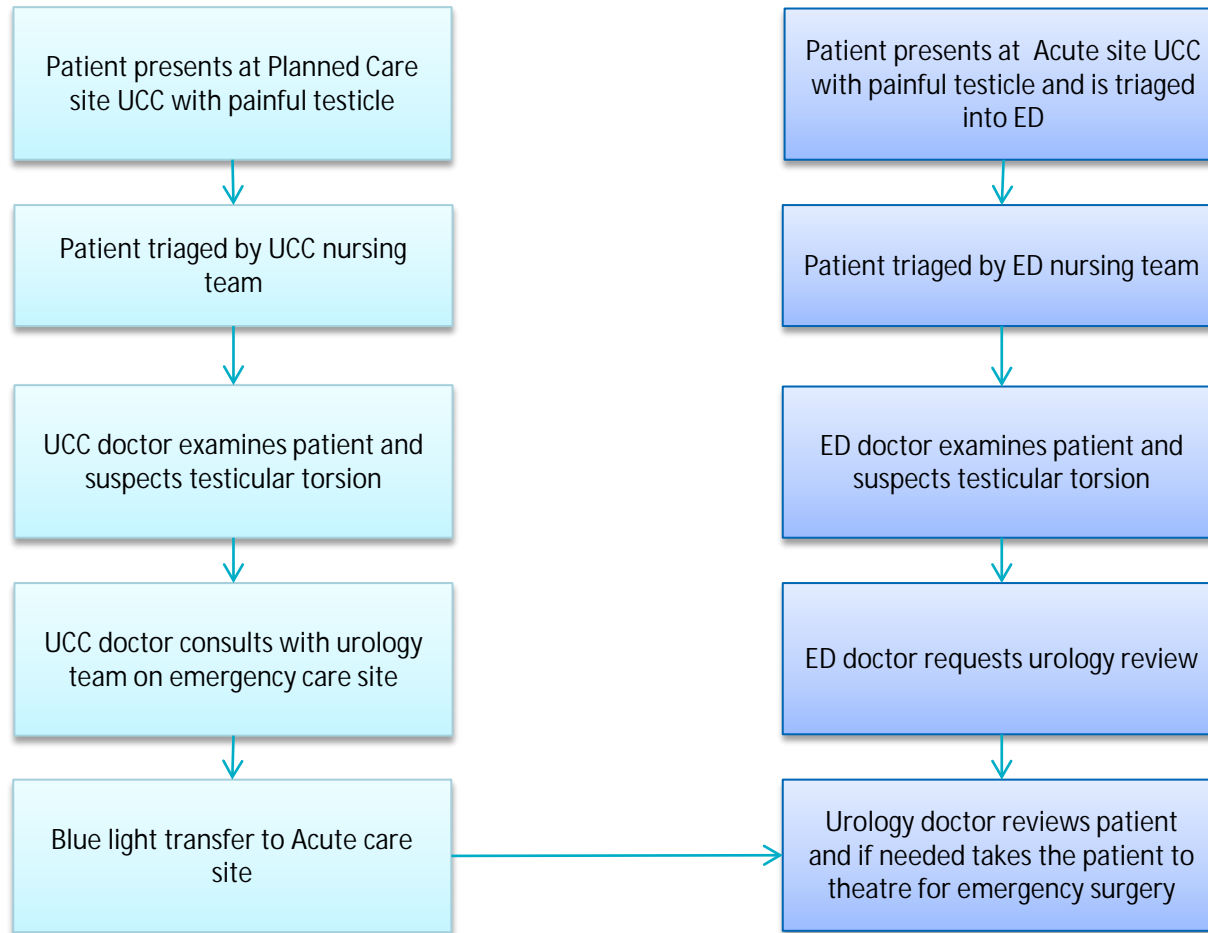
Patient presenting at ED with upper GI pain- DRAFT



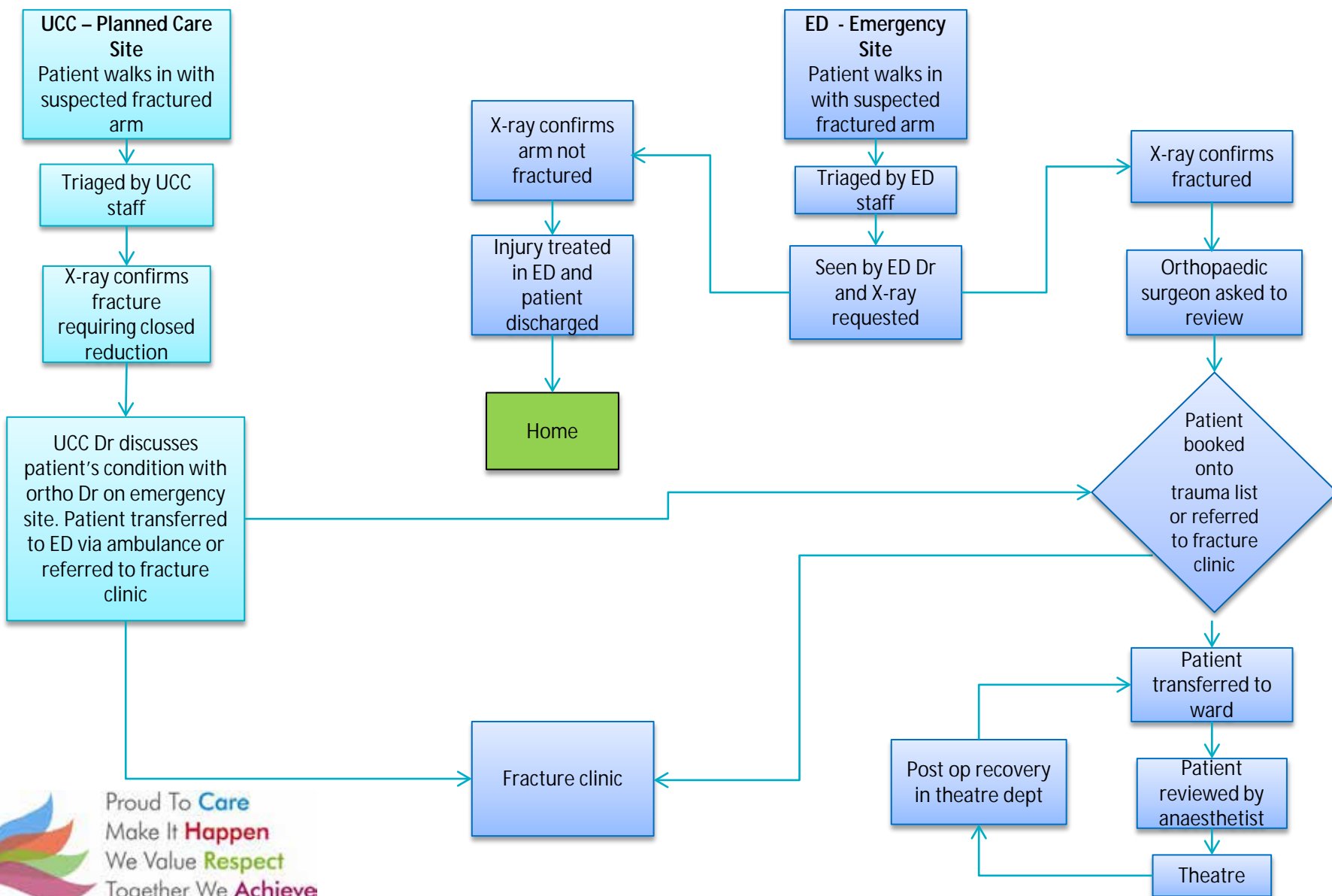
Patient presenting at ED with abdominal pain DRAFT



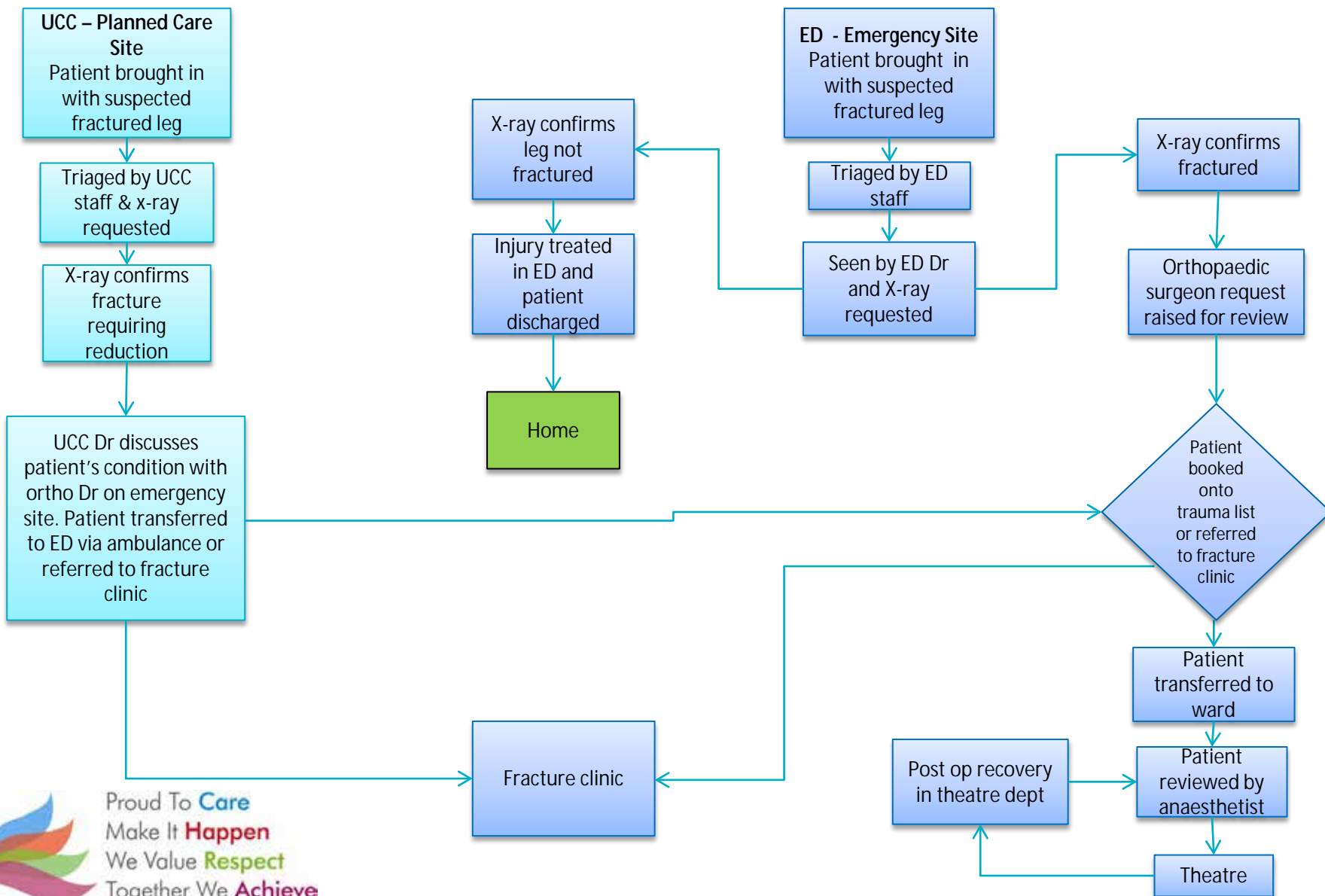
Patient presenting at UCC or ED with testicular pain -DRAFT



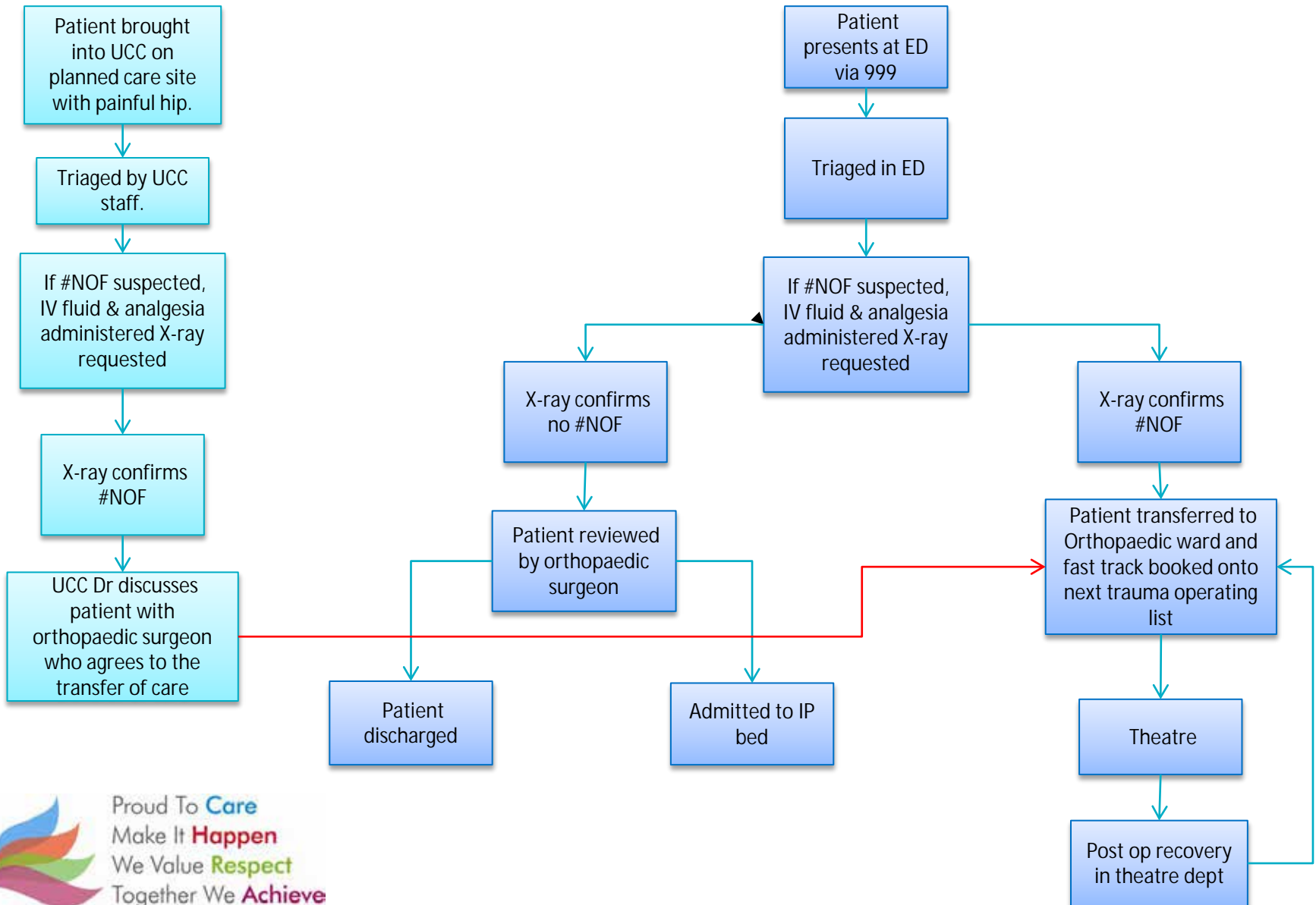
Patient presenting to the ED/UCC requiring closed reduction of fractured arm under anaesthetic



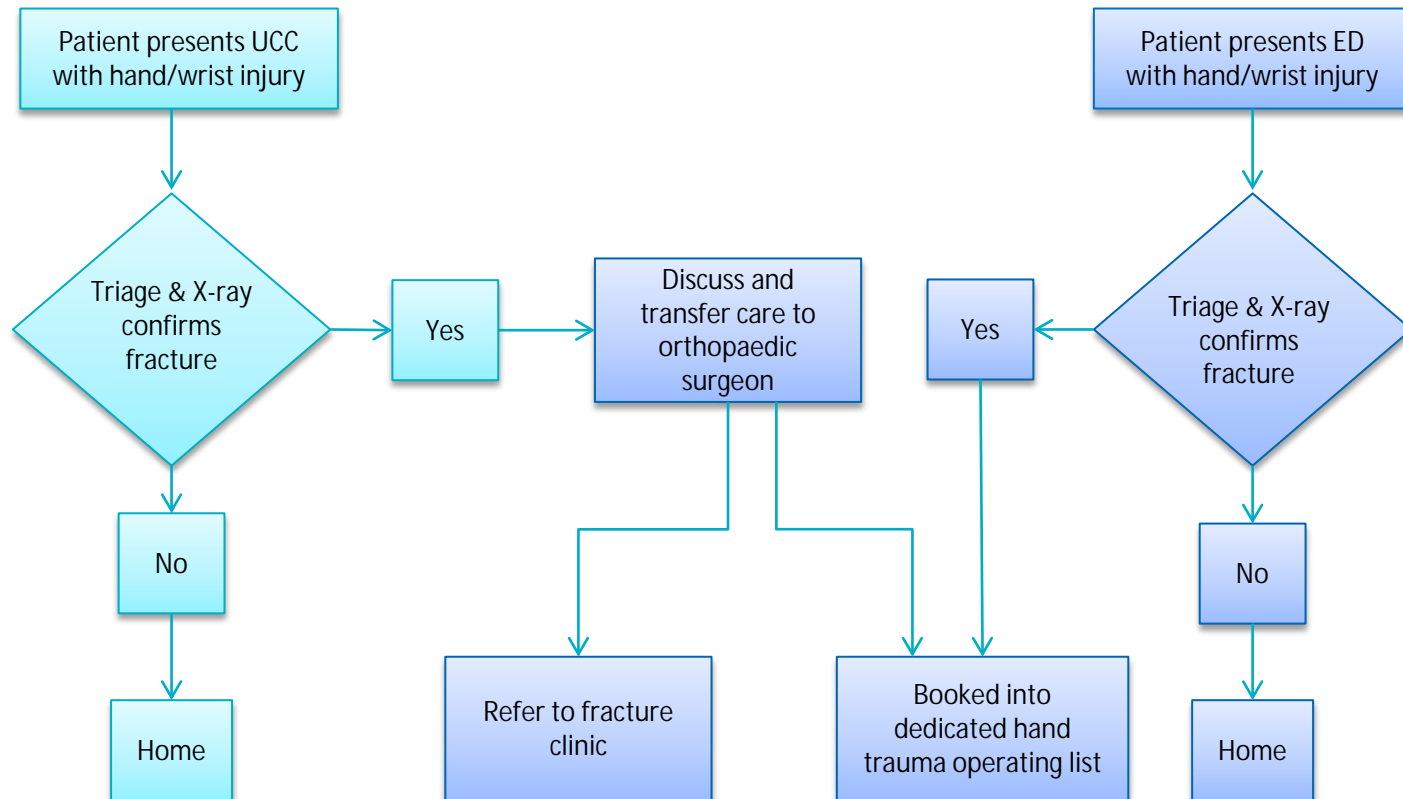
Patient presenting to the ED/UCC requiring closed reduction of fractured leg under anaesthetic



Patient presenting to the ED/UCC with fractured neck of femur (frail and elderly patient)



Patient presenting at ED/UCC with a hand or wrist injury



APPENDIX 4a– Future Fit Assurance Workstream Terms of Reference

*Taken from the Future Fit Programme Execution Plan***5.11.1 Workstream 5: Assurance**

The purpose of Workstream 5 is to develop for Programme Board approval, and to ensure the effective implementation of, a comprehensive Programme Assurance Plan which will provide assurance to the Programme Board, sponsor Boards, the Joint Health Overview and Scrutiny committees and other external parties regarding the governance, management and decision making within the programme. This will include:

- § Ensuring that there is proactive engagement with Health and Wellbeing Boards throughout the programme so that service change proposals can reflect joint strategic needs assessments and joint health and wellbeing strategies, and so that Health and Wellbeing Boards are given an opportunity to comment on and be involved in the development of plans.
- § Ensuring that decisions taken by the Programme Board are ratified by the appropriate governance structures within each of the partner organisations.
- § Development and implementation of effective and independent clinical and programme assurance processes, including:
 - Development and maintenance of strong links with the Joint HOSC & CHC;
 - Planning and coordination of Gateway Reviews;
 - Effective and timely Local Assurance Processes (LAP);
 - National Clinical Assurance Team (NCAT) reviews.
- § Receiving and reviewing reports from sponsor/stakeholder organisations about their plans in order to provide assurance to the Board that those plans will support and contribute to the FutureFit vision.
- § Ensuring best practice and value for money in the management of the Programme.
- § Ensuring the appropriateness and effectiveness of all evaluation processes and decision-making.
- § Ensuring processes are in place to ensure collective decision making can be achieved, including the development of a dispute resolution process.
- § In conjunction with the Engagement & Communications workstream ensuring that patients and the public are appropriately involved in the Programme, and that involvement and consultation has covered equitably the different geographies affected by the programme.
- § Identifying the benefits and risks in relation to governance and assurance and ensuring effective strategies for benefits realisation and risk management, including:
 - contributing to the Benefits Realisation Plan
 - contributing to the Programme Risk Register

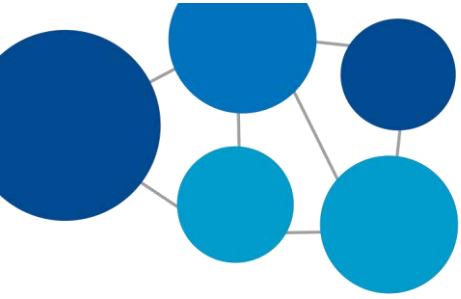
It will be the responsibility of each individual workstream to secure any external assurance which the Programme Board or Programme Team deems to be required for work which that workstream has undertaken or commissioned.

The Workstream will be led by Paul Tulley, with support from Chris Bird (Midlands and Lancashire CSU), and will comprise the following membership:

Table 1 Workstream 5: Assurance

Name	Role	Organisation
Paul Tulley (Chair)	Chief Operating Officer	Shropshire CCG
Bharti Patel-Smith	Director of Governance & Involvement	Shropshire CCG
Alison Smith	Executive Lead, Governance & Performance	Telford & Wrekin CCG
Julie Thornby	Director of Governance	Shropshire Community Health NHS Trust
Julia Clarke	Director of Corporate Governance	Shrewsbury & Telford Hospital NHS Trust
Cllr Gerald Dakin	Committee Chair	Shropshire HOSC
Rani Mallison	Corporate Governance Manager	Powys tHB
Fiona Bottrill	Scrutiny Group Specialist	Telford & Wrekin HOSC
Terry Harte	Nominated Representative	Healthwatch Shropshire
Paul Wallace	Vice Chair	Healthwatch Telford & Wrekin
David Adams	Chief Officer	Montgomeryshire CHC
Sylvia Pledger	Nominated Representative	Shropshire Patient Group
Giles Tinsley	Delivery Manager	NHS Trust Development Authority
Chris Bird	Corporate Affairs Lead	Midlands and Lancashire CSU
David Frith	Senior Programme Manager	Midlands and Lancashire CSU

APPENDIX 4b –Future Fit Programme Assurance Plan

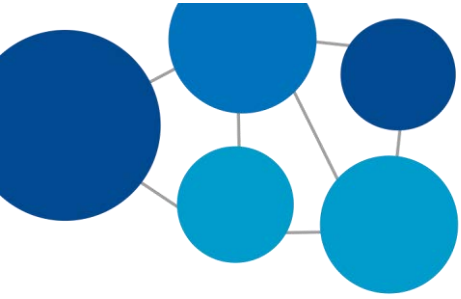


NHSE Assurance Action Plan

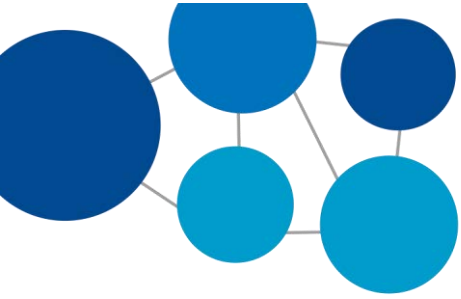
RAG Rating Key	
	Overdue
	Risk of delay
	On track
	Action completed

In discussion at the Sense Check meeting with NHSE LAT on 2nd May 2014, the following areas were highlighted as requiring further work before the Assurance Checkpoint. The following table summarises the actions taken in response to each recommendation. This information will be required as part of the formal Stage 2 Assurance prior to Public Consultation.

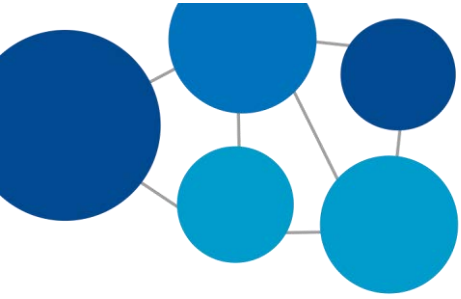
No.	Requirement	Actions	Programme Team Owner	Due Date	Progress	RAG rating
1.	Further clarity on the case for change, being more explicit about ambitions and outcomes for local patients and wherever possible these should be quantified. You will also need to be clear that the case for change	a) Previous draft Case for Change (as referenced by NHSE) to be added as an Appendix to the PEP.	David Frith	21 st May	a) PEP updated with earlier Strategic Context document. Further work will be required in due course to update and further detail the case for change for use in SOC/PCBC (especially re: SaTH workforce issues). Document expected from SaTH 7th May 2015.	



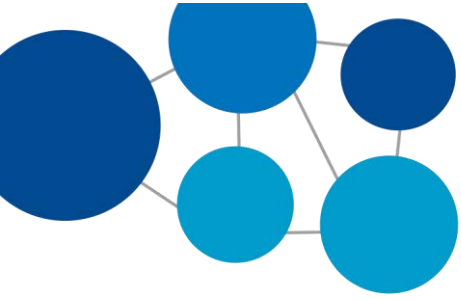
No.	Requirement	Actions	Programme Team Owner	Due Date	Progress	RAG rating
	has been agreed by the Governing bodies of the CCGs.	b) Programme Team to identify and undertake further work required (especially on outcome ambitions).	Mike Sharon	September	b) Baseline Impact Assessment completed. Further work planned including re: protected characteristics. Detail in support of case for change being updated from providers. Evidence against the Four Tests well advanced. Benefits Realisation Plan updated, including identification of outcome ambitions. These now need to be quantified.	
		c) Benefits Realisation Plan draft to be revised in the light of the Clinical Model, evaluation criteria and outcomes ambitions.	Mike Sharon	November	c) Populated to the degree of detail required for a Strategic Outline Case (see above).	
		d) Summary Case for Change to be approved by CCG Governing Bodies and provider sponsor Boards.	David Frith	asap	d) Approved by both CCG Boards, Powys tHB and SaTH/ShropCom Boards. Supported by Joint HOSC and Health and Wellbeing Boards.	



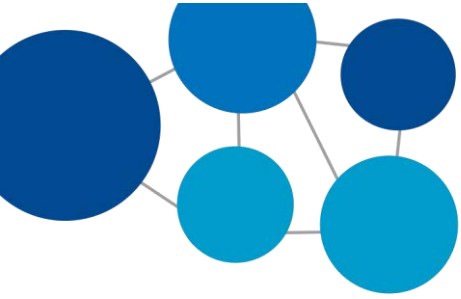
No.	Requirement	Actions	Programme Team Owner	Due Date	Progress	RAG rating
2.	A long list of options will need to be agreed along with criteria as to how they will be evaluated.	a) Board to approve process for developing options and benefit criteria.	Mike Sharon	September	a) Process for developing and agreeing a long list, and for evaluating which options should be shortlisted, was approved at May Board. Evaluation Panel formed with single representative from each stakeholder organisation and with a clinical majority. Panel recommendation on a long list and on evaluation criteria to be finalised on 9 th Sept for confirmation by Board on 17 th Sept. Development of criteria & options has been informed by public engagement events/stratified telephone survey.	
3.	Appropriate work is undertaken to ensure that the options being considered for consultation are subject	a) Impact Assessment workstream to be formed.	Mike Sharon	June	a) May Board approved the formation of a new workstream to have responsibility for Impact Assessment, informed by defining the scope of the work.	



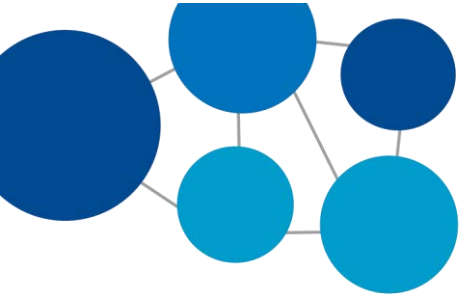
No.	Requirement	Actions	Programme Team Owner	Due Date	Progress	RAG rating
	to a full equality impact assessment.	b) Programme Team to scope requirements to enable Board to determine membership and remit.	Mike Sharon	June	a) Board approved an approach involving an initial baseline assessment and an iterative assessment of options to enable potential for mitigation of any adverse impacts identified. Baseline assessment undertaken. Targeted work underway on groups with Protected Characteristics. Full IIA to be planned to align with Public Consultation.	
4.	Acknowledgement of the need to commission financial modelling to support proposals. This will need to be undertaken in detail for all of the options that will be consulted upon and will need to cover capital requirements and flag how capital will be accessed.	a) Financial Model to be developed, populated and tested.	Andrew Nash	July	a) Model constructed and populated.	
		b) Plans for quality assurance of financial outputs to be developed by Finance Workstream and reviewed by Assurance Workstream.	Andrew Nash	September	b) Finance workstream identified need for additional resource to assure: <ul style="list-style-type: none"> i. Functionality of the model; ii. Appropriateness of assumptions made; iii. Adequacy of sensitivity analysis. Shared appointment has been made by CCGs to support this work and additional senior expertise has been utilised to develop a definition of affordability.	



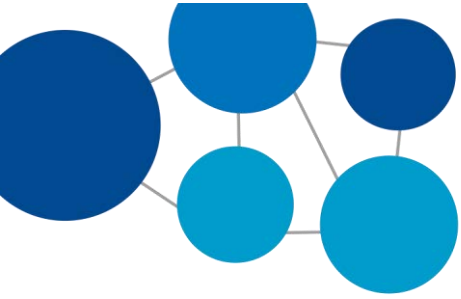
No.	Requirement	Actions	Programme Team Owner	Due Date	Progress	RAG rating
5.	Clarity on the activity modelling which sets a common baseline and a set of assumptions which can be reconciled at both commissioner and provider level.	a) Activity impact of new Clinical Model to be modelled against baseline.	Mike Sharon	Done in March	a) Initial Programme modelling supplied to providers and commissioners to inform 5 year plans.	
				September	Phase 2 modelling completed. Full reconciliation against 5 year plans completed.	
6.	Ensure consultation and other programme documents cover and describe community care, social care and articulate the GP as a provider and what it means to them.	a) PEP to be revised to clarify management of interdependencies.	David Frith	May	a) Completed at May Board.	
		b) All relevant programme documentation to recognise work being undertaken outside of scope to address interdependencies.	Mike Sharon	Ongoing	b) Board approved process for monitoring programme interdependencies through the Assurance workstream. Community Fit and IT programmes reported to April 2015 Board. Information received on programmes impacting Powys. Close working underway with PtHB re: Strategic Delivery Model programme.	



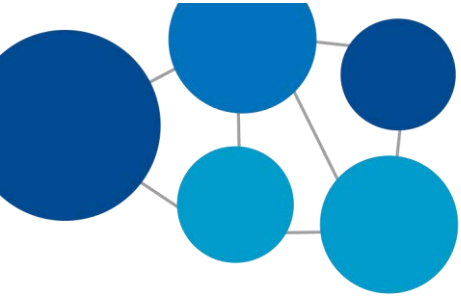
No.	Requirement	Actions	Programme Team Owner	Due Date	Progress	RAG rating
7.	Ensure the Welsh commissioners in Powys are linked into governance arrangements and communications strategy.	a) Confirm Powys role in governance and Programme groups.	Mike Sharon	July	a) Meetings held with Powys CEO. Powys tHB is a full sponsor of the Programme and its Board has approved the PEP, Clinical Model and Evaluation Process. It has also agreed in principle to provide funding. Powys position re: final decision making is subject to receipt of expert advice. Legal advice provided to SROs.	
		b) Engagement and Communication Plans should full account of the Powys population.	Adrian Osborne	June	b) Overall strategy fully includes Powys. Detailed plans co-produced with Powys. Periodic meetings continue.	
8.	The Area Team has offered to review and offer advice in regard to your engagement and communication strategy. It would be helpful to you to keep an audit trail to demonstrate how patient and public involvement is shaping the development of options and the criteria	a) Request NHSE review of engagement and communication strategy.	Adrian Osborne	May	a) NHSE consulted on development of the strategy.	
		b) Responses to Public Engagement on the Clinical Model, draft Long List and draft Benefit Criteria to be recorded and reported to Board to inform its decision making.	Adrian Osborne	September	b) Report prepared for Sept Board covering a series of deliberative events around the 3 geographical areas and a stratified telephone survey of 1000 people. Results provided to Evaluation Panel to inform development and appraisal of options.	



No.	Requirement	Actions	Programme Team Owner	Due Date	Progress	RAG rating
	by which they will be evaluated. We suggested you agree 'touch points' to review the engagement process.	c) The Engagement and Communication Implementation Plan to set out the touch points for internal (Assurance Workstream) and external (Consultation Institute) Review.	Adrian Osborne	June	c) The first internal review by the Assurance Workstream took place on May 12 th prior to Board approval of the Strategy. Implementation plan was approved at June Board. Periodic internal assurance reviews subsequently.	
9.	The outcome of the clinical senate review will form a key part of the clinical assurance process. We proposed that you agree the terms of reference for this review with the Area Team Medical Director.	a) Terms of reference for Senate assurance to be agreed with NHSE.	Bill Gowans	June	a) Outline approach agreed with Senate and Chair/Vice Chair appointed. ToR developed and approved by LAT Medical Director 22 nd Sept. Stage 1 Review completed and forwarded to NHSE. Discussions underway with WM Clinical Senate re: scope and timing of Stage 2 review.	
10.	The business case and consultation document should describe how the new models of care will augment patient choice.	a) Impact Assessment outputs to be fed into business case and consultation processes.	Mike Sharon	June 2015	a) See item 3 above. Assurance workstream also reviewing evidence against the 4 tests at each monthly meeting (using NHSE questions).	



No.	Requirement	Actions	Programme Team Owner	Due Date	Progress	RAG rating
11.	Governance arrangements still require clarification; particularly arrangements for final decision making. We acknowledge you are taking further legal advice on this and want to be assured of the process agreed.	a) Commissioners to develop and agree final decision making processes, including confirmation of the role of Welsh commissioners.	Alison Smith	July	a) Agreement of arrangements for final decision-making is being addressed through the facilitated work on collaboration. CCGs have discussed this work with the Area Team in relation to Domain 5 assurance. The matter has also been raised with Powys tHB which is seeking advice on their position. Clinical members of CCG Boards having a series of meetings to explore this. Paper outlining possible approaches being drafted. Legal advice provided to SROs. To be discussed with NHSE/TDA 2nd June	
12.	Transition plans and risks need to be clear and agreed with SaTH, Shropcom and TDA, and implemented alongside the Future Fit programme.	a) Impact on providers to be clearly set out and business case(s) to incorporate transition plans/risk management. To be initiated for shortlisting of options and developed in full for preferred option.	Mike Sharon	tbc	a) Sponsor 5 year plans submitted. Risks to be set out in SOC and OBC.	



No.	Requirement	Actions	Programme Team Owner	Due Date	Progress	RAG rating
13.	Interim sustainability of services at SaTH sits outside the programme but with close linkages. Can you clarify how and where being taken forward.	<ul style="list-style-type: none"> a) Process to be agreed for the robust management of Programme interdependencies. b) Interim plan for A&E to be agreed through NHSE/TDA planning processes. 	Paul Tulley	ongoing	<ul style="list-style-type: none"> a) May Board agreed that sponsor/stakeholder plans should consider potential impact on FF programme and notify PMO if any impact identified. PMO will report to Board as required. b) 5 year and 2 year plans submitted. ED business continuity plan supplied to with commissioners and TDA and actions to mitigate being implemented re: recruitment of consultant and middle grade staff. 	RAG rating

APPENDIX 4c – West Midlands Clinical Senate - Key Issues and Recommendations Stage 1 Review Panel



**West Midlands Clinical Senate
Shropshire and Telford
Future Fit Programme**

NHS England

Stage 1 Phase 1 Report

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1. Foreword by Panel Chair and Vice Chair - Mr Simon Brake and Mr Peter Thompson

This review was undertaken on behalf of the West Midlands Clinical Senate following a request from Shropshire CCG (Clinical Commissioning Group) and Telford & Wrekin CCG received in April 2014 to review the proposals for health care in Shropshire, Telford and Wrekin and to act 'as a critical friend'. The report has been written on the basis of a wealth of information and evidence, as well as contributions and observations from a range of experts on the panel and from the Future Fit Programme. As this was a stage 1 clinical review, much of the report is based on broad proposals and plans, projections and a number of assumptions which will only be tested and probed as the plans progress and are implemented. Notwithstanding that, the information provided was comprehensive, and demonstrated a considerable amount of careful thought, public and professional engagement and ambition for the health and wellbeing of the community.

2. Clinical Senate Chair Summary and Recommendations – Dr David Hegarty

The West Midlands Clinical Senate was asked to provide informal advice and expert 'critical' challenge, to the service models being developed in the Future Fit: Shaping Healthcare Together programme as part of NHS England's Stage 1 assurance process.

The Clinical Senate Review panel has concluded that there is an unsustainable health model across the Shropshire, Telford and Wrekin's health and social care economy which warrants a need for fundamental change and improvement. Future Fit therefore, provides the opportunity to improve the quality of care provided to the Shropshire, Telford and Wrekin's changing population.

The methodology utilised by the Clinical Senate Review panel is described within the document and a panel of appropriate clinical and non-clinical experts were convened from within the West Midlands.

The panel agree that the remodelling and redesign of the whole health and social care economy should be commended and the approach taken reflects the scale of changes proposed and the challenges faced. However, the Clinical Senate Review Panel also recognises clinical and financial risks which will require further exploration and clarification before the NHS England stage 2 review. There are also some risks from interdependencies outside of the terms of reference of the review, and therefore beyond the remit of the Senate review panel. These risks are all clearly defined within the report, alongside some key recommendations for consideration by the Future Fit Programme.

The Clinical Senate Review panel noted that this report is a NHS England Stage 1 Phase 1 report and further panel will be convened to assess Future Fit programme progress, in January and February 2015.

3. Background

Health services within Shropshire, Telford and Wrekin have developed over many years in order to meet the needs and expectations of the populations served, including that of mid-Wales. With the changing needs of the population, advancements in medicine and the economic environment within which the NHS has to work, however, it is clear that the time has come to look again at the design of services to meet the needs of Shropshire, Telford and Wrekin's dispersed rural and urban populations in order to provide excellent healthcare services for the future.

The "Future Fit" programme (FFP) was commissioned in response to NHS England's 'Call to Action' survey undertaken in November 2013. Leading clinicians and patient representatives met to establish a compelling case for change based around the needs of an increasingly ageing population, the rise in prevalence of long-term conditions, higher public expectations both of the quality and convenience of services and growing workforce pressures; all within an environment of economic challenge across all sectors. The scope of FFP is to design and configure acute and community hospital services. Three hundred clinicians and patients involved in the clinical design work stream agreed that high quality, safe, efficient and sustainable hospital services can only be delivered if the whole of the health and social care economy is functioning to the same high standards. This can only be achieved through whole system transformational change.

The FFP described a clinical model based on three areas of care:

- acute and episodic illness
- the management of long-term conditions and frailty
- the delivery of planned care

The clinical model for acute and episodic care describes an urgent care network, with one central emergency centre working closely with peripheral urgent care centres. For planned care, one central diagnostics and treatment centre will provide circa 80% of planned surgery, whilst the majority of assessment, diagnosis and follow up will be performed closer to peoples' homes. The care of people with long-term conditions will be seamless, responsive and lifelong.

The structural changes proposed describe the consolidation of specialist services to achieve 'critical mass', whilst also addressing the need to improve quality and patient experience through delivering more care closer to home.

Three additional challenges have been identified beyond the reconfiguration of hospital services: the need to integrate health and social care and resolve the funding anomalies between them; the requirement to create community capacity to manage the shift in care closer to home; and, most importantly, the need for local communities and society as a whole to tackle the prevention and wellbeing agenda.

4. Scope and Limitations of the Review

The scope of the review was agreed between Shropshire CCG, Telford and Wrekin CCG and the West Midlands Clinical Senate. The stage 1 review was necessarily limited by the early phase of the FFP, and a range of untested, underpinning hypotheses. Some of the assumptions upon which the proposal was based are novel and the causal relationships asserted are not established through published studies or experience of successful reconfigurations and service/pathway modernisations. Finally, all of the conclusions are limited to the evidence presented, and are not exhaustive.

5. Methodology of Review

The methodology of the review was informed by national guidance (Clinical Senate Review Process: Guidance Notes 2014) and in discussion with the FFP.

5.1 Terms of Reference

An approach was made in April 2014 by Shropshire CCG and Telford & Wrekin CCG to the West Midlands Clinical Senate, requesting that a group of external clinicians be convened to challenge and review the work undertaken by the FFP to date, with the aim of:

“Providing informal advisory and expert ‘critical’ challenge to the service models being developed in the Future Fit: Shaping Healthcare Together programme, as part of NHS England’s stage 1 assurance process.” (See Appendix 1)

NB It was anticipated at that point that a formal NHS England stage 2 clinical assurance review would be likely to be required to be undertaken in June 2015, once a preferred option had been identified.

The Shropshire CCG and Telford & Wrekin CCG request emphasised the importance of continuity between the clinicians who are involved at key points in the process, as the planning develops through to the formal assessment of the final short-listed options or preferred option which would ultimately go out to public consultation. The West Midlands Clinical Senate, however, took the view that the clinicians required to undertake the formal assessment at stage 2 should be different from those having provided informal advice and challenge at stage 1, in line with NHS England guidance (Clinical Senate Review Process: Guidance Notes 2014).

The Shropshire, Telford and Wrekin “Future Fit” programme was formally adopted onto the West Midlands Clinical Senate work programme by the Clinical Senate Council on the 9th July 2014.

5.2 Process

The process to formulate the clinical advice was led by Simon Brake and Peter Thompson, both of whom are members of the Clinical Senate Council. The Terms of Reference for the work were developed as per NHS England guidance (see [Appendix 1](#)). This included the approach for formulating advice and the overall process through which the advice and recommendations would be developed and reported.

The Terms of Reference (ToR) were then shared and agreed with Shropshire CCG, Telford & Wrekin CCG, the “Future Fit” Programme Director and Programme Board. This ensured that the advice which the Clinical Senate had been asked to provide, and the approach to formulating it, were transparent to all key stakeholders. Any comments and feedback received with regard to the ToR were considered and addressed, as appropriate.

The Clinical Senate formulated its advice between October and November 2014. An Independent Clinical Review Team (ICRT) was established to assist the Senate. These included members from professional groups with specific knowledge and expertise in the areas which the Clinical Senate had been asked to provide advice (see [Table 1](#) and [Appendix 2](#)). A Confidentiality Agreement was signed and any potential conflicts of interest were identified and declared at the outset of the process. These are recorded in [Appendix 3](#).

Review dates were held on 3rd and 13th October 2014. The ICRT reviewed relevant documentation which had been provided by Shropshire CCG and Telford & Wrekin CCG. Presentations relevant to the review were also made by key members of the FFP (see [Appendices 4](#) and [5](#)).

This report sets out the key issues that were discussed and the emerging themes from the evidence presented (both documentary and verbally). It is not intended to be a comprehensive record of the discussion. The panel’s main observations and conclusions are presented as per the Clinical Senate Review Process: Guidance Notes (NHS England 2014) stage 1 assurance.

5.3 Table 1 Independent Clinical Review Team

The members of the Independent Clinical Review Team (ICRT) were as presented in Table 1 below:

Member	Position	Organisation
Mr Simon Brake	Chair – Shropshire and Telford ICRT	Coventry City Council
Mr Peter Thompson	Vice Chair - Shropshire and Telford ICRT	Birmingham Women's Hospital
Dr Neil Gittoes	Consultant Endocrinologist / Associate Medical Director	University Hospitals Birmingham
Mr Doug Robertson	Consultant Physician	Sandwell and West Birmingham Hospitals NHS Trust
Mr Paresh Sonsale	Consultant T&O	Heart of England NHS Trust
Mr Rajan Paw	Emergency Consultant	The Dudley Group of Hospitals
Ms Liza Walsh	Deputy Director of Nursing	Birmingham Community NHS Trust
Mr Alan Lotinga	Service Director	Birmingham City Council
Ms Deb Smith	Patient Representative	On behalf of West Midlands SCN and Senate NHS England
Mr Robin Comley	Patient Representative	On behalf of West Midlands SCN and Senate NHS England
Dr Mary Montgomery	Clinical Lead	West Midlands SCN and Senate NHS England
Dr Michael Kuo	Consultant in Paediatric Otolaryngology	Birmingham Children's Hospital
Dr Sue Protheroe	Paediatric Gastroenterologist	Birmingham Children's Hospital
Angela Knight Jackson (in attendance)	Clinical Senate Manager	West Midlands SCN and Senate NHS England
Ms Marilyn McKoy (in attendance)	Quality Improvement Lead	West Midlands SCN and Senate NHS England
Karen Edwards (in attendance)	Senate PA	West Midlands SCN and Senate NHS England
Alison Lake (in attendance)	SCN and Senate Admin Support	West Midlands SCN and Senate NHS England

6. Description of Current Service Model

The Shropshire area is served by two Clinical Commissioning Groups (CCGs). Shropshire CCG is based in Shrewsbury and represents 44 GP practices. This CCG serves a population of 302,000 and has coterminous boundaries with Shropshire Council. Telford & Wrekin CCG is based in Telford. This CCG represents 22 GP practices, serves a population of approximately 172,000 and has coterminous boundaries with Telford Borough Council.

Together the CCGs are responsible for commissioning services in the following areas of care:

- hospital care
- rehabilitation care (such as visits from district nurses)
- urgent and emergency care (including the out-of-hours GP service, ambulance call-outs and A&E)
- community health services
- mental health and learning disability services.

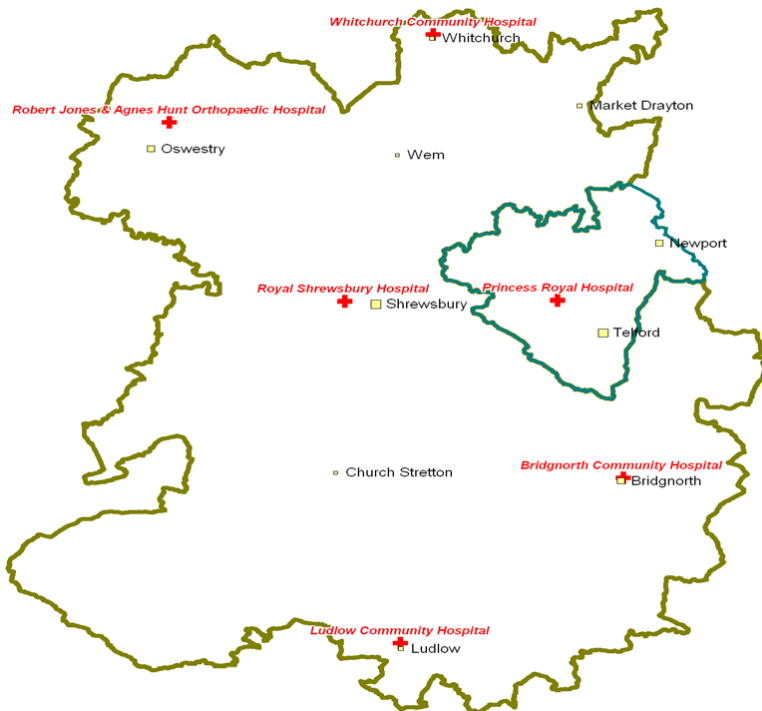
The Shrewsbury and Telford Hospital NHS Trust (SaTH) is the main provider of district general hospital services for half a million people living in Shropshire, Telford & Wrekin and Mid Wales.

Services are delivered from two main acute sites: Royal Shrewsbury Hospital (RSH) in Shrewsbury and the Princess Royal Hospital (PRH) in Telford. Both hospitals provide a wide range of acute hospital services, with a combined capacity of 819 beds. The Shrewsbury and Telford Hospital NHS Trust provides outreach services to Shropshire's four Community Hospitals along with the Community Hospital in Welshpool as well as outreach services to Robert Jones & Agnes Hunt Orthopaedic Hospital in Oswestry. The Robert Jones and Agnes Hunt Orthopaedic Hospital NHS Foundation Trust (RJAHS) is a leading orthopaedic centre of excellence, providing a comprehensive range of musculoskeletal surgical, medical and rehabilitation services both locally, regionally and nationally. The organisation is a single site hospital based in Oswestry, Shropshire, close to the border with Wales and serves both England and Wales, acting as a national healthcare provider.

Shropshire Community Health NHS Trust provides community health services to people across Shropshire, Telford and Wrekin. These services include Minor Injury Units, community nursing, health visiting, school nursing, podiatry, physiotherapy, occupational therapy, and support to patients with diabetes, respiratory conditions and other long-term health problems. In addition, they provide a range of children's services, including specialist child and adolescent mental health services.

Shropshire's four Community Hospitals have a total of 113 beds. These hospitals, operated by Shropshire Community Health Trust, are situated in Bishops Castle, Bridgnorth, Ludlow and Whitchurch (see figure 1). They provide care for those who do not need acute hospital care or have been transferred from an acute hospital for rehabilitation or recovery following an operation or who need palliative care (Future Fit Programme Execution Plan, 2013).

Figure 1 Map



Crown Copyright (2011) Ordnance Survey Licence no. 100044987 (Future Fit PEP 2013)

6.1 The Current Service Model – Challenges

The spread of services across multiple sites means that services are struggling to avoid fragmentation and incurring additional costs from duplication of services thereby adding to pressures in funding. The clinical and financial sustainability of acute hospital services have been a concern for more than a decade. Shropshire has a large enough population to support a full range of acute general hospital services, but splitting these services over two main sites is becoming difficult to maintain without compromising the quality and safety of the service.

SaTH currently runs two full accident and emergency (A&E) departments, but does not have a consultant-delivered service available 16 hours a day, over 7 days a week on either of these sites. Even without achieving Royal College standards, the Trust currently has particular medical workforce recruitment issues in respect of: A&E services, stroke, critical care and anaesthetic cover. Most of the services are delivered on two sites, though stroke services have recently been brought together on an interim basis; this latter move having delivered measurable improvements in clinical outcomes. During the stage 1 review, the ICRT were informed that Women's and Children's services had also been consolidated onto a single site in Telford, though it was too early to measure any change in clinical outcomes arising from this.

7. The Case for Change

The commissioners provided and presented information to support the case for change, from which the panel formed the following observations and views:

7.1 Case for Change - Unsustainable Health Model

The ICRT was presented with evidence showing that there is an unsustainable health model across the wider Shropshire, Telford and Wrekin health and social care economy; which therefore warrants a need for fundamental change and improvement.

The panel was of the opinion that the *status quo* is no longer acceptable, and that the requirements to achieve both clinical and financial sustainability were the primary catalysts for change. The panel was presented with evidence regarding the FFP (Clinical Design Workstream Final Report May 2014, Future Fit Programme Execution Plan, and Clinical Services Strategy) but were not provided with evidence that other relevant models had been fully explored. The panel was of the opinion that the proposed FFP model would be advantageous for the majority of the population, whilst a smaller proportion of the population might be disadvantaged; therefore on balance this would represent an overall improvement over the existing service configuration.

The panel acknowledged that the Future Fit Programme Execution Plan (2013) provides the opportunity for:

- Better clinical outcomes (including reduced morbidity and mortality) through bringing specialists together and treating a higher volume of cases routinely so as to maintain and improve skills; as well as by ensuring a greater degree of consultant-delivered clinical decision-making across more hours of the day and more days of the week
- A pattern of services that better meets the population needs; delivers quality comparable with the best anywhere in the NHS through the development of resilient clinical teams; and can become highly attractive to the best workforce, thereby rebuilding staff morale
- Better communication between services through redesign and bringing them together
- Improved environments for care
- A better match between need and levels of care through a systematic shift towards greater care provision both in the community and the home
- A reduced dependence on hospitals as a fall-back for inadequate provision elsewhere, with hospitals providing to the highest standards those services which only they can provide (i.e. providing higher dependency and technological care)
- A coordinated and integrated model of care, both across the NHS and across other sectors such as social care and the voluntary sector; with reduced duplication as well as placing the patient at the centre of care.

The panel obtained evidence from the clinical commissioners, other local clinicians and many members of the public who had responded to the “Call to Action” consultation; and accepted that there is a case for making significant change to the pattern of services currently delivered - provided there was no predetermination of where or how the services will be delivered and that there was full public and patient engagement in thinking through the options.

The panel was of the view that Future Fit Programme provides the opportunity to improve the quality of care provided to Shropshire, Telford and Wrekin’s changing population.

7.2 The Case for Change – alignment with local, regional and national strategic intentions

The panel was of the view that a clear case for change had been made, based on the evidence presented to it on current performance. The panel noted these were in line with some of the national and local drivers affecting health care systems, in particular:

National Drivers

These include:

- Department of Health (2010) Improving the health and well-being of people with long term conditions: world class services for people with long term conditions
- HM Government (2010) Healthy lives, healthy people: our strategy for public health in England
- Health and Social Care Information Centre (2013a) National Child Measurement Programme: England, 2012/13 school year. Public Health England
- Health and Social Care Information Centre (2013b) Statistics on Smoking.
- Health and Social Care Information Centre (2013c) Statistics on Women's Smoking Status at Time of Delivery
- The Marmot Review (2010) Fair Society Health Lives, The Marmot Review
- National Audit Office (2013) Emergency admissions to hospital: managing the demand, National Audit Office
- National Audit Office (2011) Transforming NHS ambulance services.
- NHS England (2014) Better Care Fund- Revised Planning Guidance
- Monitor (2014) Guidance: Enabling integrated care in the NHS

- NHS England (2013) Transforming urgent and emergency care services in England, Urgent and Emergency Care Review, End of Phase 1 Report.
- NHS England (2013) Transforming urgent and emergency care services in England, Urgent and Emergency Care Review, End of Phase 1 Report, Appendix 1 – Revised Evidence Base from the Urgent and Emergency Care Review.
- NHS England (2013) Statement on the health and social care: Integration Transformation Fund (2013)
- NHS Future Forum (2011) The NHS' role in the public's health
- National Information Board (2014) Personalised Health and Care 2020 Using Data and Technology to Transform Outcomes for Patients and Citizens A Framework for Action.

(See Section 9 for full references)

Local Drivers

These include:

- Announcement of New Shropshire Women and Children's centre in Telford 2014
- Future Fit (2014) Clinical Design – Request for support to West Midlands Clinical Senate July 2014
- Future Fit (2014) Clinical Design Work Stream Final Report, Models of Care May 2014
- Future Fit Clinical Design Work Stream Appendix
- Future Fit Programme Execution Plan v1.4
- Future Fit (2013) Clinical Services Strategy – Shropshire Hospitals Strategic Context v11

(See Section 9 for full references)

8. Clinical Advice and Recommendations

The Commissioners provided and presented documentary and verbal information to the panel. From this information the panel formed the following observations and views:

8.1 Challenges

The panel recognised the challenges of providing healthcare for a mix of both urban and rural populations, such as across Shropshire, Telford and Wrekin where there are two highly-populated areas and a dispersed rural population across a large geographical area.

NB Although the current services provided within the FFP area include the sizeable population of Powys within Wales, the remit of this review is limited to exploring those services provided to the populations served by the two CCGs as part of the NHS in England. Notwithstanding this, however, the ICRT acknowledged that care for the Welsh catchment population served by SaTH and SCH is important and must be properly attended to by the FFP, in discussion with Powys Local Health Board.

The panel acknowledge that national, regional and local political views will play a fundamental role in this review, and identified that inconsistent views expressed by local political bodies may risk undermining any future proposals. The panel, however, did not allow constraints of existing policy, financial requirements or political considerations to limit its response to the FFP; although the consequences of change on surrounding health economies were not taken directly into account by this review.

The panel noted that the FFP is effectively a remodelling and redesign of the whole health and social care economy, which should be commended for its ambition. The innovative and intellectually-demanding approach taken was acknowledged, and reflects the scale of changes proposed - and challenges faced.

8.2 Diagnostic and Treatment Centre

The model of separating DTCs (Diagnostic and Treatment Centres) from acute clinical environments is well established, tested and evidence-based. The panel was of the view that the separation of DTCs from acute providers does reduce the bed-base flexibility of acute medicine to cope with excessive demand, however, and this factor will need to be considered within the risk analysis for stage 2. This should also be informed by the West Midlands Ambulance Service (WMAS) data relating to travel times, patient location and efficient use of ambulance resources.

The panel suggested that the location of the DTC will need to be considered in relation to population concentrations, implication of travel time, choice, accessibility and clinical risk as well as access to acute clinical services from the DTC.

8.3 Emergency Centres vs Urgent Care Centres

The panel was of the view that the model of emergency centres (EC) and urgent care centres (UCC) is both a good idea and are in line with national guidance. The success of the UCCs will be dependent upon ensuring a consistent and equitable service provision for all users regardless of where they live (or whether the UCC is co-located with the EC).

As part of the stage 2 review, there will be a need to further understand the travel and clinical activity modelling, which the panel was informed would be available by January 2015. This will help inform the final decision regarding the number and location of UCCs. The panel recognised the risk expressed by the FFP team regarding separating the EC from public access, and agreed that co-locating a UCC with the EC may resolve some of these issues.

NB The panel did not consider how this model applies to or affects Welsh residents; which should be considered by the FFP.

8.4 Integrated Electronic Patient Record

There are multiple benefits from having an Electronic Patient Record (EPR) and the government is committed to this objective becoming a reality, with the aim that patients will be able to access their own health records by 2018. Although progress is being made throughout health care economies with regards to this objective, to date, none has achieved an integrated primary and secondary care record. The panel noted that the success of the FFP will depend to a large extent upon the success of these Information Technology programmes, in particular the combination of a health and social care record; albeit recognising this may be particularly challenging. The panel was of the view that for EPR to be achieved effectively, both financial investment and pragmatic decisions will need to be made by both commissioners and providers.

8.5 Workforce

The panel recognised that the local health economy across Shropshire, Telford and Wrekin is unsustainable without a transformation in the way in which services are delivered. This provides particular workforce challenges, since the success of any reconfiguration is dependent on an appropriately skilled and sized workforce for the longer-term; with implications for workforce planning, training and education. The panel noted however that the challenges facing this proposed reconfiguration are not significantly different from those faced elsewhere, and therefore learning from neighbouring health and social care economies will be invaluable.

The FFP's clinical design report describes changes in working practice as a key system principle, stating that 90% of both the challenges and the changes proposed sit within working practices. The commissioners have advocated that it is only through changes in working practices that there will be a sensible configuration of buildings and facilities, not the other way around.

The panel acknowledged the difficulties faced by the FFP when trying to meet the challenge of engagement and communications, particularly when public interest and publicity often defaults to questions of how many A&Es there will be in the area and what buildings are going to be built, etc.

The panel was of the view that there are a series of workforce assumptions inherent in the FFP, including with regard to job roles, future career trajectories, training, supervision, sustainability and succession planning for clinicians, Advanced Nurse Practitioners (ANPs) and Allied Health Professionals (AHPs), which needs to be further clarified and tested. The panel felt therefore that it was not possible to express an opinion over the reasonableness of the workforce plans within FFP at this stage.

The rationale for the FFP not having a Consultant-delivered service, but rather a Consultant-led service, was understood and accepted. The panel suggested however that the rationale for this should be made clear to all stakeholders, including patients.

The panel was of the view that there is a need to support clinicians in behaving differently and delivering change through new working practices. Individual clinicians will need to understand and accept proposed new models of working – which, if deemed unacceptable, may result in further destabilisation of the workforce. GPs may also need to be ‘up-skilled’ or supported in some specialist areas e.g. paediatrics, especially in more rural areas. These changes in working practices are also on the back of those changes required to achieve ‘Seven Day Services’, with equitable outcomes for patients achieved across the full week. Whilst the panel agreed that it is likely that the present workforce configuration is unsustainable, this would again need to be clearly evidenced.

8.6 Public Health Improvement and Integration

The panel noted the forward-thinking public health agenda within FFP, where activity and impact is required from specialisms, through generalisms (i.e. primary care), back into community mobilisation, community resilience and individual well-being. The FFP wishes to mobilise enthusiasm for change at all levels, with a focus on delivery through local communities (who in turn apply “bottom up” pressure for service change on local authorities, with action being community driven, not statutorily driven, “top down”). This thesis is in line with NHS England’s Five Year Forward View (5YFV) for the NHS (NHS England, November 2014).

The panel were of the view that the proposed reductions in activity through preventative strategies within FFP are ambitious, as reductions of this magnitude have not previously been achieved within the NHS, and it was yet to be evidenced whether this will result in a reduction in clinical need, activity and bed occupancy. The panel therefore urged FFP to keep remodelling the assumptions applied to the

efficacy of public health interventions, using all available evidence to ensure they are realistic, in advance of the NHS England stage 2 review. The panel suggested that this should include broad socio-economic evidence such as that included within the Marmot Review report (2010) and the 5YFV.

8.7 Acute Bed Reduction

The acute activity modelling element of the FFP proposal includes a number of elements, the most significant being the reduction in average occupied bed days to 7 days and introduction of a 7 day financial 'trim point'. The panel recognised the clinical rationale behind this assertion and supported it in principle. The application of this model across all acute activity for Shropshire and Telford however was felt to represent a significant, albeit logical, step which has not previously been delivered successfully at such scale elsewhere in the NHS. The panel's opinion was that the modelling will benefit significantly from further sensitivity analysis around this factor in advance of the stage 2 assurance review, as well as further exploration of the clinical evidence from elsewhere to support this contention.

8.8 Children's Services

The panel were informed that the women's and children's services had recently been consolidated onto the Telford site. There is though still a paediatric assessment unit which is open 12 hours a day in Shrewsbury. With this new development, the panel was concerned that the FFP considers whether:

- a) this creates a fixed point in the new plans, which is contrary to the espoused FFP clinical design principle that there are no fixed points (i.e. are these services to remain in Telford in the long term?); and if
- b) it is necessary for women's and children's services to be co-located with support services such as an emergency centre and critical care facilities.

The rationale for the relocation of the women and children's service was not clear to the panel. The review of this service appears to have been undertaken separately, and the approach to the development of the Shrewsbury paediatric service (PAU) seems inconsistent with the FFP programme. In particular, the model focusses on acute care and has not considered education, community care or primary care, etc.; and will need to do so in the future. The panel felt that this service area needed more joined-up thinking, as conceptually there is evidence in favour of basing services around children and families, with a focus on improvement across antenatal, postnatal and early years (<2yrs) care.

The panel, however, acknowledged the FFP ethos that change is emergent and there is a five - seven year lead-in time to new services and related infrastructure

being developed; and as such recognised that there is a need to maintain continuity in the existing configuration which may at times seem at odds with future plans.

8.9 Clinical and Public Engagement

The panel received evidence that the FFP had engaged with clinicians and residents at an early stage in its development, with 300 persons (approximately 50 patients and 250 clinicians) being involved. In addition, a smaller number of individuals have been involved in focus groups looking at specific issues. To date, people have generally supported the FFP's medium and long-term proposals which have been put forward.

The panel was of the view that engagement has been both inclusive and supportive. This demonstrates commendable practice which can be used as a model elsewhere. Going forward, the FFP team will need to continue to comply with the NHS England's guidance with regard to public engagement in respect of proposals for service change.

8.10 Risk

The panel was presented by the FFP with the dilemmas of managing risk within transformational, often radical, change. FFP identified that there is currently no existing forum to manage whole- system risk i.e across Telford, Shropshire and Powys. The Health and Wellbeing Boards are not currently constructed to undertake this role and neither are the individual commissioning organisations, whether local authorities or CCGs, equipped to carry this level of cross-system risk. The panel was informed by the FFP, however, that it believed it could undertake whole-system change without there being a forum to carry whole-system risk.

The panel was of the opinion that as a high-level proposal, the FFP provides a potential way forward to enable the construction of a clinically and financially-sustainable health and social care economy. The panel had concerns, however, regarding the level of potential clinical and financial risk; and was clear that a significant level of detail would now need to be worked up in order to prove the model could be clinically and financially sustainable. The panel suggested that certain areas of the proposal could be implemented early on in order to prove its overall viability - e.g. the integration of records, reduction of levels smoking etc. This would then provide an early indication of the likely future success of the programme as a whole, which would also help its further assurance through stage 2. The panel was also in agreement that a back-up proposal should be developed, should the current proposal not prove to be achievable once more fully worked-up.

The panel was of the view that there are several modelling assumptions which either assert novel causal relationships or else are significantly in excess of previously achieved outcomes. Work, therefore, needs to start as early as possible to model the impact of these assumptions, using sensitivity analysis, on the various components of the plans; as well as to review their impact on implementation, refreshing the assumptions of the final model based on these early findings. If the modelling

assumptions are proven to be incorrect, there is the risk to the health economy of suffering significant pressure (e.g. if the presenting clinical need exceeds the reduced bed availability). A graduated approach to implementation should therefore be considered in order to mitigate this risk. Furthermore, consideration of early bed reductions in anticipation of the future configuration might be more likely to achieve a sustainable change.

The panel noted that responsibility for assuring implementation of certain elements of FFP sits outside NHS England (e.g. local government). This may therefore pose obstacles to the FFP as well as presenting a greater risk to delivery.

The panel was also of the view that further exploration of risk in respect of detailed modelling assumptions as well as national guidance (Clinical Senate Review Process: Guidance Notes 2014) will need to be undertaken prior to the stage 2 assurance process.

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10. Abbreviations and Glossary of Terms

AHP- Allied Health Professional

An umbrella term encompassing a group of professionals such as therapists , chiropodists, podiatrists, dieticians, occupational therapists, , paramedics, physiotherapists, radiographers and speech and language therapists.

ANPs – Advanced Nurse Practitioners

A registered nurse who has usually undergone further accredited education and training at an academic level.

CCG - Clinical Commissioning Group

An organisation responsible for the commissioning of healthcare services in their geographical area.

CRG – Clinical Reference Group

CRGs are responsible for providing the NHS with clinical advice regarding specialised services, and for promoting equity of access to high quality services for all patients, regardless of where they live.

CS – Clinical Senate

Clinical Senates have been established to be a source of independent, strategic advice and guidance to commissioners and other stakeholders to assist them to make the best decisions about healthcare for the populations they represent

DTC - Diagnostic and Treatment Centre

A place that offers diagnostic services to the medical profession or general public

EC - Emergency Care

Conditions that are serious or life threatening emergency needs

FFP - Future Fit Programme

The Future Fit programme is a case for change which proposes to design and configure acute and community hospital services fit for the next twenty years

EPR System - Electronic Patient Record system

An IT system allowing the creation and access of patient's medical records

ICRT – Independent Clinical Review Team

Assess the strength of the evidence base of the case for change and proposed models

IT – Information Technology

M&M - Mortality and Morbidity Rates

The incidence of Mortality (Death) and Morbidity (poor health)

NICE – National Institute for Clinical Excellence

National Institute for Health and Care Excellence (NICE) is an executive non-departmental public body of the Department of Health in the United Kingdom

NHS England – National Health Service England

NHS England authorises the clinical commissioning groups, which are the drivers of the clinically-led commissioning system introduced by the Health and Social Care Act.

ODN – Operational Delivery Network

ODNs ensure the delivery of safe and effective services across the patient pathway and help secure the best outcome for patients

PEP – Programme Execution Plan

Programme Execution Plan (PEP) forms the basis for the development of an agreed model of care for excellent and sustainable acute and community hospitals that meet the needs of the urban and rural communities in Shropshire, Telford and Wrekin and Mid Wales

PH - Public Health

Local and National organisation with the responsibility for the protection and improvement of the nation's health and wellbeing, and reduction of health inequalities.

PRH – Princess Royal Hospital

RJAH – Robert Jones Agnes Hunt Hospital

RSH – Royal Shrewsbury Hospital

S&TH – Shrewsbury and Telford Hospital NHS Trust

T&O – Trauma and Orthopaedics

Trauma and orthopaedics deals primarily with injuries, congenital and acquired disorders of the bones, and joints and their associated soft tissues, including ligaments, nerves and muscles.

TOR – Terms of Reference

The purpose and structure of a project, committee, meeting, or any similar collection of people who have agreed to work together to accomplish a shared goal

UC - Urgent Care

Conditions that is urgent but non-life threatening

UCC's- Urgent Care Centres

Centres that effectively deliver care to patient with conditions that are urgent but non-life threatening

WMAS – West Midlands Ambulance Service

West Midlands Ambulance Service NHS Foundation Trust provides a range of services such as NHS 111, emergency and non-emergency healthcare and transport across the West Midlands region

WMSCN – West Midlands Strategic Clinical Network

Strategic Clinical Networks bring together those who use the service, provide and commission the service to make improvements in outcomes for complex patient pathways using an integrated, whole system approach

PAU - Paediatric Assessment Unit

Paediatric assessment unit based at Royal Shrewsbury Hospital. This provides a part of the range of care for children delivered by The Shrewsbury and Telford Hospital NHS children at their two hospitals.

11. Appendices

Appendix 1 – Terms of Reference



West Midlands Clinical Senate Future Fit Programme 1st Stage Assurance Terms of Reference

West Midlands Clinical Senate

‘Future Fit’ programme Terms of Reference

First published: September 2014

Amended: October 2014

Prepared by

**Angela Knight Jackson
Clinical Senate Manager**

**Marilyn McKoy
Quality Improvement Lead**

TERMS OF REFERENCE

Terms of Reference for: Clinical Review Panel

Topic: 'Future Fit programme'

Sponsoring Organisations: Shropshire CCG and Telford & Wrekin CCG

Clinical Senate: West Midlands Clinical Senate

NHS England (regional or area team): Shropshire and Staffordshire NHSE Area Team

Terms of Reference agreed by:

Name DR DAVID HEGARTY **on behalf of the Clinical Senate**

Date: 09.10.14

Name DR BILL GOWANS **on behalf of the Sponsoring Organisations**

Date: 13.10.14

1. Independent Clinical Review Team Members

Chair:

Name	Position	Organisation
Mr Simon Brake	Assistant Director – Communities and Health	Coventry City Council

Vice Chair:

Name	Position	Organisation
Mr Peter Thompson	Consultant Obstetrician and Medical Director	Birmingham Women's NHS Foundation Trust

Members:

Name	Position	Organisation
Nathan Hudson	General Manager	West Midlands Ambulance Service
Mark Farthing	Head of Clinical Practice Long Term Conditions	West Midlands Ambulance Service
Neil Gittoes	Consultant Endocrinologist and Associate Medical Director	University Hospitals Birmingham NHS Foundation Trust
Doug Robertson	Consultant Physician	Sandwell and West Birmingham Hospital NHS Trust
Paresh Sonsale	Consultant in Trauma and Orthopaedic s	Heart of England NHS Trust
Rajan Paw	Consultant in Emergency Physician	The Dudley Group NHS Foundation Trust
Alan Lotinga	Service Director – Health and Wellbeing	Birmingham City Council
Deb Smith Robin Comley	Patient and Public Representatives (x2)	On behalf of the West Midlands SCN and Senate, NHS England
Mary Montgomery	Clinical Lead for Maternity	West Midlands SCN and Senate NHS England
Michael Kuo	Consultant Paediatric	Birmingham Children's

	Otolaryngologist	Hospital NHS Trust
Sue Protheroe	Paediatric Gastroenterologist	Birmingham Children's Hospital NHS Trust
Liza Walsh	Associate Director of Nursing	Birmingham Community Healthcare NHS Trust
In attendance		
Angela Knight Jackson	Clinical Senate Manager	West Midlands SCN and Senate NHS England
Marilyn McKoy	Quality Improvement Lead	West Midlands SCN and Senate NHS England
Karen Edwards	Senate PA	West Midlands SCN and Senate NHS England
Alison Lake	Admin Support	West Midlands SCN and Senate NHS England

All independent clinical review team members will sign a declaration of conflict of interest and confidentiality agreement (see appendix 1 and 2), and their names and affiliations will be published in the Clinical Senate Stage 1 report.

2. Aims and Objectives of the Independent Clinical Review

2.1 Aim

To provide informal advisory and expert 'critical' challenge, to the service models being developed in the Future Fit: Shaping Healthcare Together programme as part of NHS England's stage 1 assurance process.

2.2 Objectives

The Independent Clinical Review Team will:

- Assess the strength of the clinical case for change
- Check alignment with clinical guidelines and best practice
- Ensure an appropriate range of clinical models have been explored and that potential risks are identified and mitigated
- Assess alignment between the proposed change and strategic commissioning intentions
- Identify key areas where there is no need to repeat work which has been undertaken, ensure and impartial input to the Board and meet the formal requirements within the framework to which the Clinical Senate must adhere
- Provide a report of the advice generated from the clinical review panel
- Complete the NHS England assurance Stage 1

3. Timeline

Week Beginning	Action	Organisation
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Overall timeline July 14 – March 2015	Phase 1 -Critical Friend Challenge and review vision and models Challenge and review options	ICRT
15th September	Agree terms of reference Request for documentation from the sponsoring organisation Conflict of Interest and confidentiality guidance to the Independent Clinical Review Team	Shropshire CCG CS (Clinical Senate) CS
22nd September	Clinical Senate receives documentation	Shropshire CCG
22nd September	Documents and Clinical Senate process, governance and guidance dispatched to the independent clinical review team	CS
22nd-29th September	Independent Clinical Review Team reading	CS
29th-September	Independent Clinical Review Team Meeting	CS
13th October	Independent Clinical Review Team Meeting	CS
27th October	Independent Clinical Review Team – report writing	CS
3rd November	Draft report to sponsoring organisation for fact checking	CS
12th November	Report to Clinical Senate Council	CS
19th November	Clinical Senate Council meeting - for formal endorsement of advice	
1st December 2014	Submit final report to sponsoring organisation Publish and disseminate as per terms of reference	CS
May 2015	Phase 2 - Formal Stage 2 Review	Shropshire CCG CS NHS England

4. Methodology

The role of the independent clinical review team will be to examine documentary evidence, carry out site visits if necessary and decide recommendations.

It is anticipated that the review will be over 2 days and will take place on the following dates:

3rd October 2014
13th October 2014

The independent clinical review team will need to consider the following;

Independent Clinical Review Team Report v1.0 Final
Future Fit Programme – Shropshire and Telford

Is there robust evidence underpinning both the clinical case for change and the proposed clinical model? Documentation should include the case for change, proposed clinical models and relevant activity information.

Alignment with other national, regional and local intentions?

Is there evidence of clinical overstatement or optimism bias in the proposals?

The interdependencies involved in the clinical design work:

Acute and episodic; Long term conditions / Frail Elderly and Planned care

Cross cutting themes identified by the Sponsoring Organisation:

- Mental health
- Women's and children's
- Social care
- Primary care
- Secondary care
- IT
- Therapeutics
- Ambulance and transport
- Diagnostics
- Workforce/7 Day working
- Cancer
- Therapies

5. Reporting

A draft report from the Independent Clinical Review Team will be made available to the sponsoring organisation for fact checking prior to publication. Any comments / corrections must be received within 5 working days.

The Independent Clinical Review Team will submit a draft report proportionate to a stage 1 review to the Clinical Senate Council who will agree the report and be accountable for the advice contained in the final report. The council may wish to take a view or offer advice on any issues highlighted that should be taken into consideration in implementing change.

The Council will be asked to comment specifically on the:

- Comprehensiveness and applicability of the review
- Content and clarity of the review and its suitability to the population in question
- Interpretation of the evidence available to support its recommendations
- Likely impact on patient groups affected by the reconfiguration
- Likely impact / ability of the health service to implement the recommendations

The final report will be submitted to sponsoring organisation by agreement following phase 1 of the review and the clinical advice will be considered as part of the NHS England's Staffordshire and Shropshire Area Team Stage 1 assurance process for service change proposals. The report is not expected to comment upon issues of the NHS England assurance process that will be reviewed elsewhere (e.g. patient engagement, GP support or the approach to consultation).

The review report will remain confidential until placed in the public domain at the conclusion of the review process

6. Communication and Media Handling

The Clinical Senate review will be published on the website of the Clinical Senate and council and assembly members will provide support to disseminate the review at local level. The Clinical Senate may engage in various activities with the sponsoring organisation to increase public, patient and staff awareness of the review

7. Resources

The West Midlands Clinical Senate will provide administrative support to the review team, including setting up the meetings and other duties as appropriate.

The independent clinical review team will request any additional resources, including the commissioning of any further work, from the sponsoring organisation.

8. Accountability and Governance

The independent clinical review team is part of the West Midlands Clinical Senate accountability and governance structure.

The West Midlands Clinical Senate is a non-statutory advisory body and will submit the report to the sponsoring organisation.

The Sponsoring Organisation remains accountable for decision making but the review report may wish to draw attention to any risks that the sponsoring organisation may wish to fully consider and address before progressing their proposals.

9. Functions, Responsibilities and Roles

9.1 The Sponsoring Organisations

The Sponsoring Organisations will:

- Provide for the clinical review panel all relevant background and current information, identifying relevant best practice and guidance. Background information may include, among other things, relevant data and activity, internal and external reviews and audits, impact assessments, relevant workforce information and population projection, evidence of alignment with national, regional and local strategies and guidance (e.g. NHS Constitution and outcomes framework, Joint Strategic Needs Assessments, CCG two and five year plans and commissioning intentions).
- Respond within the agreed timescale to the draft report on matter of factual inaccuracy.
- Undertake not to attempt to unduly influence any members of the clinical review team during the review.

- Submit the final report to NHS England for inclusion in its Stage 1 formal service change assurance process.

9.2 The Clinical Senate Council and the Sponsoring Organisations

The Clinical Senate Council and the Sponsoring Organisations will:

- Agree the terms of reference for the clinical review, including scope, timelines, methodology and reporting arrangements.
- Clinical Senate council will
- Appoint a clinical review team; this may be formed by members of the senate, external experts, or others with relevant expertise. It will appoint a chair or lead member.
- endorse the terms of reference, timetable and methodology for the review
- endorse the review recommendations and report
- provide suitable support to the team.
- Submit the final report to the sponsoring organisation

9.3 The Independent Clinical Review Team

The Independent Clinical Review Team will:

- undertake its review in line with the methodology agreed in the terms of reference
- follow the report template proportionate to stage 1 review process and provide the sponsoring organisation with a draft report to check for factual inaccuracies.
- submit the draft report to clinical senate council for comments and will consider any such comments and incorporate relevant amendments to the report. The team will subsequently submit final draft of the report to the Clinical Senate Council.
- keep accurate notes of meetings.

9.4 The Independent Clinical Review Team Members

The Independent Clinical Review Team members will undertake to:

- commit fully to the review and attend all briefings, meetings, interviews, panels etc that are part of the review (as defined in methodology).
- contribute fully to the process and review report
- ensure that the report accurately represents the consensus of opinion of the clinical review team
- comply with a confidentiality agreement and not discuss the scope of the review nor the content of the draft or final report with anyone not immediately involved in it. Additionally they will declare, to the chair or lead member of the clinical review team and the clinical senate manager, any conflict of interest prior to the start of the review and /or materialise during the review.

10. Appendices

Appendix 1 (within ToR)

Declaration of Conflict of Interest

West Midlands Clinical Senate Future Fit Programme

To be completed by all members of the clinical review team. Clinical Senate Council members should also consider if they have any conflicts in considering the review team's report.

For advice on what items should and should not be declared on this form refer to the Conflicts of Interest Policy issued by the West Midlands Clinical Senate. Further advice can also be obtained from the Clinical Senate Manager.

Name:

Position:

Please describe below any relationships, transactions, positions you hold or circumstances that you believe could contribute to a conflict of interest:

For completion

Type of Interest – Please supply details of where there is conflict in accordance with the following list:

A direct pecuniary interest: where an individual may financially benefit from the consequences of a commissioning decision (for example, as a provider of services);

An indirect pecuniary interest: for example, where an individual is a partner, member or shareholder in an organisation that will benefit financially from the consequences of a commissioning decision;

A direct non-pecuniary interest: where an individual holds a non-remunerative or not-for profit interest in an organisation, that will benefit from the consequences of a commissioning decision (for example, where an individual is a trustee of a voluntary provider that is bidding for a contract);

An indirect non-pecuniary interest: where an individual is closely related to, or in a relationship, including friendship, with an individual in categories a-f.

A direct non-pecuniary benefit: where an individual may enjoy a qualitative benefit from the consequence of a commissioning decision which cannot be given a monetary value (for example, a reconfiguration of hospital services which might result in the closure of a busy clinic next door to an individual's house);

An indirect non-pecuniary benefit: where an individual may enjoy a qualitative benefit from the consequence of a commissioning decision which cannot be given a monetary value but is a benefit to peers or colleagues (for example, a recommendation which results in an increase in revenue or status to their employing organisation or results in their organisation becoming the preferred provider).

An indirect non-pecuniary conflict: where the evidence of the senate may bring a member into direct or indirect conflict with their contracting or employing organisation, to the extent that it may impair the member's ability to contribute in a free, fair and impartial manner to the deliberations of the senate council, in accordance with the needs of patients and populations.

Other – please specify

Name	
Type of Interest	
Details	
Action Taken	
Action Taken By	
Date of Declaration	

I hereby certify that the information set forth above is true and complete to the best of my knowledge.

Signature:

Name:

Date:

Appendix 2 (within ToR)

Confidentiality Agreement

West Midlands Clinical Senate Independent Clinical Review Team Future Fit: Shaping Healthcare Together programme

I _____ (name)

.....
hereby agree that during the course of my work (as detailed below) with the West Midlands clinical senate I am likely to obtain knowledge of confidential information with regard to the business and financial affairs of an NHS body, or other provider, its staff, clients, customers and suppliers, details of which are not in the public domain ('confidential information') and accordingly I hereby undertake to and covenant that:

I shall not use the confidential information other than in connection with my work; and

I shall not at any time (save as required by law) disclose or divulge to any person other than to officers or employees of West Midlands clinical senate, other NHS organisations, staff, clients, customers and suppliers whose province it is to know the same any confidential information and I shall use my best endeavours to prevent the publication or disclosure of any confidential information by any other person.

The restrictions set out above shall cease to apply to information or knowledge that comes into the public domain otherwise than by reason of my default of this Agreement.

The 'Work' (clinical review) is:
Future Fit: Shaping Healthcare Together programme

Signed _____ Date: _____

Name (caps) _____

Appendix 3 (within TOR)

West Midlands Clinical Senate Independent Clinical Review Team Report Template

Future Fit: Shaping Healthcare Together programme

[senate email]@nhs.net

Date of publication to sponsoring organisation:

CHAIR'S FOREWORD (Independent Clinical Review Team)

Statement from Clinical Senate Chair

SUMMARY & KEY RECOMMENDATIONS

BACKGROUND

CONCLUSIONS AND ADVICE

REFERENCES

This should include advice against the test of 'a clear clinical evidence base' for the proposals and the other checks defined in the terms of reference agreed at the outset of the review.

Has the proposal been founded on robust clinical evidence? What evidence has been used and how has it been applied to local circumstances?

Has the available evidence been marshalled effectively and applied to the specifics of the proposed scheme?

GLOSSARY OF TERMS

APPENDICES

Terms of Reference

Independent Clinical Review Team Members biographies and any declarations of interest Background-

(NB this should be a summary and is not intended to be the set of evidence or information provided)

Appendix 2 - ICRT Panel Member Biographies

MEMBER BIOGRAPHY / PROFILE

Name	Mr Simon Brake, Chair, Independent Clinical Review Panel
BRIEF INTRODUCTION	
<p>Simon is a local government senior manager, having worked in health and social care in a variety of roles at local, sub-regional, regional and national levels for the past seventeen years. After graduating from the University of Warwick with a degree in Politics, Simon trained as general manager in the UK National Health Service, and has worked as an operational general manager in several acute hospitals, as a specialist health commissioner on a and national level, and as a civil servant in the national Department of Health. Simon has also completed an MPA (Masters in Public Administration) at the University of Warwick, an ERASMUS year at the Sciences-Po Bordeaux, France, as well as completing post graduate studies in conflict resolution. Working with clinical colleagues, Simon led the transformation of maternity and neonatal services across the West Midlands whilst commissioning specialist services for children, and, since 2006, been working in local government.</p> <p>In his current role, as Assistant Director for Policy, Performance & Health with Coventry City Council, Simon leads on policy and performance for health, social care, libraries, adult education, public safety and housing, supporting elected members to reduce inequalities and improve services for residents of the city, responding to and delivering the significant reductions in funding for local government, scrutinising and overseeing the city's health services, as well as chairing the local Coventry Citizen's Advice Bureau. With a staff of some 800 in his City Council role, and an annual budget of approximately £20 million, Simon is also responsible for leading the City Council's response to the current health reforms, sitting on the board of the city's 2 CCG clinical leadership teams, and representing the Authority within the new sub regional system board, as well as leading and operationally managing the city's library, translation, resilience & emergency planning and adult education services.</p>	

MEMBER BIOGRAPHY / PROFILE

Name	Mr Peter Thompson Vice-Chair, Independent Clinical Review Panel
BRIEF INTRODUCTION	
<p>I am a Consultant Obstetrician and the Medical Director at Birmingham Women's NHS Foundation Trust, an acute specialist Trust providing maternity, neonatal, genetics, gynaecology and support services. I have been a consultant in Birmingham for 13 years and I am presently the West Midlands Senate representative on the CRG for specialist maternity services. In the past I have played a lead role in the Southern West Midlands</p>	

Newborn Service and the West Midlands Children, Young People and Maternity Service Strategy Group, led by the West Midlands Strategic Health authority.

MEMBER BIOGRAPHY / PROFILE

Name	Dr Neil Gittoes Consultant Endocrinologist and Associate Medical Director, University Hospitals Birmingham.
BRIEF INTRODUCTION	
<p>I graduated with honours from the University of Birmingham in 1990 and have always worked in the West Midlands. I am Consultant Endocrinologist at the Queen Elizabeth Hospital (QEH). My initial career was as a senior clinical academic supported by the MRC and honoured by award of Goulstonian Lecturer by the Royal College of Physicians (RCP). As Divisional Director at QEH (2008-2011), I had responsibility for acute services, including A&E, unselected medicine and neurosciences. Since 2011, I have been Associate Medical Director for Clinical Partnerships, working closely with clinical commissioning groups. I also sit on the NHS England Commissioning Group for Specialist Endocrinology. Throughout my consultant career, I have held senior positions at a national level working with charities, professional societies and many patient groups. I devised and lead a national peer review of osteoporosis services scheme. I have national roles in medical education, including with the RCP. I have published widely and have an active clinical and laboratory research portfolio.</p>	

MEMBER BIOGRAPHY / PROFILE

Name	Mr Doug Robertson Secondary Care Board Member, North Staffordshire Clinical Commissioning Group and Consultant Physician, Acute Medicine, Diabetes and Endocrinology
BRIEF INTRODUCTION	
<p>I have been a consultant physician clinically active in long term conditions (diabetes & hypertension) and urgent care, for 20 years. I have had substantial experience over time chairing Trust committees: clinical governance, research ethics, and risk. I am trained and lead on incident investigation, and am experienced in complaint resolution and learning. With 10 years experience as Clinical and Divisional Director in Medicine and Emergency Care, I contribute to NHS England's Urgent Care and 7-day working workshops and recently led multi-professional groups across the Health Economy for clinical pathway development and Ambulatory Emergency Care, the latter receiving an award for stakeholder engagement.</p>	

I take part in multicentre cardiovascular outcome trials, and am trained in, and teach, critical appraisal methodology. Associate Clinical Professor at Warwick Medical School, and on the Royal College of Physicians' Education Faculty, delivering training in leadership, education methods and patient safety, I sit on the Acute Medicine and General Internal Medicine Training Committees in the West Midlands, on the WMQRS Clinical Reference Group and the West Midlands Diabetes Network.

I have chaired multi-professional and patient engagement groups for our health economy, including the local diabetes network and urgent care models of care. As SHA sponsored Clinical Champion for Prevention I have used this cross-organisational approach to develop a Health Improvement and Social Inclusion programme for the local health economy, and out of this work, am now UK representative on the International Network of Health Promoting Hospitals' General Assembly.

Learning all the time as a Secondary Care Board member of North Staffordshire CCG, I aim to be an effective non-executive director: developing a collective view through debate and challenge, and holding to account both the CCG and its providers through Board Committees (Quality & Safety, Clinical Priorities and Audit) and triangulation with visits throughout the health economy.

MEMBER BIOGRAPHY / PROFILE

Name	Mr Paresh Sonsale Orthopaedic Consultant, Clinical Lead – Trauma & Orthopaedics, Good Hope Hospital
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BRIEF INTRODUCTION

I work as an Orthopaedic Consultant for Heart of England NHS foundation trust which is one of the largest trusts in the UK. I also work as a Clinical Lead for Trauma and Orthopaedics for Good Hope Hospital. As a part of my outreach clinic I work at Sir Robert Peel hospital, Tamworth. Thus I serve a large population of North Birmingham and South Staffordshire

I passed my basic qualification, MBBS, in 1989. I have Orthopaedic experience of more than 25 years and have Consultant experience of nearly 10 years. I have passed FRCS orth. in addition to holding other qualifications of M. Ch., Master of Surgery (MS), and Diploma in Orthopaedic surgery. I have special interest in Joint replacement, Arthroscopic surgery of Shoulder and Knee and Hand surgery. I have done a research thesis as part of my reparation for M. Ch and Masters.

I have knowledge and experience of nearly 20 years of practice in NHS and I feel I will be able to assist the Commissioners to achieve their goal of providing best quality care to the local population. I will be able to advise and provide clinical leadership to meet challenges in the NHS. I already provide support to Clinicians in my role as Clinical Lead

and I will be able to translate this to a much bigger scale in the West Midlands. I participate in management of one of the largest trusts in the UK and have an awareness of day to day running and the challenges faced by NHS.

Thus I will be able to champion provision of quality assurance and improvement for the NHS in West Midlands. I see this as an opportunity to improve the local NHS to the highest standards within the limitations of financial constraints faced by the NHS.

MEMBER BIOGRAPHY / PROFILE

Name	Mr Rajan Chimanlal Paw A&E Consultant, The Dudley Group of Hospitals
BRIEF INTRODUCTION	
<p>I am a Consultant Emergency Physician and Clinical Director of Urgent care at the Dudley Group NHS Foundation Trust. I have trained and practiced through my whole career in the West Midlands, and along with Emergency Medicine I have worked in General medicine, Anaesthetics and Orthopaedics. I have been involved in emergency service redesign for the last 4 years</p> <p>I see my role at the clinical senate to provide a external clinical sense check to redevelopment plans. It is easy to be so involved in service redesign that you cannot lift your head up and see the bigger implications or be blind to certain issues as you are intricately involved in the process of redesign. I see my role to provide a external view that can point out issues that may have been overlooked or implications not fully thought out.</p>	

MEMBER BIOGRAPHY / PROFILE

Name	Ms Liza Walsh Deputy Director of Nursing, Birmingham Community NHS Trust
BRIEF INTRODUCTION	
Biography requested. None received.	

MEMBER BIOGRAPHY / PROFILE

Name	Mr Alan Lotinga Service Director, Health and Wellbeing, Birmingham City Council, Directorate for People
BRIEF INTRODUCTION	

Worked in Local Government since 1980, with spells in the NHS and consultancy. Qualified as an accountant (CIPFA) in 1985, focused on health and social care since 1990, branching initially from finance and strategic/support services to wider management. Joined Birmingham City Council in 2009 from Staffordshire County Council. Currently Service Director (Health and Wellbeing) in the Directorate for People. Started in Birmingham as what was then called the Director of the Health and Wellbeing Partnership – focusing on a range citywide JSNA work, joint commissioning, health inequalities, and personalisation. My current responsibilities include the leadership and transformation of Adults Social Work, the Continuous Improvement Team, and our Customer Involvement Unit; I lead for the City Council on partnership arrangements with the NHS; and I currently chair the Birmingham Adults Safeguarding Board. My most significant more recent major health and care partnership activities have been establishing the Birmingham Health and Wellbeing Board arrangements and Senior Responsible Officer for the Better Care Fund. I believe the mutual trust and emphasis on transparency I have promoted over the past 5 years, and the importance of integrity in dealings with partners, are paying off. I am a Local Government Association Peer Reviewer and contribute to a number of networks.

MEMBER BIOGRAPHY / PROFILE

Name	Ms Deb Smith Patient Representative
BRIEF INTRODUCTION	
<p>I am a patient leader from the Worcester and Arden area and also from West Midlands Clinical Senate. I am passionate about good healthcare having been a psychiatric nurse until health problems prevented that and am a strong advocate for mental health issues. I was vice chair of South Warwickshire CCG's work stream for patient involvement and am a shadow Governor for my local Mental Health Trust and a member of my local Acute Trust. I have used mental health services myself and as a long time sufferer of fibromyalgia I have used primary and secondary services for this. I try and put the patient's voice at the heart of all I do.</p>	

MEMBER BIOGRAPHY / PROFILE

Name	Mr Robin Comley Patient Representative
BRIEF INTRODUCTION	
<p>I am a pensioner and have lived with my wife in Telford for six years. I am a survivor of both bowel and nasal cancer as well as diabetes, so have a lot of experience of the NHS. I currently help run a support group for Head & Neck patients, and serve on a hospital cancer forum as well as the West Midland Cancer Patient Expert Advisory Group. Recently I was asked to join a regional group of cancer doctors and nurses as one of two patient representatives, and have been a member of the Citizens Working Party establishing the Citizens Senate in the West Midlands. Before retirement, I worked as an electronics engineer designing and maintaining computer control systems for the water industry.</p> <p>As a local patient, I am acutely aware that I must obtain the best possible result for the County.</p>	

MEMBER BIOGRAPHY / PROFILE

Name	Dr Mary Montgomery Clinical Lead, West Midlands Strategic Clinical Network
BRIEF INTRODUCTION	
<p>I joined Birmingham Children's Hospital in 2010 as a Paediatric Intensivist and as Clinical Lead for KIDS – setting up Kids Intensive Care and Decision Support (KIDS) which provides single telephone number access for clinicians in the West Midlands to</p>	

Paediatric Intensive Care (PIC) Consultant advice for critically ill children, PIC beds, trained transport teams, specialised ambulances and equipment, and logistics. The service has streamlined the pathway of care for critically ill children in the region, providing paediatric intensive care ‘without walls’, from the moment the child presents at the District General Hospital, using telecommunication technology to conference multiple professionals to plan best management. Service developments include all parts of the network: lowering referral thresholds; supporting local care wherever possible; transparent governance; sharing learning through outreach and education; improving customer service; improving family experience of care.

I am Clinical Lead at WMSCN for the development of the West Midlands Paediatric Critical Care ODN, and Networks ACMO at BCH: driving improvements in networked working across patient pathways, including PIC; integrating neonatal and paediatric transport and in utero referrals; general paediatric pathways; paediatric gastroenterology; general paediatric surgery; neonatal surgery – with the focus being increased care closer to home, improved ease of access to (telephone) advice, seamless networked care across pathways between different providers, improving efficiency (more for less...).

I bring my personal qualities as a networker and facilitator, able to see how local issues fit into ‘the big picture’, leadership qualities, experience and training (NHS Leadership Academy Fellow 2012-2013), human factors and crew resource management knowledge and experience, quality improvement methodology, and my embedded belief that though skills, knowledge and experience are all necessary to provide best patient care, without the ‘human’ element or ‘non-technical skills’ we cannot build the culture necessary to truly excel.

MEMBER BIOGRAPHY / PROFILE

Name	Dr Michael Kuo Consultant in Paediatric Otolaryngology, Birmingham Children’s Hospital
BRIEF INTRODUCTION	
Biography required. None received.	

MEMBER BIOGRAPHY / PROFILE

Name	Dr Sue Protheroe Paediatric Gastroenterologist, Birmingham Children’s Hospital
BRIEF INTRODUCTION	

Member of NHS-E Clinical Reference Group for paediatrics- speciality medicine. Council member for 6 years (Chair of Education Committee and Convenor) of national Society, (BSPGHAN), representing multi-professional groups and working in partnership with RCPCH, Charitable and Patients organisations and lead of national network for patients with intestinal failure. Quality Advisor for CSAC College Speciality Advisory Committee for training.

Expert Advisory group Chair W Midlands Clinical Senate Assembly. Clinical Lead of Operational Delivery Network for Paediatric Gastroenterology, Hepatology & Nutrition. Clinical departmental lead responsible for governance, quality and productivity improvement.

I can provide knowledge and experience of working in a leadership role at departmental, Trust, regional and national arenas. I am committed to developing collaborative clinical networks and clinically-led commissioning within the NHS. I can work across boundaries to ensure collaborative working between the Clinical Senate, CRG's, NHS-E and social care. I will provide expertise and strategic advice on how health services should be designed in the W. Midlands for all children.

I have developed experience in evidence based decisions and policy –making, having set out Service Specifications and other CRG commissioning products (QIP's, dashboards), network pathways and have advised on quality standards for NICE. I understand the importance and am committed to achieving best value pathways to improving improve patient outcomes and quality.

I have worked in partnership with a range of external organisations working with patients and the public such as charitable bodies (Patients Association, Coeliac UK) and patient groups in our Trust to obtain awareness of issues. I can easily access the consensus opinion of regional and national colleagues via the clinical networks to obtain a collective view to achieve outcomes that are clinically supported and promote the needs of patients above all

Appendix 3- Declaration of Interest

Dr Neil Gittoes, Consultant and Associate Medical Director at UHB, declared that UHB provides specialist care for many clinical areas.

Mr Robin Comley, Patient Representative, declared that he is a patient in the area affected

No other declaration of interest were declared by the ICRT.

Appendix 4 - Day 1 Final Agenda



West Midlands Clinical Senate

DAY 1

**Independent Clinical Review Panel
Shropshire and Telford – Future Fit Programme**

Friday 3rd October 2014, 10.00 am until 4.30 pm

**Venue – The International Convention Centre (The ICC), Broad Street,
Birmingham, B1 2EA**

PLEASE REPORT TO MAIN BUSINESS RECEPTION IN THE FIRST INSTANCE

AGENDA

Item			Purpose
10.00	1	Arrival with Refreshments and Panel Pre-meet Simon Brake (Chair) Peter Thompson (Vice Chair)	
10.30	2	Declaration of Interest	
10.40	3	Session 1: Introduction and Review of Documentation Submitted	Review ToR Overview of the documentation
12.00		Panel Discussion	Explore and clarify specific issues Formulate questions for Commissioners
12.30	4	Lunch	
1.15	5	Panel Discussion	As Above
1.45	6	Session 2: Presentation of Clinical Case for Change Dr Bill Gowans along with names to be confirmed <ul style="list-style-type: none"> • Clinical Design • Programme Execution Plan 	Commissioners presentation of the Clinical Case for Change and Clinical Design

		<ul style="list-style-type: none"> • Areas for the Panel to Consider 	
3.30	7	Refreshment Break (if required)	
3.40	8	Panel Deliberations and Next Steps	Assess Evidence Presented Formulate agenda for Day 2
4.30	9	End	

Appendix 5 - Day 2 Final Agenda
West Midlands Clinical Senate
DAY 2
**Independent Clinical Review Panel
Shropshire and Telford – Future Fit Programme**
Monday 13th October 2014, 10.00 am until 4.30 pm
**Venue – The International Convention Centre (The ICC), Broad Street,
Birmingham, B1 2EA**
PLEASE REPORT TO MAIN BUSINESS RECEPTION IN THE FIRST INSTANCE
AGENDA

Item			Purpose
10.00	1	Arrival with Refreshments and Panel Pre-meet Simon Brake (Chair) Peter Thompson (Vice Chair)	
10.30	2	Declaration of Interest and Review of Day 1	Review ToR (amended)
10.40	3	Session 1: Introduction and Continuation of Documentation – Bill Gowans (representing commissioning organisation)	Overview of further documentation (available on day only)
12.00		Panel Discussion	Points of clarification
12.30		Lunch	
1.15		Session 2: REPORT WRITING	Compilation of first draft of report
3.30		Refreshment Break (if required)	
3.40		Summary and Conclusions	Discuss next steps in review process
4.30		End	

Produced by:

West Midlands Clinical Senate

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Date: December 2014

APPENDIX 4e – Health Overview Scrutiny Committee - Questions and Programme Reponses

Questions from Joint HOSC for Committee Meeting on 18th October

1 Risk for Current Services	
1a) Please clarify the level of risk for Emergency Services at SaTH. While it was reported in August that the consultant cover has improved – what is the level of Middle Grade medical cover and what risks does this present for the sustainability of the ED service?	Sustainability of the current A&E services at SaTH remains a challenge especially with regards to medical staffing. Failure to recruit to middle grade doctors means that consultants act down on a frequent basis. The Trust is working with UHNM to progress the provision of consultant support to both A&Es
1b) Current risks to other services: <ul style="list-style-type: none"> What other services are identified as fragile? What plans are in place to mitigate this? Are the services currently being provided safe? 	Critical Care fragility is mitigated through the use of locum consultants and agency nurses. The safety of patients is of paramount importance to the Trust and so the filling of workforce vacancies through external agencies continues alongside the commitment of staff to keep patients and services safe.
2) Deficit Reduction / STP	
2a) What planned in year savings from reducing duplication of services have been built into the budgets for 2015/16? What are these savings and what services will be affected?	There were no planned savings from reducing duplication costs built into the budgets for 2015/16.
2b) Are there any proposed changes to services in the Deficit Reduction Plan that involve a substantial variation or development in service? What are the timescales for these proposed changes? What consultation will be carried out and how / when will the Joint HOSC be consulted? What are the risks of dis-investing from these services? Please provide details on the equality impact assessment that has been carried out on these decisions?	The Deficit Reduction Plan is currently being revised. However, the largest savings result from a 2% efficiency levied annually from each provider (this has been accepted practice for the last five years); from the savings that result from the reconfiguration of acute services (£16m); and from repatriation of patients that are currently treated outside of the Shropshire border (£12m)
2c) How have the Local Authorities been involved in the development of the Deficit Reduction Plan and the Disinvestment programme?	Not explicitly, although Local Authority Chief Executives are part of the STP Partnership Board
3) Clinical Model and Work Force Planning	
3a) Information on recruitment to existing A&E / proposed ED and UCCs – What practical immediate difference would approval of the Future Fit Programme make to recruitment? Is there comparative information from a similar hospital (previous comparisons have been with Stoke which is a	Due to the progression of the programme and the approval of the SOC, we have already seen an improved recruitment position into Unscheduled care for medical staff. Once the preferred option is known, more detail of the programme and its timelines will form part of all recruitment packs for

Appendix 4E

<p>Major Trauma Centre?)</p>	<p>registered professionals inviting them to be part of the development for services at the Trust. This worked well in the recruitment of staff for the W&C reconfiguration.</p> <p>Advanced practitioner training is currently underway with expectation that 50 wte will be in place to support a reconfigured service.</p> <p>A workforce transformation plan will form part of the OBC and investment has also been identified for the creation of new roles (double running, back fill etc) and the management of change.</p>
<p>3b) Work force planning for Future Fit. What consultation will be carried out consultation with staff re: change of roles, location, and salary.</p>	<p>Significant engagement has been completed already in determining the workforce requirements identified within the plan. This work culminated with senior leadership sign off on numbers, role developments, staff movement etc. A full engagement and communication plan will be instrumental in ensuring successful delivery as we move forward and we will be adhering to our management of change policy with appropriate formal staff consultations, informal group sessions. New role developments will be driven forward with health education colleagues, the clinical body and staff side colleagues.</p>
<p>3c) What consultation has taken place with care providers regarding the work force needed to support the Future Fit model and /or the tele-health and tele-care systems that will need to be in place? What investment will be available for this work?</p>	<p>The STP workforce workstream is a cross cutting enabler and as such will develop new ways of working ensuring that focus is placed where it supports the clinical model within Future fit and IT requirements. This is aligning with the internal piece on SSP and the work with Channel 3 (external IT consultancy)</p>
<p>3d) What will be the staffing arrangements at the UCCs and what training opportunities will there be for staff? How will staff rotate between the UCC and ED?</p>	<p>On the Emergency Site the UCC will be staffed by Advanced Practitioners, GPs and Doctors in Training. In the UCC on the Planned Care Site staff the Advanced Practitioners will be supported by a GP. Training is underway for advanced practitioners. The staff will be expected to rotate through the UCC and ED on both the Emergency and Planned Care Sites to ensure the maintained and development of skills. Social Services and Mental Health Teams will also support services on both sites.</p>
<p>3e) How will GPs be recruited to the UCCs? Will they be employed by the Trust, working in partnership with Shrop Doc / GP Federation or will an agency be used?</p>	<p>This is still being explored although the Trust has made provision to employ GPs directly into the UCCs</p>

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3f) What training opportunities would there be for GPs and primary care staff in the UCCs?	As above. This will also form part of the workforce transformation plan.
3g) How are / will existing staff at the Trusts be supported to undertake training so the necessary skills are available for the proposed UCCs? From the visit to the UCCs at Runcorn and Widnes it was noted that there was a shortage of nursing staff with paediatric skills and that it takes time to train staff to the necessary levels e.g. to Masters level.	Staff at both A&E's currently see and treat the patients that will be transferring to the UCC. These staff will be rotating through the ED and UCC in the future to develop and maintain skills.
3h) What is the view of NHS England, national clinical bodies and regulators on the safe percentage of patients who can be treated at a UCC?	Not explicitly, although Local Authority Chief Executives are part of the STP Partnership Board
3i) What will the triage process for patients who attend the UCC be and what will be the target timescales?	Streaming of patients will take place upon arrival to the UCC by an experienced clinician. Pathways of care and capacity has been planned on the basis that patients will be seen and treated and discharged within 2 hours of arrival in line with NHSE guidance (Transforming Urgent and Emergency Care Services in England, August 2015)
3j) What proportion of urgent care / trauma patients currently go out of county? (can this be broken down to show the medical condition or reason for specialist service e.g. heart attack or road traffic accident)	Data is being validated but for 15/16 emergency spells at either Wolverhampton Hospital or Royal Stoke accounted for approximately 2% of all emergency spells. These figures do not differentiate between "normal" and tertiary activity. For RTAs data suggests about 10% go to Stoke or Wolverhampton.
3k) What advice has the CCGs received about the location of the ED Department and the Women's and Children's Service?	The CCGs have commissioned an independent review by the Manchester Transformation Unit of what is referred to as Option C2 where the W&C Centre would be located on the planned care site at Telford with the Emergency Centre on the Shrewsbury site. It has been the view of local clinicians that this option will be extremely challenging to deliver. The report from the review has been included in the non-financial appraisal.
3l) How will the Future Fit Clinical Model include end of life pathways?	The clinical model will support the delivery of End of Life care being provided within the home through development of the community pathways as part of the Neighbourhood workstreams.
3m) How will the Future Fit Clinical Model help to reduce health inequalities?	There was clear and repeated recognition throughout the clinical design process that the biggest single factor which will determine success or failure of the programme over the next twenty years is the degree to which the prevention and wellbeing agenda is addressed. The general health of the

	<p>population and the years they live without disease ('disease free life years') will be the primary determinant of the 'disease burden', the size of which will determine whether or not health and social care is effective and sustainable in the future. Whilst targeted prevention is effective in social and health care settings, and will continue to be embedded in the health and social care system, this will largely benefit people known to be at risk or who already have disease. There is an absolute requirement for an enhanced and integrated education and prevention programme addressing the wider determinants of health of the whole population, driven by a commitment to wellbeing as a primary health, social, economic, political and cultural aim, without which the sustainability and quality of services in the future will be seriously threatened.</p> <p>There is currently confusion between the delivery of targeted prevention activities and the wider wellbeing agenda relevant to the whole population. To resolve this, it is proposed that the nomenclature for targeted prevention aimed at those 'at risk' is prevention, whilst addressing the wider determinants of health through social change is wellbeing. This will enable clarity in planning and in determining roles and responsibilities for the prevention agenda as distinct from the wellbeing agenda.</p> <p>The Community response to Future Fit is a work in progress. The community response, encompasses rural urgent care, end to end pathway redesign and the innovative Neighbourhoods approach; all being developed in harmony to improve health and wellbeing and reduce health inequalities.</p>
<p>3n) How will the Future Fit Clinical Model ensure that the mental health needs of patients (including dementia) are met in an acute / urgent care setting?</p>	<p>As part of the development of the UCC and ED service, pathways and facilities have been developed with specific consideration of this patient group. Specifically the provision of dedicated rooms where patients with mental health needs can wait, be assessed and/ or treated within an appropriate setting in line with NICE guidance. New ward environments will be designed to be dementia friendly and anti-ligature rooms will also be created in high risk areas.</p>

Appendix 4E

4) Activity and Capacity	
4a) Details on activity and capacity work – who has been involved and how many meetings?	The acute activity and capacity sub group met on 7 occasions to february 2014. Membership included SaTH clinicians, Shropshire CCG , T&W CCG, Shropshire Community Trust , GP leads, ambulance services and patient representation
4b) Assumptions on reduction in activity for A&E prior to implementation of Future Fit –Can you confirm the accuracy of figures and if these are correct – are they realistic? E.g. reduction of 32% in admissions for people with frailty or LTC, 15 – 20% reduction in admissions related to smoking, 20 – 50% fall in alcohol related admissions* and 20% reduction in admissions for falls.	The OBC describes a reduction in activity that’s relates to a reduction of 4200 admissions over the next 5 years. With a further reduction of 27000 Outpatients over the same time period. The alternatives to acute hospital care are in development within the Neighbourhood workstreams. Mitigation for non delivery of the activity shift will be described in the OBC.
4c) Please clarify the figures below for Anticipated Emergency Department Attendances (current A&E attendances at both A&Es 120,000): <ul style="list-style-type: none"> • Future Fit Phase 2 modelling assumption 31% of front door urgent care activity will go to ED – 68,000 ED attendances (based on projected 110,628 A&E attendances in 2018/19) • Sustainable Services Activity modelling 35% urgent care to ED – 40,690 attendances (based on 1157712 A&E attendances) 	<p>The Trust has seen a year on year increase in A&E activity of 5%. The OBC will describe levels of activity in the UCCs and ED that reflect the 2015/16 actual activity.</p> <p>Using 15/16 activity data as a baseline of the 121,096 patients that attended A&E, through application of the Future Fit algorithm, 64% of patients will be treated in the UCC and 36% in the ED.</p>
4d) What evidence is there nationally of the number of patients who go to a UCC who will be transferred to an A&E / ED? What modelling has been done to look at how the age and frailty of a patient increased the risk of transfer from a UCC to the ED?	Through the development of patient pathways and the model of care of a single site for admission, patients will be triaged to the right site. Discussions with the ambulance services are underway to develop pathways of care in partnership to ensure the safe transfer of patients. Development of the Ambulatory Emergency Care Unit and the Frailty Assessment Unit on the Emergency Site will ensure that frail patients are cared for in an appropriate setting without delay to minimise the need for admission.
4e) How have the assumptions that have been made about activity and capacity been ‘future proofed’ so that the services will be sustainable for the long term? E.g. projected demographic changes.	Demographic growth has been included in activity assumptions within the OBC. Changes in population size and age profile were derived from the Office for national Statistics (ONS) sub national population projections. For A&E activity projections are based on 5% PA which reflects the average growth seen over the last 2 years.
4f) From the visit to the UCCs at Widnes and Runcorn it was recognised that some patients who attended the UCC could have been seen in primary care. The UCCs in this model were strongly connected with	Currently there are no plans to incorporate primary care activity within the UCCs. However, joint and integrated working between Primary, Secondary and Community Care is essential to the success of a reconfigured health system.

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<p>Primary Care and this transfer of activity was not seen as an issue and may help to create capacity in Primary Care. This was also supported by the IT system which enabled GPs and A&E staff to access the records of patients who attended the UCC. How will these issues be addressed in the Future Fit Model for the UCCs?</p>	
<p>4g) Who engaged has the West midlands Ambulance Service been in the activity and capacity work and the managing the implications for this service?</p>	<p>A dedicated meeting has taken place with WMAS and an engagement plan has been agreed. This will include members of SaTH shadowing a crew to understand pathway challenges, WMAS attendance at pathway and architectural development groups. WMAS are supportive of the clinical model. Quarterly meetings are being planned for SaTH, WMAS, Welsh Ambulance Service and the Air Ambulance.</p> <p>A commissioner led Task and Finish Group has been agreed to coordinate the activity and contract elements of the change.</p>
<p>5) Equipment and Information Technology</p>	
<p>5a) Will the IT systems will be in place to enable both Primary Care and staff at the Acute Trust to access records of patients who attend the UCC?</p>	<p>Yes that is anticipated. The Digital Strategy Group is taking forward a number of key objectives that will support Future fit and the wider STP. For example paper free at the point of care by 2020 and ; digital enabled self care;</p>
<p>5b) What diagnostic equipment will be available at both UCCs and what diagnostic services will be available remotely?</p>	<p>UCCs will have access to a full range of diagnostics, however, should a patient require what is considered complex investigations such as CT, they would become an ED patient by definition. Discussions are underway with regards to the rural urgent care services, which are also being progressed through the Neighbourhood Workstreams. Investigations are likely to point of care testing, plain film x-ray and ultra-sound.</p>
<p>6) Governance and Timescales</p>	
<p>6a) How will the Future Fit model engage with emergency planning policies and procedures for both local authority areas?</p>	<p>A joint approach will continue as now</p>
<p>6b) How are social care providers engaged in the development and testing of the Future Fit model?</p>	<p>Through the Clinical Design Group and the Clinical Reference Group.</p>
<p>6c) Are there any other proposed changes to services e.g. orthopaedic services? (STP report commissioned from 3 sites and at level beyond peer group.) Do any of the proposed changes involve a substantial variation or development in service?</p>	<p>We know that Shropshire CCG appears to have a disproportionately high spend on orthopaedic services. Musculo-skeletal and orthopaedic services are currently provided by Telford, Shrewsbury and Robert Jones hospitals and by the community. The review is a clinical review to determine whether or not</p>

	we currently have the best configuration of services and to recommend any changes that need to be made
7) Leadership and Capacity	
7a) Learning from the visit to Widnes and Runcorn UCCs we heard how important it was that all organisations had a shared vision and provided leadership to deliver the UCCs and that there were the skills and capacity in the organisations to deliver it. Can you confirm that the Future Fit Programme and the Hospital Transformation Programme have united leadership and that this vision is jointly owned by clinicians in Primary Care?	The STP Partnership Board and the governance arrangements we have put in place for our supporting value streams and enabling workstreams provides an ability for all organisations and professional groups involved in delivering health and care to take forward our shared vision for services. We have a unified vision and agreed priorities which include reconfiguration of our hospitals and developing neighbourhood care models that prevent unnecessary unplanned admissions and proactively support effective discharge from hospital. All organisations within health and social care have agreed to work together to implement the STP plan of which Future fit is one part.
8) Consultation	
8a) At each stage of the discussion on the development of the Future Fit Programme the Committee has stressed the importance of the links between the UCCs / A&E and primary and community care. What level of detail will be included in the consultation document regarding the Community Fit programme and the pathways being developed, Rural Urgent Care Centres / Services and Primary Care – including the timescales for this work and the funding available and the consultation that will be carried out on these proposals?	This work is being progressed through the value streams within the Sustainability and Transformation Plan (STP). The Neighbourhoods work is developing models for supporting communities to become more resilient, supporting people to stay health and developing neighbourhood care models. It is anticipated that whilst this work will not be completed we will be able to present high level models of care and early examples at the point we consult on the acute service reconfiguration options in December. More detailed work will be completed over the next 3-6 months and prior to the OBC approvals process.
8b) How has the NHS responded to issues / concerns raised during pre-consultation phase? How will this be demonstrated in consultation document?	The NHS Future Fit communications and engagement team has collected hundreds of comments during the pre-engagement period. These comments have been collated and analysed to help inform the basis of the consultation plan. A key piece of work is currently underway to get feedback on the methods used during a consultation to ensure that the needs of local people are met as far as resources will allow. We have added people to our mailing list when they have requested to do so. They have then been sent regular news bulletins, which have included press releases and regular e-bulletins. Where people have provided us with their views and suggestions they have been read and considered by programme board members, responded to and

Appendix 4E

	<p>given feedback as to how their views will be taken into consideration. Their views have been used to shape services, an example being where we have held 'Rural Urgent care workshops', understanding the key issues that local people were facing and their concerns.</p> <p>All pre-engagement evidence will be included in the consultation document.</p>
<p>8c) Learning from the visit to the UCCs at Widnes and Runcorn the Committee recognises that the services at the UCCs will develop once they are established e.g. refining patient pathways and developing new ones. This needs to be balanced with a commitment to provide a minimum level of service provision at the UCCs – how will this be demonstrated in the consultation document?</p>	<p>The description of what will be provided in the UCCs has been widely shared and the relevant internal pathways and workforce model developed. Whilst the UCCs may evolve over time in response to changes in activity, the key elements of the UCCs at RSH and PRH have been identified for this stage of the process.</p>
<p>8d) Will the consultation document set out how the existing community hospitals, including the Minor Injuries Units, will be utilised in the Future Fit model and how this capacity be better used and publicised?</p>	<p>This information will not specifically form part of the consultation. However work is being progressed through the Neighbourhood value streams within the Sustainability and Transformation Plan (STP) to shape services locally. The Neighbourhoods work is developing models for supporting communities to become more resilient, supporting people to stay health and developing neighbourhood care models. It is anticipated that whilst this work will not be completed we will be able to present high level proposed models of care and early examples.</p>
<p>8e) Will the CCG Boards form a Joint Committee / Committee in Common as the decision making body for the Future Fit Programme? If formed, how will the membership and the terms of reference for this Committee be determined?</p>	<p>The two CCGs have agreed to form a Joint Committee to receive the recommendations on the preferred option from the Future Fit Programme Board. Draft terms of reference will be considered by their respective Boards in October</p>
<p>8f) Will the consultation document include the measures against which the CCGs will commission and assess the effectiveness of the Future Fit model?</p>	<p>The options have been put through a weighted appraisal process, both financial and non-financial. This process will be evidenced in the consultation document and made publically available.</p>

APPENDIX 5a – Engagement Work to Date

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Week Commencing	Monday		Tuesday		Wednesday		Thursday		Friday	
	Internal	External	Internal	External	Internal	External	Internal	External	Internal	External
07/03/2016		Rural Urgent Care Centre Project Sub-Group		T&W CCG Board		SC CCG Board	SSP Project Team			
14/03/2016				Whitchurch RUCC Briefing		Bishops Castle RUCC Briefing	SSP Roadshow (RSH)			
21/03/2016		Ludlow RUCC Briefing	Breast MDT meeting		Women and Children's Task & Finish	Oswestry RUCC Briefing	SSP Roadshow (PRH)	Runcorn Urgent Care Centre Visit	Good Friday	
28/03/2016	Easter Monday				Unscheduled Care Task & Finish		SSP Roadshow (RSH) Trust Board Public Session (SSP SOC)	Patient Critical Friend's Presentation		
04/04/2016		Patient Critical Friend's Group	Women and Children's Task & Finish				SSP Roadshow (PRH)			
11/04/2016	Women and Children's Task & Finish		Scheduled Care Task & Finish		Critical Care Task & Finish		SSP Project Team SSP Roadshow (RSH)			
18/04/2016	Women and Children's Task & Finish			FF Clinical Reference Group	ED Task & Finish		SSP Roadshow (PRH) Patient Critical	SSP Roadshow (Ludlow Community Hospital)		SSP Roadshow (Bishops Castle Community

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							Friend's Group			Hospital)
25/04/2016			Women and Children's Task & Finish Sustainability Committee		SSP Project Team		Support Services Care Group Board SSP Roadshow (RSH)	SSP Roadshow (Whitchurch Community Hospital)		SSP Roadshow (Bridgnorth Community Hospital)
02/05/2016	May Day			SSP Roadshow (Oswestry Community)	Scheduled Care Task & Finish Group SSP Project Team		SSP Roadshow (PRH) Anaesthetics meeting		Clinical Working Group	
09/05/2016			AEC meeting		Critical Care Task & Finish		SSP Steering Group SSP Roadshow (RSH)			
16/05/2016							SSP Roadshow (PRH) SSP Project Team			
23/05/2016					SSP Project Team		Support Services Care Group Board SSP Roadshow (RSH)			
30/05/2016	Bank Holiday				ED Task & Finish Group AEC Task & Finish Group SSP Project Team		SSP Roadshow (PRH) Critical Care Task & Finish Group			

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06/06/2016	Women and Children's Task & Finish Group						SSP Roadshow (RSH) SSP Project Team			
13/06/2016					AEC Task & Finish Group		SSP Roadshow (PRH)		ED Gossip Group (PRH)	
20/06/2016			SSP Project Team				SSP Roadshow (RSH)			
27/06/2016			Clinical Working Group		SSP Project Team Women & Children's Task & Finish Group		ED Task & Finish Group Support Services Care Group Board SSP Roadshow (PRH)			
04/07/2016			Critical Care Task & Finish Group				SSP Project Team SSP Roadshow (RSH) Critical Friends Meeting	Clinical Design Workstream		
11/07/2016	Clinical Working Group		AEC Task & Finish Group SSP Steering Group	Future Fit Comms and Engagement Workstream Meeting			ED Task & Finish Group SSP Roadshow (PRH)		Women and Children's Task & Finish Group	

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18/07/2016			Critical Care Task & Finish Group SSP Project Team				Critical Friends Meeting SSP Roadshow (RSH)	Shrewsbury & Atcham GP Engagement		
25/07/2016			Sustainability Committee				Support Services Care Group Board update SSP Roadshow (PRH)			
01/08/2016	Clinical Working Group		Critical Care Gossip Group (RSH)		T&O Patient Pathways Meetings		SSP Roadshow (RSH)			
08/08/2016			Critical Care Gossip Group (PRH)				SSP Roadshow (PRH) Critical Care Gossip Group (PRH)			
15/08/2016							SSP Roadshow (RSH)			
22/08/2016							SSP Roadshow (PRH) ED Gossip Group (PRH)			
29/08/2016					SSP Steering Group		SSP Roadshow (RSH)		Critical Friend meeting HON Workforce meeting	Fun Day/AGM stall (3/9/16)

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05/09/2016					General Surgery Clinical Governance meeting Department Visits		SSP Roadshow (PRH) Channel 3 Visioning Workshop Department Visits		Department Visits	
12/09/2016	Department Visits		SSP Steering Group		SSP Cardiology meeting Department Visits		SSP Roadshow (RSH) Clinical Design Workstream meeting Department Visits		Department Visits	
19/09/2016	Department Visits				Department Visits		SSP Roadshow (PRH) Catering Gossip Group (RSH) Department Visits			
26/09/2016				Patient Critical Friend Meeting			SSP Roadshow (RSH) ED Gossip Group (RSH) Clinical Design Workstream			
03/10/2016	Channel 3 Workshop			Patient Critical Friends Meeting			SSP Roadshow (PRH)			

APPENDIX 6a – Health Service Need Criteria

Appendix 6a - Health Economy's health service need against NHSI health service need criteria

Criteria	Relevant Measure	Identified/Addressed
1) Need for improved strategic fit	Meets the strategic needs of locality	Strategic case for change and models of care developed with partners, the public and stakeholders
	Improves the quality of service relationships and departmental links	Integrated partnership working is key to the future emergency/urgent care service model Co-location of specialties promotes efficiencies and smooth pathways Co-location of specialties promotes efficiencies and smooth pathways
	Realises the benefits of interdependence	
	Introduces flexibility to cope with changes in demand	Capacity designed to respond to growth and demographic change, including shifts from acute to community provision
2) Need to meet national, regional and local policy imperatives	Promotes new models of care	New models of care proposed within: Acute and episodic care Long term conditions/frailty Planned Care Partnership working integral to patient pathways
	Enables a shift to primary care (where appropriate)	
	Is sufficiently flexible/robust to cope with future changes in patterns of service delivery	
	Enables better integration of services	
	Delivers long term service commitments, including maximum waiting times	Split of unscheduled and scheduled care supports delivery of national waiting time targets
3) Need for better access to services	Reduces travelling time by public and private transport for patients, staff and visitors	Provision of Urgent Care Centres for non-life threatening urgent care Services delivered in rural and urban locations Planned care services delivered locally
	Improves equality of access	
	Has a greater responsiveness to patients' health needs, including patient choice	
4) Need for improved clinical quality of services	Prevents quality of services deteriorating	Addresses challenges with split site provision for emergency and critical care Clinical teams have required numbers of staff Outcomes are improved out of co-location of consolidated emergency services Partnership approach supports knowledge and skills transfer between acute and community staff
	Addresses clinical problems in the service	
	Provides better health outcomes for patients	
	Facilitates improvements in clinical practice	
	Facilitates better configurations of service extending to whole health economy	Whole system approach to addressing current challenges with proposed improvements in acute and community services

Criteria	Relevant Measure	Identified/Addressed
5) Need for development of existing services and/or provision of new services	Develops or provides services as required by commissioners	Addresses challenges with split site provision for emergency and critical care Clinical teams have required numbers of staff Outcomes are improved out of co-location of consolidated emergency services Supports the provision of care closer to home where clinically appropriate
	Protects the provision of existing services	
6) To meet training, teaching and research needs	Makes it easier to recruit and retain staff	Addresses challenges with split site provision for emergency and critical care Clinical teams have required numbers of staff Morale is improved within existing teams as service challenges are resolved
	Contributes to clinical advance	
7) For improved environmental quality of services	To address backlog maintenance requirements and improve the quality of the estate	Backlog maintenance will continue to be an issue in some options as the use of existing estate is required however New/refurbished facilities in all options will improve functional suitability
	To improve functional suitability and site lay-out	
8) To make more effective use of resources	To improve productivity and make better use of cash, human and estate resources	Clinical teams have required numbers of staff
9) Other To address acute service workforce challenges	Consolidates teams around patient and service needs	Addresses challenges with split site provision for emergency and critical care Clinical teams have required numbers of staff Outcomes are improved out of co-location of consolidated emergency services
	Makes it easier to recruit and retain staff	
	Promotes partnership working across organisations and clinical 'boundaries'	

APPENDIX 7a – 72 Hour Audit Report

Clinical Audit Report

Audit of all medical patients' clinical state and appropriateness for transfer to a Planned Care Site.

Project leads

Dr Kevin Eardley
Dr Saskia Jones-Perrott
Dr Nawaid Ahmad

Other staff members involved

Jo Kolze-Jones – pro-forma design,
Sally Allen Clinical Governance Manager – Guidance and support
Louise Jones - Audit analysis and report

1.0 Aim/Objectives

The aim of the audit is to test the proposed clinical model for the Sustainable Services Project. Assessing what proportion of medical patients are clinically appropriate to transfer to a Planned Care Site for their on-going care and rehabilitation.

2.0 Sample

The audit was carried out at RSH on Wednesday 17th August and at PRH on Wednesday 24th August. It aimed to include all medical in-patients.

3.0 Data source

The data was collected by completion of a survey (form attached). The form was completed by the lead Consultant for each area.

4.0 Methodology – including data collection methods

The survey was designed by Clinical Audit Department in scannable format using Cardiff Teleform Software. Medical Consultants completed the audit pro-forma for medical patients during the ward rounds. The audit was applicable to patients on days 0-3 of their hospital stay (Day 0 being the day of admission) but all medical patients were included as this would provide valuable data in the development of the clinical model. The completed surveys were scanned into Microsoft Excel using the Cardiff Teleform system. Data was analysed in Microsoft Excel.

5.0 Findings

161 forms were completed at RSH and 136 completed at PRH, 297 forms in total.

Length of Stay at time of audit	No of patients RSH	No of patients PRH	Total
0	2	0	2
1	24	8	32
2	13	9	22
3	9	6	15
Total at day 3	48	23	71 (24%)
4	5	6	11
5	13	15	28
6	9	13	22
7	8	8	16
8 to 14	31	33	64
15 to 21	19	13	32
22 to 28	12	8	20
29 to 35	5	6	11
36 to 42	3	8	11
43 to 49	3	1	4
50+	5	2	7
Totals	161	136	297

Of all the medical patients audited nearly a quarter (23.9%) were 0-3 days LoS.

1) Is the patient highly likely to be discharged today or tomorrow?

LoS	No	Yes	Not recorded
0-3 days	47	23	1
4 + days	204	20	1
Total	251	43	2

If No, to Question 1...

2) Is the patient medically stable enough to be discharged, but has additional non-medical needs to be met in order to support discharge?

No	Yes	Not recorded
153	89	9

If yes (some patients had >1 reason recorded):

(Multiple choice question)	Yes
a. Patient awaiting package of care for discharge home (PW1)	20
b. Patient needing on-going rehabilitation which could be provided in a community hospital or step down bed facility? (PW2)	40
c. Patient awaiting nursing home placement? (PW3)	28

Patients who had on-going medical needs – 153 patients (60.9%)

3) Was the patient suitable to be moved to the non-emergency centre site?

Yes	No	Not recorded
68 (44.4%)	80 (52.2%)	5 (3.2%)

If no, reason (some patients had >1 reason recorded):

(Multiple choice question)	Yes
a. Patient needing access to surgical services?	9
b. Patient at high risk of deterioration and needing direct access to HDU/ITU services?	28
c. Patient needing access to acute cardiology services?	18
d. Patient needing access to emergency/acute renal services?	10
e. Patient needing NIV?	2

6.0 Conclusions

A total of 297 audit forms were completed for all medical patients. 15% (n=43) of these patients were considered likely to be suitable for discharge on the day of or day following the audit. Of the 254 remaining patients, 30% (n=89) were deemed medically stable enough for discharge but needing further support services arranged prior to discharge.

This left 153 patients who had on-going medical needs. Of these, 68 patients (44.4%) were documented as suitable for transfer to the non-emergency centre site.

In total, on the day of the audit, 43 patients were fit for discharge by the following day. 76 were considered clinically suitable for the Planned Care Site. 88 patients did not have a decision in relation to whether they were appropriate for the Planned Care Site; however 82 of these patients were classified as medically stable. Therefore it can be assumed that they could be transferred to the Planned Care Site.

Audit categories	Patients	% of Total
Suitable for discharge in next 24 hours	43	15
Medically stable but need support services arranged	89	30
Ongoing needs but suitable to be transferred to Planned Care Site	69	23
Ongoing needs requiring Acute Care Services	96	32
Total Patients	297	

In summary, 201 (68%) of the 297 patients audited would have been suitable to move to a Planned Care Site for their on-going care, rehabilitation and discharge planning.

APPENDIX 8a – Future Fit Phase 2 Modelling

APPENDIX 8a

Yr_Trans	Care Group	TFC	TFC Narrative	Sum of IP_Elec_Ord Activity	Sum of IP_Emer Activity	Sum of IP_Mat Activity	Sum of Total Activity
Trans_P2_ICs_Avoided	Unscheduled Care	180	Accident & Emergency	-	-	-	-
Trans_P2_ICs_Avoided	Unscheduled Care	257	Paediatric Dermatology	-	-	-	-
Trans_P2_ICs_Avoided	Unscheduled Care	300	General Medicine	-	-	746	746
Trans_P2_ICs_Avoided	Unscheduled Care	302	Endocrinology	-	-	1	1
Trans_P2_ICs_Avoided	Unscheduled Care	307	Diabetic Medicine	-	-	-	-
Trans_P2_ICs_Avoided	Unscheduled Care	314	Rehabilitation	-	-	8	8
Trans_P2_ICs_Avoided	Unscheduled Care	320	Cardiology	-	-	45	45
Trans_P2_ICs_Avoided	Unscheduled Care	340	Respiratory Medicine	-	-	7	7
Trans_P2_ICs_Avoided	Unscheduled Care	361	Nephrology	-	-	1	1
Trans_P2_ICs_Avoided	Unscheduled Care	400	Neurology	-	-	-	-
Trans_P2_ICs_Avoided	Unscheduled Care	430	Geriatric Medicine	-	-	-	-
Trans_P2_ICs_Avoided	Scheduled Care	100	General Surgery	-	-	32	32
Trans_P2_ICs_Avoided	Scheduled Care	101	Urology	-	-	8	8
Trans_P2_ICs_Avoided	Scheduled Care	103	Breast Surgery	-	-	-	-
Trans_P2_ICs_Avoided	Scheduled Care	104	Colorectal Surgery	-	-	4	4
Trans_P2_ICs_Avoided	Scheduled Care	106	Upper GI Surgery	-	-	-	-
Trans_P2_ICs_Avoided	Scheduled Care	107	Vascular Surgery	-	-	1	1
Trans_P2_ICs_Avoided	Scheduled Care	110	Trauma & Orthopaedics	-	-	10	10
Trans_P2_ICs_Avoided	Scheduled Care	120	Ear nose & throat	-	-	-	-
Trans_P2_ICs_Avoided	Scheduled Care	130	Ophthalmology	-	-	1	1
Trans_P2_ICs_Avoided	Scheduled Care	140	Oral Surgery	-	-	-	-
Trans_P2_ICs_Avoided	Scheduled Care	142	Paediatric Dentistry	-	-	-	-
Trans_P2_ICs_Avoided	Scheduled Care	144	Maxillo-Facial Surgery	-	-	-	-
Trans_P2_ICs_Avoided	Scheduled Care	191	Pain Management	-	-	-	-
Trans_P2_ICs_Avoided	Scheduled Care	301	Gastroenterology	-	-	16	16
Trans_P2_ICs_Avoided	Scheduled Care	306	Hepatology	-	-	-	-
Trans_P2_ICs_Avoided	Scheduled Care	460	Medical Ophthalmology	-	-	-	-
Trans_P2_ICs_Avoided Total				-	-	879	879
Trans_P2_Interaction	Unscheduled Care	180	Accident & Emergency	-	-	3	3
Trans_P2_Interaction	Unscheduled Care	257	Paediatric Dermatology	-	-	-	-
Trans_P2_Interaction	Unscheduled Care	300	General Medicine	-	0	862	860
Trans_P2_Interaction	Unscheduled Care	302	Endocrinology	-	-	0	0
Trans_P2_Interaction	Unscheduled Care	307	Diabetic Medicine	-	-	-	-
Trans_P2_Interaction	Unscheduled Care	314	Rehabilitation	-	-	3	3
Trans_P2_Interaction	Unscheduled Care	320	Cardiology	-	0	20	23
Trans_P2_Interaction	Unscheduled Care	340	Respiratory Medicine	-	-	2	2
Trans_P2_Interaction	Unscheduled Care	361	Nephrology	-	0	2	2
Trans_P2_Interaction	Unscheduled Care	400	Neurology	-	-	0	0
Trans_P2_Interaction	Unscheduled Care	430	Geriatric Medicine	-	-	3	3
Trans_P2_Interaction	Scheduled Care	100	General Surgery	-	5	166	161
Trans_P2_Interaction	Scheduled Care	101	Urology	-	1	20	21
Trans_P2_Interaction	Scheduled Care	103	Breast Surgery	-	0	0	1
Trans_P2_Interaction	Scheduled Care	104	Colorectal Surgery	-	5	1	6
Trans_P2_Interaction	Scheduled Care	106	Upper GI Surgery	-	13	1	12
Trans_P2_Interaction	Scheduled Care	107	Vascular Surgery	-	0	2	2
Trans_P2_Interaction	Scheduled Care	110	Trauma & Orthopaedics	-	1	67	67
Trans_P2_Interaction	Scheduled Care	120	Ear nose & throat	-	3	15	18
Trans_P2_Interaction	Scheduled Care	130	Ophthalmology	-	0	1	1
Trans_P2_Interaction	Scheduled Care	140	Oral Surgery	-	1	0	1
Trans_P2_Interaction	Scheduled Care	142	Paediatric Dentistry	-	-	-	-
Trans_P2_Interaction	Scheduled Care	144	Maxillo-Facial Surgery	-	0	3	3
Trans_P2_Interaction	Scheduled Care	191	Pain Management	-	0	-	0
Trans_P2_Interaction	Scheduled Care	301	Gastroenterology	-	1	17	19
Trans_P2_Interaction	Scheduled Care	306	Hepatology	-	-	-	-
Trans_P2_Interaction	Scheduled Care	460	Medical Ophthalmology	-	-	-	-
Trans_P2_Interaction Total				16	-	1,137	4 - 1,117
Trans_P2_LTC_Avoided	Unscheduled Care	180	Accident & Emergency	-	-	3	3
Trans_P2_LTC_Avoided	Unscheduled Care	257	Paediatric Dermatology	-	-	-	-
Trans_P2_LTC_Avoided	Unscheduled Care	300	General Medicine	-	-	937	937
Trans_P2_LTC_Avoided	Unscheduled Care	302	Endocrinology	-	-	1	1
Trans_P2_LTC_Avoided	Unscheduled Care	307	Diabetic Medicine	-	-	-	-
Trans_P2_LTC_Avoided	Unscheduled Care	314	Rehabilitation	-	-	8	8
Trans_P2_LTC_Avoided	Unscheduled Care	320	Cardiology	-	-	93	93
Trans_P2_LTC_Avoided	Unscheduled Care	340	Respiratory Medicine	-	-	3	3
Trans_P2_LTC_Avoided	Unscheduled Care	361	Nephrology	-	-	4	4
Trans_P2_LTC_Avoided	Unscheduled Care	400	Neurology	-	-	-	-
Trans_P2_LTC_Avoided	Unscheduled Care	430	Geriatric Medicine	-	-	3	3
Trans_P2_LTC_Avoided	Scheduled Care	100	General Surgery	-	-	22	22
Trans_P2_LTC_Avoided	Scheduled Care	101	Urology	-	-	5	5
Trans_P2_LTC_Avoided	Scheduled Care	103	Breast Surgery	-	-	-	-
Trans_P2_LTC_Avoided	Scheduled Care	104	Colorectal Surgery	-	-	5	5
Trans_P2_LTC_Avoided	Scheduled Care	106	Upper GI Surgery	-	-	1	1
Trans_P2_LTC_Avoided	Scheduled Care	107	Vascular Surgery	-	-	4	4
Trans_P2_LTC_Avoided	Scheduled Care	110	Trauma & Orthopaedics	-	-	3	3
Trans_P2_LTC_Avoided	Scheduled Care	120	Ear nose & throat	-	-	1	1
Trans_P2_LTC_Avoided	Scheduled Care	130	Ophthalmology	-	-	-	-
Trans_P2_LTC_Avoided	Scheduled Care	140	Oral Surgery	-	-	-	-
Trans_P2_LTC_Avoided	Scheduled Care	142	Paediatric Dentistry	-	-	-	-
Trans_P2_LTC_Avoided	Scheduled Care	144	Maxillo-Facial Surgery	-	-	-	-
Trans_P2_LTC_Avoided	Scheduled Care	191	Pain Management	-	-	-	-
Trans_P2_LTC_Avoided	Scheduled Care	301	Gastroenterology	-	-	18	18
Trans_P2_LTC_Avoided	Scheduled Care	306	Hepatology	-	-	-	-
Trans_P2_LTC_Avoided	Scheduled Care	460	Medical Ophthalmology	-	-	-	-
Trans_P2_LTC_Avoided Total				-	-	1,110	- - 1,110
Grand Total				16	-	3,126	4 - 3,106

APPENDIX 9a – STP Neighbourhood Workstreams

Extract from v7 Pre Consultation Business Case – Neighbourhoods

Please note references relate to the PCBC document and supporting appendices and not the OBC

11. Wider System Capacity Changes and Impact Assumed

For the acute model of care described in this PCBC to work optimally and to achieve maximum benefit, all health and social care sectors need to contribute their part to effective and integrated patient pathways which both support reduction in demand on acute services and improve flow through acute services to discharge back to community. This may require investment for appropriate alternative community service provision to acute hospital care.

This section describes the multi-faceted approach being taken to ensure that the wider system capacity changes and impacts are delivered to support the activity and capacity assumptions in the PCBC. It also describes the proposed community models at their current state of development through the STP Neighbourhood Workstreams.

11.1 Service Pre-requisites to deliver maximum impact

As identified in the activity modelling in support of the development of the Future Fit Clinical Model, there are certain key service pre-requisites without which the proposed model of acute hospital care will not achieve maximum impact:

Public health related strategies, for example:

- § Obesity management initiatives
- § Smoking cessation initiatives
- § Alcohol reduction initiatives
- § Maximising immunisation and vaccination rates
- § Initiatives to minimise risk of falls-related admissions

Strategies dependent on provision of alternative primary, community or social care services or support, for example:

- § Proactive management of ambulatory care sensitive conditions
- § Frailty management
- § Risk stratification / virtual wards
- § Provision of specific step-down pathways eg. community stroke rehabilitation
- § Community rehabilitation and re-ablement services
- § Comprehensive social care and domiciliary care support services
- § Discharge-to-assess packages for domiciliary or care home discharge
- § Provision of mental health and dementia support services etc.
- Urgent care management in primary care

Provider or commissioner management strategies or operational policies, for example:

- § Procedures of limited clinical value policy
- § Ambulatory emergency care protocols in primary and community care
- § Best practice day case and short stay surgery protocols
- § Best practice enhanced procedure pathways
- § Policies on pre-op length of stay

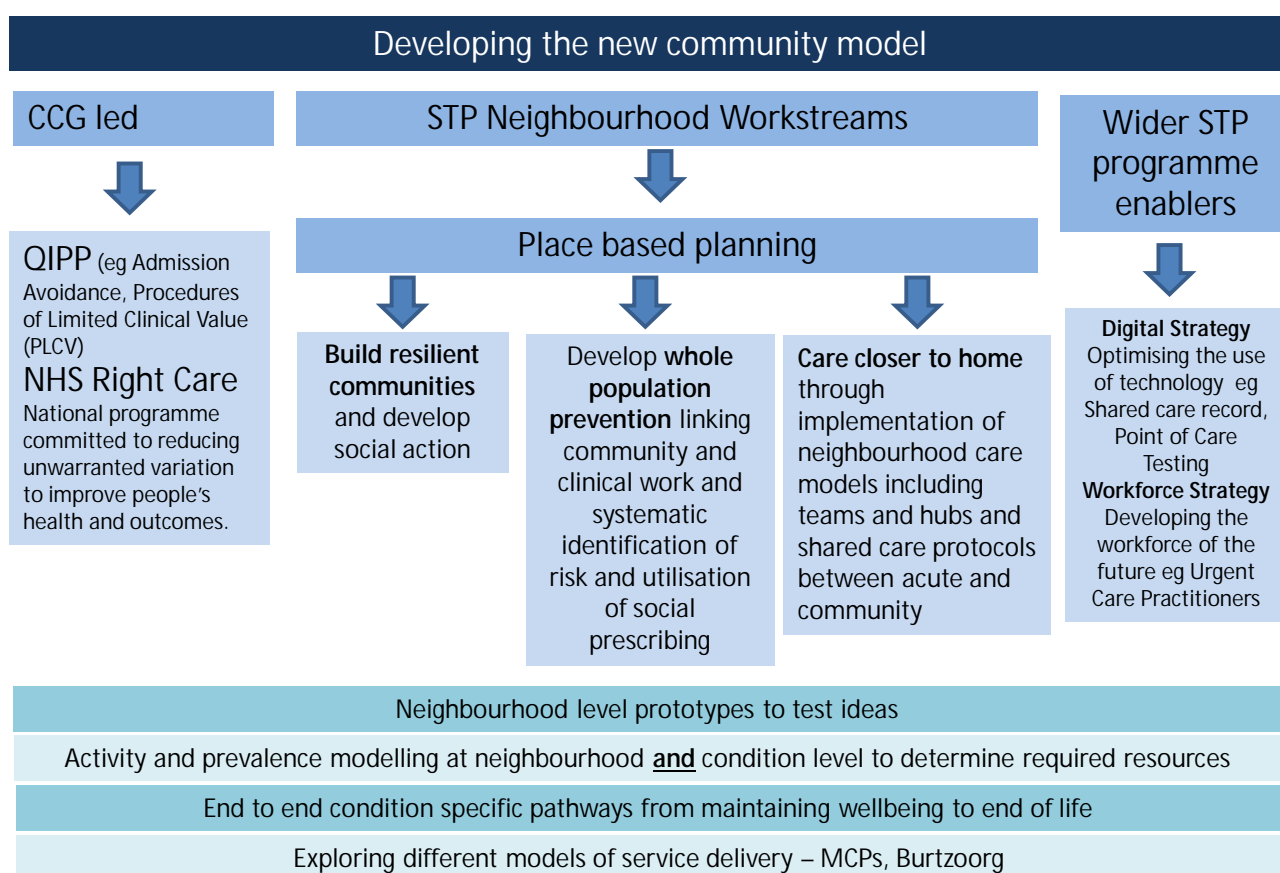
The activity and capacity modelling assumptions described in section XXX require the following reduction in demand on acute hospital services by 2021:

- Emergency admissions – reduced by 4,215
- Out-patient appointments – reduced by 27,21

11.2 Developing the Community Model

The community model to deliver this reduction in demand on acute services is being progressed through a multi-faceted approach which is represented diagrammatically below and described in more detail in the strategic context section of this document (Section XXX):

Figure xx:



11.3 Neighbourhood Workstreams of the STP

As described in section XX, one of the STP priorities is to develop and implement a model for Neighbourhood working because the causes of poor health are rooted within communities and the solutions need to be community based. This programme of work is being taken forward through the 3 Neighbourhood workstreams of the STP (Shropshire, Telford & Wrekin and Powys). The emphasis is on:

- *Supporting individual communities to become more resilient*
- *Supporting people to stay healthy*

- *Developing Neighbourhood Care Teams*
- *The community bed review*

This section describes in more detail the development of community based solutions within those 3 STP workstreams.

11.3.1 Neighbourhoods Vision

The Health and Wellbeing (HWB) Strategy provides our vision: to be the healthiest, most fulfilled people in the country. To achieve this goal we need to replace the ill health paradigm with wellness and deliver place-based integrated health, care and community models that support independence into older age for the majority of our population. Integrated technology and data moving freely across our system will support the placed-based delivery models, backed up by an asset based approach and a one public estate philosophy which maximises the use of community and public assets to the full.

These transformational changes will not only deliver better health outcomes for our communities but will support an investment shift into prevention, maintenance, early detection and treatment and reduce demand for secondary care provision, releasing hospital specialists' capacity to focus on the acutely unwell .

This will only be achievable by working closely with our communities; by helping people take control of their own health and supporting communities to develop social action and resilience. The rural nature of Shropshire provides a potentially positive environment for the wellbeing of the people living and working in Shropshire. This needs to be better valued and harnessed. Equally the rural nature of the county presents challenges of access and delivery that are a significantly influencing factor on the development of the Neighbourhood's strategy and delivery.

There are already many services in place across Shropshire that are working towards the Neighbourhood ambition. In particular, the Better Care Fund has seen closer working between the NHS and councils, however, we think that we can go much further towards an integrated patient centred service.

Together, we have recognised the opportunities for creating new ways of delivering care and front line services and also joining up social action, prevention activities and the currently fragmented care system to develop a wellness focussed and person centred system for our local population. We are now developing effective, collaborative relationships around this shared purpose that will enable us to move at scale and pace to deliver fundamental change.

Our neighbourhood care model will remove existing barriers to integration and bring together primary, community and mental health services and learning disabilities with local authority, voluntary and the independent care sector to deliver the right care in the right place and maximise the efficiency and effectiveness of local services. Our vision puts the needs of patients at the centre of our Neighbourhood model. This will operate in a more efficient, focused manner, steering away from bed based services to a more community centred style of care.

With the patient at the centre, together we will replace the transactional nature of care provision across multiple teams and providers with integrated, flexible, responsive health and care teams, focussed on locality priorities and needs, providing our communities with the optimal outcome in

the best value care setting. Our objective is to break down traditional boundaries between primary care, community and mental health services through the development of the Multi-Speciality Community Provider (MCP) model of care within our Neighbourhoods.

We will focus on prevention and wellbeing by promoting shared management and self-care, allowing patients to continue living independently at home. We aim to move care out of hospitals to the community, wherever possible, and enable better access to, and continuity of care by aligning primary, community, mental health and care teams, breaking down the existing barriers and providing integrated solutions to deliver improved health outcomes for our population. This will enhance clinical and service quality allowing more patients to be managed in the community. These expanded multi-disciplinary and multi sector community-based team will be complemented by the development of new clinical roles to coordinate care for people with frailty and long-term conditions.

11.3.2 Neighbourhood Workstream - Shropshire

Shropshire has defined 11 neighbourhood teams within the County as set out in Table xx below:

Neighbourhood Team	Population
Bridgnorth North	30,543
Bridgnorth South	24,881
Ludlow	23,155
North East	29,175
North West	17,068
Oswestry	34,523
Shrewsbury North	42,555
Shrewsbury Rural	18,223
Shrewsbury South	39,154
South West	20,261
Whitchurch	24,261

Table xx;

The GP practice groupings supporting this neighbourhood team structure is set out in the Figure XX below:

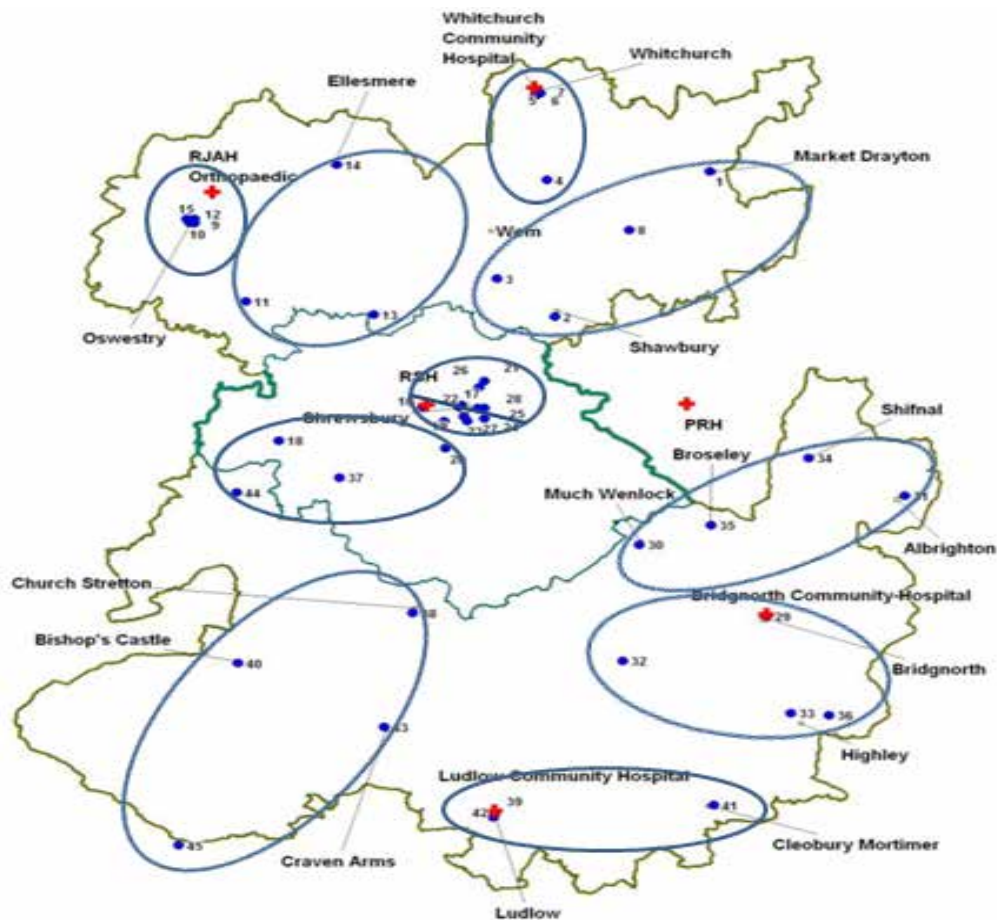


Figure xx:

The Shropshire Neighbourhoods programme will use place based planning to reduce demand on acute and social care services by:

1. Building resilient communities and develop social action
2. Developing whole population prevention by linking community and clinical work – involving identification of risk and social prescribing
3. Designing and delivering neighbourhood care models that provide alternatives to admission to hospital through care closer to home

1. *Building Resilient Communities*

Volunteering and community initiatives exist in abundance in Shropshire and are supported by the Shropshire Voluntary and Community Sector Assembly as well as by communities themselves. The **'Communities First, Service Second'** Resilient Communities Workstream will work to support and enable communities to help one another and promote positive, healthy life choices. They will support linking the clinical world to the community via developing the 18 place plan areas in Shropshire to:

- § Further develop place based governance and delivery – cross-cutting across sectors and themes
- § Develop hyper-local directories of activity and services
- § Develop Networks of Community Connectors Support community prototyping developments – such as Oswestry

- § Connect and support the wealth of volunteering and services that support people in the place where they work and live (these include C&CCs, Let's Talk Local Hubs, C&YPS Early Help hub of services, volunteers to support these, local voluntary groups, community activity)

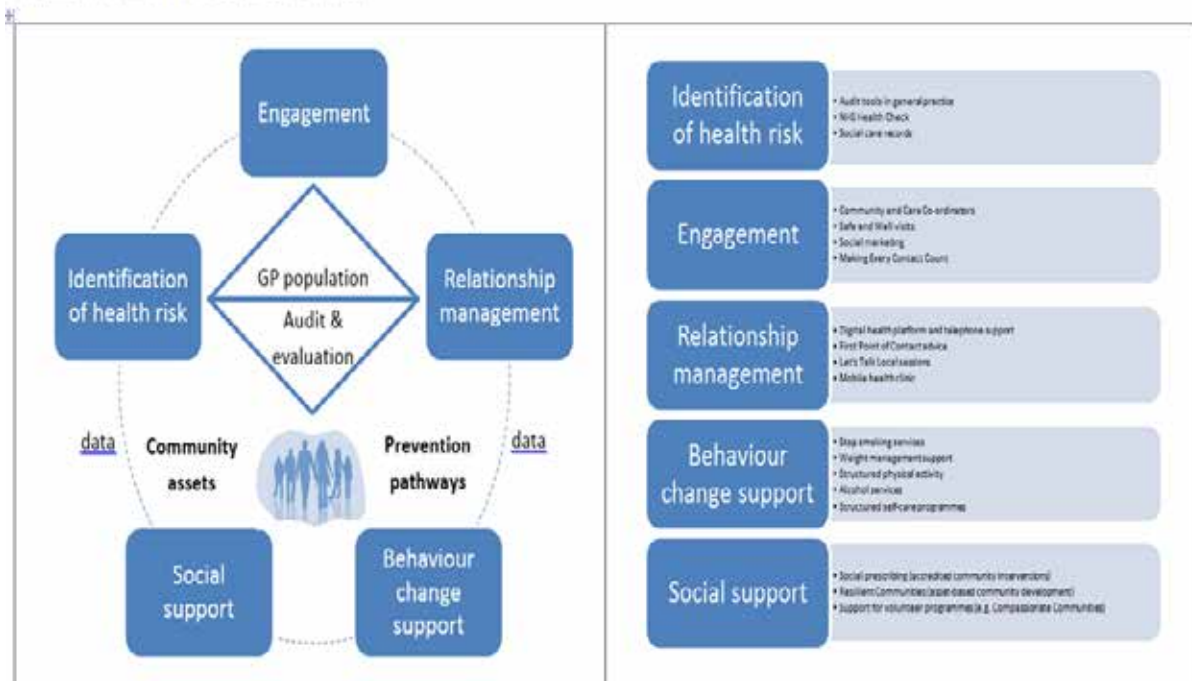
2. Partnership Prevention Programme: Healthy Lives

Bringing about population level behaviour change through a suite of prevention activity that reduces the burden of ill health and disease in Shropshire. The programme's objectives are:

- § Implement a system wide prevention programme
- § Proactively identify health risk and connect people to the right level of support from across the community and neighbourhood care model to address that risk
- § Maximise the impact of preventative activity in reducing the demand on acute and social care services and helping people into work
- § Help people to remain independent at home for as long as possible and improve population level health and well-being in Shropshire

Shropshire Healthy Lives programme

The Shropshire Healthy Lives programme supports individuals, families and communities to take more control over their health and reduce their risk of chronic disease. It connects GP populations with health-promoting assets and support programmes in their neighbourhood, to improve wellbeing and reduce dependence on health and social care services.



The programmes includes:

- Social Prescribing
- Diabetes and CVD Prevention
- Falls Prevention
- NHS Health Check
- Future Planning , Housing and Fire Service Safe and Well Visits
- COPD and Respiratory Prevention

- Carers and Dementia Support
- Mental Health and Learning Disabilities

3. *Neighbourhood Care Models*

The Scope of Care to be delivered in the Neighbourhood Care Model includes:

- § **Urgent Care** - Supporting people in crisis with access to rapid response care and interventions in their home or a community setting including Mental Health Crisis & Home Treatment.
- § Supporting patients who have accessed Emergency Care to return to their home as soon as clinically appropriate
- § **Planned Care** - Supporting the left shift from acute to community settings, delivered through lower cost workforce models
- § **Prevention and Maintenance Care** - Supporting people living with more than one health issue or co-morbidity at the same time to live well with chronic conditions thereby preventing or delaying complications

It is recognised that the development of fit for purpose neighbourhood care models will require a bottom-up locality approach of co-production and will involve a wide range of different stakeholders from across the health and social care system. A set of guiding principles has been agreed to support the development of place-based models of care that will deliver consistent outcomes and standards for local populations.

4. *What will be different?*

- § Our integrated care delivery model will be shaped by our communities, patients and their carers. We will build on our existing engagement mechanisms to ensure comprehensive patient engagement so that we know our communities' perceptions about what would improve their quality of life and use their ideas to create a care model which helps to meet their collective and individual priorities.
- § Our integrated care delivery model will enable us to use our resources more flexibly across care teams to ensure we have capacity to meet demand in the most appropriate care setting and respond to variation.
- § Our integrated workforce will support local GPs and primary care resilience with timely access to out of hospital multidisciplinary healthcare teams including mental health and learning disabilities that are responsive to local need and priorities.
- § Our integrated workforce will significantly improve system resilience with staff multi-skilled to be able to work across organisational boundaries.
- § Our Partnership and integrated structures will provide educational and development opportunities for all staff to facilitate local health and social care system talent management and improved recruitment, retention and career development.
- § Our information and communication systems will support a shared patient record, transferable and visible to all care providers and to the patient. We will further develop our IT and governance arrangements to support this.

- Our Population Health Management approach will enable urgent care provision in out of hospital settings, where appropriate, will support admission prevention and will reduce demand for acute healthcare services.

5. *Shropshire Neighbourhood Model of Care*

- § Seamless service delivery across both place based and whole pathways of care with a focus on prevention, early intervention and improved outcomes.
- § Integrated health and care teams to support a flexible response to our communities' health and care needs and ensure local service sustainability.
- § Extended healthcare teams offering rotational opportunities for staff to work across patient pathways and traditional service and organisational boundaries. This not only supports recruitment, retention and career development for staff but also ensures clinical service sustainability through a flexible workforce that can respond to variation in demand and capacity.
- § Frailty management through cross-system mechanisms to support the frail to remain independent and out of hospital including specialists integrated with out of hospital teams to optimise patient care and ensure that patients are looked after in the most appropriate setting including the community.

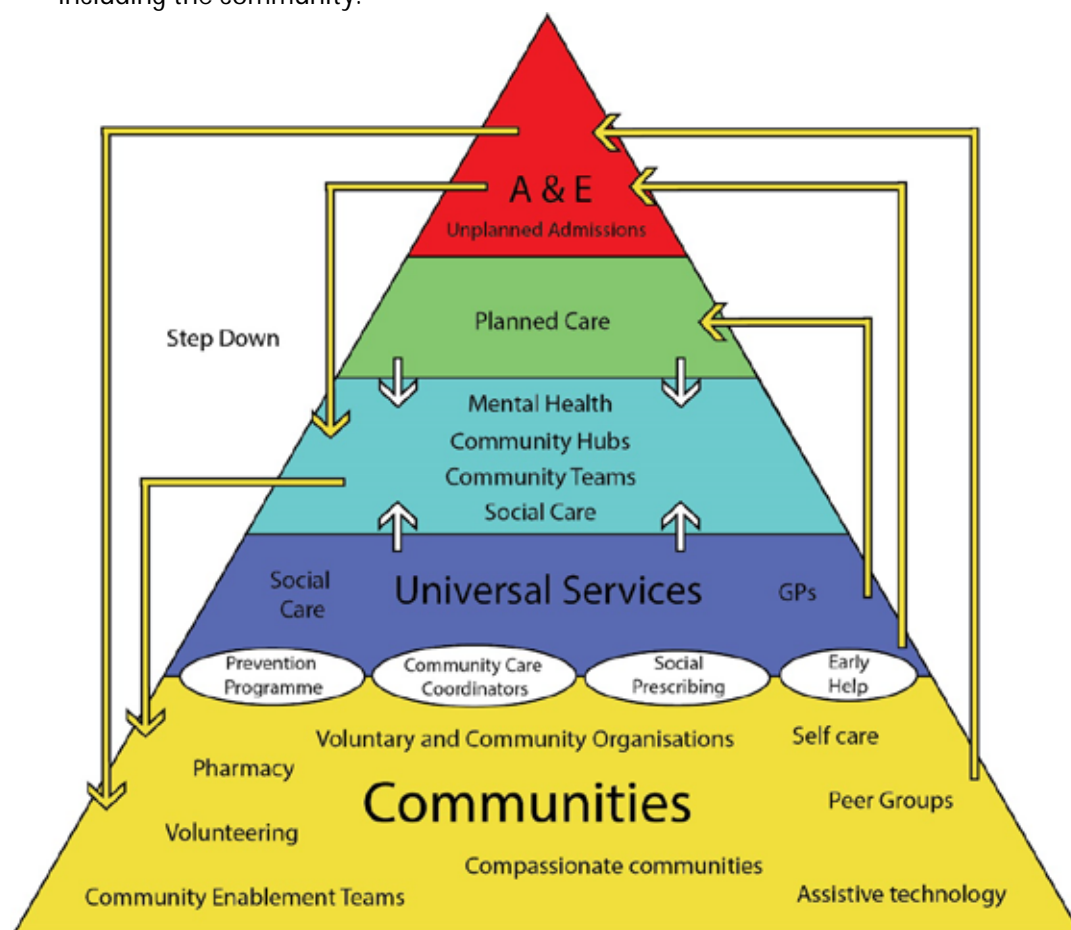


Figure xx:

11.3.3 Neighbourhood Workstream –Telford & Wrekin

Telford & Wrekin has defined 4 neighbourhood teams as set out in Table xx below:

Neighbourhood Team	Population
TELDOC	49,615
South Telford	45,427
Newport	27,492
Group 4	59,155

Table xx;

The Telford and Wrekin Model of Care aims to promote:

1. *Community resilience*
2. *Teams working around the patient*
3. *Intermediate care*

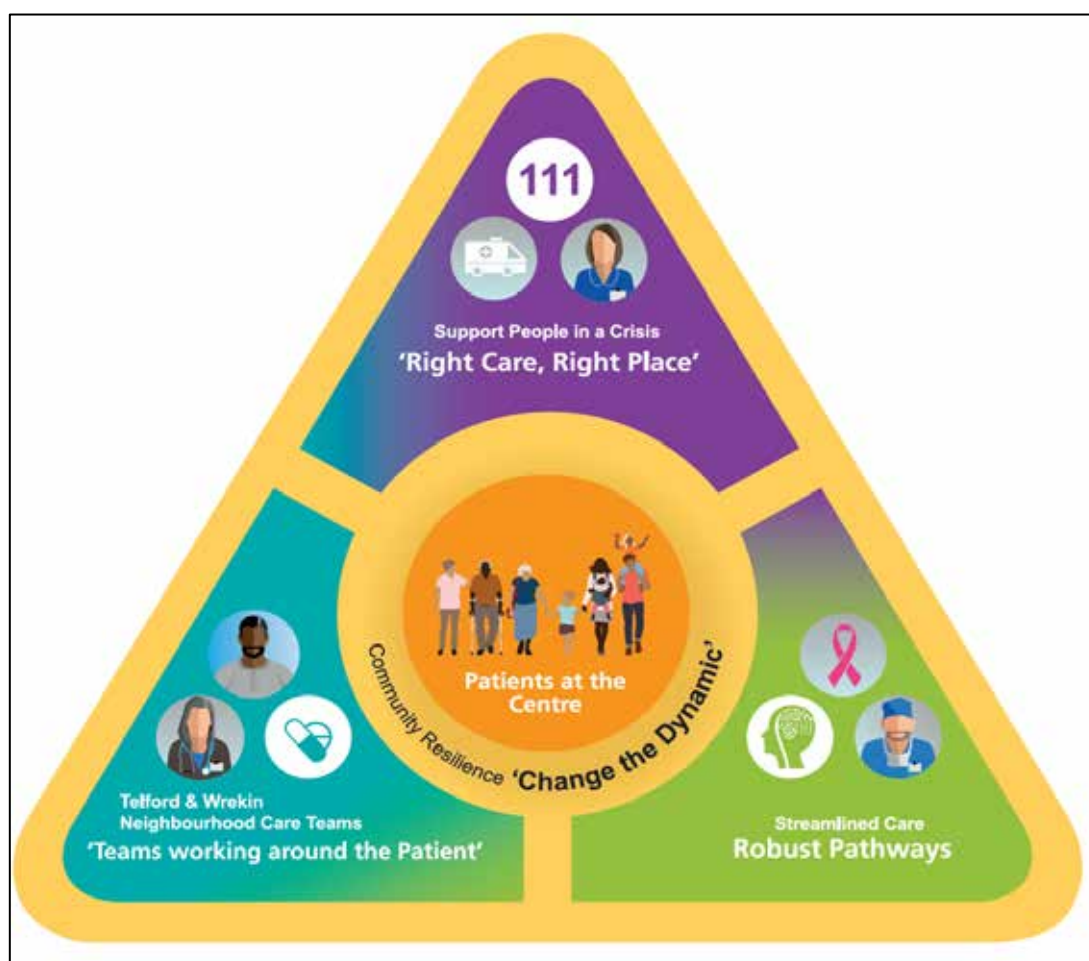


Figure xx:

The approach to building neighbourhoods is through:

- Building some prototypes around natural neighbourhoods.
- Optimising the total resource in the neighbourhood

- A community centred approach that increases access to community resources to meet health needs and increase social participation
- Supporting the development of strong neighbourhoods that can work collaboratively to take action together on health and the social determinants of health
- Needs to be locally determined and accept there are a variety of drivers for change and starting positions
- Incremental and organic change
- Support people properly to make the change (from front line staff to senior teams)
- Empower a broader spectrum of people to support the transformation, rather than the 'usual suspects'!
- Ensure we are embedding the principle of improved patient experience as one of our improved quality expectations

1) Telford & Wrekin Community Resilience Vision and Aims

Telford will have strong and connected communities. The community will drive the development of local assets and people will:-

- Have friends and support networks
- Feel empowered to improve their own and their families health
- Things to do
- A feeling of being safe and belonging to their community
- Confidence to go and help and ask for help
- Centres of 'connecting points' to go to

Why?

- Traditional models of statutory services are no longer fit for purpose. They promote dependence, they are expensive and outcomes could be better.
- There is a strong and growing evidence base about the importance of building confident and connected communities in improving outcomes for people
- Individuals benefit from contributing to the wellbeing of others
- Significant proof that poor health can be prevented or delayed
- Needs escalate and people's health and wellbeing deteriorate because they don't have enough support in the community
- People depend on services because they have very limited alternatives in their own communities

2) Neighbourhood Care Teams Vision and Aims

People with an identified long term health condition will be supported to live their life to their full potential:

- The notion of care 'from cradle to grave' will be reinvigorated
- Individual professionals will take responsibility for the delivery of as much care as possible, drawing on specialists where necessary
- Professionals will work together to seek out those who would most benefit from an intervention/support
- People will share their story once in a way that is right for them
- People will understand their condition and how to deal with it and people will self care/self manage where possible
- Carers will be supported

Why?

- We need a much greater focus on prevention
- We need to find people earlier in their disease progression so they can manage their condition better, earlier
- A greater number of people have become more dependent on statutory services
- Current services tend to do things to and for people rather than promoting self management
- Multiple individuals from different organisations are providing care for any one patient at any one time
- The current way of working is not the most effective way of supporting people
- We have lost a holistic nature of care by focusing on 'tasks'

3) Telford & Wrekin Pilot Sites

a) Newport Neighbourhood (pop. 33,000)

Priorities:

- Integration of nursing, therapy and care workforce and mental health and learning Disability professionals across a single area
- Utilise a different model of care based on Buurtzorg principles
- Align dementia related services with the practice and enhance early diagnosis
- Map and better utilise community assets (including local buildings)
- Develop the local offer within this market town, including range of diagnostics and outpatient clinics
- Better support to residential homes

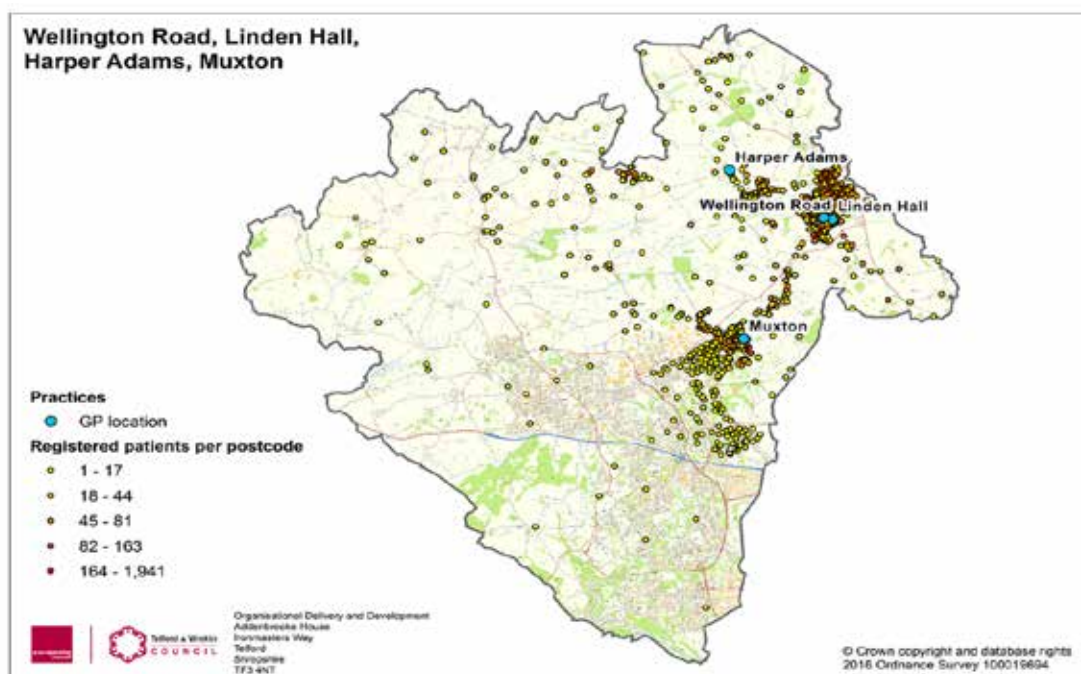


Figure xx:

b) South Telford Neighbourhood (pop. 44,000)

Priorities:

- Integration of health and social care teams

- Greater involvement of drug and alcohol services
- Consideration of those aged 0-5, initially through improved alignment of health visiting
- Implementation of creative support planning and other links with local authority teams

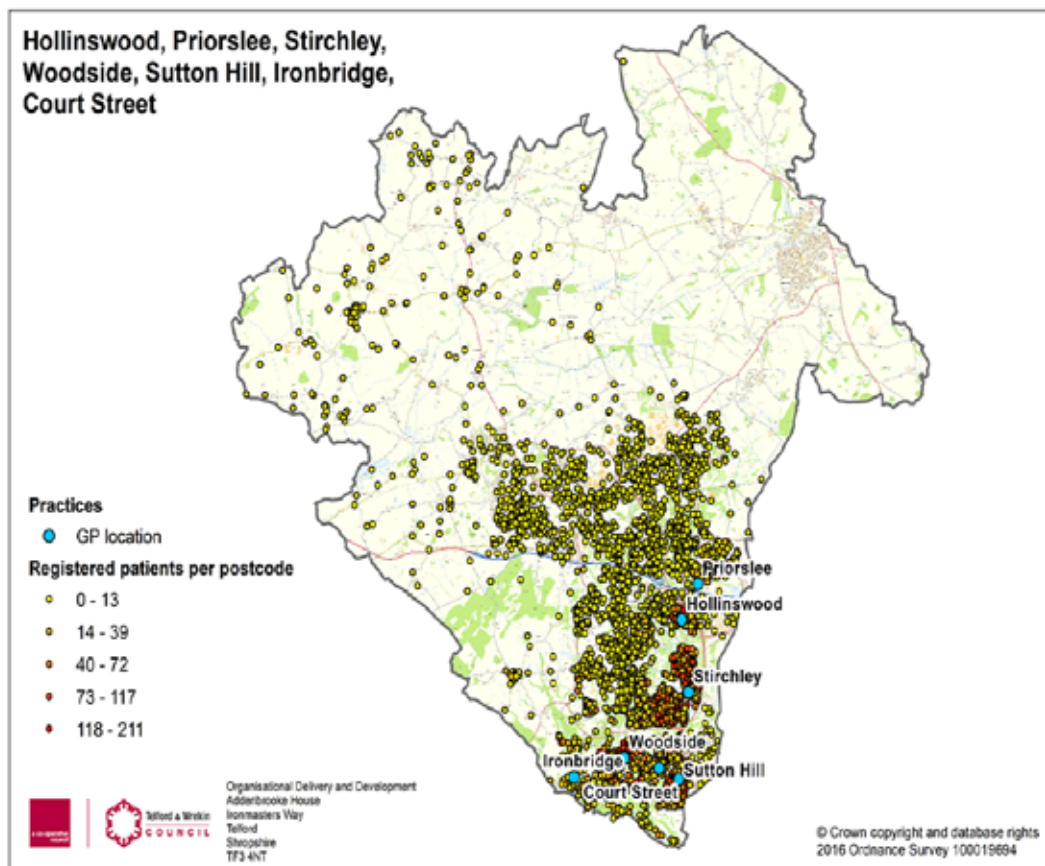


Figure xx:

11.3.4 Neighbourhood Workstream –Powys

- Radical realignment of resources to support community working already achieved.
- Health Board resources now equally split between primary care, community and secondary care.
- Secondary care activity at Shrewsbury reduced by 10% in 12 months

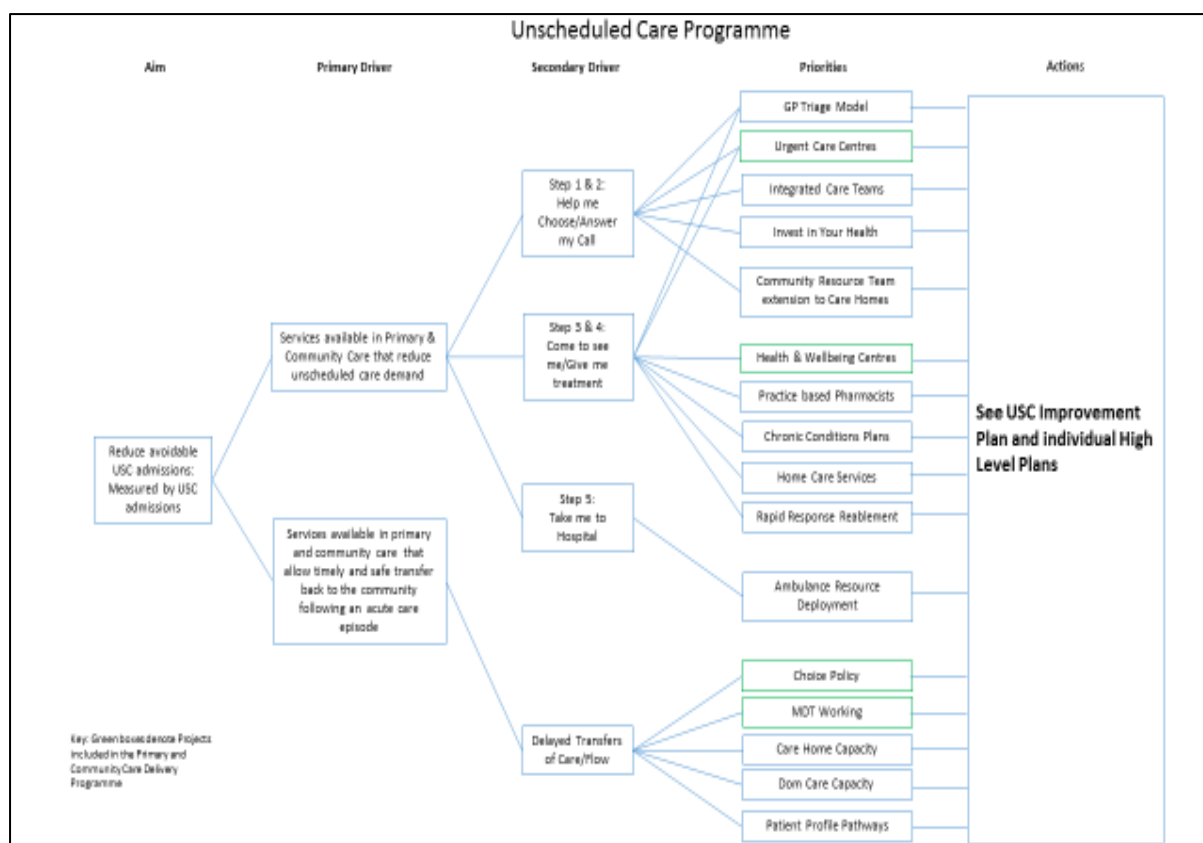


Figure xx:

11.3.5 Local Authority Leadership in Neighbourhood Working

a) *Shropshire County Council*

- Neighbourhood workstream chaired by County Council Chief Executive
- Committed to supporting its contribution to prevention for the next 18 months

But significant risks in future:

- National proposal to change funding arrangements for Public Health and Attendance Allowance makes financial planning difficult
- Councils have to set legal budgets resulting in severe cuts. In future, this could include cuts to preventative services
- The proposal on local Business Rates would mean Shropshire losing £12m of Public Health funding
- Attendance Allowance is an open-ended cost pressure and likely to have a clear impact on health services – such as the ability to discharge patients from hospital

b) *Telford & Wrekin Council*

Neighbourhood workstream chaired by T&W Chief Executive

£80m savings achieved over 6 years with a further £30m to be achieved in 16/17 & 17/18.

- Focus on solving problems and promoting social responsibility to reduce demand
- Reimagining the way we do things

- Re-focussing the work that we do and contributing to Neighbourhood work
- Supporting work to build resilient communities and maximising the use of community assets
- Providing some universal services which prevent problems arising in the first place
- Retaining a workforce to work with our most vulnerable children families and adults
- A focus on safely reducing demand away from higher tier more expensive services
- A clear outcome focus

11.3.6 Supporting Primary Care

General Practice provides the building block for Neighbourhood Teams. Providing support is a fundamental part of the model.

a) Objectives

- To ensure that patients have the knowledge, skills and confidence to manage their own health and health care.
- To develop active Patient Participation Groups (PPGs) to support practices to deliver the Primary Care Strategic Priorities.
- To support new models for sustainable Primary Care - addressing inequalities by attracting a multidisciplinary skilled workforce via a workforce strategy, to increase patient access, supported by excellent IT infrastructure and Estate.
- To ensure that Primary Care is resourced to identify and manage those health conditions highlighted as a priority by public health and the increasing number of patients with complex health conditions.
- Promote and develop a culture of continuous improvement and shared outstanding practise.
- Develop a formal stakeholder communication and engagement plan to support the delivery of the Primary Care Strategic priorities.
- Develop a long term financial plan to support the delivery of the Primary Care Strategic priorities.

b) Progress to-date

- Formal quarterly reporting to Primary Care Committees
- Primary Care Needs Assessment Undertaken
- Review of all PPGs across the County
- Shropshire wide Primary Care Workforce audit process commenced
- Primary Care Estates Plan being progressed
- Primary Care IT Roadmap approved
- Transformation bids submitted to NHSE to resource IT and Estates projects – outcome expected early September 2016
- 12/17 practices in Telford and Wrekin are now working in 3 clusters/localities to secure sustainability (5/17 practices are being offered individual practice support)
- The development of Practice clusters are being progressed in Shropshire
- National Practice resilience programme underway with the support of NHSE

- Practices have attended training sessions to understand their referral data better (via the Aristotle system)
- Shared learning from Care Quality Visits has commenced
- New Quality and Improvement assurance process has commenced
- Primary Care Communication and Engagement Plan submitted for approval to Primary Care Committee
- Primary Care Financial plan approved by Primary Care Committee
- Pilot for Social Prescribing outlined for approval
- Review of Primary Care Access in and out of hours has commenced

11.4 End to End Clinical Pathways

Six condition specific pathway multi-stakeholder task and finish groups have been developing 'end to end' pathways from prevention through treatment to end of life (where appropriate).

The 6 agreed pathways are Respiratory (including Paediatric Asthma), Chronic Kidney Disease (CKD), Diabetes, Heart Failure, Preventing Falls and Fractures and Frailty. As can be seen from the diagram below the pathways will describe the interventions to be delivered at each stage of illness progression and where the responsibility for delivering those interventions will reside.

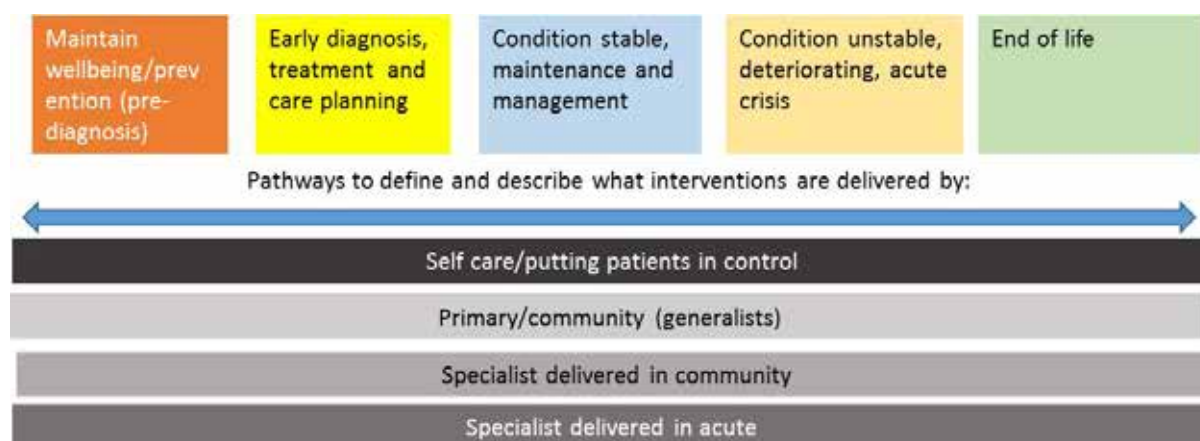


Figure xx:

The pathway design is being framed around a set of guiding principles agreed by the Futurefit Clinical Design Work stream as follows:-

- End to end from prevention to treatment
- Do only what is needed, no more, no less; and do no harm
- Professionals routinely providing only the service which requires their level of clinical ability or expertise
- Put patients in control of their conditions, with a focus on preventing deterioration and complications, avoiding crisis and preventing referral to more acute services
- “Home is best”
- Maximise the opportunities for innovation through use of technology
- Support partnership care arrangements and smooth transitions for patients between clinicians, settings and organisations
- All clinical activity that does not absolutely need to be carried out in a hospital will take place in the community
- Funding will follow the patient to ensure that resource is in the optimal delivery setting

All existing or previous related pathway development work, whether through ongoing CCG service redesign programmes, Right Care or QIPP, has been taken into account in this programme of work, with the emphasis on consolidating it into high level system wide pathways and adding to where there are gaps.

Stakeholder partners were asked to nominate appropriate representatives for each pathway's task and finish group membership which also included patient reps. Further members have been added where their input was identified as being vital to pathway development eg podiatry for diabetes. Membership of the groups is provided at appendix XX.

The format of the pathways is a consistent front sheet detailing the clinical interventions to be delivered in each of the care settings for each stage of the patient's journey along the pathway from maintaining wellbeing to end of life, where appropriate. This front summary sheet is supported by more detailed patient flow diagrams and supporting narrative where necessary. An example of a draft pathway is provided at Appendix XX.

Common and consistent themes are emerging from the pathways work including:-

- A three tiered model of care. Tier 1 would be those clinical situations that would lie in primary care and would be the responsibility of primary care. Tier Two would be those clinical situations where primary care would remain responsible for the care of the individual but where primary care would be able to access specialist support. Tier Three would be those clinical situations where secondary care or specialist services would be responsible for the care of the individual.
- The need for an interface specialist workforce to support primary care and community care professionals in the community and act as liaison between acute and community delivery of care.
- Peer support and structured education programmes for both patients and professionals.
- There are other enablers such as IT which are success critical, in particular the shared care record and access via technology to support self care and management.

The pathway development work is linking in with the already established and developing programmes for prevention lead by the 2 respective local authorities.

Next steps will be:

- Secure sign off from the Task & Finish Groups for all the pathways
- Commence a period of wider stakeholder engagement (primary care, acute etc.) to 'sense check' and seek support for the proposals.
- The final stage would be for the pathways to go through formal CCG approval processes for clinical pathways and for them to be translated into formally commissioned services or formal prototypes.

11.5 Community Activity and Capacity Modelling

11.5.1 Introduction

As described in section xx, activity currently taking place in the acute sector will in future be delivered in community settings.

The Community Fit project was established by the Future Fit Programme Board in April 2015. The first phase of this project was designed to provide insight into the challenges facing the non-acute sector and to encourage stakeholders to consider how these challenges and those originating from Future Fit might be met. A summary of the report from this work is provided below, the full report is provided at appendix xx.

A further phase of Community Fit was described, building on the phase one work; this is now part of the STP Neighbourhoods Workstreams.

11.5.2 Phase 1 Community Fit Modelling – Project Deliverables and Scope

Six deliverables were expected from the first phase of the Community Fit project

- 1 To summarise the level and nature of activity currently taking place in the out-of-hospital health and care sectors.
- 2 To estimate the likely impact of demographic changes on the demand for health services in these sectors.
- 3 To create a patient-linked dataset to provide insight into the patterns of patients' health service use across multiple sectors.
- 4 To develop a taxonomy or classification of patients based on their patterns of healthcare use.
- 5 To summarise the assumptions in the Future Fit activity models about the movement of activity out of acute settings.
- 6 To assess of the current and potential contribution to Community Fit of voluntary sector organisations in Shropshire, Telford and Wrekin.

The main focus of analyses was on four out-of-hospital sectors;

- community health services
- primary medical services
- adult social care services
- mental health services

The scope was set in this way to provide the best balance between practicality and coverage. It is acknowledged that this approach excludes a number of important services (e.g. GP out-of-hours, children's social care, continuing healthcare, dental services etc).

The adults social care data, the patient-linked dataset and cluster analysis related to patients aged 18+ only.

Data on adult social care packages are those which incorporate some local authority funding. Fully privately funded social care packages are not included in this analysis.

The project focuses on services predominantly delivered within the borders of Shropshire and Telford and Wrekin Unitary Authorities. Appendix xx provides information about the number and distribution of patients registered with a GP practice within the Shropshire and Telford and Wrekin Authorities boundaries, but living outside of these areas and vice-versa.

The project used data from 2014/15; the latest complete financial year at the point the project commenced.

Participants in the primary care reference group expressed concern about the extent to which data extracted from primary care clinical information systems could be used for the purposes of the project. Four pilot practices agreed to work with the project team to assess the quality, utility and comparability of data within clinical information systems. The outcome of this process would guide decisions about the value of extending this approach to all practices in Shropshire and Telford.

11.5.3 Phase 1 – Project Approach

Five workstreams were established to oversee the work with a reference group for each workstream. Each reference group met on approximately 5 occasions to oversee and comment on the project deliverables.

Workstream
Community Services
Mental health services
Primary medical services
Adult social care services
Voluntary sector

11.5.4 Description of the nature and level of Out of Hospital Health and Social Care Services

Data was supplied by each of the relevant stakeholder organisations against an agreed specification and under suitable data-sharing agreements.

Detailed descriptive analyses were produced for each of the 4 out-of-hospital sectors; community healthcare, adult social care, mental health and primary medical services¹. This process served 2 purposes;

- to build a shared understanding of the quality and completeness of the underlying data
- to provide a baseline assessment for the later stages of the project

Early drafts were reviewed by the reference groups for completeness and accuracy. Final versions of these reports are provided in appendices xx, but in summary the reports contained the following information;

Mental Health Services

- For PbR services – by cluster
 - Activity and patient counts

¹ For the 4 pilot practices

- Age, Gender & ethnicity profile
- Practice prevalence
- Admissions and length of stay
- Seasonality of admitted care
- Transitions between clusters
- For non-PbR services – by service
 - Activity and patient counts
 - Age, Gender & ethnicity profile
 - Practice prevalence
 - Seasonality of activity

Adult Social Care Services

- Patient counts
- Age and gender profile
- Services and age group
- Change in activity levels
- Service intensity (home care)
- Activity vs cost

Primary Medical Services (4 Pilot Practices)

- Patient characteristics
- Diagnoses
- Long Term Conditions
- Patient activities
- Prescriptions

Community Healthcare Services

- Activity trends
- Patient age and gender profile
- Patients CCG by registration and residency
- Activity by contact type, contact purpose
- Activity service type and team
- Contacts rates and duration by service type

Voluntary Sector

Discussions were held with existing voluntary sector forums to test the potential for organisations to contribute to the Community Fit analysis. It was recognised that activity performed by organisations delivering under a contract to the CCG or social care would likely be captured by those workstreams. However, organisations were not at present able to deliver a data set of activity which included individual client level activity with an NHS number identifier. Both councils are exploring the possibility to jointly complete a more detailed 'state of the sector' questionnaire to inform on-going developments alongside their own work. It was recommended that Phase Two of Community Fit (Neighbourhoods Workstreams) should explore the potential for voluntary organisations to record NHS number.

11.5.5 The Impact of Demographic Change on Demand

Changes in demography are commonly given as one of the main sources of demand pressure on a healthcare system. Community Fit developed estimates of the scale of the challenge arising from;

- changes in population size

- changes in the population age profile
- Changes in age specific health status

It is worth noting that demography is only one of a number of potential drivers of demand growth. Other sources include the development of new medical technologies, changes in thresholds for healthcare and changes in patient expectations. This following analysis relates only to demand growth arising from demographic change.

Forecast changes in population size and age profile can be obtained from Sub-National Population Projections published by the Office of National Statistics. The 2012-based projections were used to understand the changes that were likely to occur in Shropshire. In Telford and Wrekin however, stakeholders expressed concern that these population projections did not take account of planned housing developments designed to attract working age people into Telford. T&W Council produce local population projections and these local projections were used within Community Fit to understand the likely changes to the population size and age profile within Telford and Wrekin.

Utilisation rates by gender and single year of age in 2014/15 were calculated for a range of out-of-hospital services as the ratio of activity counts and population. These utilisation rates were multiplied by the forecast population in 2019/20 and summed across all ages to estimate the levels of activity in 2019/20.

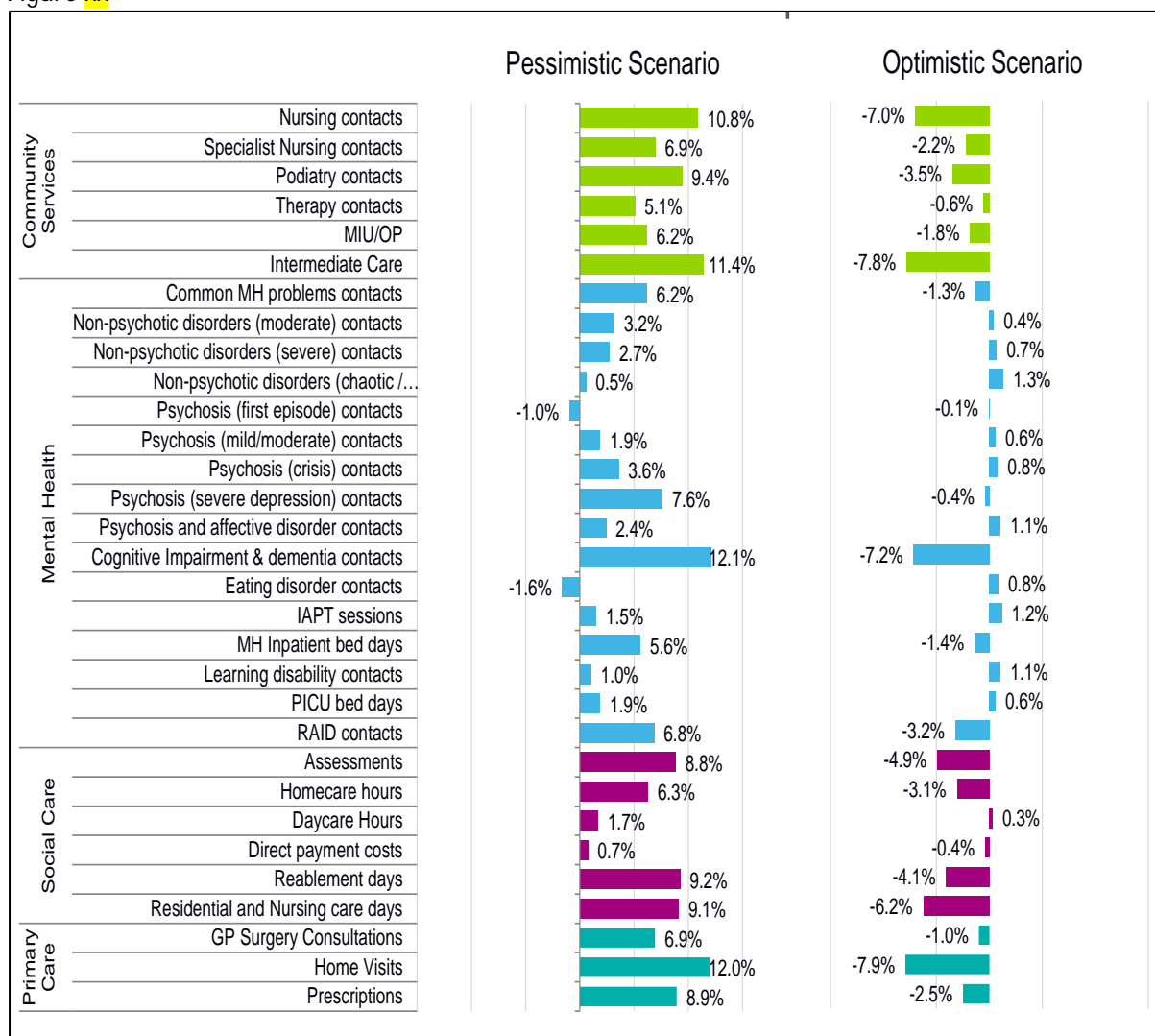
Whilst this approach is commonly used in healthcare sectors to estimate demand growth associated with population change, it fails to take account of secular trends in age-specific health status – notably that older people of a given age are on average healthier than people of the same age in the past. This is reflected in improvements in disability-free life expectancy² since 2000. The effect of this impact was modelled for healthcare utilisation under three future scenarios;

- a **pessimistic** scenario : where there is no further improvement in disability free life expectancy
- an **optimistic** scenario : where improvements in disability free life expectancy result in a relative compression of morbidity – in line with recent national trends
- an **intermediate** scenario : where improvement in disability free life expectancy track improvements in life expectancy

Figure xx below compares the anticipated change in demand for a range of out-of-hospital services under two of these scenarios. This analysis demonstrates that in most cases, increases in demand associated with a growing and aging population can be offset with modest annual improvements in disability-free life expectancy.

² Disability-free life expectancy is the average number of years an individual is expected to live free of disability (self-reported limiting long-term illness) if current patterns of mortality and disability continue to apply.

Figure xx



Many of the features of a healthcare service which delivers improvements in disability free life expectancy are referenced in the Future Fit Clinical Vision, notably;

- reducing the prevalence of key lifestyle risks (e.g. smoking, excessive alcohol consumption, poor diet, lack of exercise, obesity etc) to reduce the prevalence of lifestyle related illness
- improving the management of long term conditions to delay the disabling consequences of long term conditions
- the use of targeted acute planned care interventions to tackle and reverse the worst consequences of a disease.

A detailed report summarising the impact of demography for each sector is available.

11.5.6 Linking Patient Data across Multiple Sectors

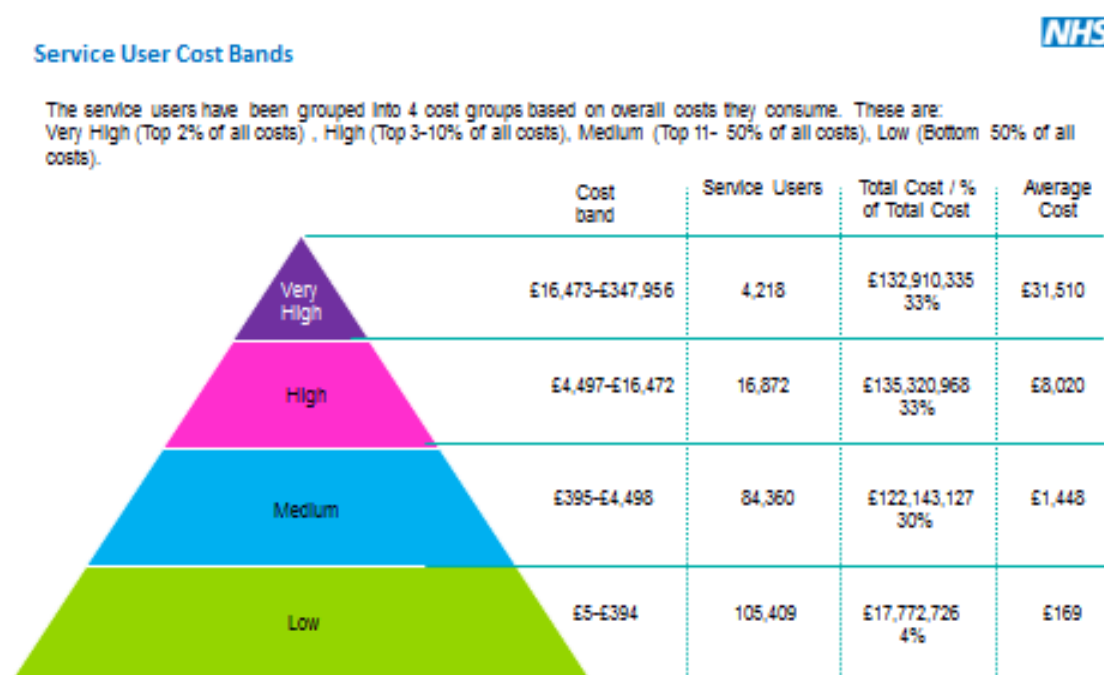
Greater service integration and improved care coordination are often cited as objectives for the health and social care system. Although linked datasets are seen as a prerequisite for greater integration and coordination, data on service usage is usually reported sector by sector. Under normal circumstances explicit patient consent is required to link patient's data from several organisations in a way which allows individuals to be identified. Alternative methods exist however

which meet the legislative requirements and best practice guidelines on data-sharing which allows data to be linked at a patient level but in a way which does not serve to identify any individual patient.

A method known as 'pseudonymisation at source' was employed within the Community Fit project to link patient data from acute hospital services, community healthcare services, mental health services and adult social care services.

Of the circa 381,000 people aged 18+ living in Shropshire and Telford, 211,000 has a recorded contact with at least one of the service listed above where the patient's NHS number and age were recorded.

Figure xx



A report detailing the methods and results of this process can be found in appendix xx. Key highlights are listed below:

- A very small number of patients, circa 2%, henceforth referred to as very high cost patients, consume approximately one third of all health and social care resources. The report describes the demographic profile of these patients, the services they receive, the health conditions they exhibit and their area of residence.
- More than 80% of costs of state-funded social care packages are spent on these very high cost patients.
- Approximately 3,000 people receive services during 2014/15 from all four sectors.

- People receiving Social Care services are much more likely to use mental health services than the general population.
- The report uses data from the 4 pilot practices to demonstrate the following benefits of incorporating data about a patient's primary care use;
 - increases the coverage of the linked data considerably (given the frequency of patient interactions with primary care services)
 - allows a more accurate assessment of patient's long term conditions (i.e. using practice disease registers)
 - provides an additional dimension to descriptions of patients' service usage (e.g. that high cost patients receive on average 19 GP consultations and more than 110 prescription items per annum).

11.5.7 Classifying Patients by Service Use Patterns

Having gathered and linked data about patients' service usage, the Community Fit project explored the extent to which patients could be usefully classified in terms of service usage patterns into a relatively small number of groups. If possible, this might support the health and social care system to identify those areas where service integration or improved care coordination might be of particular benefit and support thinking about the nature of out-of-hospital package that might substitute for care packages currently supplied in acute hospital settings.

Appendix xx provides detailed information about the cluster analysis methods, the variables used to direct the cluster analysis and the outcomes of this method. In summary however, 16 distinct clusters were found with the following characteristics, see table below; Cluster Characteristics:

Cluster characteristics



Cluster	Cluster Name	Cluster size (n)	Cluster size (%)	Average cost (£)	Average Age	Average acute cost (£)	Average community cost (£)	Average mental health cost (£)	Average social care cost (£)
Multi-sector patients									
11	Complex frail elderly	2,516	1.2%	18,913	76	5,071	2,186	1,873	9,315
6	Complex needs – mainly managed in community	273	0.1%	32,606	73	5,217	19,185	444	7,430
3	Long stay acute care	3,514	1.7%	13,360	70	11,860	1,027	85	288
4	Younger adults with complex disabilities	234	0.1%	94,599	44	995	1,307	2,469	89,689
2	Intensive / institutional mental healthcare	180	0.1%	51,672	57	2,728	741	42,714	5,230
7	Young adults with simpler mental health needs	5,121	2.4%	3,420	50	1,028	53	1,787	431
5	Well-maintained social care users	1,486	0.7%	13,040	61	548	305	148	11,863
1	Discrete planned care with community follow-up	12,571	6.0%	2,815	62	2,588	191	2	14
8	Community support-occasional acute input	7,940	3.8%	2,751	71	1,574	949	30	186
9	Community & social care – occasional acute input	6,075	2.9%	5,728	74	2,288	965	468	1,713
10	Simple investigations – physical health	20,041	9.5%	642	61	431	172	4	16
12	Simple investigations – physical/mental health	3,775	1.8%	824	55	233	128	423	1
Single-sector patients									
13	Acute contact only	113,689	54.0%	931	50	931	-	-	-
14	Community contact only	30,557	14.5%	267	60	-	267	-	-
15	Mental Health contact only	270	0.1%	2,520	50	-	-	2,520	-
16	Social Care contact only	2,237	1.1%	5,880	52	-	-	-	5,880

This analysis provides stakeholders with;

- An enhanced understanding of the common ways in which patients use health and social care services in Shropshire Telford & Wrekin
- Analysis to guide thinking about the potential to reorganise care - particularly for those patients with contact with more than one sector .
- Information to support considerations about the packages of community support that might substitute for acute care packages.

11.5.8 Phase 2 Community Modelling in the Neighbourhood Workstreams

The analysis described above from the first phase of community activity and capacity modelling provides a rich resource to support stakeholders to develop and assess out-of-hospital service design options. In particular the outputs of the first phase of Community Fit provide information on current levels of service usage, the potential impact of demographic change on service demand, the patterns of service usage across multiple sectors and the activity transfer assumptions from Future Fit.

APPENDIX 11b – Education Programme

Action	2017	2018	2019	2020
Leadership Academy programmes commence	supportive programmes developed to support leaders and their teams to deliver change programme required	programmes accessed	programmes accessed	programmes accessed
Workforce Transformation half day workshops	To further engage clinical and service leaders in conversations about shaping the workforce in readiness for working in the new reconfigured services To agree and generate further innovative ideas for workforce change that will achieve WTE and pay cost reductions in 2017-20	Engagement workshops held quarterly	Engagement workshops held quarterly	
Increase mentorship capacity	new modes of mentorship delivery agreed and provider commissioned	delivery of training for mentorship	delivery of training for mentorship	delivery of training for mentorship
Advanced Clinical practitioner places commissioned	15 trainees recruited and commence year 1 training	15 trainees recruited and commence year 1 training 15 trainees enter year 2 training	15 trainees complete training with 15 entering year 2	final 15 complete training
Emergency nurse practitioner development		5 ENPs commence masters training modules	Modules completed	
Assistant practitioner development	areas identified through the workforce plan with education provision scoped to ensure fit for purpose programmes commissioned	trainees recruited to programme		
Nurse associate role development	30 nurse associates recruited inducted and commence training year 1	30 nurse associates recruited inducted and commence year 1 with 30 completing year two and fully trained	further 30 nurse associates commence training with further 30 completing training	

IT roll out plan	develop and engage with service on any IT training requirements	roll out training plan	roll out training plan	roll out IT training plan
Identify areas for pilot IT programmes	develop cross site remote consultation pilot	review outcomes		
E Roster	roll out e roster across non ward clinical areas			
Clinical activity management	through the transformation programme use clinical activity monitoring to revisit and where necessary revise job plans	through the transformation programme use clinical activity monitoring to revisit and where necessary revise job plans	through the transformation programme use clinical activity monitoring to revisit and where necessary revise job plans	through the transformation programme use clinical activity monitoring to revisit and where necessary revise job plans

APPENDIX 12a – IM&T Strategy

Shrewsbury and Telford Hospitals NHS Trust

IM&T Strategy 2012 - 2017

Executive Overview

14th August 2012

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1. Executive Summary

Following a widespread consultation programme with key stakeholders, the high level information needs of clinicians, managers, patients and public have been identified and an analysis performed to highlight how the innovative use of IM&T will support the Trust's clinical strategy for the development of health services.

This report examines the strategic ambitions of the Trust both as a provider of patient care and as a business. A future vision is outlined, which, if approved by the Trust Board, will provide the target for work plans in information management and technology at Shrewsbury and Telford Hospital NHS Trust over a five year period commencing September 2012.

1.1. The Vision for IM&T

The vision statement describes how the Trust will create a 'Digital Hospital Environment', that will use technology to support agile working, eliminate paper, provide a secure clinical environment and empower patients to support their own healthcare. The key components of this vision are:

- **IM&T Infrastructure** – Achieving a solid foundation for clinical and business systems.
- **Electronic Care Record** – The existing set of clinical applications will be integrated together, using a connect-all strategy, to deliver a single, unified clinical system that supports agile ways of working. This in turn will deliver a paper-free environment, enterprise-wide scheduling that minimises patient time in the trust, and maximises clinician usage, and will build an environment that delivers the right information, to the right person, at the right time.
- **Knowledge Management** – There is a need to make better use of information, both about the patients under care, and also about how the organisation itself is operating. This information is a valuable asset that is not currently being fully utilised. The information team, led by a Chief Information Officer, will develop the knowledge to allow the trust to know itself, and to drive the right processes to deliver benefits.
- **Process Improvement** – The Trust faces complex healthcare, funding and legislative processes that require careful management to ensure that systems, (both technical and personal), behave exactly as expected. These processes must be understood and managed to deliver the right solution to identified problems.

The Trust is experiencing significant drivers for change, and IM&T will be an essential enabler to support extensive integration of clinical and corporate services and the achievement of associated qualitative and productivity-based performance improvement across the organisation.

1.2. Next Steps

The Board is asked to approve this strategy and endorse the following actions as early priorities:

- Review the options for infrastructure delivery, as there is potential for savings in excess of £1m per year, (based on the Channel 3 predictive model). These savings will be verified by the production of a Strategic Outline Case for infrastructure sourcing options;
- Commission an OBC for the next stage of Electronic Care Record delivery;

The Finance Director is currently planning the appointment of a Chief Information Officer to lead the 'knowledge management' initiative. There are some 'quick wins' that may be delivered early including delivery of correspondence services and VitalPAC integration. These quick wins should be considered as part of the OBC for the next stage of the ECR development.

2. Introduction

The Shrewsbury and Telford Hospital NHS Trust was formed in October 2003 following the merger of two previous Trusts (Princess Royal Hospital NHS Trust and Royal Shrewsbury Hospitals NHS Trust).

We are the main provider of acute hospital care for almost 500,000 people from Shropshire, Telford & Wrekin and mid Wales. Patients come to us from Telford, Shrewsbury, Ludlow, Oswestry, Bridgnorth, Whitchurch, Newtown and Welshpool in Powys.

The Trust manages two hospital sites:

- Royal Shrewsbury Hospital (RSH).
- Princess Royal Hospital (PRH).

The Trust is currently preparing to apply for Foundation Trust status and has recently re-configured the organisation into eleven autonomous clinical centres, as shown below:



Through a series of interviews with key senior managers and clinicians, together with reference to a number of Trust strategic reports and plans, the high level strategic information needs of clinicians, managers, patients and public have been identified and this has enabled a future vision to be presented in which excellent healthcare provision is supported and enabled through the innovative use of IM&T.

3. Strategic Context

The Trust's stated vision is expressed as follows:

'We will embody in our hospitals all the principles, values and the sense of service that created the NHS by providing consistently good safe care in a friendly, listening and informative way, as and when people need and want it and always with dignity and respect.'

Analysis of the situation suggests a challenging future environment dominated by global recession, an increasingly ageing population and rising healthcare demand.

On the positive side there are opportunities provided by the new technologies that can help us do more with less. The national ICT Strategy makes clear that government departments should 'do more with less' and deliver 'whole systems change through collaborative innovation'.

The national vision places the patient at the centre. Patients are generally interested in their healthcare. New remote monitoring facilities, connected by improved networks, can help them contribute to the efficient use of healthcare staff and facilities at a time and place that is efficient for all concerned.

The Department of Health has now officially dismantled the National Programme for IT (NPfIT). Also the supplementary procurement route known as the Additional Supply Capability and Capacity (ASCC) will shortly close. No central funding for IT is on the horizon. Under the localism agenda, Trusts are expected to make their own way and fall back on their own funding resources.

Equity & Excellence: Liberating the NHS (June 2010) sets out reforms that will free NHS organisations from direct Government control, coupled with an increased responsibility to be locally accountable for the quality of services provided and the efficient use of public money.

Liberating the NHS: An Information Revolution (November 2010) supports this and describes an environment in which people have the information they need to stay healthy, to take decisions about and exercise more control of their care; and to make the right choices for themselves and their families. There will be greater openness, transparency and comparability of information and a focus on data collected real time, with the patient, as a bi-product of patient care, not as an administrative 'add-on'.

The NHS Outcomes Framework 2012/13 describes the changes made since the first edition of the framework was published in December 2010. The initial framework set out the outcomes that the NHS Commissioning Board will be held to account for delivering, with corresponding indicators. It formed part of the drive to move the NHS away from centrally driven process targets. The framework is updated annually, to provide a national overview of what the NHS will aim for when improving patient outcomes. The updated framework renews the focus on improving patient results. The NHS will be measured against a number of areas including whether a patient's treatment was successful, whether they were looked after well by NHS staff and whether they recovered quickly after treatment.

Government IM&T Policy is clear. Public Service Infrastructure and technology services will be moved to shared/commercial and Cloud provision. The savings from consolidation of Data Centres alone will deliver £300m per annum. There is an overarching target of £3.2bn operational efficiency from the Governments £16bn per annum expenditure on IM&T.

4. Stakeholder Requirements

This section summarises feedback received from stakeholders about the future use of information and IT to support the delivery of excellent healthcare and improved efficiency. The information requirements of each stakeholder group are identified and a brief analysis of the current situation is presented alongside opportunities for the future.

4.1. Patient and the Public Want:

- Access to their health record and help in understanding it.
- A window on what the hospital has planned for them and their condition.
- An opportunity to comment on their health record and contribute to its accuracy
- Easy access to information about the hospital services and evidence of capability to deal with the conditions that trouble them in a way that suits them.
- Confidence that the hospital will treat them and information about them with due care.

4.2. Clinicians Want:

- Smarter access to what they know is in their clinical systems (including summary access to patient histories; easier login)
- Small changes to improve their efficiency (clinical alerts and notices in the right place; “top 10” work lists)
- Guidance and help with the introduction of scheduling and monitoring capability that exists (SemaHelix bed management and VitalPAC)
- Device availability with options and without queues as well as immediate response to fix times.
- To communicate clinical decisions to all relevant parties inside and outside the hospital and to understand what other providers know about their patients.
- To influence the demand for their time in a way that is sensitive to patients needs using targeted advice and guidance systems.

4.3. Managers/Decision Makers Want:

- Guidance and help in understanding what data is collected, what it means and how it can help to manage the patient process.
- Time to understand systems and promote wider, more consistent take up across the business.
- Flexibility and availability of informatics to solve their next problem, now.
- More timely and accurate ways to predict and monitor spend.
- More timely and accurate ways to predict, monitor and influence levels of patient activity.
- Clinicians to collect sufficient quality outcome data to support quality and outcome based commissioning.

5. IM&T Vision

The vision for Shrewsbury & Telford NHS Trust is of a digital healthcare environment that will extend beyond the boundaries of our hospitals and enable accurate and timely information in support of decision-making for excellent patient care and a productive, streamlined support infrastructure.

5.1. The Patient Experience

The patient experience will be enhanced by patient-centred systems with sophisticated enterprise-wide scheduling such that the patient's visit to the hospital will be as short as possible. To achieve this, appointments for consultations, interventions and tests must be scheduled together, with prerequisite activities undertaken first, time given for the patient to move between different parts of the hospital or wider health system and avoiding conflicts. Choice will be given to patients so they can select convenient times and locations for them. This will include being supported, monitored and treated at home where clinically appropriate.

Patients will have easy access to hospital information including their own health care records to enable them to check and correct the information held and view information about their condition and treatment. This will include access to a summary health record, to enable them to interact with those caring for them including requesting changes to their bookings and receiving appointment reminders by SMS, voice mail, or email. Options for providing this service may include online access via a secure Internet portal, access via Digital TV and patient-held smart cards.

General information about the Trust's clinical performance will also be easily available to patients, in order to give confidence and evidence of the Trust's capability.

5.2. The Trust Perspective

From the Trust's perspective, efficient scheduling of resources such as beds, clinics, rooms, theatres, equipment and staff will ensure that expensive resources are utilised in the most efficient way. Tracking systems, utilising RFID technology and making use of the hospital-wide wireless network, will ensure that progress through the patient journey can be monitored and delays minimised.

The patient's record will be held electronically, with the majority of it made up from information collected through the clinical process in dedicated clinical systems and brought together in the Trust-wide Electronic Clinical Record (ECR) system. This will enable all relevant clinical data to be viewed in multiple locations simultaneously if required, including non-hospital locations.

5.3. Paperless working

The Trust wishes to create a virtually paper-free hospital environment. To achieve this, in the interim, existing legacy paper records will be scanned "on demand" as they are requested from off-site storage and added to the ECR. Archived records may be scanned and held electronically or stored in off-site libraries depending on the business case. The generation of new paper records will be discouraged, but can be scanned and added to the record where necessary.

5.4. Communications with Stakeholders

Communication with GPs will be electronic as far as possible including referral letters, discharge summaries, requests and results, giving improved accuracy of information and greatly improved timeliness of information.

Clinicians will be supported by holistic patient information provided at the point of care to enable timely and clinically safe decision-making. This will include patient history, results and investigations

including PACS images and clinical correspondence presented in a single look and feel solution or portal. Video conferencing facilities will be used for teaching, and to bring together multi-disciplinary teams across the entire district.

Over time, the concept of shared clinical systems will be explored to support the delivery of seamless clinical care between primary and secondary care.

5.5. Decision Support

Decision-support will be implemented within Order Communications systems to encourage clinicians to make requests which are cost-effective, avoid duplication and are in line with clinical best practice. Rules will also ensure that results are viewed and acknowledged within agreed timescales, with a built-in escalation route.

5.6. Prescribing

Full electronic prescribing is a medium term ambition for the Trust. In the interim, the existing prescribing solution (eScripts) will be fully utilised to provide benefits to clinical staff

5.7. Mobile / Remote Technology

All locations from which services are delivered will have equal access to hospital systems. Mobile technology will be deployed where this improves timeliness, patient safety and efficiency. This may include handheld devices to allow doctors to view results and nurses to input patient observations, for example, and computers mounted on trolleys to facilitate ward rounds with PACS image viewing and point of care order communications and prescribing. In addition, it is the intention of the trust to allow users to use their own devices on the trust network to access clinical information (BYOD).

In the medium term, the Trust may choose to introduce more near-patient testing and these devices, along with VitalPac and other modern medical equipment, will be able to interface directly into the patient's electronic record. Telemetry systems will allow nurses and doctors to monitor patients remotely and react to alerts. Other devices, such as pressure pads and motion sensors in beds and rooms, can be used to alert healthcare professionals to movements of vulnerable patients so they can assist them and hence avoid falls.

The Trust's investment in wireless networking facilitates the use of RFID technologies, allowing the tracking of patients through the hospital. With additional investment, this technology can be used to update systems to improve data quality in areas such as A&E and Theatres where tracking of locations and timings is essential to ensure waiting time targets are met and scarce resources are used efficiently. RFID tags can also be used to assist positive patient identification with screens automatically updated with patient details in theatre for example, or screen displays tailored to an appropriate view as a clinician wearing a tag steps forward for example.

Telehealth will allow patients greater choice and flexibility in how and where they engage with the trust, as well as enabling the collection of more, and better, clinical information to inform clinical care.

5.8. Back Office

The Trust's back office processes will be as streamlined as much as possible and will minimise the use of paper. This will be achieved through the use of document workflow, passing forms electronically around the Trust for authorisation, and systems such as e-rostering and e-requisitioning. Stock control will be managed electronically and enhanced by the use of bar-coding and/or RFID tracking.

5.9. Correspondence

The rollout of electronic correspondence services, which can send all external correspondence electronically will improve the efficiency, quality and timeliness of all correspondence. This will also provide market value in making the Trust a preferred partner of local primary care clinicians.

5.10. Management Information and Reporting

Management information will be produced as a by-product of clinical and operational processes. It will be supported through a centralised data warehouse, fed from operational systems with information presented to users in the form of standard reports and dashboards through a self-service portal. Analysis will include forecasts predicted from past trends of historic data. Operations centres will be supported through real-time tracking information and predictive information displayed on large screens. Information will be considered as an asset of the trust, and managed appropriately, with information asset owners responsible for guiding the trust in the best possible use of the organisation's information.

5.11. In Summary

There are clearly a number of implications resulting from the above narrative which will impact the Trust in a several areas. Key amongst these are:

- A sound IM&T infrastructure platform will be needed to support the enhanced use of technology for clinical and business decision-making;
- new ways of working will need to be adopted to optimise use of the new technology. This in turn requires an appropriate level of investment, in both time and money.

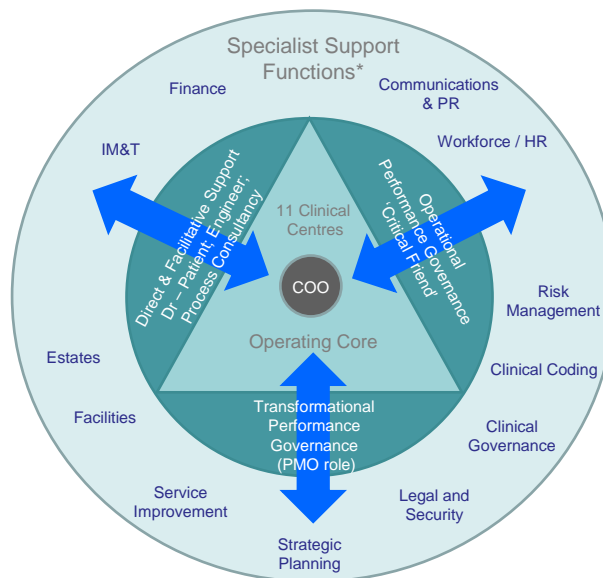
Some tactical decisions that have already been taken must be reviewed in light of strategic decisions outlined in this report. Future tactical requests for IM&T developments will need to be judged on the basis of whether they are consistent with the aims of this strategy. Other Trust-wide, strategic choices will need to recognise the impact that these vision statements will create – e.g. PAS and EPR related decisions and the need to ensure full integration with systems supporting these statements.

6. Current Status of IM&T

6.1. Organisation and Management

IM&T is currently managed as a specialist support function and it will engage with the Clinical Centres in three key operating models, as illustrated in the diagram below:

- direct, facilitative e.g. support according to Service Level Agreement
- advice, guidance, challenge e.g. business case or risk assessment support
- transformational, innovative and enabling *e.g. new system development.*



* Examples only shown

Although there is an information management team within the IT group, this is an area that is recognised as needing further focus to deliver benefits to the business. In particular, the current Foundation Trust application process identified the lack of an information department.

The Director of Finance is currently finalising the case for appointing a Chief Information Officer to ensure that, not only the information needs of the Trust continue to be met, but the quality, timeliness and overall integrity of information improves, in accordance with the IM&T strategic vision.

There are numerous processes in place to manage IM&T projects, however these need revisiting to ensure that they adequately capture requirements, and deliver the expected benefits, in the wake of the restructuring to clinical centres.

6.2. Service Management

Services are managed through two helpdesks, one for each hospital site. The support function is supported equally by the clinical centres, proportional to the size of the clinical centre. Currently, the service management function is not using the ITIL industry standard process. This contributes to the observation that the trust is excellent at introducing innovative solutions, but finds it difficult to maintain these into business as usual.

6.3. Clinical Systems

There are six key clinical systems which form the core components of the ECR :

- PAS (Patient Administration System)
- Radiology (RIS) & Picture Archiving & Communication System (PACS)
- Pathology
- Pharmacy
- Order Communications (pathology only)
- VitalPac bedside monitoring

There are also approximately 130 other clinical systems that are utilised around the trust for a variety of clinical and administrative needs. Systems have been procured based on a 'best-of-breed' approach, where systems are generally single-purpose, and focussed to a particular discipline or task. There is limited connectivity between systems (for example, results reporting from Pathology) which must be improved to deliver the benefits of the ECR.

Short-term improvements that have already been identified include integrating radiology results reporting into more clinical applications, and the production of electronic discharge summaries.

6.4. Infrastructure

Servers, networking equipment, storage, desk-top and mobile device hardware are largely dependable. However; the stock is ageing and requires an increasing, (and increasingly scarce), capital provision to replenish it, or an appraisal of alternative sourcing options to decrease the capital provision, in order to deliver the benefits of mobile working, and increase the usage of the clinical systems.

Computer rooms are inadequate in terms of space, air-cooling, fire and power protection. There are key issues here not least of which is the location of the existing rooms which make fire protection a non-trivial task.

The hospital computer network is 'patchy' in its coverage. Some areas are well serviced whilst, expansion of applications into other areas is compromised. Our plan is to increase coverage, accommodate voice traffic, introduce a management system (automation), increase the bandwidth (number of devices able to use it concurrently) and allow for asset tracking.

6.5. Summary of Key Gaps

- Information management is perceived by senior management to be weak;
- Processes for capturing user requirements (and for managing projects) need to be reviewed following the clinical service restructure;
- IM&T Service management needs to be strengthened;
- There is limited connectivity between systems;
- Infrastructure stock is aging and in need of further investment;
- Computer rooms have inadequate cooling, fire and power protection;
- The communications network coverage is patchy

7. IM&T Work Programme

A flexible, forward-thinking but achievable IM&T work programme will be a key enabler for the Trust’s ambition to attain Foundation Trust status and realise its strategic direction.

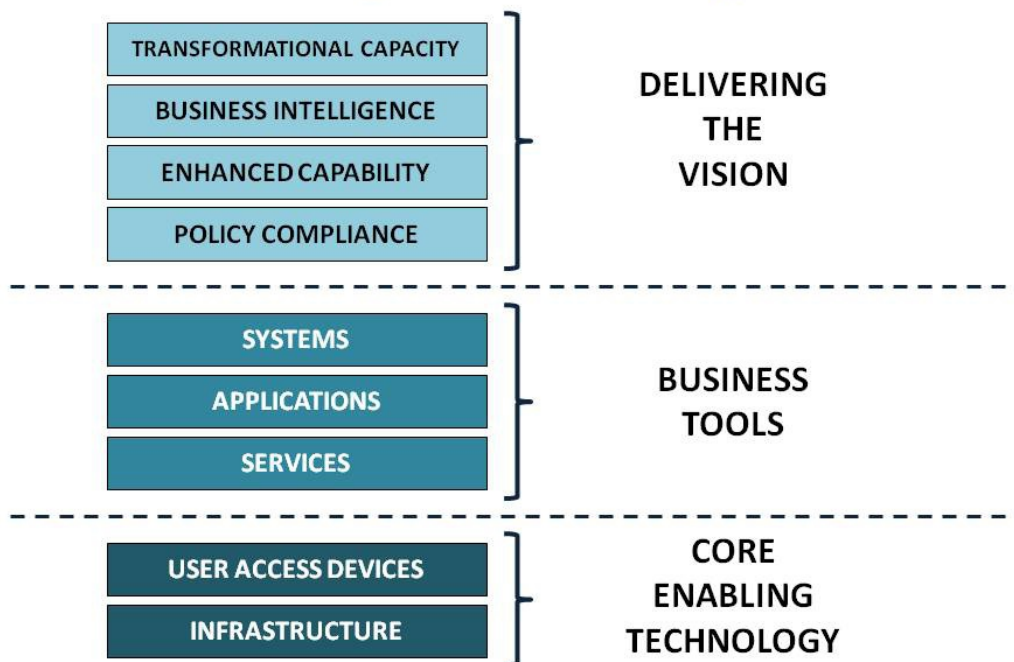
7.1. Guiding Principles

The guiding principles of the work programme follow these key steps:

- Create a sound infrastructure base on which to run high quality clinical applications
- Deliver the Electronic Clinical Record
- Improve the knowledge management and business management processes

In order to deliver the vision, all of these areas must be delivered. In some areas, these high-level end-points have further requirements that are needed first.

IM&T as a Strategic Lever: Technology Accelerator



The process of delivering the vision can be seen as an incremental one. The foundation to delivery is the necessary improvements to the core technology – both the server and network infrastructure, and also the end-user devices that clinicians, patients and managers will use to access the system and the information within the system.

Building on the foundation of the infrastructure is the development of the tools used by the business. These tools are both clinical, leading to the development of the ECR, and also managerial, supporting the production and usage of information.

Once the technology and tools are in place, the processes and people are developed to make the best possible use of the tools and the technology to deliver the benefits to the business. This will require developing processes to inform how projects and programmes are delivered, as well as

ensuring that the information about the business is collected, shared, and acted upon in the best possible manner.

Each of these areas, infrastructure, systems and processes, must be developed with an aligned vision, to build towards a programme of work, which can deliver the vision of a flexible, secure and knowledgeable IM&T function that is able to support the Trust vision.

7.2. Programme of Work

Covering a period of five years, we have split the work required into manageable components, which can be delivered, and will move the organisation forwards. Firstly, focussing on what we need to deliver today, and then getting ready for tomorrow's challenges, before delivering the components that will move the organisation to delivery of the vision.

7.2.1. Stabilisation

- ***Evaluate options for delivery of infrastructure***

Multiple options are available for the delivery of technology to the organisation. These must be evaluated to ensure that the trust are choosing the best possible option for delivery to the business:

- The resilience solution for the trust servers should be considered;
- network wireless delivery across the estate should be assessed and surveyed;
- the current approach to refreshing end-user devices should be re-visited, and there needs to be re-evaluation of the strategy for what devices are the most appropriate for the multiple different users of trust IT services

- ***Implement electronic correspondence services***

Delivering paper correspondence electronically is a key first step to a paperless clinical record, with added benefits for cost saving, improved perception of the trust to external partners, and timely delivery of information that forms part of national targets

- ***Begin work on Electronic Care Record delivery***

The first step on the path to a connected, best-of-breed ECR will be to integrate the six core clinical applications, to begin delivering the benefits of the ECR, and to engage clinical stakeholders through the delivery of those benefits

7.2.2. Improvement

- ***Continue delivery of the Electronic care Record***

Integrate all clinical systems ('Connect-All') to build on the work of the previous package to further deliver the clinical benefits of the ECR. In addition, all components of the ECR will have a single sign-on, which will mean that users only log in to the system once. A system for electronic scanning of paper notes will be implemented as part of the ECR to reduce the use of paper within the trust

- ***Develop a personal device policy***

Ensure that users can bring in their own devices to use the trust services. This will save the Trust money; build clinical and patient engagement with IT, and also with the clinical record.

- ***Enhance the network infrastructure***

Build on the network deliveries in the previous phase to allow secure use of the network by patients and other non-trust personnel

- ***Improve Management Reporting***

Knowledge management capability will be developed to create information asset owners who will be able to build a view of how the trust is operating, and report this as necessary. This management reporting will form a key part of the programme management and delivery cycle, ensuring that knowledge management is a key part of system delivery and change

- ***Back-office improvements***

The back-office administrative function will target automation of common and repetitive tasks, and improved processes to ensure that access to systems is a core part of the HR and administrative function. In addition, targeted data cleansing will improve the information available for management reporting

7.2.3. Enhancement

- ***Deliver the full ECR***

The final stage of the ECR will be delivered through a clinical portal which allows access to all of the components of the ECR. This will also be able to be published to patients, who can contribute to their health record directly, and through the implementation of telehealth monitoring. An electronic prescribing system will also be integrated into the ECR, to fulfil the clinical needs of the system

- ***Management reporting KPIs***

Management reporting will deliver a dashboard that will report on all necessary key performance indicators. This will enable managers, clinicians and patients to have access to all necessary information to deliver at their best, as well as enabling processes to minimise key national targets, such as patient re-admission

- ***Improve the enterprise view of scheduling***

The enterprise will be able to gain a unified view of the scheduling requirements of the patient, and how these fit into the organisation, to minimise both the patient's time in the process, and maximise the organisation's ability to work with as many patients as possible

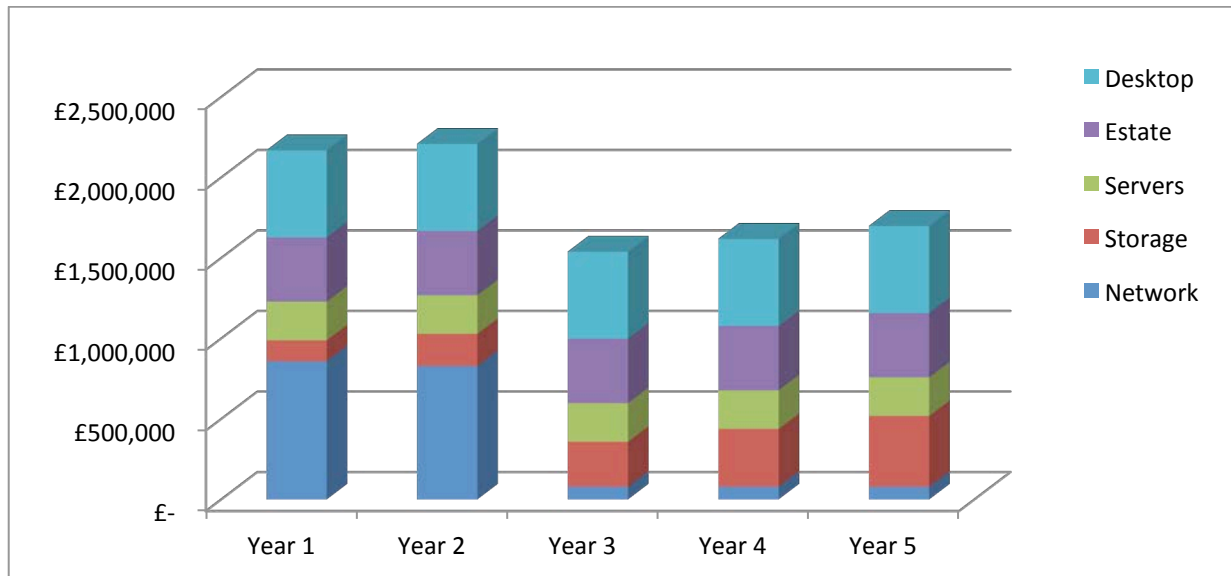
7.3. Delivery Plan & Timetable

The figures below for the delivery plan were supplied by the head of IT and have not been fully validated as part of this strategy, due to the time constraints of the process.

The delivery plan is presented in three parts, aligned to the guiding principles detailed in section 7.1. These are the infrastructure improvements, the delivery of the ECR and the process transformation to deliver knowledge management. A cost summary is included in Section 7.4.

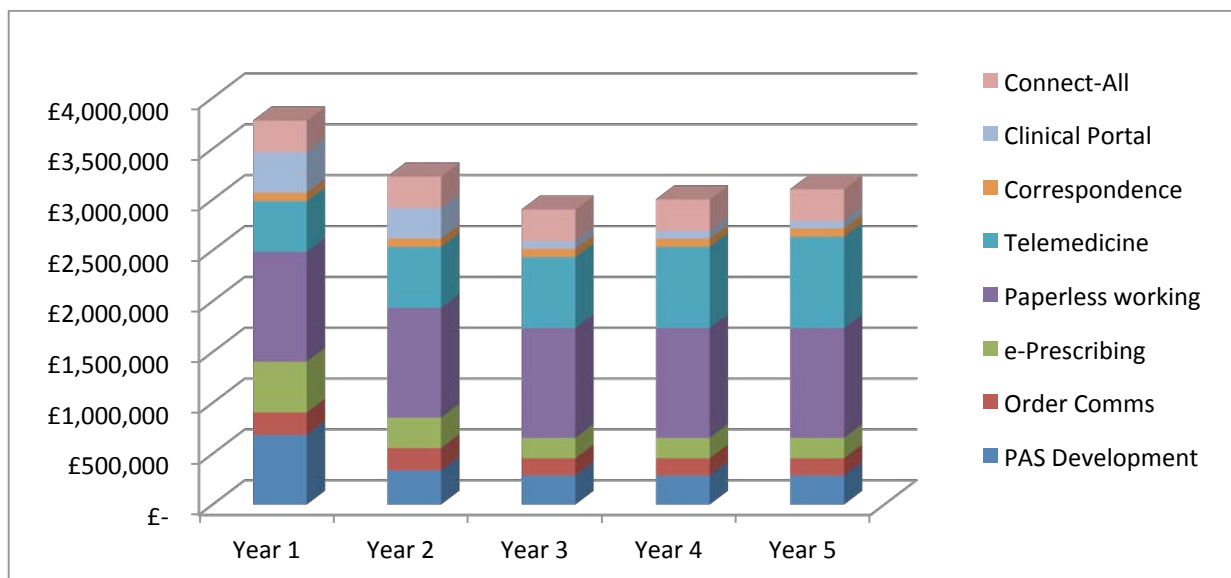
7.3.1. Infrastructure

The infrastructure elements include the improvements to the network, the physical estate used by the infrastructure, the servers and desktop hardware, and the storage solution.



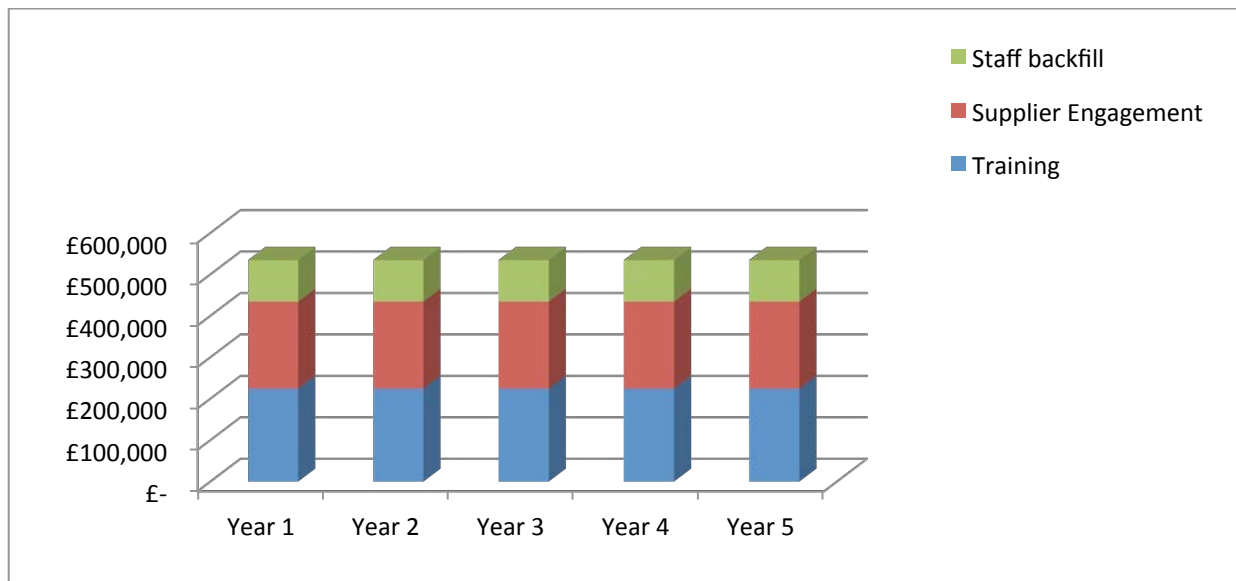
7.3.2. Electronic Care Record

The ECR elements include development of the SemaHelix PAS, such as national spine integration (PDS) and daycase planner; the integration of existing disparate systems to form the ECR, and portal to provide a single view; enhanced order communications and the development of telemedicine, e-Prescribing and electronic correspondence, as well as the move to a paperless hospital.



7.3.3. Change Management

Change management to support the improvements in knowledge management involves training of staff in the new process and procedure, supplier engagement in the new ways of working, and necessary staff backfill to allow the training to take place.



7.3.4. Cost Summary

It is important to note that the Board is not being asked to sanction all the spending referenced in this plan, merely to agree to the general strategic direction being proposed. Separate Outline Business Cases (OBC's) will be written for all the major areas of spend and agreement of these will be the triggers for committing the investment.

IM&T Work Programme 2012 - 2016

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Infrastructure						
Network	860,000	830,000	80,000	80,000	80,000	£ 1,930,000
Storage	130,000	200,000	280,000	360,000	440,000	£ 1,410,000
Servers	240,000	240,000	240,000	240,000	240,000	£ 1,200,000
Estate	400,000	400,000	400,000	400,000	400,000	£ 2,000,000
Desktop	540,000	540,000	540,000	540,000	540,000	£ 2,700,000
Sub-Total	2,170,000	2,210,000	1,540,000	1,620,000	1,700,000	£ 9,240,000
ECR						
PAS Development	690,000	340,000	290,000	290,000	290,000	£ 1,900,000
Order Comms	220,000	220,000	170,000	170,000	170,000	£ 950,000
e-Prescribing	500,000	300,000	200,000	200,000	200,000	£ 1,400,000
Paperless working	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	£ 5,400,000
Telemedicine	500,000	600,000	700,000	800,000	900,000	£ 3,500,000
Correspondence	80,000	80,000	80,000	80,000	80,000	£ 400,000
Clinical Portal	400,000	300,000	75,000	75,000	75,000	£ 925,000
Connect-All	310,000	310,000	310,000	310,000	310,000	£ 1,550,000
Sub-Total	3,780,000	3,230,000	2,905,000	3,005,000	3,105,000	£ 16,025,000
Change Management						
Training	225,000	225,000	225,000	225,000	225,000	£ 1,125,000
Supplier Engagement	210,000	210,000	210,000	210,000	210,000	£ 1,050,000
Staff backfill	100,000	100,000	100,000	100,000	100,000	£ 500,000
Sub-Total	535,000	535,000	535,000	535,000	535,000	£ 2,675,000
Total	£ 6,485,000	£ 5,975,000	£ 4,980,000	£ 5,160,000	£ 5,340,000	£ 27,940,000

7.3.5. Outline Timetable

The following table shows a possible order of projects and timescales. This is dependent on the availability of finances to support the activities and may require short-term, additional external support.

The first section highlights developments needed in IM&T infrastructure. The Trust is advised to commission a Strategic Outline Case to assess infrastructure-sourcing options, as other forms of infrastructure management may be more cost-effective than the current, in-house approach, (see next Section 7.4).

IM&T Work Programme Timetable

	Year 1				Year 2				Year 3				Year 4				Year 5							
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Infrastructure																								
Networks	Wi Fi with RFID Tracking								Portal & Integration															
	BYOD																							
																	Mobile Working							
Storage	Renew/Replace Data Storage (inc NAS & Sufficient Capacity for Digitisation of Medical Records)																							
Servers	Phased Server Replacement (100 Servers @ £15K each)																							
	Server Virtualisation Project																							
					Virtualise Desktops																			
Estate					New Data Centre																			
Desktop	Enhanced Rolling Replacement Programme																							
ECR																								
PAS Development					ECR Developments				ECR Developments															
Order Comms									Extend Results															
e-Prescribing																	Procure (6mths) Implementation							
Paperless working					EDM																			
Telemedicine					Rollout				Rollout															
	Vital Pac Integration																							
Correspondence	Correspondence																							
Change Management																								
Training					Training; Supplier Engagement; Stakeholder Engagement																			

7.4. Options Evaluation

The Head of IM&T has recommended the selected option for ECR architecture involving development of the SemaHelix patient management system, with best of breed systems interfaced for specialist departmental areas. Supporting options may involve a portal to bring together the enterprise architecture and integration which will ensure best of breed components are successfully integrated without creating a huge increase in IM&T management overhead.

For many of the programme items above, particularly those in the infrastructure workstream, there are multiple options for delivery which need to be evaluated. These range from delivery by the in-house IT team, to full outsourcing of the work package, and hybrid approaches. It is beyond the

scope of this strategy to perform a full options evaluation, but this should be considered as part of any business cases moving forward.

The case for assessing infrastructure service delivery is strong. Indeed, all NHS Trusts throughout the UK are considering infrastructure sourcing options. There is an opportunity to attain better quality services, at significantly reduced cost and in parallel, introduce innovation to support the strategic objectives of the Trust.

Guidance and direction from the Department of Health QIPP (Quality, Innovation, Productivity and Prevention) back-office work-stream and the NHS Confederation Trust Network Review group is clear. The Quality and Innovation available through the marketplace surpasses that which can be developed internally and savings of between 25% to 40%, recurring/cash releasing are projected nationally, (Audit Commission).

Locally, there is potential for savings in excess of £1m per year, (based on a Channel 3 predictive model, which has been derived from experience of conducting similar studies in similar NHS Trust). These savings will be verified by the production of a Strategic Outline Case for infrastructure sourcing options.

7.5. Conclusions & Recommendations

The Trust is already heavily dependent on its IM&T infrastructure, which is partly due to its geographical catchment and partly due to changes in the way the Trust wishes to interact with patients. The Trust's reliance on its infrastructure is being exacerbated by more initiatives to achieve a closer relationship with patients, and therefore a need exists to ensure that infrastructure is sourced appropriately. There is evidence (from other NHS organisations) that formal assessment of infrastructure sourcing options can be viewed as a QIPP initiative to transform the Trust, with a cost effective service that will simultaneously raise service quality.

The Board is asked to approve this strategy and proceed with the development of a business case for the work programme outlined. The following actions should be considered as early priorities:

- 1) **Further explore infrastructure sourcing options** through the development of a Strategic Outline Case (SOC) that will confirm the potential for cost savings; allow the case to be affirmed, (strategically, commercially, financially, managerially and economically) and ensure that the strategic direction is achievable;
- 2) **Commission an OBC** for the next stage of Electronic Care Record delivery.

Some 'quick wins' may be delivered early and these include delivery of correspondence services and VitalPAC integration. These quick wins should be considered as part of the OBC for the next stage of the ECR development.

APPENDIX 12b – Channel 3 Health Informatics Report

Shrewsbury & Telford Hospital NHS Trust

Outline Approach for Use of Health
Informatics to Support Proposed
Reconfigured Services

Sustainable Services Programme



Document Information

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- 3.0. Health Informatics in the Future Trust (Pg 6)
- 5.0. Technology Requirements in ED/UC/CC (Pg 12)
- 6.0. ED/UG/CC Example Clinical Scenarios (Pg 14)
- 9.0. Conclusion (Pg 18)

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Version History

1.0 Initial Client Release (13/10/2016)

1.0 Introduction

1.1 Document Purpose

This document has been developed as a supplement to the Outline Business Case released by Shrewsbury and Telford Hospital NHS Trust in October 2016 as part of its Sustainable Service Programme. The document details the role that Health Informatics technologies may play in supporting the reconfigured Trust in delivering effective, safe and quality care to patients attending the proposed services across the two sites.

Technology is likely to be a key enabler for the reconfiguration initiative, particularly in ensuring Trust staff can work together effectively, patients benefit from rapid access to specialists and information is available to the right people, at the right time in any location.

The following sections of the document provide:

- An overview of health informatics and its potential role in the reconfiguration
- A new vision for health informatics and the impact of the new service
- High level information around potential technology solutions to support the proposed Emergency Department, Critical Care and Urgent Care configuration
- The next steps required to further develop the vision and solutions

This document was developed by Channel 3 Consulting, a specialist Health Informatics advisory business, in conjunction with Trust Doctors, Clinicians and Managers.

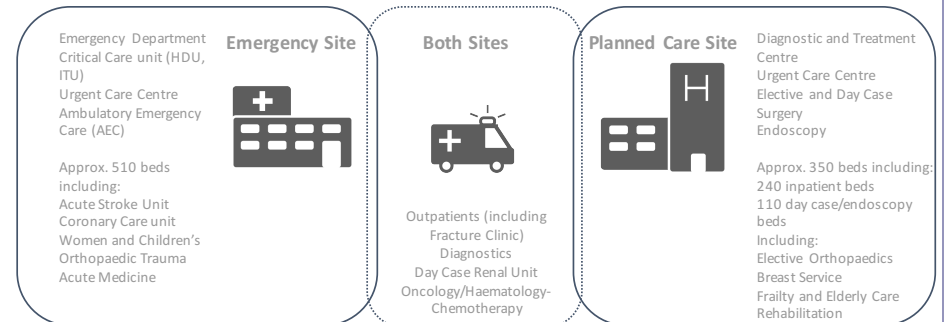
1.2 Background

The Shrewsbury and Telford Hospital NHS Trust **Sustainable Services Programme (SSP)** aims improve the care provided to the citizens of Shrewsbury, Telford and the surrounding areas. The improvements will be achieved through a proposed reconfiguration of services between its two sites, the **Royal Shrewsbury Hospital** and the **Princess Royal Hospital, Telford**.

The transformation programme will bring benefits to patients, clinicians and the wider healthcare economy through the reconfiguration of Emergency Care, Urgent Care and Critical Care across the Trust's two sites as well as the essential re-balancing of other services, including planned care. The proposed reconfiguration is expected to provide:

- Better quality, safer and more effective services to patients
- Resolution of key workforce issues currently faced by the Trust
- Sustainable services across planned, emergency, acute and critical care
- A solution to estates challenges the Trust is seeking to solve

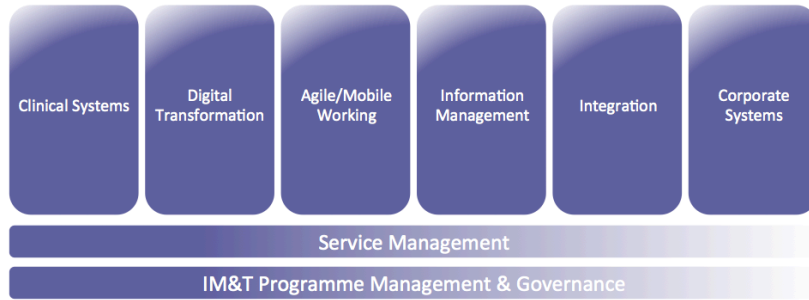
A summary of the proposed solution for reconfiguration of the services being considered is illustrated below:



2.0 Health Informatics

2.1 Overview

Health Informatics is the capabilities and technologies that enable healthcare information to be collected, managed, used and shared to support the delivery of healthcare and to promote health and wellbeing regardless of care setting or location.



The scope, which is illustrated above, broadly incorporates **Information Technology**, **Information Management** and some **Digital Medical Technologies**. Elements include:

- **Clinical Systems:** Electronic Patient Record, Clinical Decision Support, e-Prescribing
- **Digital Technologies:** Tele-health, Video Conferencing, Remote Patient Monitoring
- **Agile/Mobile Working:** Community nursing solutions, Tablets, Collaboration Tools
- **Information Management:** Business Intelligence, Data Management, Reporting
- **Integration:** Messaging between systems, cross-organisation data sharing

Health Informatics is a mature discipline and effective delivery of technologies and services is critical to the smooth running of any hospital. Therefore its management, governance and strategic direction is very important.

2.2 Why Informatics will be Important to the Future Trust

The service reconfiguration proposed under the SSP offers significant benefits to patients, clinicians and the wider health economy. It may also present some challenges to overcome and will require changes in working practices to ensure the reconfiguration is a success.

It is clear from the Trust's SSP development, and information gathered throughout the development of this document, that some working practices will not be transferrable to the new configuration. However, this is a positive change, and provides the opportunity to introduce new ways of working that are more effective and ultimately deliver a better level of care to patients.

Many of these new ways of working will be enabled by technology. Particular areas which have been identified are:

Introducing better processes: The reconfiguration will allow the introduction of new processes and ways of working. In particular the design and implementation of effective and clear care processes and increased automation, particularly in areas which are the focus of the Carter review such as pharmacy, pathology and back office functions.

Paperless and efficient administration: Paper processes and storage will be eliminated as part of the reconfiguration. Technologies will be required to support new electronic processes and fully digitised patient records. Patient communications will also be digitised (where possible) to improve efficiency.

Reduce travel between the two sites: Travel between the two sites by patients and staff may be reduced by introducing new processes and technologies.

Agile access to clinical expertise: Cross-site clinical collaboration will be increasingly important. This can certainly be supported through the use of collaboration and virtual meeting technologies. Clinical decision support solutions will also support effective delivery by providing clinicians with access to evidence based guidance and proactive workflow based alerting and protocols, for example abnormal test results, prescribing.

A new Vision for Health Informatics



3.0 Health Informatics in the Future Trust

3.1 A Vision for Health Informatics

Following a brief review of the stakeholder requirements and the demands of the SSP, a new provisional vision for Health Informatics was created. This provides stakeholders with an understanding of the purpose and direction of the Trust's Health Informatics in one brief statement.

The provisional vision for the future informatics service is ***"a strategic Health Informatics service that enables collaboration, clinical excellence, seamless information flow and digitally-enabled clinical and administrative processes"***. The vision will be refined and finalised following a further Informatics strategy development exercise.



The future health informatics service will play a key role in delivering the ambitions of the SSP and in supporting the Trust to achieve its vision of providing the best healthcare to the people of Shropshire, Telford and beyond through the enablement of efficient, effective and clinically excellent services for the Trust. A high degree of flexibility and innovation will be required to achieve this, and the maintenance of a stable and secure base of infrastructure and clinical systems will be critical.

The key attributes and outcomes of the Health Informatics service required to support the SSP are illustrated below and are detailed further on the following 4 pages:



Holistic Patient Records



Effective Workflow Management



Streamline Administrative Processes



Enhance Collaboration



Agile Workforce



Connected Patients



Partner Integration



Resilient Infrastructure

4.0 How Informatics Will Support the Reconfigured Trust



4.1 Holistic Patient Records

When information exists on paper, it can only ever be in one place and accessible to one person in one location which results in a lot of manual processes. Once captured on paper information is immediately out of date. A completely electronic patient record will make all relevant information available to the right people, at the right time and in the right place. It will provide access to comprehensive records, alerts and decision support. It should be noted that implementing an EPR has Trust wide implications.

What this will mean for patients:

- Assurance that the team caring for them have the right information and can collaborate effectively
- Information can be shared – so care providers can work together (regardless of their location) to provide the best possible advice and execute the correct course of treatment.
- Information doesn't get lost or need to be repeated
- Better patient experience

What this will mean for clinicians:

- Access to the right information at the right time, from any location
- Information presented to the clinician, without the clinician having to go looking for it in multiple systems
- Complete clinical context in one place including. tests, orders, results and medications
- Capture of observations electronically
- Embedded best practice guidelines, pathway and prescribing into workflow

How the Trust will benefit:

- Enables the Trust to use information more effectively
- Supports multi-disciplinary team and cross-site working, which is not possible with paper
- Eliminates the need for and costs of paper movement and storage
- Better use of resources



4.2 Effective Workflow Management

Using technology to drive and automate care delivery will ensure that standardised processes are followed and that information flows around the patient. Typical workflows, like test ordering, reviewing results, prescribing and obtaining clinical decision support or devising care plans will be handled electronically and driven using a common system.

What this will mean for patients:

- Care is optimised using clinical information as healthcare professionals can work together, informatively
- Care delivery plans for each patient, centred on their needs
- Assurance that the patient's full background, scenario and care plan is understood and relevant care processes are executed effectively

What this will mean for clinicians:

- Standardised clinical workflow, processes and ways of working
- Information being proactively pushed to clinicians
- Saves time, improves decision making
- Supports collaborative working amongst colleagues and other health care partners and agencies
- Simplifies ordering, prescribing and reviewing results
- Automatic triggers and decision support to aid care planning and delivery of optimal care regimes
- Supports point of care decision making

How the Trust will benefit:

- Standardisation in the delivery of care models
- More effective use of resources
- Reduced variation
- Reduction of unnecessary cross-site transfers
- Support for efficient and effective diagnostic and other support services



4.3 Streamline Administrative Processes

To support the reconfigured Trust efficient, paperless administration processes will be necessary to increase the effective use of resources, support centralisation initiatives and reduce paper storage. Patient communications should be simple, clear and where possible (and desired) electronic.

What this will mean for patients:

- Simple, clear communications
- Where desired, electronic correspondence
- Knowing who to contact at the Trust for support when required
- Avoidance of duplicate communications, cancellations and errors

What this will mean for clinicians:

- Receiving the right patient, at the right time, in the right place
- Fewer DNAs
- Assurance that the patient understands the purpose of their visit and that they are prepared
- Elimination of paper forms and processes
- An effective administrative support function

How the Trust will benefit:

- Effective administration functions and better use of resources
- No paper processes or storage
- Fewer communication issues with patients and DNAs resulting in a better experience



4.4 Enhance Collaboration

Using proven technology methodologies – the Trust will support the delivery of the right care, at the right time and in the right place by the right person. No location will be disadvantaged in terms of access to information and resources. Staff will be able to make effective and more accurate decisions with their colleagues, supported through the use of virtual collaboration tools (e.g. video conferencing, tele-health, skype, instant messaging etc.).

What this will mean for patients:

- More effective communication amongst healthcare professionals – to provide timely and efficient diagnosis and clinical care
- Reduces need for cross-site travel to see additional specialists as they are able to ‘see’ the patient remotely – using technology
- Limits the risk of being in the wrong place at the wrong time, reduces dependency on family or transport services

What this will mean for clinicians:

- Virtual collaboration tools, including instant messaging, virtual phones, follow me communications
- Access to colleagues and collaboration instantly, seamlessly from any location
- Direct access to colleagues, understanding of who does what, where based and if working/on shift.
- Tele-meetings for Trust management and facilitation of cross site multi media clinical discussion

How the Trust will benefit:

- Enables colleagues to work together across the two sites
- Facilitates access specialist support and advice regardless of location
- Prevents teams from becoming disjointed
- Reduces unnecessary cross-site travel



4.5 Agile Workforce

Agile and mobile working technology will create an environment that allows staff to work effectively from any location and enable cross-site teamwork. Teams will have access to the information and collaboration tools they require to make sure they are available to their colleagues and patients, using end-user devices that suit their role. This requires suitable IT infrastructure, reliable and fast connectivity and suitable mobile/agile devices.

What this will mean for patients:

- Access to healthcare professionals regardless of their location
- Assurance that the information used during a consultation is complete, reliable and up to date
- Clinicians can use agile technologies to inform and advise patients – to involve them in their decision making

What this will mean for clinicians:

- Access to required information from any location or device
- Possibility to work “off-line” where connectivity is unavailable
- Allows for the development of virtual teams and working
- Multiple input methods – voice, touch screen, pen, keyboard.
- Allows clinicians to work closer to their patients

How the Trust will benefit:

- Agile working will be a key enabler to the future Trust configuration
- Enables clinicians and allied professionals to work flexibly across the two sites whilst remaining available to their colleagues
- Ensures that mobility does not result in a disadvantages, in terms of access to information, systems and colleagues



4.6 Connected Patients

Innovative connected care solutions enable the patients and clinicians to connect, allowing delivery of care in the hospital and other environments. Solutions specifically designed for Emergency and Critical care allow real-time patient physiology to be monitored by specialists from a remote monitoring station. This would allow the Trust to provision ICU/HDU beds on either site to support patients who need specialist monitoring or care. Additionally, tele-medicine solutions and other tools may be used to support patients to monitor and care for themselves – keeping them out of hospital.

What this will mean for patients:

- Access to a healthcare professionals based in other locations
- Access to Critical Care support and oversight from either hospital site
- Reduces requirement for transfer between sites
- More accurate diagnoses made
- Patient telemedicine to provide at home/community support and guidance.
- Supports patient self management

What this will mean for clinicians:

- Real time remote access to patient vital signs and complete clinical record
- Patient vital signs automatically collected and added to the patient record
- Ability to support clinical colleagues remotely, with full access to the necessary information
- Possible provision of proactive remote assistive care and virtual consultations outside of the hospital environment

How the Trust will benefit:

- Two sites working as one – staff will collaborate effectively together and support each other in diagnoses and clinical decision making
- Better use of resources, especially clinical specialists working in Critical Care
- Ability to provision ICU/HDU beds on the planned care site
- Modernisation of Critical Care facility using leading edge monitoring solutions
- Maximises the use of acute care to those that truly need it



4.7 Partner Integration

Improved use of technology as a means for better communication and interoperable working will allow the Trust to share information (and obtain access to information) with partner organisations in the local health economy and beyond. The patient once again becomes central to the decisions being made – with teams of professionals from multiple sites and organisations working together, all with reliable and timely access to the information they need.

What this will mean for patients:

- Provides assurance that those caring for a patient have correct information
- No need to repeat information to multiple healthcare professionals or carry records to appointments
- May reduce the need for referral to hospital and admission – care can be delivered closer to home by a suitable partner organisation

What this will mean for clinicians:

- Enables cross-org MDT working
- Better liaison within teams, across teams and healthcare professions – both within the Trust and across other healthcare providers
- Fully designed, integrated care pathways and care plans for interaction between social, physical and mental health partners
- Screening and assessments can be delivered in the community, or at home

Why it is important to the reconfigured Trust

- Shared record across different care settings (GP, Community)
- Better coordination of care amongst partners, supports prevention and out of hospital care.
- Non acute care can be managed and coordinated in the community, supported by the Trust but alongside partner providers



4.8 Resilient Infrastructure

To support the aforementioned initiatives and ensure safe, resilient and secure cross-site working the Trust will be heavily dependent on its infrastructure provision. This will include internal networking, Wi-Fi, external networking between Trust and partner sites and server, datacentre and device technologies. Other modern technologies such as RFID for the locating of assets and people may also support the Trusts ambitions. Security will become a big concern for the Trust as it develops more detailed sets of patient data, and will require continuous review and uplift to stay ahead of new cyber security threats. Infrastructure is an unseen but essential element of any Health Informatics service and investment in this area will be critical to the success of the SSP.

What this will mean for patients:

- Enables patients to benefit from digitally-enabled healthcare solutions
- Assurance that technologies to support cross-site care are safe and resilient
- Personal information is kept secure

What this will mean for clinicians:

- Enables clinicians to benefit from digitally-enabled healthcare tools
- Reliable, safe and secure access to health informatics services
- Support for flexible cross-site working
- Potential ability to source and locate equipment and people using RFID

Why it is important to the reconfigured Trust

- Enables cross-site working and reduction in patient transfers
- Support for new technologies
- Better use of resources
- Secure patient and corporate information
- Closer integration of remote sites and partner organisations

Informatics for Emergency, Urgent and Critical Care



5.0 Technology Requirements for ED, UC and CC Configuration

The following section describes the high level functionality that Trust stakeholders indicated may be required to support the proposed reconfiguration. Possible solutions have also been indicated. It will be necessary to refine these requirements as the reconfiguration exercise progresses, eventually developing an outline specification and delivery approach.

5.1 Functional Requirement



Holistic Patient Records

- Full patient record available for read and write in one system interface
- Seamless integration with other systems including RIS/LIMS/Pharmacy
- All vitals (whether manually or automatically collected), results, physiological and imaging data embedded within the patient record
- Elimination of all paper processes



Effective Workflow Management

- Protocolised triage/investigation processes
- Standard data collection forms
- Real-time tracking of information (e.g. bed/patient status, wait times)
- Whiteboard tracking solution within ED and UC
- Closed loop medication management
- Full test ordering and results review through one clinical interface
- Clinical decision support



Streamline Administrative Processes

- Registration of unidentified patients and subsequent records merge
- Full paperless administration processes (eliminate CAS cards)
- Pre-registration and quick registration
- Electronic coding of ED episode
- Kiosks and patient self-check in



Enhance Collaboration

- Uninhibited communications access to colleagues regardless of location
- Ability to determine presence of and locate colleagues
- Unified communications through instant messaging, phone, tele-presence
- Tele-meeting functionality to support clinical conference/MDTs
- Remote visual inspection of the patient
- Ability to alert colleagues and provide linked patient records

5.2 Possible Solutions

- (EPR), Electronic Patient Record, to include the level of functionality indicated below (through ED/UC EPR module or system integration) – it should be noted that implementing an EPR has Trust wide implications
- ED system/module, integrated to other Trust clinical systems, including fully integrated diagnostic modules and workflow (RIS/PACS; LIMS; Cardiology etc.)
- Medications Management solution or Pharmacy module, integrated to EPR for both eMAR and FP10 capability and tailored for the ED
- Clinical decision support functionality embedded within the electronic patient record solution
- Integrated whiteboard solution
- Fully integrated patient monitoring solution (ICU/HDU-type) – fixed and mobile to support real time remote monitoring of critical patients from CCU remote monitoring station
- Audio/Visual capability allowing patient viewing/engagement from remote locations by CCU consultant
- Video conferencing, tele meeting and MDT solution to support cross-site clinical working
- Mobile working capability for clinicians including interface solution and flexible device options

Functional Requirement (Continued)



Agile Workforce

- No location will disadvantage users in terms of access to systems
- Ability to access systems from multiple device types (to suit role)
- Unified communications
- Virtual working as teams



Connected Patients

- Fully connected real-time Critical Care (ICU/HDU) monitoring solution
- Reduced latency between event, data capture and alerting through automated solution
- Fixed solutions (for CC beds) and mobile options to support quick oversight
- Ability to provision remote HDU beds for Critical Care oversight/monitoring
- Visual and audio capability to support patient assessment (although privacy concerns exists)
- Remote monitoring stations/locations for Critical Care Consultant oversight
- Patient vitals information flowing directly from devices into patient record
- Ability to use tele-health devices to monitor patients at home (poss. Pre-op or preventative)
- Educational and self-care applications



Partner Integration

- Ambulance service information and communication solution for ED/UC
- Borderless information sharing with local healthcare economy (GP, Community)
- Comprehensive and integrated electronic discharge summaries



Resilient Infrastructure

- Fast, reliable and resilient infrastructure
- Wireless technology to support mobile/agile working
- Borderless, reliable remote access
- Support for RFID tracking for physical tracking of assets
- Very resilient cross-site network links
- Very resilient datacentre capability with full disaster recovery
- Disaster recovery
- Security solution

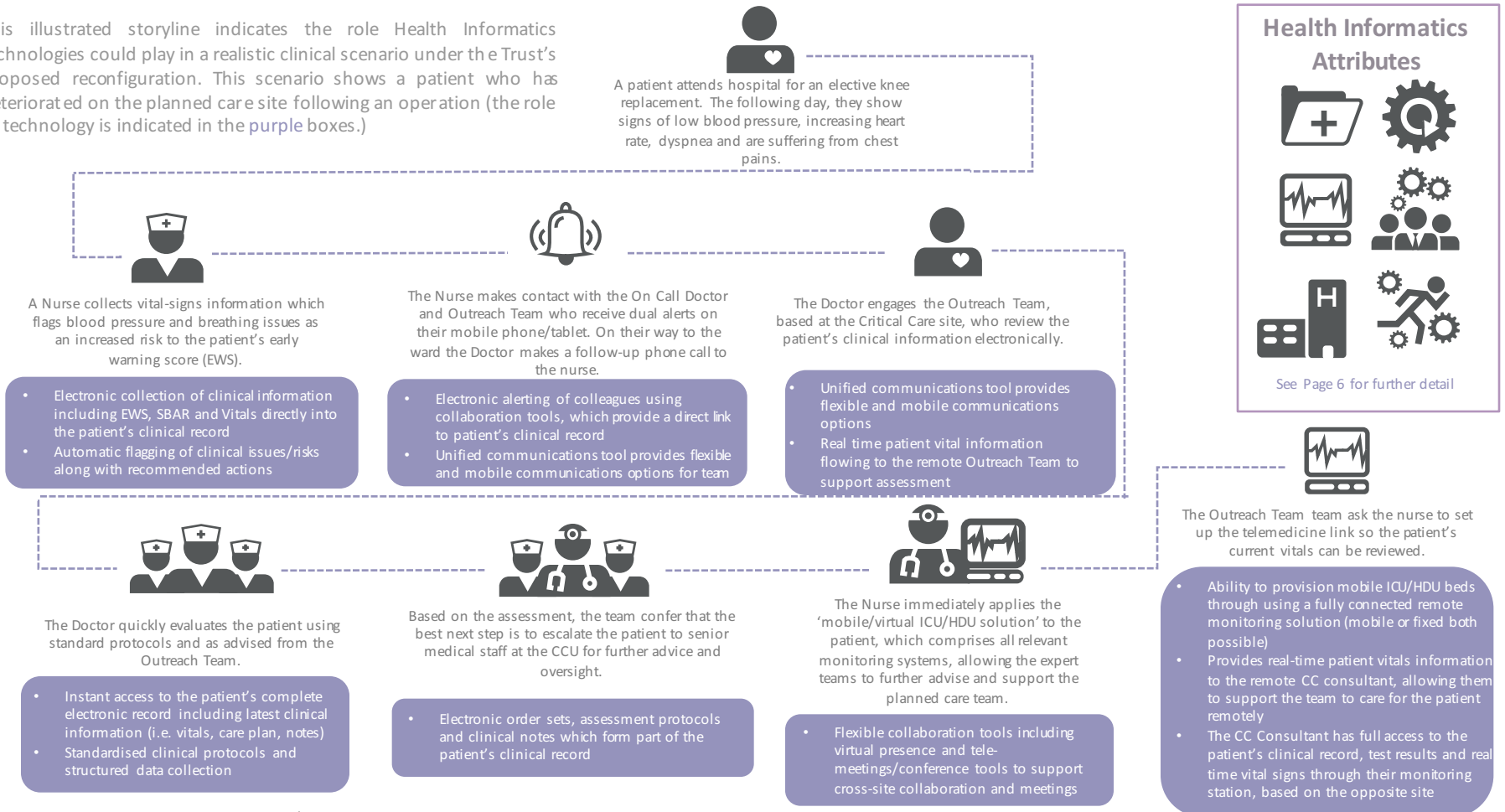
Possible Solutions (Continued)

- Unified communications solution allowing users to determine presence and location of colleagues and contact them through a variety of methods (instant messaging, alerting/paging, virtual and physical phones)
- Alerting/paging system to working with IT systems allowing alerts to be broadcast to staff and provide links to patient records requiring review
- Integration with external parties using agreed information flows and Trust integration capabilities and solutions
- Resilient, fast and secure network infrastructure within the hospital buildings (wireless, wired, RFID) and between the sites to support cross-site traffic. The cross-site interconnectivity will be critical to clinical operations and must be highly resilient and redundant
- Support for RFID tracking of assets
- Resilient and secure datacentre service
- All commodity infrastructure services must be underpinned by disaster recovery and security solutions and technologies

The following pages will detail a set of high level clinical scenarios for the proposed reconfiguration and detail how these solutions may support them.

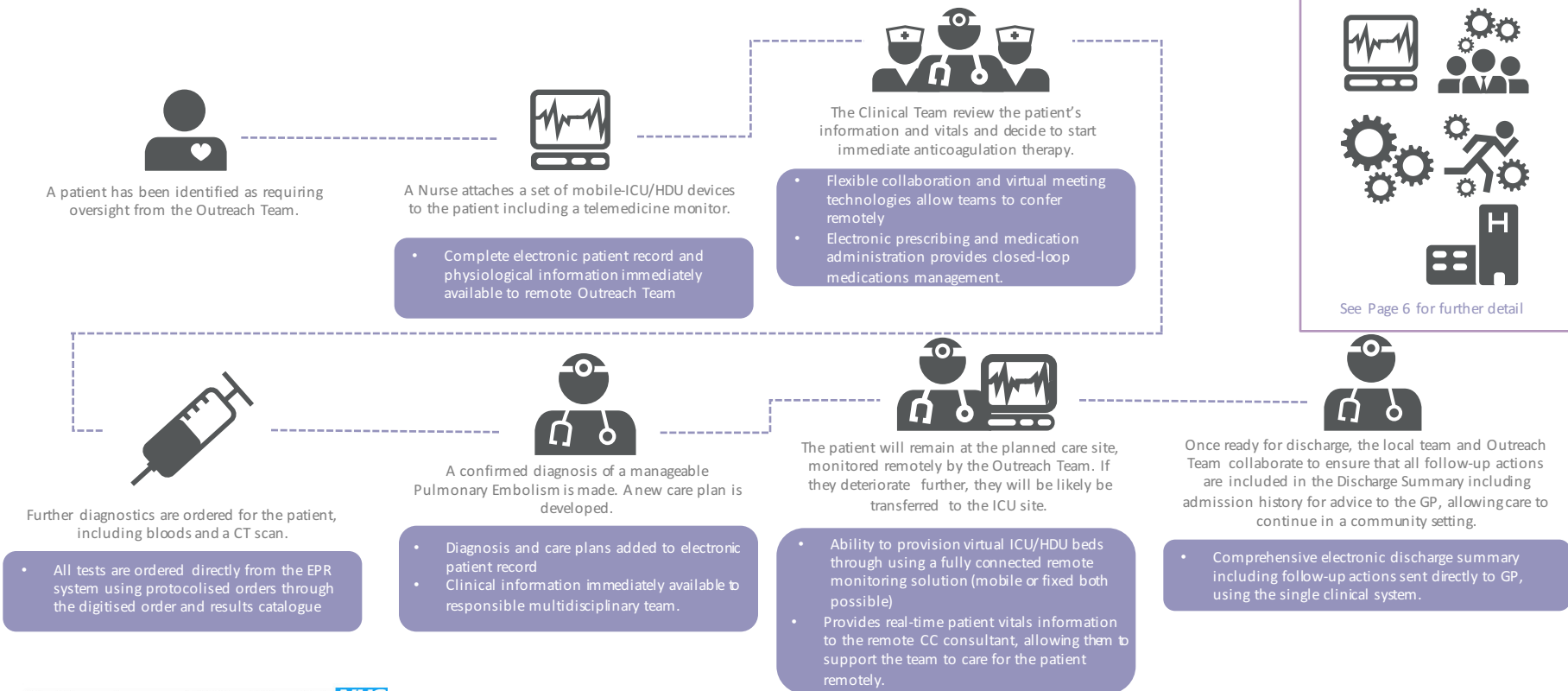
6.0 Informatics in ED, UC and CC: Scenario 1

This illustrated storyline indicates the role Health Informatics technologies could play in a realistic clinical scenario under the Trust's proposed reconfiguration. This scenario shows a patient who has deteriorated on the planned care site following an operation (the role of technology is indicated in the purple boxes.)

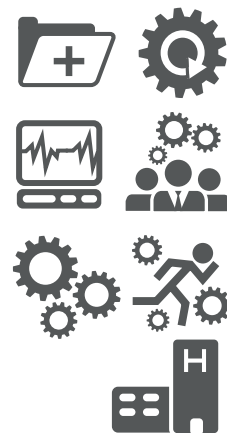


7.0 Informatics in ED, UC and CC: Scenario 2

This illustrated storyline indicates the role Health Informatics technologies could play in a realistic clinical scenario under the Trusts proposed reconfiguration. This scenario shows a patient who is under observation by a nursing outreach team (the role of technology is indicated in the purple boxes.)



Health Informatics Attributes

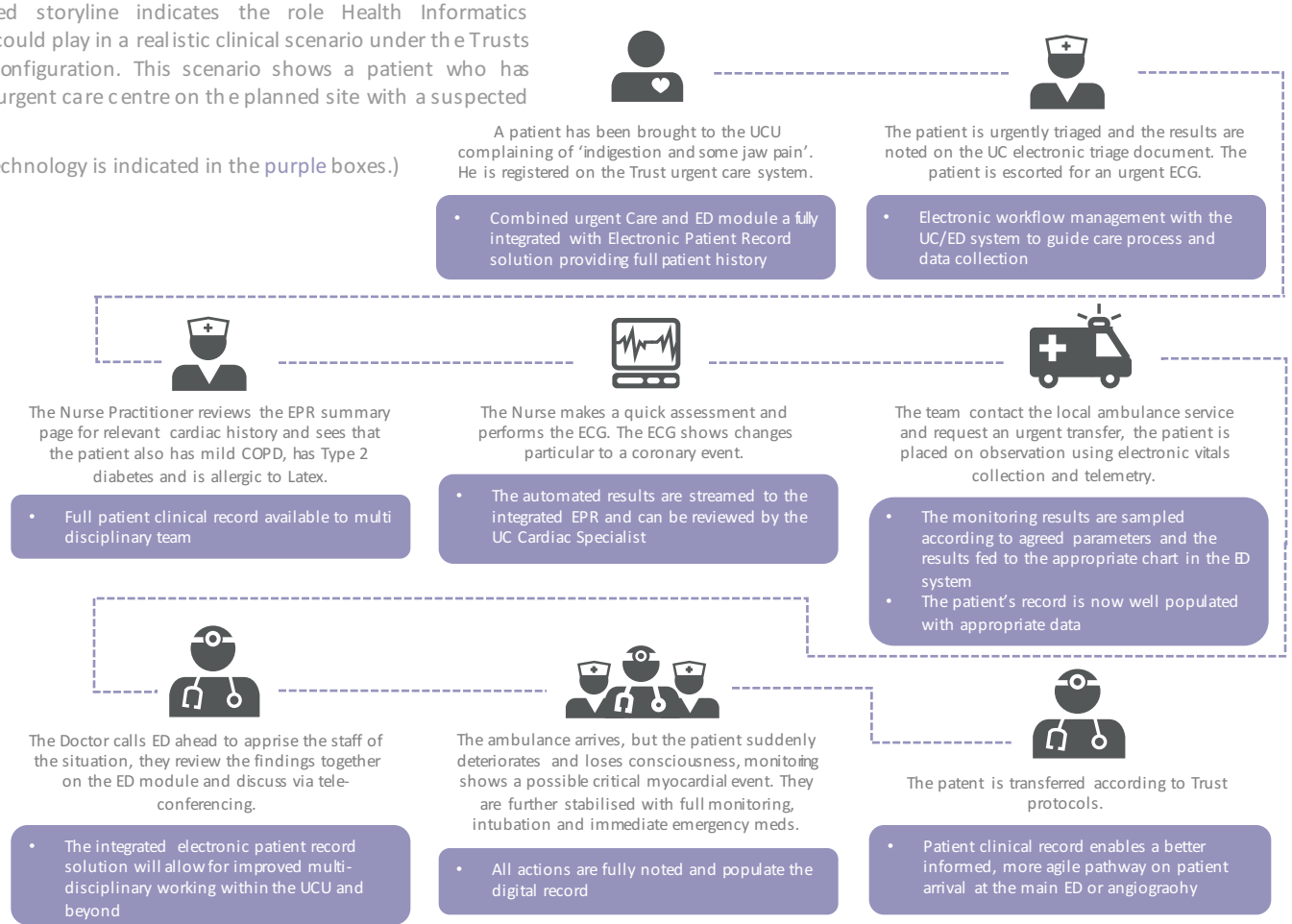


See Page 6 for further detail

8.0 Informatics in ED, UC and CC: Scenario 3

This illustrated storyline indicates the role Health Informatics technologies could play in a realistic clinical scenario under the Trusts proposed reconfiguration. This scenario shows a patient who has attended the urgent care centre on the planned site with a suspected cardiac issue.

(The role of technology is indicated in the purple boxes.)



Health Informatics Attributes

See Page 6 for further detail

Conclusion



9.0 Conclusion

9.1 Summary

The proposed solution for service reconfiguration being developed under the SSP will transform healthcare services for the better, benefiting patients in Shrewsbury, Telford and beyond.

Whilst the reconfiguration does present some challenges, it is a positive step forward and opens some real opportunities to revolutionise the way care is delivered through the intelligent application of Health Informatics technologies.

This document is the first step in defining the potential solutions that may ultimately be implemented to support the services within the reconfigured Trust. During the next phases of the SSP these solutions will be further defined, in conjunction with clinicians and other stakeholders. Future phases of work will ultimately lead to the detailed specification and design of a solution which is “owned” by the Trust’s clinical workforce, at a level of detail where technologies can be procured and implemented in the most cost effective way.

It should also be noted, that whilst the SSP is a major driver for change within the Trust, a number of local and national initiatives are also driving the need for change in the use of health informatics technologies. These include:

- Delivering the NHS Five Year Forward View
- Changes to deliver the above designed by the region’s STP
- Implementation of health economy wide integration and the Local Digital Roadmap
- Increased demand for automation and efficiencies specified in the Carter review
- Identifying opportunities and implementing recommendations in the Wachter report

It will therefore be necessary for the Trust to define an overarching strategy for delivery of all requirements and initiatives, including the ultimate SSP solution, and of course a means of financing its delivery.

9.2 Next Steps

To further refine and progress the definition (and ultimately implementation) of the solutions within this document, likely next steps to be undertaken by the Trust will include:

1. Development of a revised Health Informatics Strategy, to include a delivery strategy for these requirements and those of other initiatives
2. Further phases of clinician engagement to develop a detailed understanding of and specification for the needs of the reconfigured Trust. A particular focus on Emergency Department, Urgent Care and Critical Care will be required
3. Detailed solution specification and design for the above solutions
4. Design and mapping for new clinical processes to be in place to support changes
5. A market testing exercise to understand the availability and capability of connected ICU/HDU solutions and the possible appointment of a partner to advise on the design of the solution

APPENDIX 12c – Paper Light Project Group Terms of Reference

Sustainable Services Programme

Paper Light Project Group

Terms of Reference

Purpose
To ensure delivery of paper light way of working in the development of a new Emergency Department and Critical Care Unit as part of the Sustainable Services Programme.
To ensure utilising lessons learnt from other Trusts and projects are used to develop a programme for the rest of the organisation.
To facilitate the development and understanding of operational and workforce impact of emerging/proposed options within and between Care Groups and Corporate Teams.
To ensure the leadership and involvement of Clinical and Managerial Leads in the delivery of the paper light way of working.
To ensure the achievement of key deliverables and milestones within and across Care Groups and Corporate Teams to aid delivery of a paper free NHS by 2020
To ensure the work undertaken aligns to the overall Sustainable Services Programme (SSP) timelines and deliverables.

Objectives	
1	To support and enable the transformation change elements of the Sustainable Services Programme (SSP)
2	To receive updates from discussions between all working groups and Care Groups (within the the Trust/local health system) regarding the wider Sustainable Services Programme (SSP) ensuring inter-dependencies are identified and maintained through both programmes
3	To report to and receive feedback from the Sustainable Services Steering Group and Sustainability Committee
4	To support ongoing engagement and communication in relation to the integration of Clinical and Patient facing systems within the Trust
5	To report progress into the SSP Project Team and Sustainability Committee

Chair

Associate Director of Service Transformation

Membership

Associate Director of Service Transformation

Head of IT

IT Programme Manager

Transformation Team – Project Manager

Transformation Team – Clinical Facilitator

Centre Manager – Patient Access and Outpatient Nursing Support

Patient Access Manager

Booking and Scheduling Manager

Nominated/agreed deputies to attend as required

Quoracy

To be agreed

Accountability

The Paper Light Project Group will report into the Sustainable Services Steering Group and ultimately the Sustainability Committee (as a sub-group of the Trust Board).

Frequency of Meetings

Fortnightly (frequency of meetings to be assessed throughout the duration of the project)

Circulation of Notes

Members of the Paper Light Project Group and to the SSP Steering Group membership for info.

Date for Review of these Terms of Reference

July 2016

APPENDIX 15a – Phasing and Decant Strategy

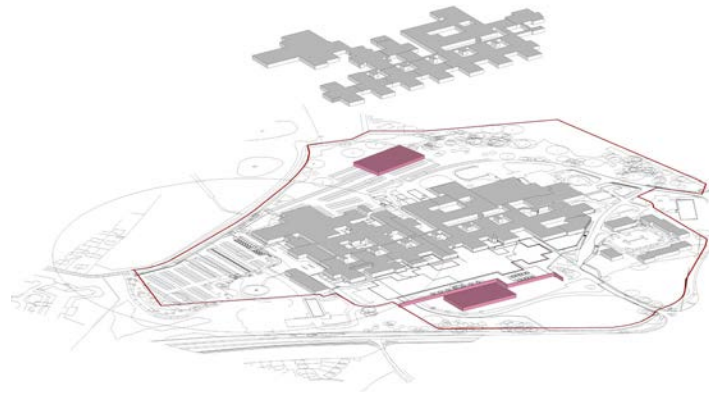
SATH- Sustainable Services Programme
 AHR-SCH-008 Phasing Strategy

OPTION B- PRH Emergency; RSH Planned Care

Phase	Princess Royal Hospital				Royal Shrewsbury Hospital				
	Construction Activities	Temporary Accommodation	Departmental Moves		Time Scale	Construction Activities	Temporary Accommodation	Departmental Moves	
			Out	In				Out	In
Phase 0 Enabling Works	Build new Retaining Wall	Off Site Car Parking Temporary Entrances Required				Refurb Cardio Rehab to Stores & Loading Bay		Cardio- Rehab	
	Build new MSCP's				Service Diversions				
	Service Diversions				Service Utilites				
	Cut and Fill								
Phase 1	Build new Clinical Support Accommodation, Emergency Portal	Temporary Entrances Required	% Theatres			Demolish existing Catering & stores	Catering 67% of Outpatients	Catering Move to Temporary Facility	Stores move to new accommodation
	Build new CCU, Wards and Entrance					Construct new MLU and Ward Accommodation		Store and Loading Bay Move to Cardio Rehab	67% of Outpatients move to temporary accommodation
	Refurbish Theatres (Phased)					Refurb 67% of Outpatients		% Theatres	
	Build Transitional Care					Refurb Theatres (Phased)		Fertility moves to other area of Ward 32	
						Refurb Loading Bay into Day Case Area		67% of Outpatients move to temporary accommodation	
Phase 2	New Build Operational		Endoscopy	ED/CCU/Wards		Refurb Ward Block	Catering 33% Outpatients Temporary Entrance Required	Fertility moves to other area of Ward 32	Day Case in former loading bay area
	Refurb former Critical Care, IP Wards and A&E		Day Surgery	Entrance & Retail		Refurb 33% of Outpatients		Fertility moves to other area of Ward 32	
	Educational Refurbishment & New Build		% Theatres	Inpatient Accommodation		Refurb Path Lab		33% of Outpatients move to temporary accommodation	
	Extension to Loading Bay & Existing Loading Bay works		% Loading Bay	% Theatres		Form new Atrium Entrance, Retail, Catering, UCC		%Path Lab	
	Mortuary Refurbishment		% Mortuary					67% of Outpatients move to refurbished Outpatients	
								33% of Outpatients move to temporary accommodation	
				Inpatient Wards moves from ward block to new build accommodation					
				% Theatres					

KEY ■ Works completed in previous phases
■ Building works in Current Phase

PHASE 0 - ENABLING WORKS



- Build new Retaining Wall
- Build new MSCP's
- Service Diversions
- Cut and Fill
- Services/Utilities

PHASE 1



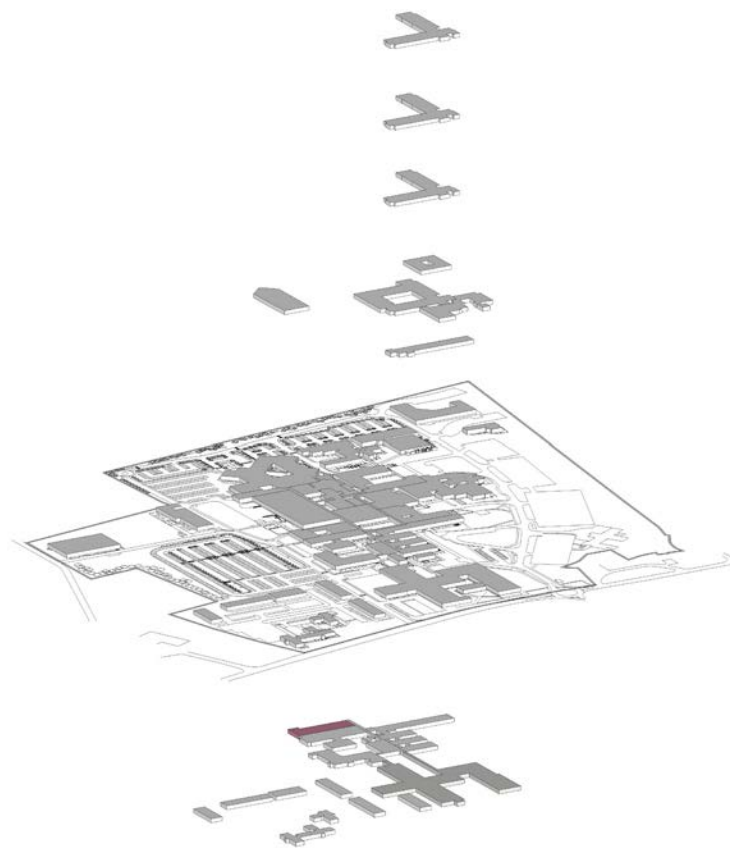
- Build new Clinical and Support Accommodation, Emergency Portal
- Build new CCU, Wards and Entrance
- Refurbish Theatres (Phased)
- Build Transitional Care

PHASE 2

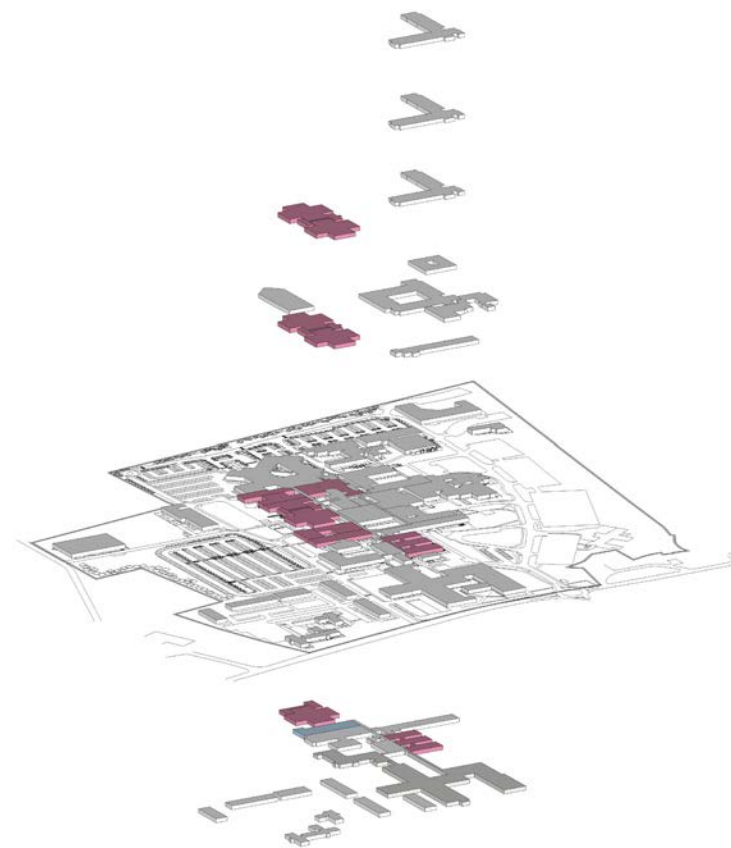


- New Build Operational
- Refurb former Critical Care, Wards and A&E
- Extension to Loading Bay
- Existing Loading Bay Works
- Mortuary Refurbishment
- Educational Refurbishment & New Build

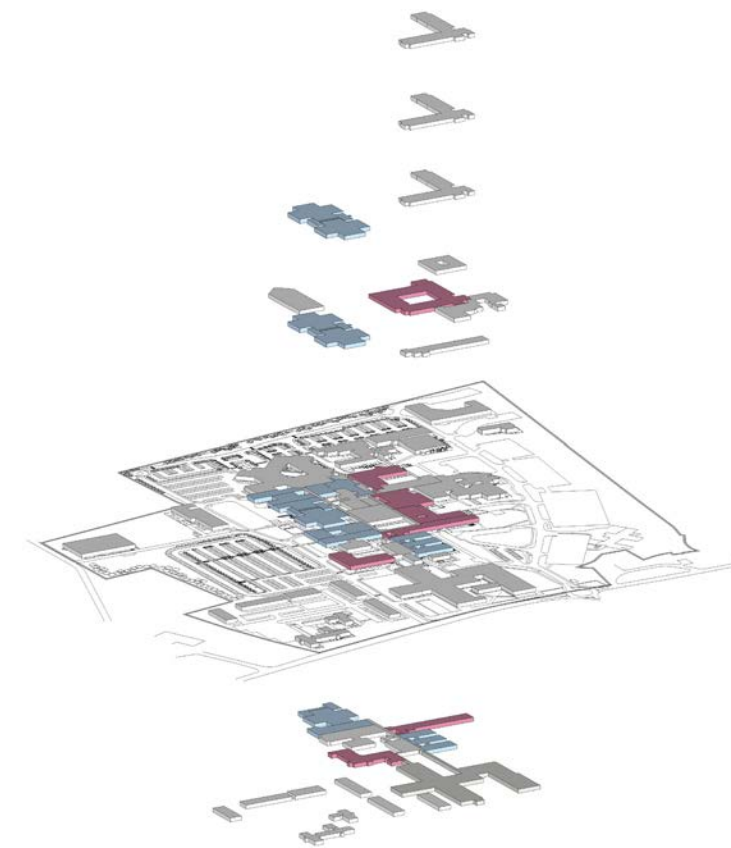
PRH - THE EMERGENCY SITE



- Refurb Cardio Rehab to Stores & Loading Bay
- Service Diversions
- Services/Utilities



- Demolish Catering & Stores
- Refurb 67% of Outpatients
- Refurb Theatres
- Refurb Loading Bay into Day Case Area
- Refurb Ward 32 & Fertility into Fracture Clinic, Fertility & Pharmacy
- Build new Wards



- Refurb Ward Block
- Refurb 33% of Outpatients
- Refurb Path Lab
- Form new Atrium Entrance, Retail, Catering, UCC

RSH - THE PLANNED CARE SITE

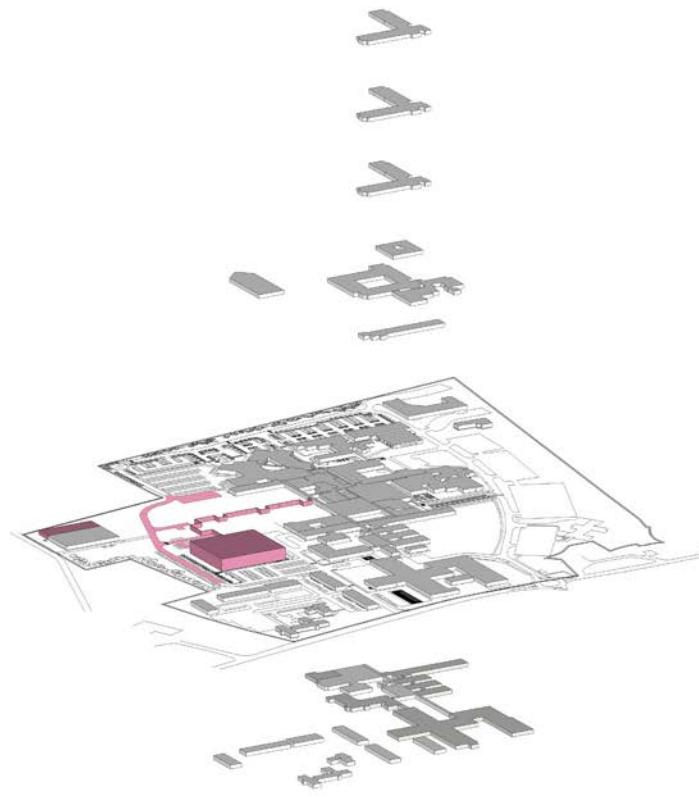
SATH- Sustainable Services Programme
 AHR-SCH-008 Phasing Strategy

OPTION C1- RSH Emergency; PRH Planned Care

Phase	Princess Royal Hospital				Royal Shrewsbury Hospital			
	Construction Activities	Temporary Accommodation	Departmental Moves		Construction Activities	Temporary Accommodation	Departmental Moves	
			Out	In			Out	In
Phase 1	Build new retaining wall	Temporary Entrance Off-Site Parking			Construct new MSCP	Displaced Parking Estates Catering Stores (in MSCP)	Estates Catering Move to Temporary Facility Stores move to temp. location in MSCP	
	Service diversions				Demolish Estates and Re-house			
	Cut and Fill				Service Diversions			
	Service/Utilities				Relocate Generator			
		Boiler House Extension						
		Service/Utilities & Duct						
		Cut and Fill/Road						
		Build new Retaining Wall						
		Demolish Catering/Stores						
	Phase 2	Refurbish theatres						
Construct new Atrium & Entrance		Refurb 67% of OPD						
Construct new Centre of Excellence - Chemotherapy Day Case Centre		Service Yard and Stores						
		Construct new ED, CCU, MLU, W&C and Wards						
Phase 3	Refurb Neonatal & Delivery as Endoscopy and Day Surgery	UCC	W & C's to RSH CCU to RSH UCC to temporary accommodation Endoscopy to refurbished Neonatal & Delivery Suite	Endoscopy to refurbished Neonatal & Delivery Suite Breast to refurb Children's Oncology Day Surgery Refurbished Inpatients Ward	Refurb Theatres	Catering	% Theatres 33% of Outpatients to Temporary Accommodation Fertility moves to other area of Ward 32 Fracture Clinic into Ward 32 and fertility A&E changes into UCC Function moves into temporary accommodation Endoscopy to PRH Day Surgery to PRH Breast to PRH	% Theatres 33% of Outpatients to Temporary Accommodation 67% of Outpatients into refurbished Outpatients Fertility moves to other area of Ward 32 Offices inot the Ward Block Stores into new Build W&C's
	Refurb Children's Oncology as Breast				Refurb 33% of Outpatients			
	Refurb A&E to UCC				Refurb Ward 32 & Fertility			
	Refurb CCU Template				Refurb Ward Block			
	Refurb Ward Template				Refurb Fracture Clinic and A&E			
					Refurb Path Lab			
	Form new atrium entrance, retail and catering.							
Phase 4	Refurb Endoscopy to Offices		Gynae to RSH		Refurb of Treatment Centre			Fracture Clinic New Entrance Atrium Catering

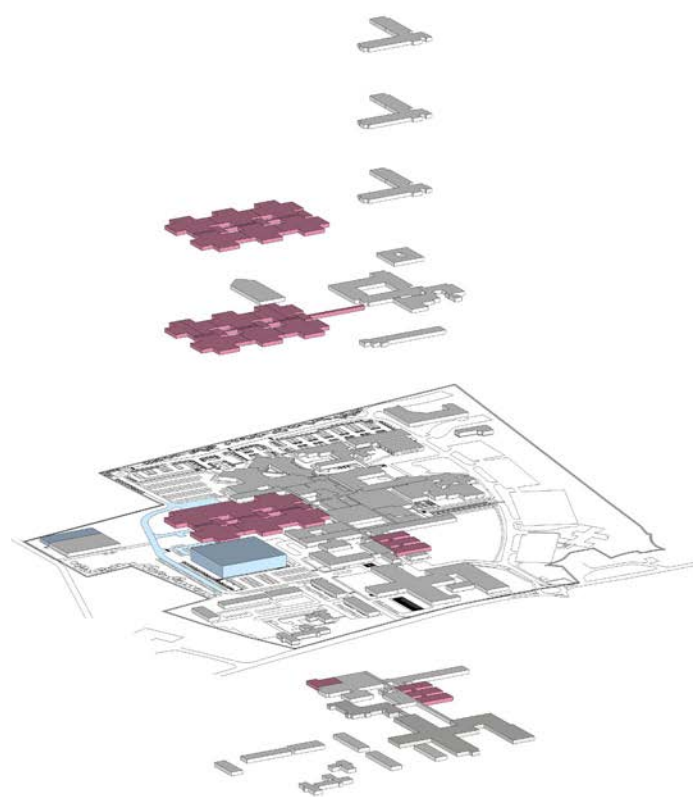
KEY ■ Works completed in previous phases
■ Building works in Current Phase

PHASE 0 - ENABLING WORKS



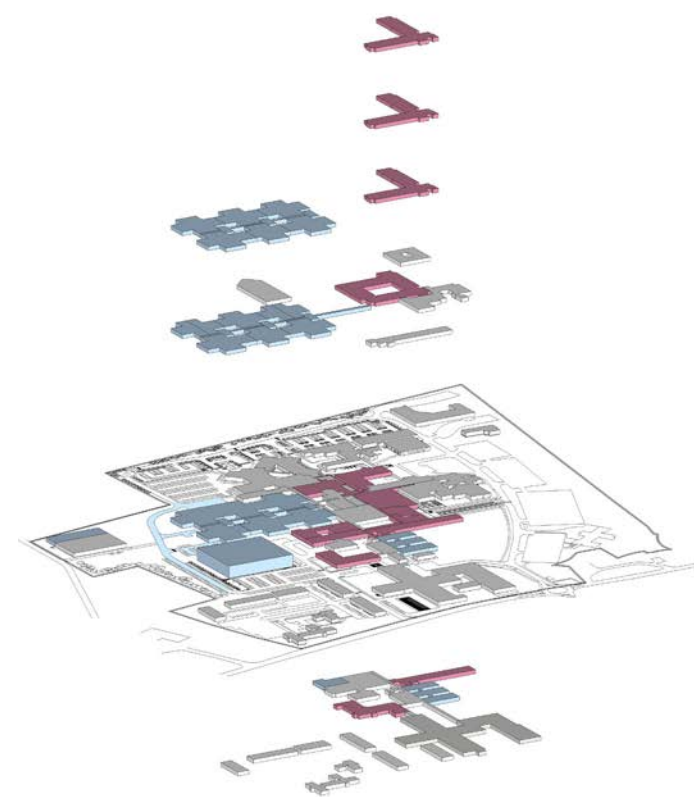
- Construct new MSCP
- Demolish Estates & Re-house
- Service Diversions
- Relocate Generator
- Boiler House Extension
- Service/Utilities & Duct
- Cut and Fill/Road
- Build new retaining wall
- Demolish Catering/Stores

PHASE 1



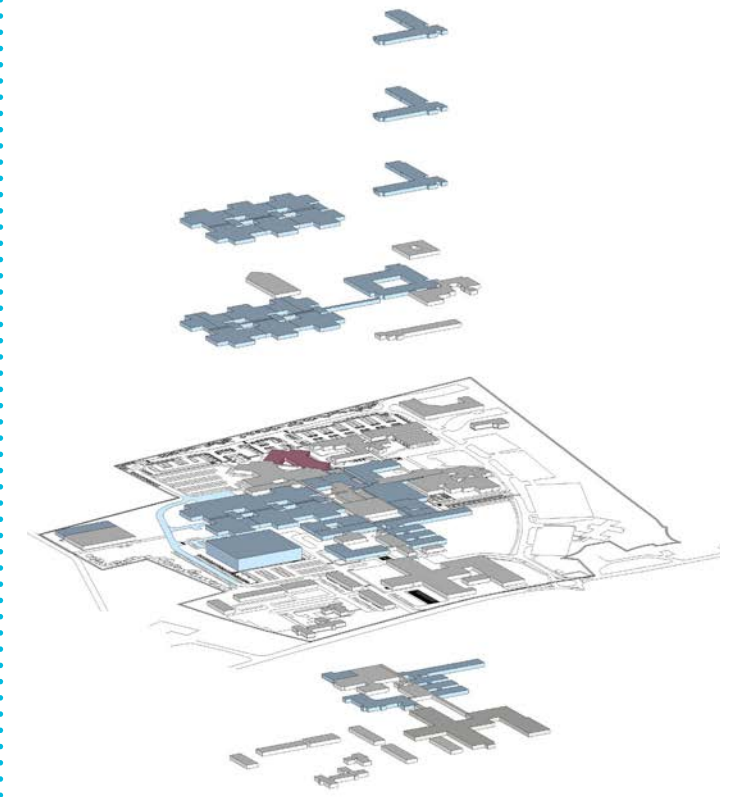
- Refurb Cardio-Rehab to expansion of Pharmacy
- Refurb 67% of OPD (in 2 phases)
- Service yard & Stores
- Construct new ED, CCU, MLU, W&C's and Wards

PHASE 2



- Refurb Theatres
- Refurb 33% of Outpatients
- Refurb Ward 32 & Fertility
- Refurb Ward Block
- Form new atrium entrance, retail and catering.
- Refurb Fracture Clinic and A&E
- Refurb Path Lab

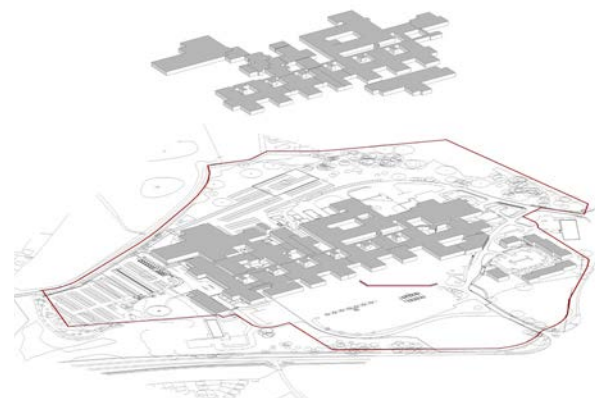
PHASE 3



- Refurb of Treatment Centre

RSH - THE EMERGENCY SITE

PRH - THE PLANNED CARE SITE



- Build new retaining wall
- Service diversions
- Cut and fill
- Services/Utilities



- Refurb Theatres
- Construct new Atrium & Entrance
- Construct new Centre of Excellence - Chemotherapy Day Case Centre



- Refurb Neonatal & Delivery as Endoscopy & Day Surgery
- Refurb Children's Oncology as Breast
- Refurb A&E to UCC
- Refurb CCU template
- Refurb Ward template





- Refurb Endoscopy to Offices

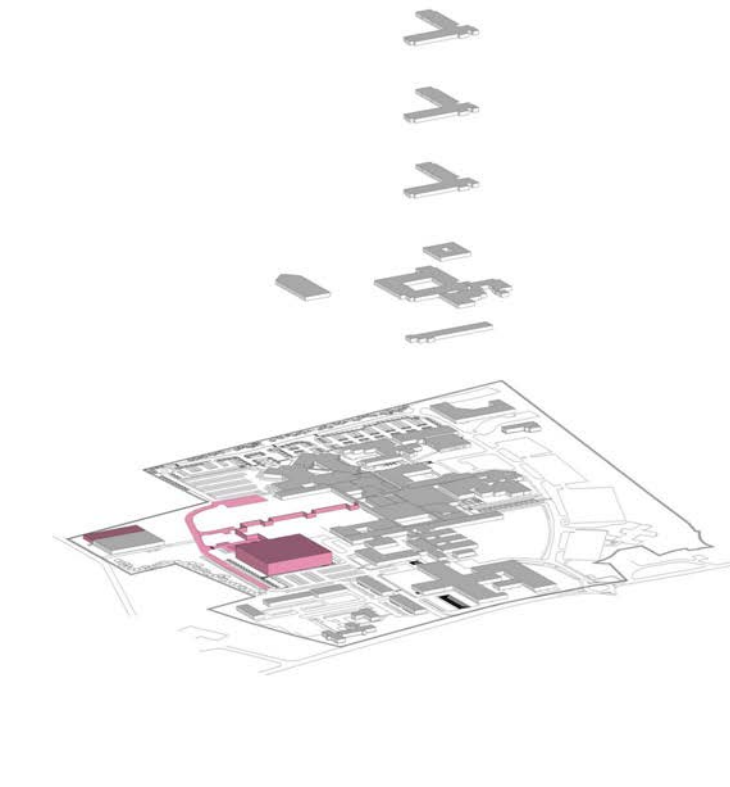
SATH- Sustainable Services Programme
 AHR-SCH-008 Phasing Strategy

OPTION C2- RSH Emergency; PRH Planned Care

Phase	Princess Royal Hospital				Royal Shrewsbury Hospital			
	Construction Activities	Temporary Accommodation	Departmental Moves		Construction Activities	Temporary Accommodation	Departmental Moves	
			Out	In			Out	In
Phase 1	Build new retaining wall	Temporary Entrance Off-Site Parking			Construct new MSCP	Displaced Parking Estates Catering Stores (in MSCP)	Estates Catering Move to Temporary Facility Stores move to temp. location in MSCP	
	Service diversions				Demolish Estates and Re-house			
	Cut and Fill				Service Diversions			
	Service/Utilities				Relocate Generator			
	Construct new MSCP				Boiler House Extension			
					Service/Utilities & Duct			
Phase 2	Refurbish theatres	Temporary Entrance	% Theatres	Atrium Entrance & Retail Centre of Excellence - Chemotherapy Day Case Centre Theatres	Refurb Cardio Rehab to expansion of pharmacy	Catering 67% of Outpatients	Cardio- Rehab 67% of Outpatients to Temporary Accommodation	Cardio Rehab 67% of Outpatients to Temporary Accommodation Pharmacy expansion into former Cardio-Rehab Area
	Construct new Atrium & Entrance				Refurb 67% of OPD			
	Construct new Centre of Excellence - Chemotherapy Day Case Centre				Service Yard and Stores			
	Construct new Treatment Centre				Construct new ED, CCU, MLU and Wards			
	Build new Transitional Care							
Phase 3	Refurb A&E to UCC	UCC	CCU to RSH UCC to temporary accommodation Endoscopy to new Treatment Centre	Endoscopy to treatment centre Breast to new treatment centre Day Surgery Refurbished Inpatients Ward	Refurb Theatres	Catering	% Theatres 33% of Outpatients to Temporary Accommodation Fertility moves to other area of Ward 32 Fracture Clinic into Ward 32 and fertility A&E changes into UCC Function moves into temporary accommodation Endoscopy to PRH Day Surgery to PRH Breast to PRH	% Theatres 33% of Outpatients to Temporary Accommodation 67% of Outpatients into refurbished Outpatients Fertility moves to other area of Ward 32 Offices inot the Ward Block Stores into new Build
	Refurb CCU Template				Refurb 33% of Outpatients			
	Refurb Ward Template				Refurb Ward 32 & Fertility			
	Imaging modifications				Refurb Ward Block			
					Refurb Fracture Clinic and A&E			
					Refurb Path Lab Form new atrium entrance, retail and catering.			
Phase 4	Refurb Endoscopy to Offices				Refurb of Treatment Centre			Fracture Clinic New Entrance Atrium Catering

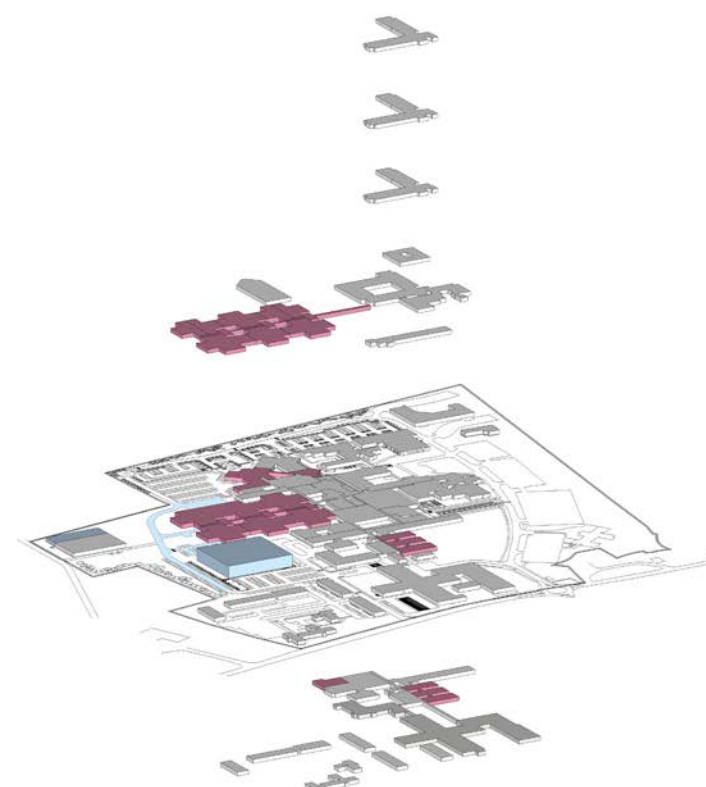
KEY  Works completed in previous phases
 Building works in Current Phase

PHASE 0 - ENABLING WORKS



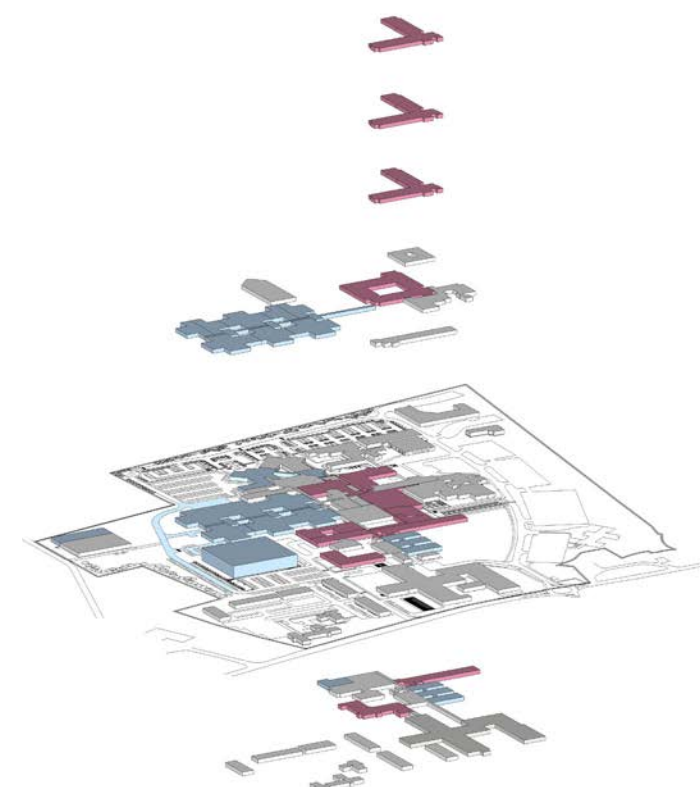
- Construct new MSCP
- Demolish Estates & Re-house
- Service Diversions
- Relocate Generator
- Boiler House Extension
- Service/Utilities & Duct
- Cut and Fill/Road
- Build new retaining wall
- Demolish Catering/Stores

PHASE 1



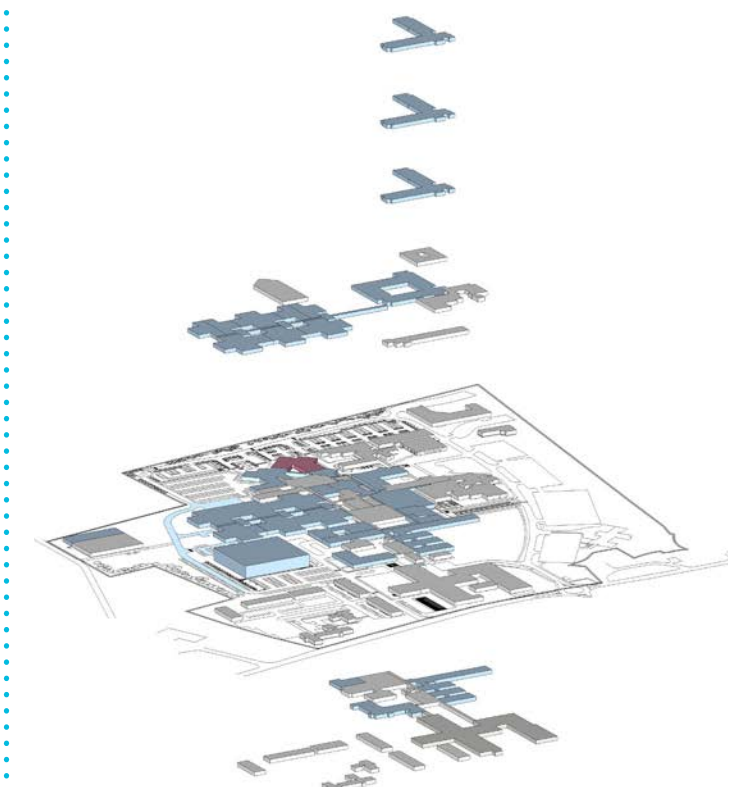
- Refurb Cardio-Rehab to expansion of Pharmacy
- Refurb 67% of OPD (in 2 phases)
- Service yard & Stores
- Construct new ED, CCU, MLU and Wards
- Refurb part of Treatment Centre

PHASE 2



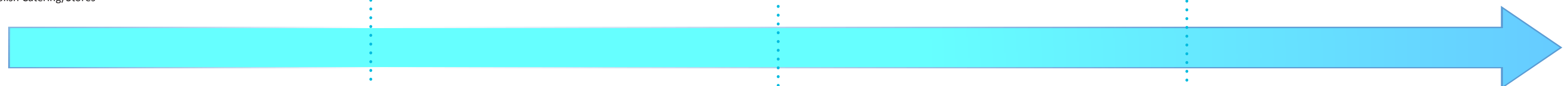
- Refurb Theatres
- Refurb 33% of Outpatients
- Refurb Ward 32 & Fertility
- Refurb Ward Block
- Form new atrium entrance, retail and catering.
- Refurb Fracture Clinic and A&E
- Refurb Path Lab

PHASE 3

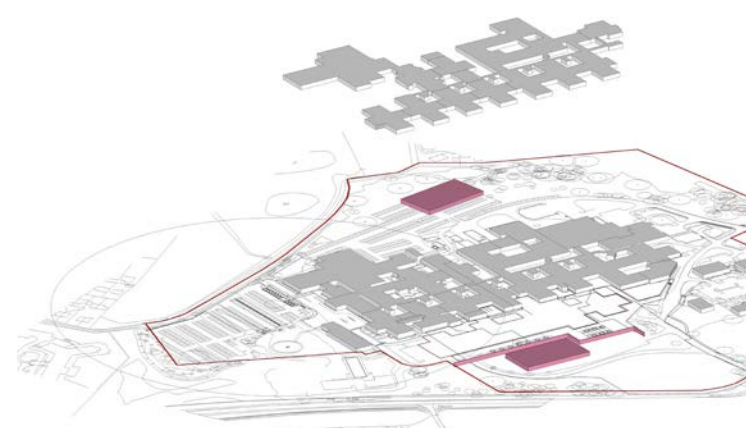


- Refurb of Treatment Centre

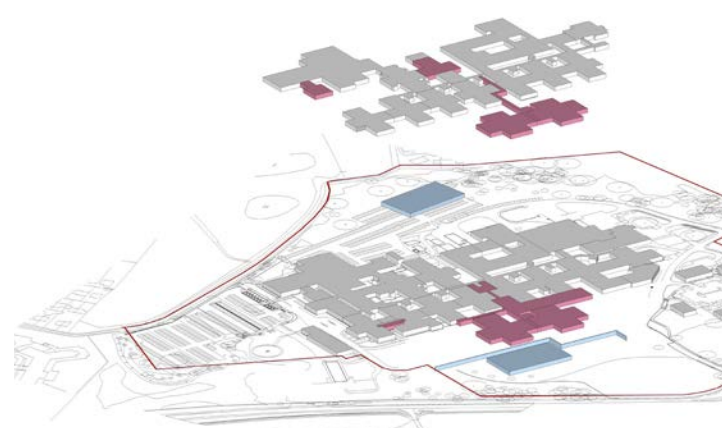
RSH - THE EMERGENCY SITE



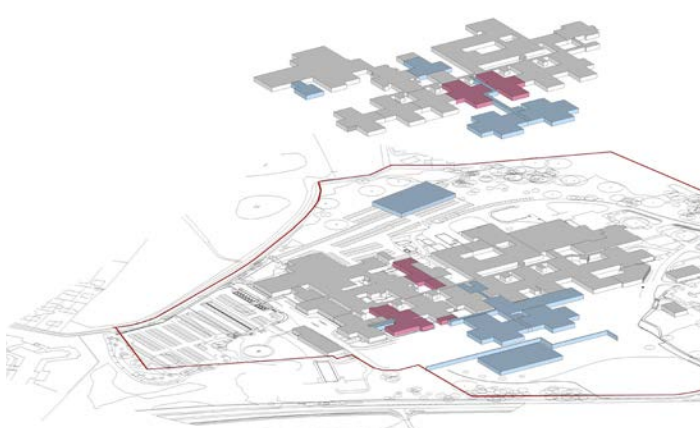
PRH - THE PLANNED CARE SITE



- Build new MSCP's
- Build new retaining wall
- Service diversions
- Cut and fill
- Services/Utilities



- Refurb Theatres
- Construct new Atrium & Entrance
- Construct new Centre of Excellence - Chemotherapy Day Case Centre
- Construct new Treatment Centre
- Build new Transitional Care



- New Build Operational
- Refurb former Critical Care, Wards and A&E
- Imaging modifications



- Refurb Endoscopy to Offices

APPENDIX 16a – Trust Travel and Transport Framework

Framework Travel Plan

Centre: Facilities
Programme Name: Travel and Transport
Authors: Alistair Baldwin / Alexander Ford
Date of first issue: 30/03/2014

Document Control**Version History**

Version	Date	Author	Brief Summary of Change
0.1	30/3/2014	Alistair Baldwin	1 st draft
0.2	28/5/2014	Alistair Baldwin	Added work on disability and disabled access
0.3	12/6/2014	Alistair Baldwin	Incorporating changes suggested by Telford & Wrekin Council, adding bus network and cycle network maps
0.35	17/6/14	Alistair Baldwin	Adds A4C mileage rate changes, attribution of tables/figures
0.4	2/7/14	Alistair Baldwin	Additional work on disabled access
0.5	28/05/15	Alexander Ford	Additional amendments
0.6	17/8/15	John Ellis-Tipton	Some minor wording changes and questions raised to Alex Ford
0.65	24/08/15	Alexander Ford	Answers to issues raised and improvements/additional comments to action plans.
0.7	2/09/15	John Ellis-Tipton	Minor change to accord with SaTH structure
1.0	4/09/15	Alexander Ford Sophie Cole	Changes made + additional comments added to action plan. Formatting

Document reviewed by

Version	Date	Reviewer	Brief Summary of Change
0.1	08/04/2014	John Ellis-Tipton	Some minor changes to figures and text
0.2	11/6/2014	John Ellis-Tipton	Minor layout and wording
0.4	9/4/15	John Ellis-Tipton	Review of T&WC comments and incorporation into document
0.5	17/8/15	John Ellis-Tipton	Content and context review, queries to Alex Ford
1.0	4/9/15	Tony Holt	Formatting/final edit

Document Approved by

Version	Date	Approved Name / Body	Approver Role
0.5	2/7/14	Chris Needham	Director of Estates and Facilities

Contents

Executive Summary	4
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Executive Summary

At The Shrewsbury and Telford Hospital NHS Trust we all believe that our role as individuals and as an organisation is to provide the safest possible care at the highest level of quality we can afford using the best evidence of what provides the greatest benefit to patients. We think that this should include Travel and Transport options to all our Hospital sites and encourage the growth of Active Travel and our commitment to our staff leading Healthier Lives and their by reducing our Carbon footprint.

We realise that there is more that we can do to help patients, visitors, volunteers and staff. Our Framework Travel plan sets out a range of measures to develop and improve existing travel choices, both in the short term and long term. We hope this will be beneficial to all that visit the Royal Shrewsbury and Telford Hospital NHS Trust.

At The Shrewsbury and Telford Hospital NHS Trust, there are currently issues at both sites about the adequate provision of car parking for visitors and staff. In addition to this, the business mileage of the Trust has grown rapidly over the past five years. This Travel Plan has been commissioned by the Estates Department to review Travel and Transport at SaTH. Transport issues intersect with a number of the Trust's strategies and operational objectives which affects staff, volunteers, patients and visitors.

Travel Survey

A travel survey was undertaken in June 2011 to establish the current modal split of staff to the sites. These results formed the basis of the Business Case to create the WCC and consequently the Travel Plans for SaTH. Additional travel surveys are planned to be carried out on an annual basis.

Objectives

The Trust is committed to achieving a number of goals with regards to Travel planning, these have been enumerated in the Travel and Transport Strategy (2012), The Good Corporate Citizen and Sustainable Development plan (2014) and the planning consent for the WCC (2012). NICE Public Health Programme QS84 – Physical activity: encouraging activity in all people in contact with the NHS. These are:

- To reduce overall business travel by 25% by 2020
- Increase the proportion of travel undertaken in pool cars
- Achieve a score of 'excellent' in Travel standard by the Good Corporate Citizen model by 2020
- Reduce the percentage of staff accessing PRH by Single Occupancy Vehicle(SOV) by 5% from 2012
- Reduce the number of appointments due to Telehealth and community health projects
- Carrying out an annual staff survey to monitor transport use
- Develop a plan to reduce travel and traffic, in line with the NHS Carbon Reduction Strategy
- To ensure BREEAM requirements are carried out for all new developments
- Encouraging activity in all people in contact with the NHS via Active Travel to the Trust's sites.

Travel Plan Measures and Action Plan

These measures will be implemented by the appointed Travel Plan Coordinator (TPC), who is based in the Corporate Governance Department. Oversight of this work is provided by the Manager- Environment and Risk and Corporate Governance Manager.

Short, medium and long term measures have been designed to influence a modal shift from SOV car trips to more sustainable forms of transport. These include measures to encourage, more walking, cycling, public transport use and car sharing modes. These Travel Options will assist service users of the sites make informed decisions on their best options of commuting to said sites, other than via a single occupancy car. The implementation strategy and its timelines are set out in the Action Plan in Section

Monitoring and Review

The monitoring of the travel plan will take place annually throughout the 5 year life of the travel plan. All monitoring will follow the most up-to-date Department of Transport and Telford and Wrekin and Shropshire Councils guidance. Results of all surveys will be submitted to Telford and Wrekin and Shropshire Councils in a short monitoring report which will include an update on how the implementation of the travel plan measures are progressing.

In the final year of the travel plan, the share of single-occupancy vehicles as a total of all travel will determine whether the targets set out in the plan have been met.

If the targets have been met, new targets will be set for the next five years, with the travel plan implemented on a voluntary basis by SaTH. If after 5 years the travel plan targets have not been met, then remedial measures will need to be discussed with Telford and Wrekin and Shropshire Councils and implemented by the Trust.

The full monitoring regime is set out in Section 10.

1 Introduction

1.1 Framework Travel Plan

- 1.1.1 This Framework Travel Plan has been prepared on behalf of SaTH to satisfy its planning obligations associated with the development of the new Women and Children's Centre (WCC) at the Princess Royal Hospital in Telford.
- 1.1.2 It builds on previous work undertaken by PTB Consultants, including a Transport Statement in February 2012 as part of the planning process for the WCC. There have also been previous reviews of Transport and Travel at SaTH undertaken by GFleet in December 2013 and Richard Armitage Transport Consultants in July 2011. Where this work has been used, the original will be cited. It will form the first stage in a series of assessments to encourage sustainable travel at the site. However, the document will cover both the WCC and SaTH as a whole. The Trust is recognised as wishing to make improvements in how it manages Travel and Transport and its approach to sustainable Transport, this travel plan will detail how it intends to manage traffic and transport issues at both sites.
- 1.1.3 SaTH also acknowledges that it faces considerable issues with regards to both car parking and business mileage at the Trust, further justifying the travel plan. These are expanded upon in Chapter 3.

1.2 Policy

- 1.2.1 The travel plan is written to achieve national and local policy aims in accordance with local and national travel plan guidance, including the following:

Department for Communities and Local Government- National Planning Policy Framework (2012)

Department For Transport- Good Practice Guidelines: Delivering Travel Plans through the Planning Process (2009)

Department of Health- Delivering Healthy Local Transport Plans (2011)

NHS Sustainable Development Unit- Knowledge Briefing 1- What does a NHS 'Active Travel Plan' look like? (2009)

Low Carbon Travel, Transport and Access- Carbon Hotspots (2014)

Shropshire Council- Shropshire Local Transport Plan-Provisional Strategy (2011)

Telford and Wrekin Council- Telford and Wrekin Local Transport Plan Three (2011)

2 Organisation Background

2.1 Overview

- 2.1.1 Shrewsbury and Telford NHS Trust runs the Royal Shrewsbury Hospital, the Princess Royal Hospital in Telford, Wrekin Community Clinic and midwife-led units in Bridgnorth, Oswestry and Ludlow. These sites serve over half a million people in Shropshire, Telford & Wrekin and Mid Wales. The Trust's main locations are the Princess Royal Hospital (PRH) and Royal Shrewsbury Hospital (RSH). Together these provide 99% of the Trust's activity.
- 2.1.2 The Royal Shrewsbury Hospital opened in 1977. Since then it has undergone a major transformation of its facilities with a £25 million Treatment Centre opened in

early 2005 and a new Cancer Centre that opened in September 2012.

- 2.1.3 The Princess Royal Hospital opened in 1989 and a new Women and Children's Unit at the hospital opened in 2014
- 2.1.4 Shrewsbury Business Park is located on the edge of Shrewsbury and houses a number of offices for local businesses; it was initially constructed in 2001, with an extension in 2008. SaTH have located back-office functions at the Business Park since 2010 and have recently extended their lease.
- 2.1.5 SaTH Trust employs over 5,000 staff. Additional employees, students and volunteers from other organisations also work in its hospitals.
- 2.1.6 It has a turnover of about £300m and in 2012/13 saw 53,217 elective & day case spells, 49,097 non-elective inpatient spells, 6,767 maternity episodes, 343,098 consultant led outpatient appointments and 110,680 accident and emergency attendances.

2.2 Site Assessment and Local Transport Context

2.2.1. Parking Charges

Visitor Charging

In October 2013, the Trust increased its rates for visitor charging, in addition to moving from a Pay & Display system to an Automatic Number plate Recognition (ANPR) system.

This was implemented at RSH in October 2013 and will be activated at PRH during 2015. The visitor charging system is as follows;

Table 1: Visitor parking charges from Oct-13

0-30 minutes	Free
30 minutes-2 hours	£2.50
2 hours- 5 hours	£3
5 hours-24 hours	£3.50

There are also a wide range of concessions available, such as a multi-use pass. In addition, patients undergoing dialysis, radiotherapy and chemotherapy receive free car parking.

Payment is made via the machine on exit or online up until midnight on the day of the visit. A parking charge system is in force for people who do not pay for their stays.

Staff Charging

The current charging system was changed in August 2014 from a three tier system to the following fairer charging system to all staff daily charges now range from 36p to £1.19 a day.

Table 2: Staff parking charges from Aug-14

Please circle your permit rate: (Note: For the purpose of this scheme, up to and including 22.5 hours a week is "part time", anything greater is "full time")		£ per annum (month)	
		Part time	Full time
Volunteer		No charge	
Bank member of staff / Student		45.00 (3.75)	
Members of staff employed by SATH, an agency or external organisation:	Band 1-3	45.00 (3.75)	90.00 (7.50)
	Band 4-5 & medical / dental staff at F1 / F2, or equivalent	60.00 (5.00)	120.00 (10.00)
	Band 6-7	90.00 (7.50)	180.00 (15.00)
	Band 8 a-c	120.00 (10.00)	240.00 (20.00)
	Band 8d, 9 & Non A4C	150.00 (12.50)	300.00 (25.00)
	Medical Registrar (ST1+, Speciality Doctor & Associate Specialist)	120.00 (10.00)	240.00 (20.00)
	Medical Consultants	150.00 (12.50)	300.00 (25.00)
	Shrewsbury Cricket Club (only) Parking	25.00 (2.08)	50.00 (4.17)
	On-call only (valid 16.00 – 08.00 weekdays and all weekend)	No charge	

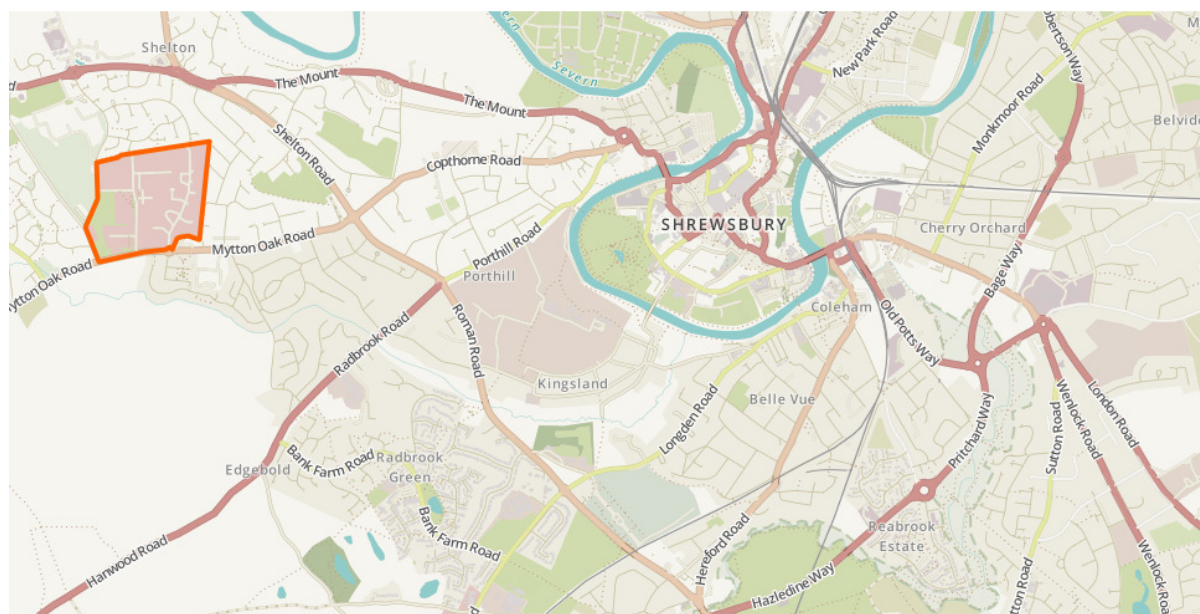
The charges listed are detailed in HR61 Staff Car Parking. The policy also notes *“The Trust reserves the right to change the price of car parking from time to time (usually annually) but scheme members will be notified well in advance of any such changes”*.

The majority of Staff permits are paid through a tax-efficient salary sacrifice scheme. Bank staff or temporary staff frequently purchase permits on a monthly basis by cash or cheque. There are approximately 5877 permits for RSH staff and 4337 permits for PRH staff in operation, held by staff, volunteers and some hospital service providers.

2.2.2. Royal Shrewsbury Hospital

The Royal Shrewsbury Hospital is located on Mytton Oak Road B4386, in Shrewsbury, located 0.9 miles east of the A5 and 2 miles west of the town centre. Figure 1 indicates the location of the hospital, which is surrounded by residential properties and buildings of other NHS trusts, South Staffordshire and Shropshire Foundation Trust and Shropshire Community Trust.

Figure 1: Location of Royal Shrewsbury Hospital (highlighted in red)



Source: OpenStreetMap

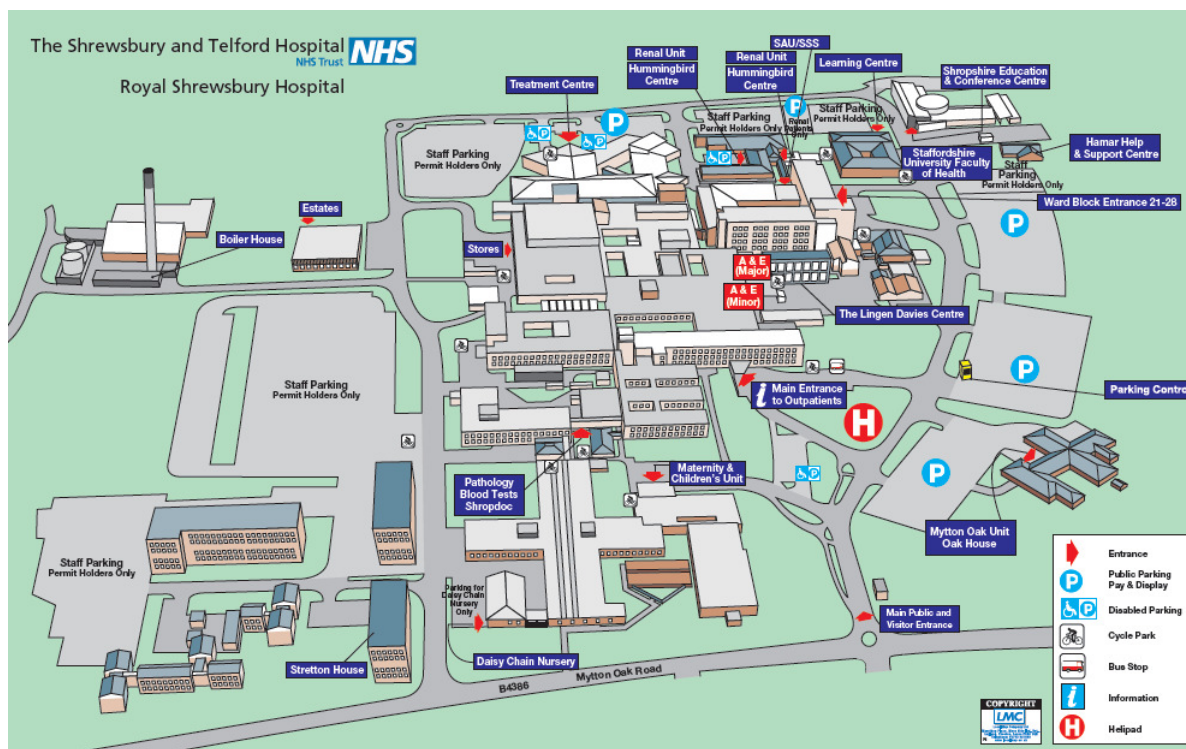
Car Parking

Car parking at RSH is split in a ratio of approximately 65:35 (staff:visitors), with the primary areas for visitor car parking being at the East of the site and the staff car parking at the West. There is an area to the north of the site where visitor and staff parking intersect; this is shown in figure 2.

Table 3: Car Parking at RSH

RSH Parking allocation	Parking Spaces
Staff	1,070
Patient and Visitor	496
Blue Badge Spaces	81
Total	1,647

Figure 2: Car Parking Map at RSH



Access and Local Highways

Mytton Oak Road lies to the south of the site, also known as the B4386. It provides both of the vehicle entrances to the site. The main access for visitors and ambulances is the eastern most entrance, while the main access for staff is further to the west. To the West lies the A5 dual carriageway. A number of separate organisations share the site with the RSH; Rooftops accommodation, Daisy Chain Nursery, Shropshire Education and Conference Centre and Staffordshire University Faculty of Health.

The hospital is bounded to the west by the Redwoods Centre, a hospital run by Shropshire and South Staffordshire Foundation Trust and the Mytton Oak GP surgery. To the North, East, it is flanked by housing with no road access to the site, but can be accessed by public

footpaths. In the South a new major housing estate is being developed which will impact current traffic on the Mytton Oak Road.

Public Transport: Bus

There is one bus stop which is located directly outside the Outpatients department which is served by the number 1 bus. All other buses are served by stops outside the hospital on Mytton Oak Road. There is no Sunday bus service.

Table 4: Bus routes into RSH

Route	AM Peak Services Per hour	PM Peak Services Per hour	Saturday Daytime Services Per hour	First Bus(Mon-Fri)	Last Bus(Mon-Fri)
1 Gains Park - Royal Shrewsbury Hospital - Shrewsbury – Monkmoor.	4	4	4	06.59	21.05
558 Montgomery - Brockton – Worthen - Royal Shrewsbury Hospital - Shrewsbury	0.5	0.5	0.5	08.16	17.59
X75 Rhayader – Llanidloes – Newtown – Welshpool - Shrewsbury	0.5	0.5	0.5	08.24	16.12
552 Bishops Castle – Stiperstones – Minsterley – Pontesbury – Shrewsbury	0.5	0.5	0.5	08.17	16.27

Public Transport: Rail

The main Train station is based in Shrewsbury. Trains run regularly between Wellington and Telford Central. The Hospital is approximately a 40minute walk from Shrewsbury station or a 25 minute cycle ride. Although the station provides cycle racks, these are not in a secure cycle hub unit. The Bus station is a five minute walk from the railway station. Taxis are available outside the station.

Journey times are as follow:

- From Shrewsbury to Wellington only take between 12 - 14 minutes.
- From Shrewsbury to Chester can take 50 minutes.
- From Shrewsbury to Hereford can take 54 minutes.
- From Shrewsbury to Crewe can take 34 minutes.
- From Shrewsbury to Birmingham can take 57 minutes.

Walking and Cycling access

There are a number of access points to the site. There are footpath entrances from adjacent housing areas at the North, North-East and North-West of the site. Pedestrian access is also possible from Racecourse Lane to the West. The primary access points to the hospital buildings themselves for staff are by the Pathology block on the West side, the Treatment Centre to the North, and the Ward entrance on the North West side.



There are two main cycling entrances to the RSH, both via the vehicular accesses from Mytton Oak Road. The road links to a town-wide set of cycle lanes, installed as part of Shrewsbury's status as a Cycling Demonstration Town.

For visitors who may be accompanied by young children or using a pushchair or buggy, there is step-free access from Mytton Oak Road to the site and all paths can comfortably accommodate the width of a wheelchair or buggy.

Disabled Access

The Trust provides a number of Blue Badge spaces (75) around the site, located proximate to the main entrances to the Hospital (A&E, Treatment Centre, Renal Unit, Outpatients). These are designed such that disabled service users are not inconvenienced in accessing services. From each disabled Blue Badge Space there is a stepless access to the nearest Hospital entrance, typically provided through the use of a drop kerb.

The majority of the drop kerbs around the Hospital Site have blister paving, facilitating access for the visually impaired. There is step-free access from the Mytton Oak Road entrance to the site to the Outpatients entrance and through this, to the rest of the Hospital site. Where there are changes of level within the Hospital structure itself, these are accounted for by lifts in the ward block and Outpatients, eliminating the need for the mobility impaired to use the stairs provided.

Signage around the site is designed to be legible and accessible in accordance with NHS guidelines. The Trust and Travel Plan Coordinator undertake regular audits of the site with a Patient Experience and Improvement Panel (PEIP) representative, with a particular focus on accessibility. These audits have identified a number of small-scale issues relating to the camber of blister paving, maintenance of pavements and angles of slope, particularly in the area opposite the Copthorne Building. A remedial program of works has been proposed for these, remaining under the capital budget.

Cycling Facilities

RSH has 16 sets of bike racks, located around the site; these are located on figure 3. These are almost all Sheffield stands, however there remain some legacy 'toast racks' stands with 32 spaces, which primarily function for overspill in the summer when biking is popular. Five of the bike racks are covered providing shelter for 72 cycles (32 of these are provided by Rooftops accommodation). 16 spaces are totally secure via 2 units. The total capacity for bikes on site is 146 at any one time.

Shower and changing facilities

RSH has several shower and changing facilities for staff, the main unit being the Staff Gym. Other areas include; Maternity, Theatres, Endoscopy and Treatment Centre.

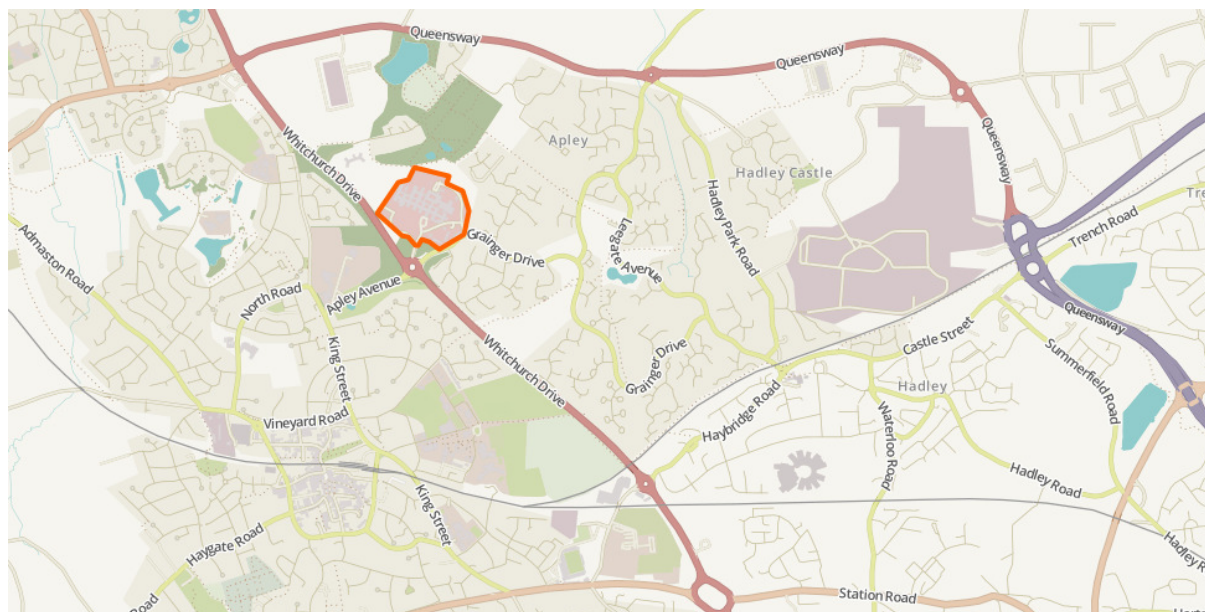
On Street Parking

The residential areas proximate to the hospital are Cala Homes, Redwood, Kingswood and Bowbrook. With the exception of Cala Homes, parking enforcement in these areas is managed by Shropshire County Council. Various “No hospital parking” signs are currently in place around the residential areas.

2.2.3. Princess Royal Hospital

The Princess Royal Hospital (PRH) is located at the junction of Witchurch Drive and Grainger Drive in the district ward of Leegomery, close to Wellington town centre. It is around 5 miles from the centre of Telford or 1 mile from Wellington town centre. Figure 4 indicates the location of the hospital.

Figure 4: Location of Princess Royal Hospital (highlighted in red)



Source: OpenStreetMap

Car Parking

Car Parking at PRH is split in the ratio of 65:35 Staff:Visitor. There are distinct areas for staff and visitor parking. Visitor parking is provided at the South of the site, outside the main Outpatients entrance and A&E.

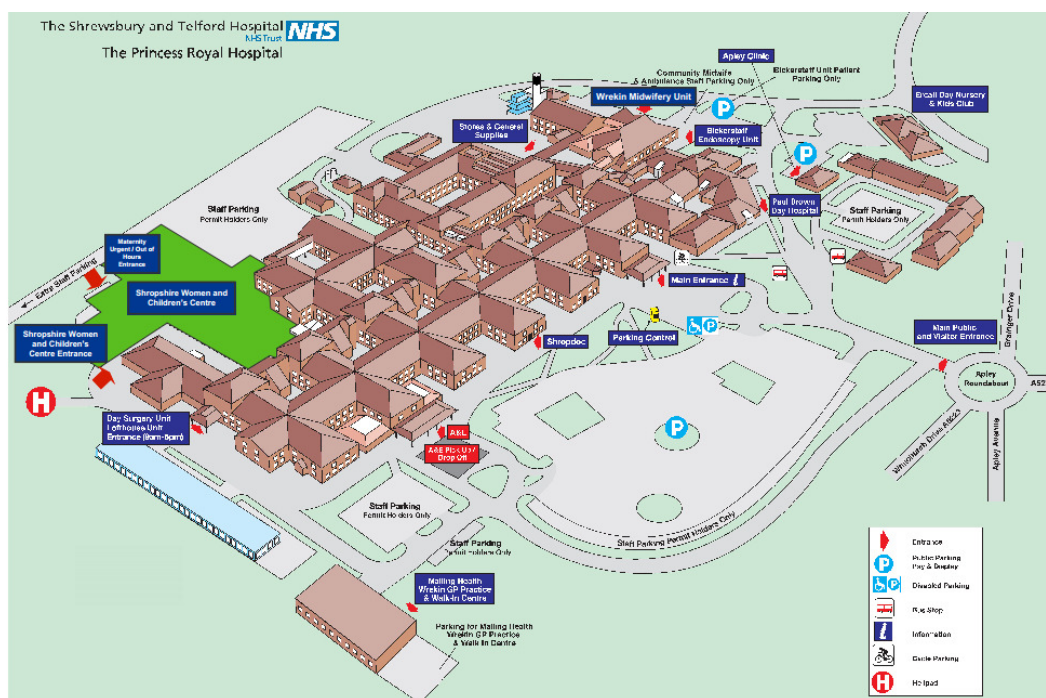
The reconfiguration developments at PRH removed around 100 spaces but an extension of staff parking around the area of the Helipad (figure 6) has added another 200, resulting in a net gain of around 100 spaces.

There is an existing arrangement to allow staff to park in a crescent along the edge of the visitor parking area when the staff parking area is full. This provides an additional 80 spaces. There is also an informal arrangement to allow parking in patient and visitor bays when staff areas are full, provided that this does not impact upon their primary purpose.

Table 5: Car parking at PRH)

PRH Parking allocation	Parking Spaces
Staff	802
Patient and Visitor(exclusive)	58
Patient and Visitor (shared with staff)	336
Blue Badge Spaces	41
Total	1,237

Figure 5: Car Parking Map at PRH



Access and Local Highways

Whitchurch Drive runs to the west of the hospital, it is a dual carriageway also known as the A5223. It converges with Apley Avenue and Grainger Drive at a roundabout directly to the south of the hospital, which provides the primary entrance for visitors and ambulances. A further access point is provided from Grainger Drive, further to the east, this is typically used to access the staff parking areas.

To the north of the hospital is the small residential area of Apley Castle, which borders Apley woods that run around to the north-east of the site. To the east and south of the hospital, there are housing estates. To the west is the newly extended Charlton School.

Public Transport: Bus

The nearest bus stops are located around 100m from the main Outpatients entrance to the hospital. They are located either side of the road, to accommodate buses going to/from Wellington town centre and provide shelter to waiting passengers.

Table 6: Bus routes to PRH

SaTH Framework Travel Plan

Services passing Princess Royal Hospital	Morning Services per hour	Afternoon Services per hour	Saturday Daytime services per hour	Sunday Daytime services per hour
4 Hadley, Muxton, Donnington made via Wellington or other areas via Telford)	29 trips towards Wellington first Bus from Leegomery 06:51 – 23 trips towards Leegomery first bus to PRH departs Madeley at 06:44	44 trips towards Wellington last bus 22:55 from Leegomery to Madeley - 49 trips towards Leegomery last bus departs Wellington at 23:18	58 trips towards Wellington first bus from Leegomery 06:57 last bus from Leegomery 22:55 – 63 trips towards Leegomery first bus from Madeley 06:23 last bus from Wellington 23:18	2 per hour towards Leegomery and towards Wellington – First bus departs Leegomery at 09:25 last departure 18:25 as far as Telford
341 -Market Drayton	07:25, 09:43 (Mon, Wed, Fri) 11:43 (Tue, Thur) towards Market Drayton – 09:30 (Tue, Thur) 11:30 (Mon, Wed, Fri) towards Wellington	13:43 (Mon, Wed, Fri) 16:53 (Tue, Thur) towards Market Drayton – 13:30 (Tue, Thur) 16:07, 18:34 (Mon, Wed, Fri) towards Wellington	09:30, 13:30, 16:07 towards Wellington – 07:25, 11:43, 16:53 towards Market Drayton	0
342 - Market Drayton	09:43 (Tue, Thur) 11:43 (Mon, Wed, Fri) towards Market Drayton – 09:27 (Mon, Wed, Fri) 11:27 (Tue, Thur) towards Wellington	13:43 (Tue, Thur) 16:53 (Mon, Wed, Fri) towards Market Drayton – 13:27 (Mon, Wed, Fri) 18:32 (Tue, Thur) towards Wellington	11:27, 18:32 towards Wellington – 09:43, 13:43 towards Market Drayton	0
15-Shawburch to Telford via Hadley	Every 60 minutes from 09:14 towards Wellington = 3	Every 60 minutes until 18:14 – A 16:14 service does not operate towards Wellington = 6	First Service towards Wellington 09:14 then every 60 minutes until 15:14 then 17:14 and 18:14 – Towards Telford first service 7:13 then 9:13 every 60 minutes until 14:13 then 16:13 and 17:13	0
16-Arleston, Wellington, Hadley and Telford	11:11 towards Rodington – 10:14 towards Telford	13:11 towards Rodington, 15:11 towards Wellington – 12:14, 14:14 towards Telford	11:11, 13:11, 15:11 towards Rodington – 10:14, 12:14, 14:14 towards Telford	0

Public Transport: Rail

Train Stations are situated in Wellington, Oakengates & Telford. Wellington station is the closest to the Hospital, trains run regularly between Wellington and Telford Central. The Hospital is approximately 15minutes walk from Wellington Station or a 10 minute cycle ride. Although the station provides cycle racks, these are not in a secure cycle hub unit.

Taxis are available outside the station and the Bus Station is in walking distance.

Trains times:

- From Shrewsbury to Wellington trains take between 12 to 14 minutes.
- From Oakengates to Wellington trains take 5 minutes.
- From Telford to Wellington trains take between 6 to 8 minutes
- From Newtown (Powys) trains take approximately 1 hour 15 mins

Walking and Cycling access

Pedestrian access to the site is from the Silkin Way, Apley Roundabout and Grainger Drive. The primary entrances for staff by foot are through Outpatients Main entrance, the Day Surgery Unit and the rear entrance running parallel to the Pathology department.

The main cycle access route for PRH is the Silkin Way, which runs to the North of the Hospital site. This access was formalised by Telford & Wrekin Council in 2011, providing access to the Hospital from the National Cycle Network. Another traffic free cycle route/bridleway runs from the South of the Hospital through Apley to Wellington. Currently this route is not signposted.

For staff or patients who may be accompanied by young children or with a buggy or wheelchair, entrances to the site from Whitchurch Drive and Grainger Drive are both step-free, with drop kerbs positioned to facilitate crossing roads where applicable.

Disabled Access

The Trust provides a number of Blue Badge spaces (41) around the site, located proximate to the main entrances to the Hospital (Outpatients and Day Surgery Unit). These provide a step-free access to Hospital services.

The site is located on flat land, limiting the number of changes in level and drop kerbs that are required. The majority of the drop kerbs around the Hospital Site have blister paving, facilitating access for the visually impaired. The drop kerbs themselves provide access for the mobility impaired and are provided at all entrances to the Hospital, road access points and various other points (such as car parks). Signage around the site is designed to be legible and accessible in accordance with NHS guidelines. The Trust and Travel Plan Coordinator undertake regular audits of the site with a Patient Experience and Improvement Panel (PEIP) representative, with a particular focus on accessibility.

At PRH, these audits have identified the potential to improve access for wheelchair users from the Silkin Way entrance, which would then link with the rest of the site. This has now been facilitated through creating a flat pavement surface and improving the signage, integrating it with the remainder of the Hospital. In the new Women and Children's Centre, different clinical areas are painted in different colours, to facilitate navigation by the visually impaired.

Cycling facilities

There are five sets of bike racks at PRH, including one located in the parking area for the WCC. These are located on figure 6. Only one of these is lockable storage in the interior of the Hospital, the others consist of Sheffield Stands. The total capacity is 34 cycles.

PRH has several existing showering and changing facilities for staff including the Staff Gym, Endoscopy, Theatres, Anaesthetics on Call, Therapy, Day Surgery and Pathology. A new

shower and changing facility has recently been completed in the centre of the hospital. A review and recommendations for improved cycle storage facilities is currently underway.

On Street Parking

The hospital is surrounded by Apley Castle, Apley and the Kingfisher estates. There are no parking controls currently in place in these areas and parking is managed through Telford and Wrekin Council.

2.3. Existing Staffing Levels

Table 7: Staffing levels

Site	FTE	Headcount
Bridgnorth Maternity	13.13	17
ICAT	12.25	14
Ludlow Community Hospital	14.62	21
Market Drayton Maternity	6.04	9
Oswestry Maternity	13.65	20
PRH	2085.71	2478
QBP	27.48	29
RJAH	3.00	4
RSH North	2452.52	2866
RSH South	31.46	42
SBP	114.89	125
Whitchurch	2.43	3
Volunteers at RSH		500
Volunteers at PRH		500
Grand Total	4777.69	6628

** Discrepancies between FTE and headcount are caused by part time or zero-hours bank staff and volunteers*

2.4. Reconfiguration of Services

2.4.1 As part of moves to better integrate the services provided by the Trust and to improve the infrastructure of the Trust, the Trust embarked on a programme known as the Future Configuration of Hospital Services (FCHS). This program published a Full Business Case in 2012 and was approved by the Trust Board and the Joint Health Overview and Scrutiny Committee in the same year. As part of its program, the following changes will be made:

- **Services relocating from PRH to RSH**
 - General inpatient surgery
- **Services relocating from RSH to PRH**
 - Head & Neck
 - Women's and Children services

General inpatient surgery and Head & Neck moved in 2013, Women's and Children Services in September 2014.

- 2.4.2 The movement of Women's and Children's services necessitated the construction of a significant new building at PRH to increase the inpatient capacity. This building achieved planning permission in 2012 and was completed in 2014. From a transport perspective, this involved the construction of a net of 100 additional parking spaces to be accessed from Grainger Drive. There were built in a single-storey fashion to the NW of the existing site. They were primarily for staff parking, although there are blue badge and visitor parking bays proximate to the hospital entrance. The construction also included an additional 14-space covered bicycle rack in the middle of the new car park, around 100m from the Hospital entrance, this adds more than 50% to the listed bicycle capacity of PRH.

The impacts of these moves are further discussed in Section 5.

3 Travel Plan Background, description of issues

3.1 Existing Transport Policies and Transport at SaTH

The Trust has an existing Green Transport Policy, written in 2007. The Trust also has a Travel and Transport Strategy, written in September 2012. These policies are 'owned' by the Estates and Facilities department. These policies were informed by a series of Consultants reports, carried out by Richard Armitage, TAS and Gfleet. There have also been Fleet Reviews carried out by the Energy Saving Trust in 2009, 2011 and 2013.

As part of the development of the WCC, the Trust produced a Travel Plan relating to the new development in 2012, this was written by PTB Consultancy.

3.2 Travel and Transport Strategy

The Strategy, written in 2012 is focused around the new building of the WCC and public consultations around this. It is informed by the Consultants reviews in 2011 and accompanying staff survey. While it partially deals with areas outside the scope of this Travel Plan (such as patient transport and ambulance response times), the majority of the work within it is along the same lines as this travel plan.

The strategy seeks to outline Trust policy for the years 2012-5 and to accommodate any problems relating to the transport for the new development. It does not contain specific SOV-reduction or CO₂ reduction targets and instead outlines general goals in terms of reducing dependency on car use and increasing cycling and walking. It is accompanied by an action plan which seeks to distribute the responsibility for administering this work to the relevant departments.

3.3 Responsibility for Transport at SaTH

The Trust has HR policies relating to Transport, these are HR12 Lease Car Scheme, HR 13 Travel Expenses and HR 61 Staff Car Parking. They are 'owned' by the Workforce Department.

The car parking permit scheme is administrated through the Facilities department, who also manage the external contract for the Car Parks (currently contracted to CP Plus). The lease car and pool car schemes are run through The Lease Car manager, who works in the Finance Department.

General responsibility for walking, cycling, car-sharing and public transport initiatives is considered to lie with the Travel Plan Coordinator. There are also transport-related areas such as non-urgent Patient Transport and the Healthcare Travel Costs Scheme, which are run by SaTH but are not integral to the Travel Plan. They are administrated by the Site Services Manager and Cashiers Office respectively.

3.4 Description of Issues

3.4.1 Parking

There is demand in excess of capacity across the Trust of around 300 cars at peak times (midday Tuesday-Thursday). Around 200 of this excess is at RSH, with the remaining 100 at PRH. At both sites, there is frequent ad-hoc parking on verges, access roads and on pathways.



The ad-hoc parking presents a number of problems for SaTH. It represents a trip hazard for visually impaired users of the site and bars access from portions of the sites to those in a wheelchair.

Bus services, delivery vehicles, ambulances and other emergency services also find it challenging to access the site, affecting effectiveness in an emergency situation.

In addition to this, it has a negative effect on the grass and estate, causing erosion

and destroying flowers and plants. When ad-hoc parking goes unaddressed, it leads to the normalisation of poor parking habits as it is tacitly accepted, resulting in the achievement of modal shift becoming more difficult.

While staff occupy the majority of the parking spaces at SaTH, they do not contribute the majority of the revenue derived from parking. This inequitable solution has a negative impact on the public image of the Trust.

3.4.2 Business Mileage

The Trust reimburses staff for miles travelled in the course of business at the level of national Agenda for Change rates, which are known as Annex L.

Table 8: Current AfC reimbursement rates

Rate	Charge (per mile)
Business mileage up to 3,500 miles per year	£0.56
After 3,500 miles per year	£0.20
Reserve Rate	£0.28
Motor cycle	£0.28
Pedal Cycle	£0.20
Additional Passenger (Carshare)	£0.05

The Trust pays for lease cars at £0.11p/mile to cover fuel costs, these are assigned to staff members who drive more than 3,500 miles per year or have a job-related need for a lease car.

Additional to this is relocation mileage (where the main base of work has been moved) paid at locally agreed rates. However, the majority of business travel is at the top rate of mileage charges.

The Trust has a fleet of 61 pool cars, which are assigned to individual departments. The fleet consists of several vehicles where personal cars would not be suitable for the jobs undertaken (such as the catering van). The fleet provides an alternative to private vehicles for journeys, cutting business mileage costs (such as the estates pool cars).

When business mileage is combined with the costs of the pool car fleet, this amounts to a spend, greater than £1m per year. According to reviews by GFleet and the Energy Saving Trust, the amount of mileage the Trust is paying for has increased from 800,000 to around 2,000,000 per year since 2008. While some of this is due to paying relocation mileage for staff members, some of the growth is organic. This is abetted by the paper-based expenses system and inconsistent line management approaches to travel expenses.

This mileage also contradicts the Trusts green initiatives and Good Corporate Citizenship initiatives, contributing 322 of tons of CO₂ to the atmosphere. This represents 2% of Trust building CO₂ emissions.

4 Staff Involvement / Consultees

Alexander Ford	Travel Plan Coordinator (Jan 2015-present)
Alistair Baldwin	Travel Plan Coordinator (Dec 2013-Aug 2014)
John Ellis-Tipton	Estates Manager, Environment and Risk
Wayne Carson	Lease Car Manager
Joanne Hulse	Deputy Director, Workforce
Keith Hudson	Deputy Head of Human Resources
Kate Shaw	Future Configuration of Hospital Services
Martin Withington	Sustainable Transport Manager, Shropshire County Council
Will Baugh	PTP Project Coordinator, Sustrans
Phil Lorenz	Road Safety Officer, Telford and Wrekin Council
Heather Bolton	Travel Plan Coordinator, Telford and Wrekin Council
Heidi Smith	Matron, Unscheduled Care
David Walsh	CP Plus Contract Manager
Tricia Penney	Corporate Finance Manager
Julia Clarke	Director of Corporate Governance

William Savage	Procurement Lead
Paul Adams	Procurement Lead
Max Clowes	Patient Representative, Patient Experience and Improvement Panel
Chris Needham	Director, Estates and Facilities

4.1 Stakeholder Analysis

- 4.1.1 Consultation in this area has been undertaken with a range of stakeholders external to the Trust. These include: Shropshire Council, Telford and Wrekin Council, the Patient Experience and Improvement Panel, local councillors for Leegomery and Copthorne, surveys of local residents, public transport operators, neighbouring Trusts (SSSFT and SCHAT) and the parking operator CP Plus.
- 4.1.2 Local residents in the estates around RSH have been issued a detailed survey in November 2013 regarding Hospital parking and whether further controls were needed, this was conducted in conjunction with Shropshire Council. The results indicated that while a minority believed hospital parking was a problem near their houses, the majority were against any further parking controls. This was then reported to the Local Joint Committee (LJC), who have a long-standing issue in parking issues at RSH. It was agreed by all parties to revisit the survey in the winter of 2014, in order to capture any changes that may have occurred due to the impact of policies in section 8 and the reconfiguration of services.
- 4.1.3 Local residents in the estates around PRH have been issued an identical survey in October 2014 regarding hospital parking and whether further controls were needed, this was conducted in conjunction with Telford and Wrekin Council. The results indicated that while a minority believed hospital parking was a problem near their houses they wished the Trust to increase parking capacity on site and that Telford & Wrekin council had enforcement parking control officers available.
- 4.1.4 Because of the nature of the work and the funding structure of the Travel Plan Coordinator, a close working relationship with the two local authorities is maintained. This has included local authority support for sustainable travel initiatives at the Trust and Trust support for local authority bids for funding. This close relationship has helped inform the future direction of Trust policy as the local authorities have been able to provide valuable expertise and support for Trust projects.
- 4.1.5 Within the Trust, consultees included Car Leasing, Future Configuration of Hospital Services Team, Assoc. Director Patient Experience, Programme Management Office, Director of Corporate Governance, Estates and Facilities Business Manager, Communications, Workforce, Finance, Capital Projects and the Matron of Unscheduled Care.
- 4.1.6 In light of the Trusts continuing commitment to integrating patients and patient representatives into all aspects of the running of the Trust, the decision was made to work with the Patient Experience and Improvement Panel (PEIP) to discuss their issues regarding Transport at the Trust and to feed back the work the Trust was doing around Transport to them for their comments. As a consequence of this, accessibility audits were undertaken at both sites to assess the disability compliance in line with the Disability Discrimination Act (DDA) and the navigability of the sites for visitors and patients. These reports were

consequently written up and presented to the monthly PEIP meetings, before being passed on to the site managers for action.

5 Survey results

5.1 Staff Survey

- 5.1.1 In 2010-11 a staff survey was commissioned by SaTH and analysed by TAS Partnership. While the numbers of staff employed by the Trust have increased over the intervening period the results are still expected to hold true in 2014. The survey was distributed with payslips, in order to gain responses from members of staff who did not have access to email.
- 5.1.2 The response rate for the survey was around 20%, which is in line with what is expected for such surveys and provides an acceptable sample size to discuss results. A further survey is presently underway to determine modal changes now that services have been relocated.

5.2 Modal Split

Table 9: Travel modes of staff

Staff Travel to work	Staff	% of Staff
Car, Drive alone	1199	87
Car, Shared	64	4.6
Walking	65	4.7
Cycling	18	1.3
Public Transport	23	1.6
Motorbike	2	0.1
Totals	1371	100

Source: data from *Task Note 4: Travel Planning*, Richard Armitage Transport Consultancy, 2011

In total, over 91% of our staff access the site via car, whether shared or alone. This is an extremely high proportion and represents a strong potential for change. The high number of shared car users relative to the existing Trust car-share scheme indicates that there is already a strong informal car-sharing network in place and that there could be beneficial results in formalising this. Cycling and walking are the biggest potential mode transfers from SOV and the applicability of these modes will be discussed below and then expanded upon in section 8.

5.3 Staff Locations

- 5.3.1 These are attached in Appendix 4. A number of conclusions can be drawn from this data. The most obvious conclusion (corroborated by the cycling and walking data below), is that there are a significant minority of members of staff who live within extremely close proximity to the hospital and continue to use SOVs to get to work. However, it also indicates that a large proportion of staff live a considerable distance from their base of work in this largely rural county, making non-SOV options challenging to provide.
- 5.3.2 What is additionally indicated is that the relative proximity of people to their workplace is site-specific, that is that PRH and RSH have differing numbers of

members of staff in their immediate vicinity. This is again further illustrated below. This is primarily a function of the differing urban structures of the two towns in which the hospitals reside. Shrewsbury is an older, denser town, with a large area of green belt preventing development on its edges. The consequences of this are that staff members live in a smaller spatial area around the hospital.

- 5.3.3 In contrast, Telford was primarily constructed in the 1960s and later, although there are areas of original villages now forming part of the conurbation. Owing to the date of its construction, the housing is generally of a lower density, and arterial roads are the primary means of travel. This means that staff living in Telford generally live further from PRH than those in Shrewsbury live from RSH. Correspondingly, this creates problems when considering the promotion of active travel at the Trust and this is considered in section 8.

5.4 Cycling and Walking

5.4.1 Methodology

Department for Transport (DfT) 2010 core accessibility indicators were obtained for each home address postcode. An assumption was made that cycle speeds are 16kph and walk speeds are 4.8kph. Walk times were factored from the cycling times using the walking average speed. We did not separately review accessibility by people combining walking with use of public transport because we wished to concentrate solely on people completing their journey to or from work by walking.

- 5.4.2 From the postcode accessibility database both for the cycling and walking accessibility figures were entered into a geographical information systems (GIS) computer programme to map both staff locations. A number of different colours have been used to indicate journey to work areas of common journey time. As a final step, we used our mapping software to count the number of employees living in designated journey times.

5.4.3 Royal Shrewsbury Hospital

Cycling accessibility figures and walking accessibility figures for the Royal Shrewsbury Hospital are shown overleaf. These show the number and proportion of staff who can reach the site in the given time.

Table 10: Cycling Journey Time to Shrewsbury Hospital by Employee

Journey Time	Total Number of Employees	Cumulative Employees	% of Total Employees	Cumulative % of Employees
0-5	306	306	10	10
5-15	351	657	11	21
15-25	567	1024	18	39
25-35	418	1442	13	52
35-45	338	1780	11	63

Table 11: Walking Journey Time to Shrewsbury Hospital by Employee

Journey Time	Total Number of Employees	Cumulative Employees	% of Total Employees	Cumulative % of Employees
0-5	85	85	3	3
5-10	76	161	2	5
10-15	145	306	5	10
15-20	110	416	3	13
20-25	0	416		13
25-30	95	511	3	16
30-40	104	615	3	19

5.4.4 Princess Royal Hospital (Telford)

Cycling accessibility figures and walking accessibility figures for the Princess Royal Hospital are shown in Table and

Table 13. These show the number and proportion of staff who can reach the site in the given time.

Table 12: Cycling Journey Time to Telford Hospital by Employee

Journey Time	Total Number of Employees	Cumulative Employees	% of Total Population	Cumulative % of Employees
0-5	169	169	10	10
5-15	304	473	18	28
15-25	213	686	12	40
25-35	179	865	10	50
35-45	352	1217	20	70

Table 13: Walking Journey Time to Telford Hospital by Employee

Journey Time	Total Number of Population	Cumulative Employees	% of Total Population	Cumulative % of Employees
0-5	42	42	2	2
5-10	83	125	5	7
10-15	44	169	3	10
15-20	73	232	4	14

Journey Time	Total Number of Population	Cumulative Employees	% of Total Population	Cumulative % of Employees
20-25	32	264	2	16
25-30	18	282	1	17
30-40	171	453	10	27

Source: data in Tables 10-13 from Task Note 3: Walking, Cycling and Public Transport Accessibility Planning, The TAS Partnership, 2011)

Figures 6 to Figure 11 on the following pages provide a geographic representation of staff home postcodes within reasonable walking and cycling journey times for those staff based at RSH and PRH.

5.5 Public Transport

- 5.5.1 As mentioned in Section 2, both Trust sites are served by bus routes provided by Arriva. As part of the travel survey, GIS was applied to postcode location data supplied by staff, to evaluate how many staff lived within a certain distance of what was considered the primary bus route to the Hospital (the 1 at RSH and the 44 at PRH). There is debate about what the 'true' maximum distance is that people are typically willing to walk from a bus stop to work or shop, but there is at least some evidence that it is highly context-dependent and not an absolute figure. Therefore, in this analysis figures of both 350m and 700m were used.

Table 14: Access to bus routes - RSH

Distance from Bus Route	Total Number of Employees	Cumulative Employees	% of Total Population	Cumulative % of Employees
350m	505	505	16	16
700m	721	1226	23	39

Table 15: Access to bus routes - PRH

Distance from Bus Route	Total Number of Employees	Cumulative Employees	% of Total Population	Cumulative % of Employees
350m	293	293	17	17
700m	483	774	28	45

Source: data from Task Note 5: Public Transport Links, The TAS Partnership, 2011

- 5.5.2 These results lie broadly in line with what was concluded with regards to cycling and walking in Shrewsbury and Telford. The inherent urban structure of Shrewsbury and its density mean that it is better placed to have a greater number of members of staff take public transport to work. While to some extent this is a function of the routes of the buses themselves, the overall structure of the urban areas is the key factor.
- 5.5.3 The ultimate impact of these geographical differences is significant. It means that deriving a single Trust Travel Policy is challenging, particularly with regard to cycling, walking and public transport. In reality, the site-specific challenges and opportunities posed by PRH and RSH require a thorough and ongoing investigation and analysis by the Travel Plan Coordinator, to ensure that any

new areas of potential are pursued. While this will to some extent be discussed in section 8 under work around Active Travel, it means that the Trust must understand that an agglomeration and homogenisation of the travel problems facing it are overly simplistic.

- 5.5.4 Fortunately, the early identification of the differing needs of the sites and a dedicated Travel Plan Coordinator enables a bespoke approach to each site, recognising their fundamental differences, while encapsulated within the overall Travel Plan.

Figure 6: Royal Shrewsbury Hospital: Cycling Accessibility (Larger Area, Smaller Scale)

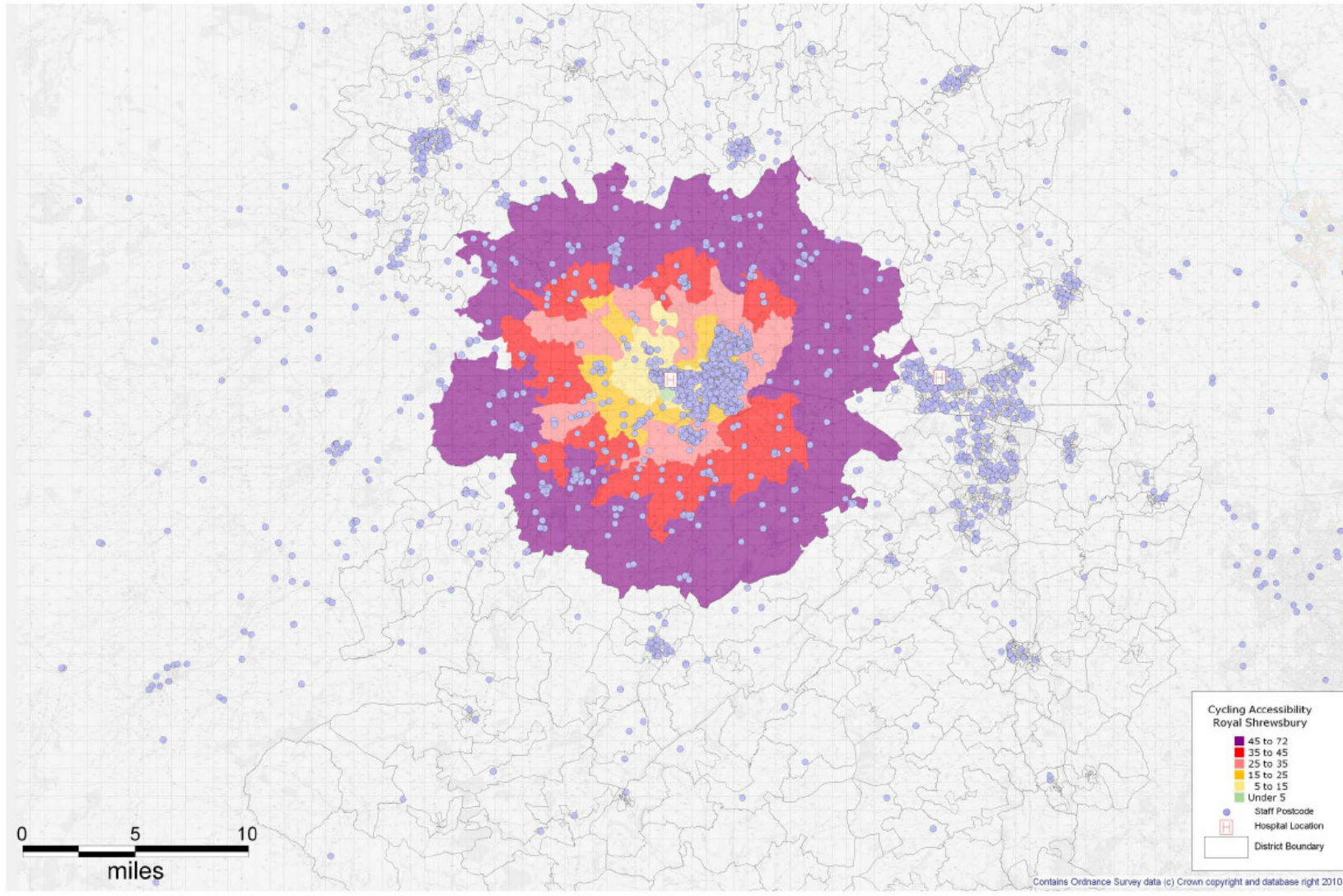


Figure 7: Royal Shrewsbury Hospital: Cycling Accessibility (Smaller Area, Larger Scale)

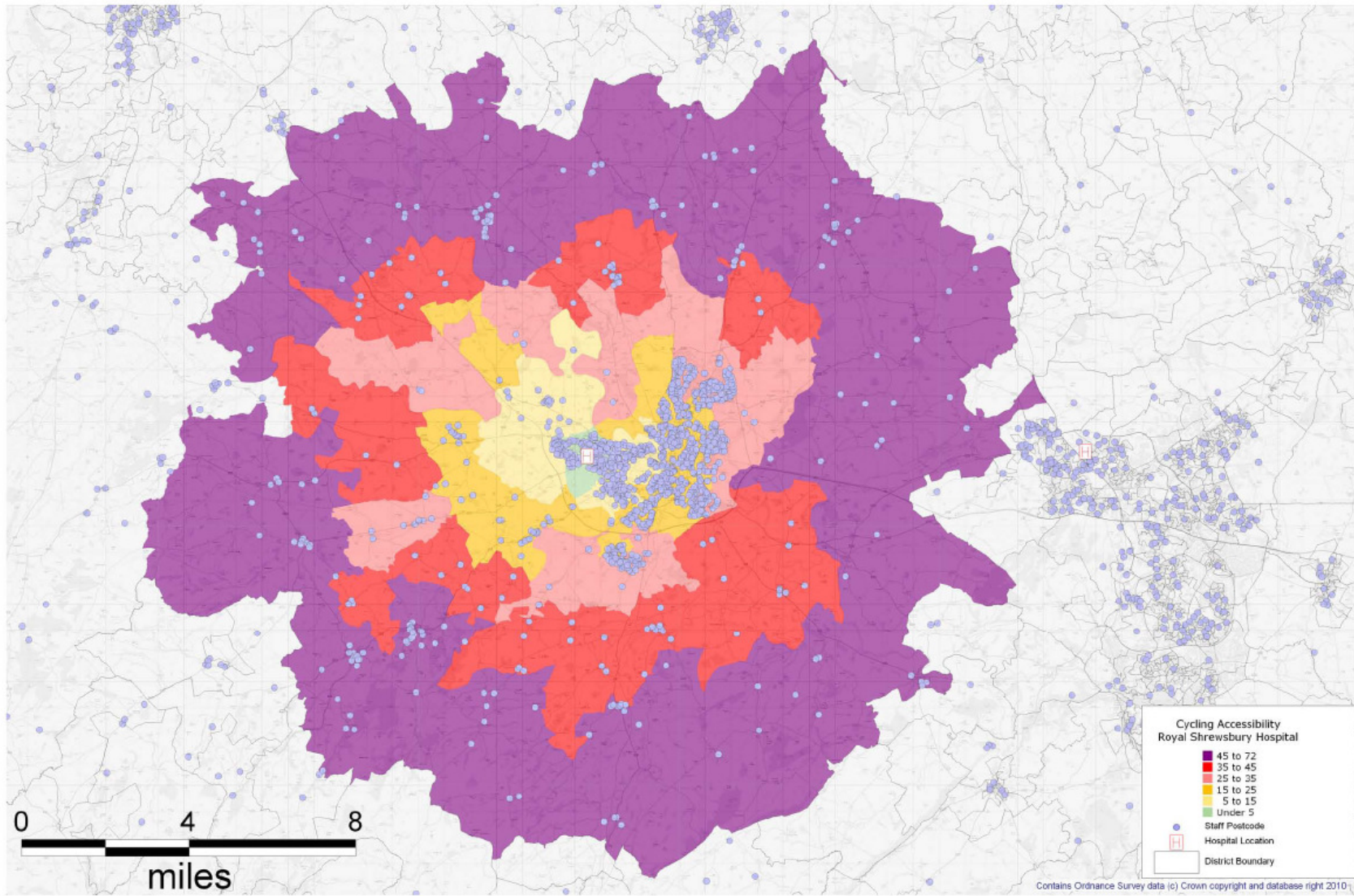


Figure 8: Royal Shrewsbury Hospital: Walking Accessibility (Smaller Area, Larger Scale)

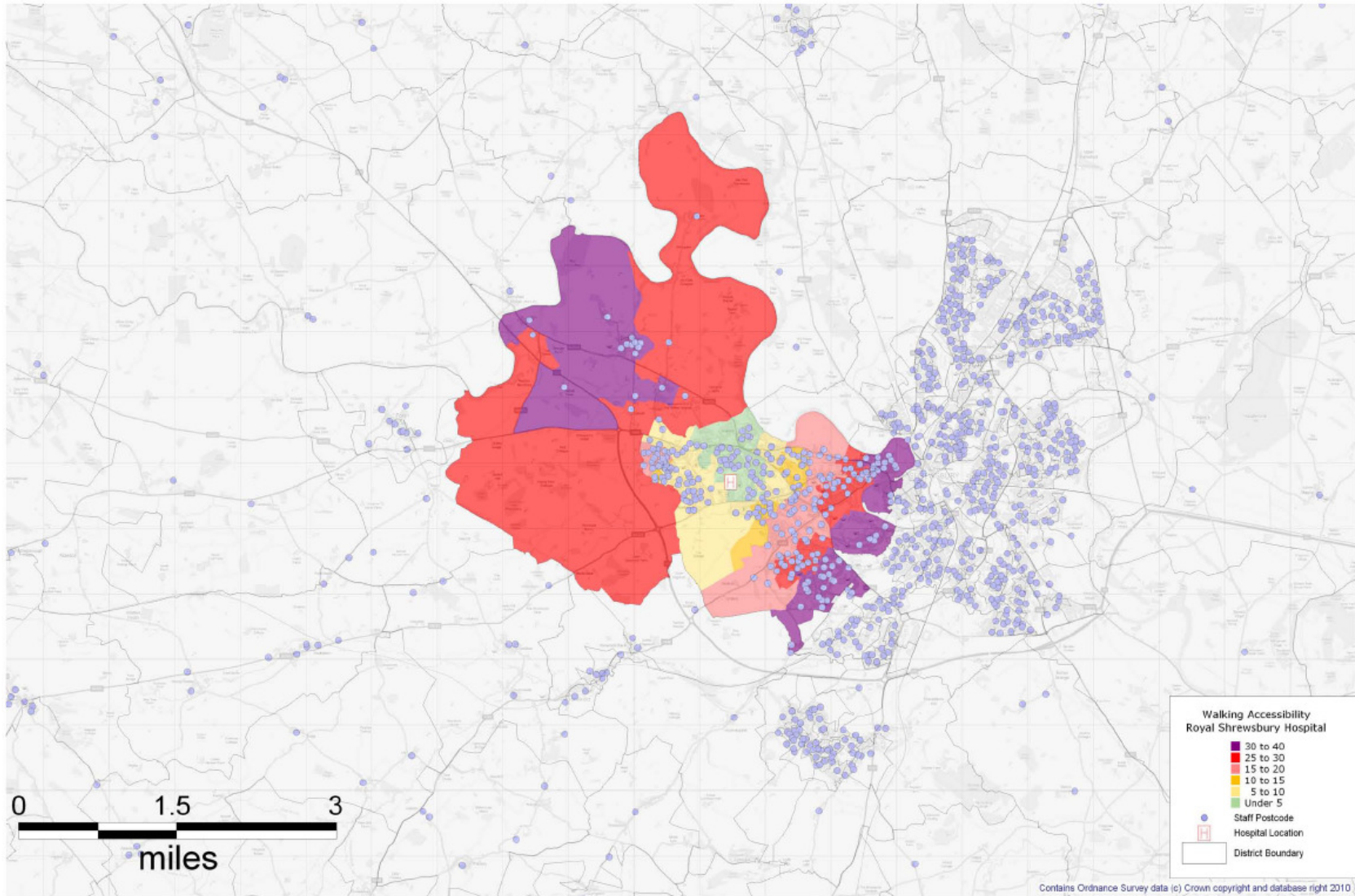


Figure 9: Princess Royal Hospital, Telford: Cycling Accessibility (Larger Area, Smaller Scale)

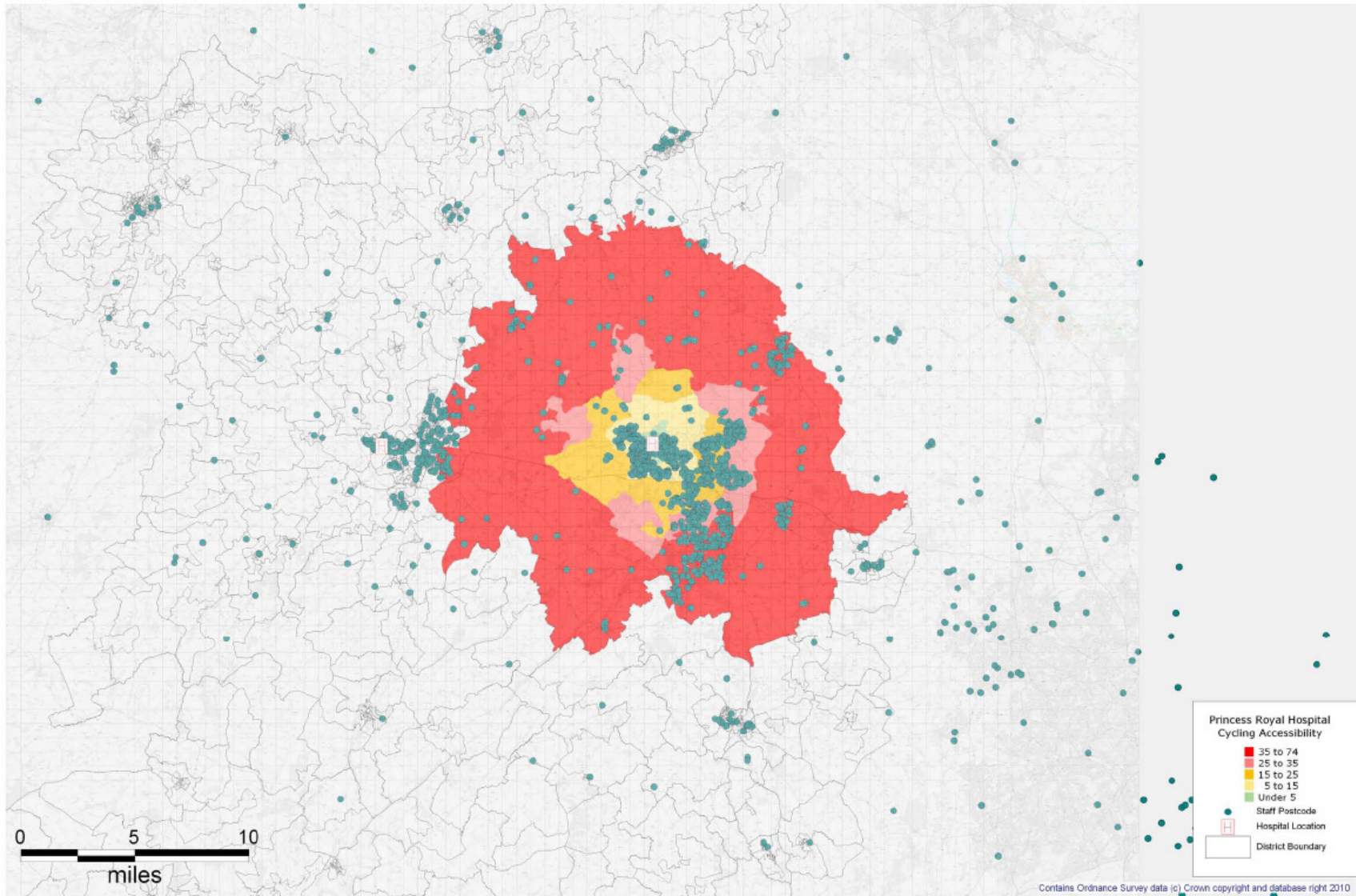


Figure 10: Princess Royal Hospital, Telford: Cycling Accessibility (Smaller Area, Larger Scale)

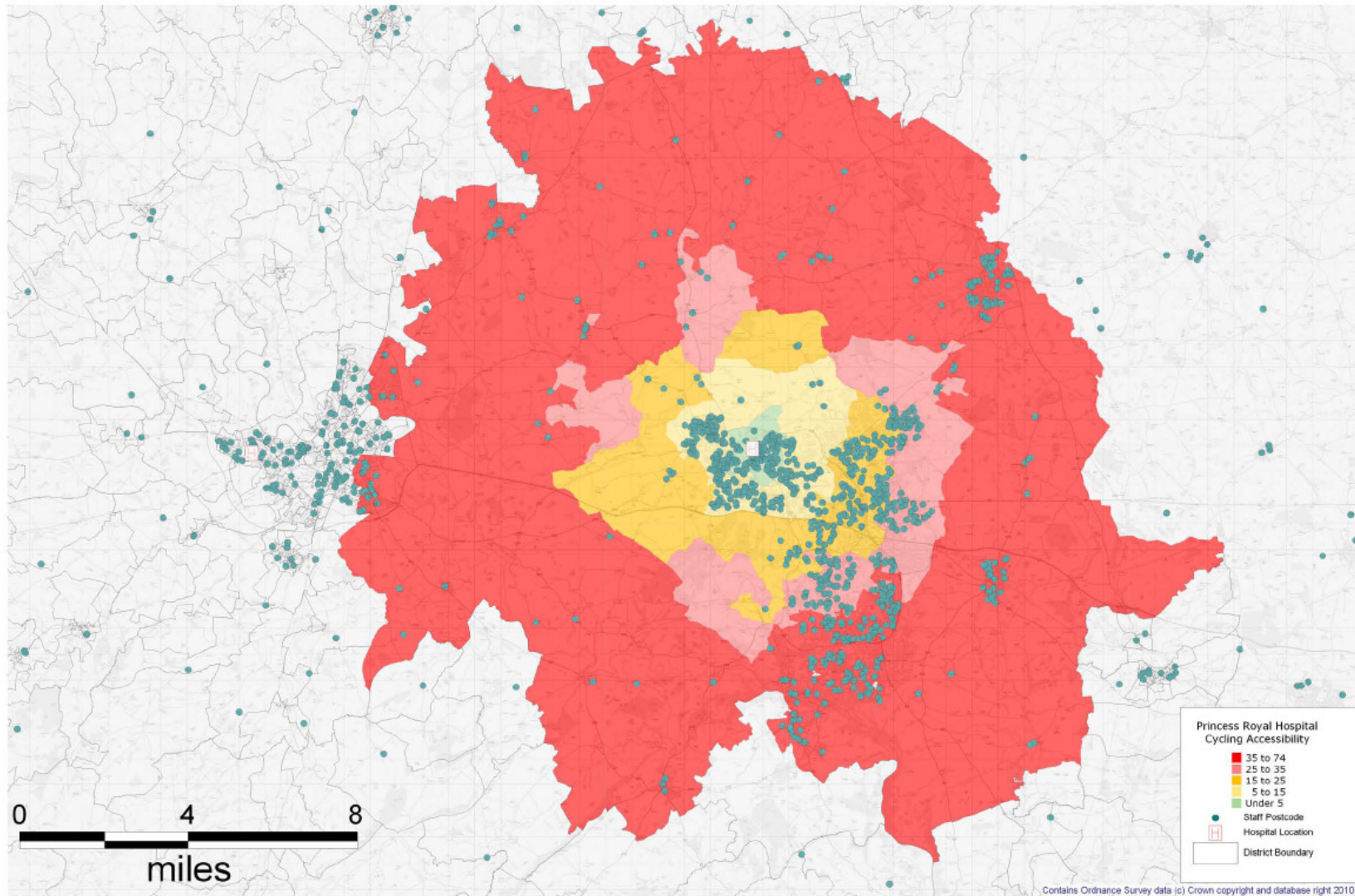
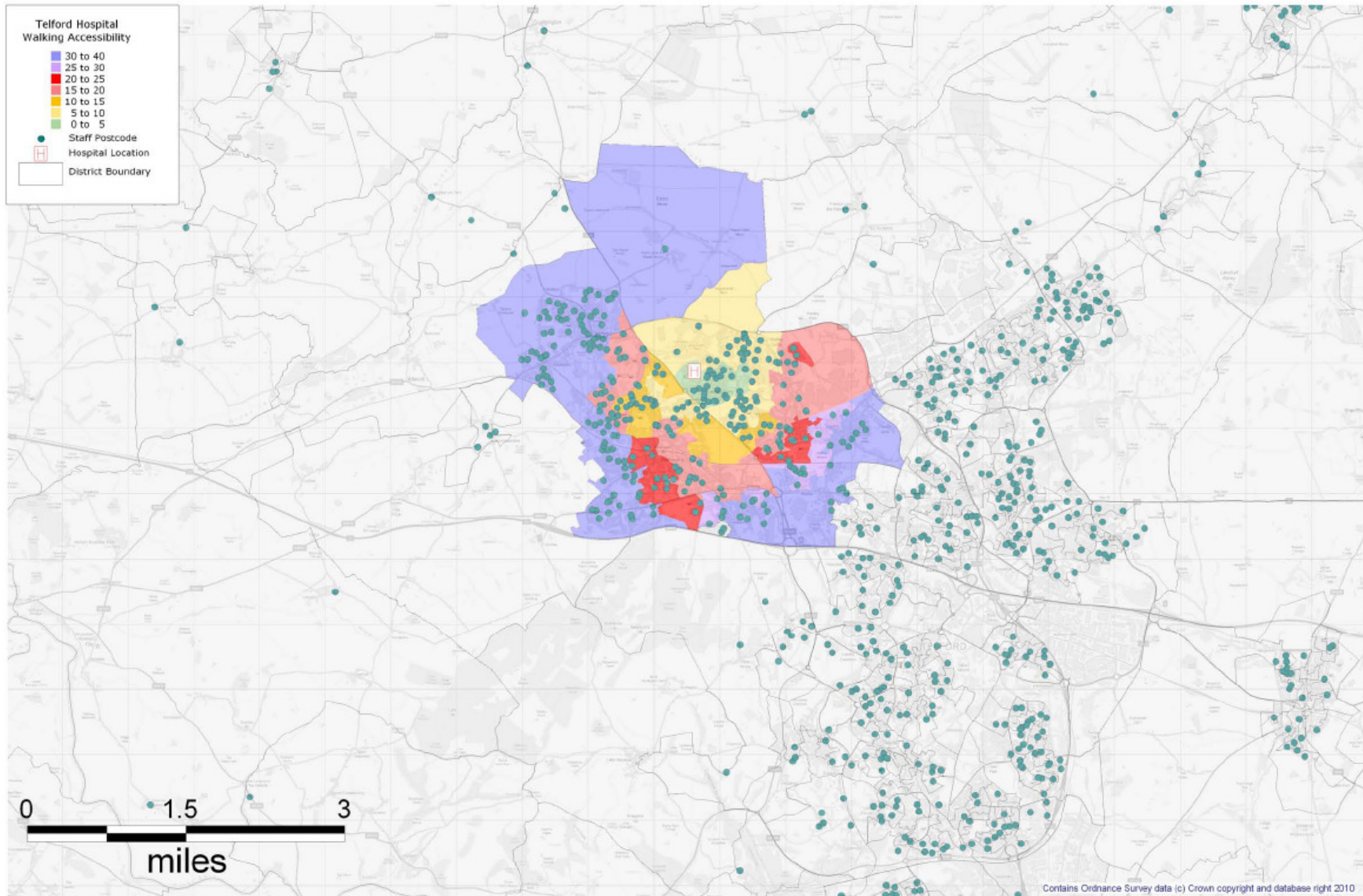


Figure 11: Princess Royal Hospital, Telford: Walking Accessibility (Smaller Area, Larger Scale)



5.6 Travel impacts of reconfiguration

Junction Analysis

- 5.7.1 This has been primarily provided in the Transport Statement and Transport Statement Addendum by PTB Consultants and is restated here, additionally a summary is included in Appendix 5 of this plan. The worst case scenario was envisaged by PTB as 38 AM car trips and 23 PM car trips. While there was some disagreement about this figure from Telford and Wrekin Council, the planning application for the WCC was ultimately approved so this is assumed to be the maximum impact of the new development.
- 5.7.2 Traffic turning counts were undertaken at the site access junctions; Apley roundabout and Grainger Drive, along with Shawbirch roundabout to the north and Haybridge roundabout to the south. These traffic counts were undertaken on 7th December 2011 and Automatic Traffic Count (ATC) passing count data was also collected at the site access points over the period 7th December to 15th December 2011.
The Apley roundabout, which gives access directly to the Hospital and also indirectly to the Hospital via Grainger Drive, is noted to experience total entry flows of 3,598 vehicles in the AM peak hour and 3,226 in the PM peak hour.
- 5.7.3 Observations of the morning peak hour indicate that the local highway network experiences an element of queuing and delay at the site access roundabout and the roundabouts to the north and south.
At the Apley roundabout queues were observed on the northern arm during the AM peak, with traffic continuing to move with relatively low levels of delay. At Haybridge roundabout to the south traffic was observed to flow relatively freely during the morning peak hour. To the north queues were noted on the northern arm of the Shawbirch roundabout.
- 5.7.4 A local residential survey was run in October 2014. Which focused on travel and parking issues that the new WCC may have a local impact on. Residents raise the desire on improved junction protection ie T-Junctions and requested that additional parking be made on hospital grounds to ease current congestion.

Car Park Analysis

- 5.7.5 This has been primarily provided in the Transport Statement and Transport Statement Addendum by PTB Consultants and is restated here. It has been calculated using provided staffing requirements for the wards moving between the two sites.
- 5.7.6 The peak car parking demand was anticipated to be an additional 69 cars on site between 8am and 9am. This was due to the shift changeover time, resulting in both night shift and day shift staff being on site simultaneously.

Table 16: Car parking demand

Period commencing	07:00	08:00	09:00	10:00	15:00	16:00	17:00	18:00
Staff to RSH	19	22	24	25	20	15	15	14
Staff to PRH	50	91	66	67	63	61	55	43
Net Change	+31	+69	+42	+42	+43	+46	+40	+29

Staff Travel Time

- 5.7.7 As part of the reconfiguration of services, around 460 staff moved from RSH to PRH for Head & Neck services and the new WCC.
- 5.7.8 Part of the planning process for this move involved assessing the travel impacts of the potential relocation of up to 10% of the Trusts workforce. A database of the postcodes of the staff members involved was obtained, which was then inputted into Geographical Information System (GIS) software, in order to derive both a visual output and a numerical estimate of additional mileage. This service was provided by Shropshire County Council. These are both represented on the following pages.
- 5.7.9 As can be seen below, the reconfiguration will lead to a significant amount of additional mileage for the Trust, as many of the employees who have moved currently live relatively near to the RSH in Shrewsbury. While there are some employees who live to the East of Shrewsbury or East of Telford, they constitute only around 90 of the 460 staff who are moving.

The Trust will be compensating the affected staff for additional mileage at the rate of £0.28 per mile for 4 years. It is currently estimated that this will cost the Trust £233,000 per annum for these four years.

Figure 12: Estimated change in daily mileage distance for staff affected by reconfiguration

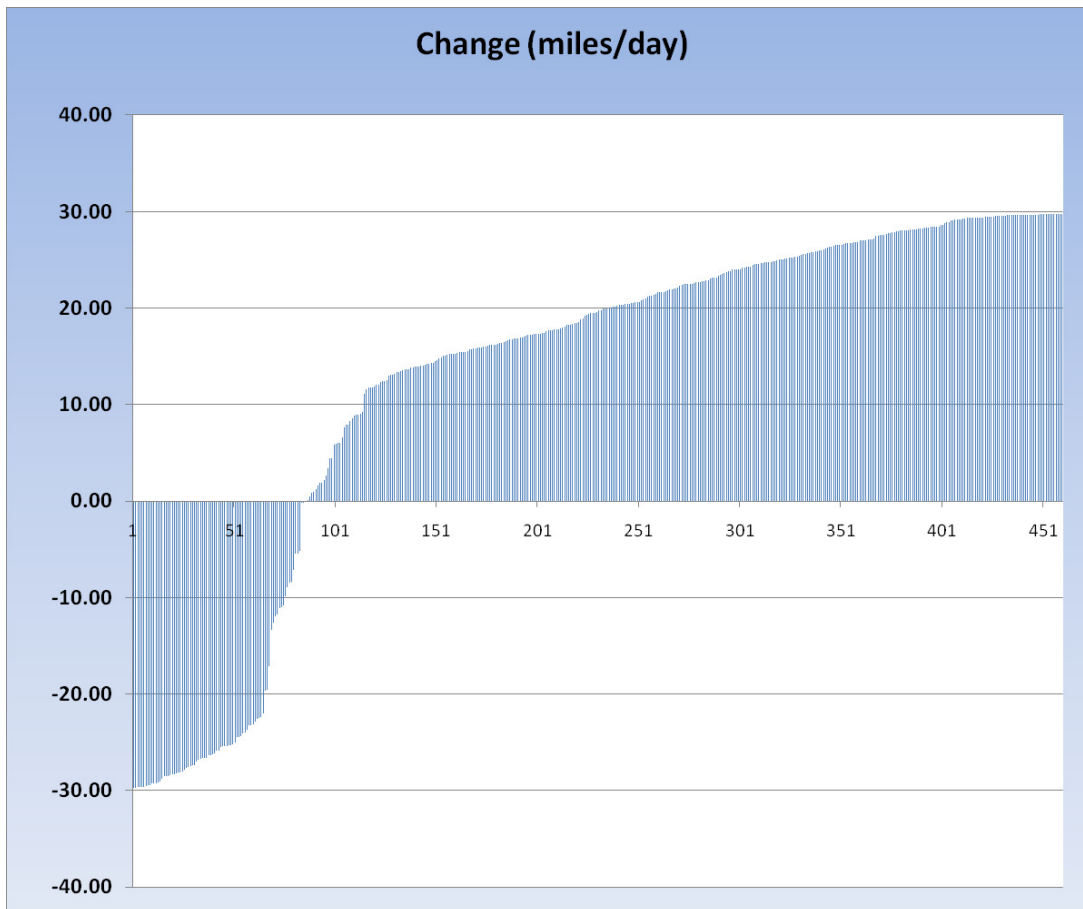
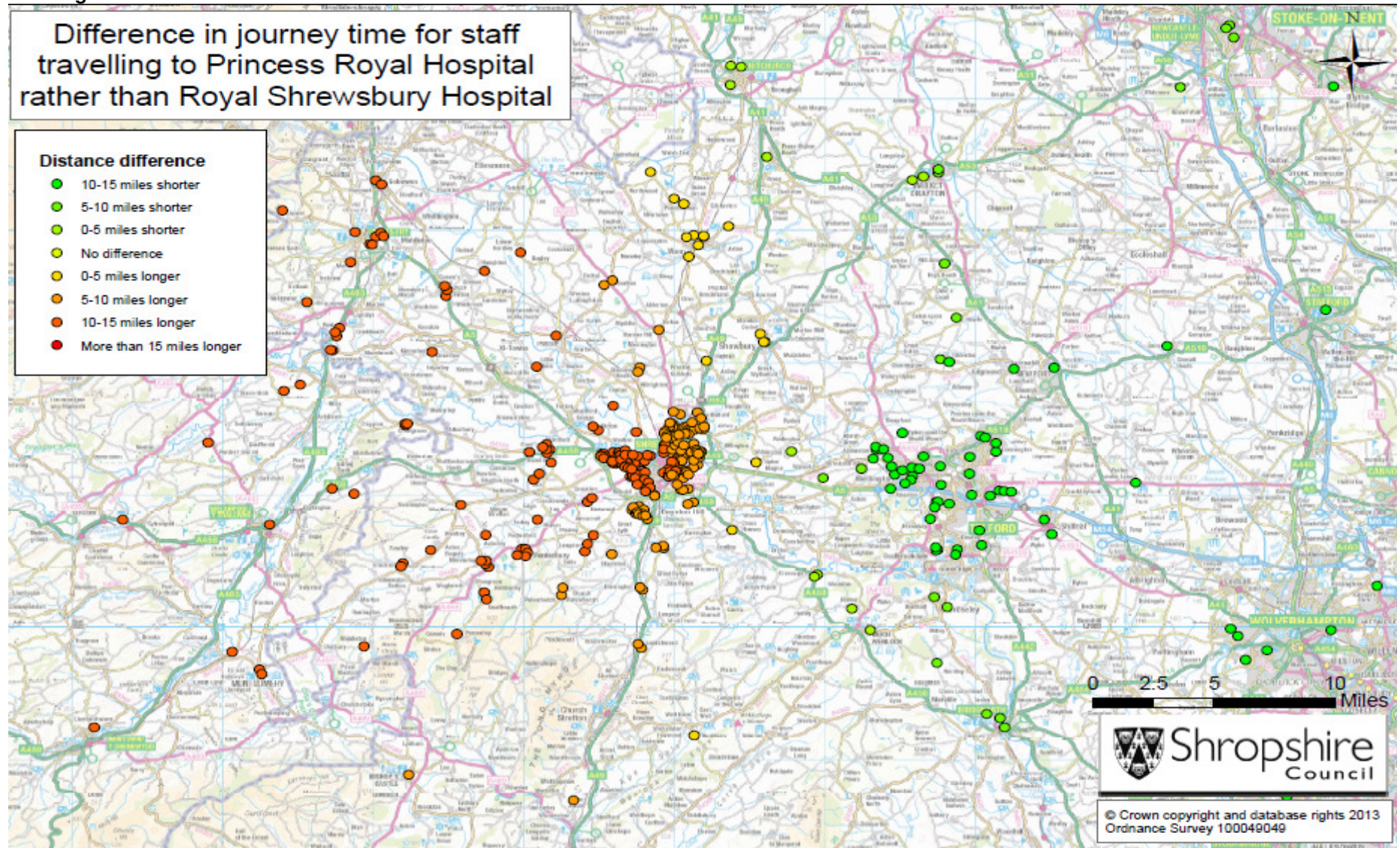


Figure 13: Estimated difference in journey time for staff affected by reconfiguration



6 Objectives and targets

6.1 The Trust is committed to achieving a number of goals with regards to Transport; these have been enumerated in the Travel and Transport Strategy (2012), The Good Corporate Citizen and Sustainable Development plan (2014) and the planning consent for the WCC (2012). These are:

- To reduce overall business travel by 25% by 2020
- Increase the proportion of travel undertaken in pool cars
- Achieve a score of 'excellent' in Travel standard by the Good Corporate Citizen model by 2020
- Reduce the percentage of staff accessing PRH by SOV by 5% from 2012
- Reduce the number of appointments due to Telehealth and community health projects
- Carrying out an annual staff survey to monitor transport use
- Develop a plan to reduce travel and traffic, in line with the NHS Carbon Reduction Strategy
- To ensure BREEAM requirements are carried out for all new developments

Many of these objectives are complementary, there is little contradiction and a joined-up holistic approach is the best way to achieve them.

Travel Plan Strategy

7.1 Travel Plan Coordinator

7.1.2 In December 2013, SaTH appointed a Travel Plan Coordinator (TPC) in partnership with Telford and Wrekin and Shropshire Councils (T&W has subsequently taken responsibility for funding the Shropshire element in 14/15)

7.1.3 The TPC will be responsible for monitoring the success of the travel plan and implementing the various measures proposed in section 8. They will also have the day-to-day responsibility for liaising with the local authorities and other stakeholders in travel and transport.

7.1.3 The TPC will work in conjunction with Telford and Wrekin Council to monitor SaTH compliance with the WCC development, in line with planning conditions relating to transport outlined under **TWC/2012/0108**

7.1.4 They will report to senior management in the Corporate Governance Directorate.

7.2 Travel User Group

7.2.1 It is proposed to re-invent the former bicycle user group that had been previously setup in 2014. The new group will involve all travel users that commute to the site with an emphasis on sustainable modes of transport. This will provide an ideal platform for the dissemination of information and as an email forum for cyclists, walkers, car-sharers, bus / rail users, motorcyclists at SaTH. It will allow users to supply ideas for areas of improvement and to articulate their concerns. It will be chaired by the TPC and will also include representatives from the relevant local authorities and estates/facilities departments.

7.3 Travel and Transport Group

- 7.3.1 A Travel and Transport Group will be created to discuss ideas and issues relating to Transport at the Trust. It will contain representatives from Trade Unions, Clinicians, Estates, and Human Resources and will be chaired by the Travel Plan coordinator.

8 Proposed Travel Plan measures

8.1 Impacts of reconfiguration

When considering how to mitigate any impacts of reconfiguration and ameliorate existing issues, a number of options were considered and evaluated by the TPC, these were:

1. Do nothing and continue with Reconfiguration
2. Pursue flexible working
3. Aim for 5% reduction in car use by active travel
4. Increase investment and aim for a 10% reduction in car use via active travel
5. Build new car parking capacity
6. Introduce pay as you park system for staff
7. Focus on car sharing
8. Put in place exclusion zones for car parking permits
9. Implement inter-site bus service
10. Alter car parking charges for staff
11. Reform the Pool Car/Grey Fleet
12. A hybrid of some aspects of above changes

- 8.1. After a project planning stage, business case and internal consultation and discussion, the TPC presented his recommendations to a group of the Hospital Executive Committee (HEC). After discussion, the following options were recommended to be further evaluated:

- **Pursue Flexible Working**
- **Aim for 5% reduction in car use by active travel**
- **Introduce Pay as you Park System for Staff**
- **Focus on Car Sharing**
- **Reform the Pool/Grey Fleet**

These can be broadly split into the following categories: Car Parking, Sustainable Modes and Reducing the Need to Travel

- 8.1.1 These were felt to represent the best combination of value for money, feasibility of implementation and maximum effectiveness. It was decided to adopt a 'Travel hierarchy' approach, which prioritised measures which had immediate effectiveness.

- 8.1.2 If measures were felt not to be having an effect then previously rejected options would be reconsidered.

- 8.1.3 The risks, SWOT/PESTLE analysis and Travel Hierarchy are all attached in Appendix 1-3

These demonstrate that the Trust has considered both the internal and external challenges that face it in deriving a new Travel and Transport Policy and Travel Plan. These particularly highlight the threats of inaction at SaTH. Laissez-faire can no longer be used as a continuing policy position, as it has in the past.

8.2 Marketing and Promotion

- 8.2.1 What underlies all of these measures is that staff, patients and visitors should be aware of their options for travelling to the hospitals. While there has been good work in the past, particularly with regards to reconfiguration, this needs to be progressed. Accordingly, a travel options guide will be developed and made available in both hard copy and electronically to staff. It will also be distributed as part of the corporate induction package, as it is recognised that early interventions can positively affect travel behaviour for staff.
- 8.2.2 While travel information already exists on the intranet and external websites, this can be developed and expanded to provide a more detailed discussion of the alternatives and the environmental, financial and health implications associated with using different modes of transport.
- 8.2.3 Various areas around the Hospital sites will be given over to promoting and providing Travel and Transport information for use by both visitors and staff. The information will include promotional materials for bus and rail services, a wide range of cycling and walking leaflets and referrals to other sources of information. Specifically, the contact details of the Travel Plan Coordinator will be placed there, to enable a single point of contact for all travel issues at the Trust.

8.3 Focus on Car Sharing

- 8.3.1 The Trust is currently a member of a car-sharing scheme operated by Shropshire and Telford & Wrekin Councils. This is a free scheme designed to enable people to find partners for common journeys. In this approach, the Trust dedicates time and resources to increasing the number of car sharers on site, particularly aimed at those staff moving base to PRH, who would be most receptive to such a move.
- 8.3.2 The Trust will dedicate a number of spaces at each site to car-sharers, initially 5 per site, increasing if there is sufficient demand. This will provide a visible way for people to obtain a reward by joining the car-sharing scheme. This could be combined with other encouragements, such as reduced prices on permits for car sharers.
- 8.3.3 The impacts of this scheme are cumulative rather than immediate. There are additional operational challenges inherent in car sharing in a healthcare environment, particularly linked to shift timings and irregular working days, which will limit the effectiveness of this option for clinical staff.
- 8.3.4 While the scheme would have limited effectiveness for some clinical workers, up to 20% of staff fall under the headings of Admin & Clerical, with a further Estates & Ancillary group often working 9am-5pm. This represents a large pool of staff members who could benefit from the scheme and correspondingly a significant potential change in parking demand.

8.4 Move to a Pay as you Park System

8.4.1 As noted in section 2, in 2013 the Trust moved to an ANPR system of camera recognition for visitor parking. One of the side effects of this new system is that the movements of staff cars on and off site are far more easily captured than before. With only two access points for each site, this lends itself to the potential of an ANPR system to charge for staff parking. This would have a number of advantages over the current system, these being:

- It would provide make staff consider their choice to drive in on a daily basis
- It would be more equitable than the current system whereby staff members pay the same rate if they drive in 1 or 200 days of the year
- There would be the potential to give staff cheaper or free parking at times of day when it was acknowledged that accessing the site could be difficult (such as night shifts or on Sundays)
- There would be a lower administrative burden on the Estates department to maintain the permit system

8.4.2 However, the system faces a number of challenges with regards to implementation and feasibility, particularly with payroll software. After initial discussions with CP Plus, it was decided to explore existing best practice in the area, rewrite the Staff Car Parking Policy to allow for the implementation of the system in the future and review it at 6 monthly intervals to consider feasibility.

8.5 Pursue Flexible Working

8.5.1 The Trust has in place a flexible working policy, HR 28, which allows employees to ask managers for flexible working where it is reasonable. However, knowledge of this policy varies through the Trust and some managers may be unwilling to allow their employees to work flexibly for worry of the additional workload created by the need to maintain continuity throughout core business hours. Despite this, flexible working represents a significant opportunity for the Trust and in particular its administrative and clerical staff (20% of the workforce) to make a significant impact on the parking issues at the Trust. If 30% of eligible staff were to begin working 9 day fortnights, then the demand for parking would decrease by over 100 spaces. Even if staff simply chose to begin earlier and leave later, this would reduce demand on nearby junctions at peak hours.

8.5.2 This option will be achieved through the promotion of flexible working for employees via the Communications department and briefings for all line managers on how they should deal with employees asking for flexible hours. The Workforce directorate will monitor the number of employees who have requested flexible hours and report back to the TPC.

8.6 Achieve 5% mode share by active travel

- 8.6.1 As mentioned in section 3, the Trust has around 180 bike rack places split across both sites, 146 RSH/34 PRH . However, most of these are not covered and very few are lockable, which are key characteristics for bike users. In addition, the locker or shower facilities that cyclists can use at the RSH are dated and in need of a refurbishment. The new shower and changing room facilities at the PRH are close to completion.
- 8.6.2 As part of this option, the Trust will target and invest in additional cycling facilities at both sites. These will initially consist of providing covered and lockable bike storage at PRH and expanding the lockable storage at RSH. This will meet the pressing concerns of cyclists at both sites. Once this has been achieved, a longer-term plan will be put into place to increase cycling capacity and improve the quality of cycle facilities. These will be guided by the travel user group, which will be re-established by the TPC. New changing facilities, including lockers and showers have been created at the PRH.
- 8.6.3 These developments will also include support for the Local Sustainable Transport Fund (LSTF) funding, with SaTH as a major local employer and partner in delivering sustainable transport.
- 8.6.4 Having the Sustainable Travels User Group guide and lead the choices of development in the future, helps to give Trust staff a real voice about where the improvements are needed around the Trust.
- 8.6.5 Walking is the other key component of active travel and one that is commonly underplayed. The TPC will conduct regular site audits, with patient and staff representatives, to identify deficient areas or routes which are holding people back from walking. Small capital improvements can be targeted at these 'blockages', which will dramatically improve the pedestrian environment and experience at both sites.

8.7 Reform the Grey Fleet

- 8.7.1 The Trust currently operates a pool of 53 cars which are leased to individual departments and administrated and charged for on a departmental basis. 23x based at RSH, 18x based at PRH 12x based at other sites. The booking system and mileage claims are paper-based and involve physically checking out the keys from administrative staff in each department.
The Trust also has a fleet of 29 lease cars, which are given to those users with a mileage of greater than 3,500 per annum or who have a job-related need for a lease car.
- 8.7.2 The total mileage for all pool, lease and grey fleet vehicles is around 2,000,000 miles per annum, of which 1,600,00 are the grey fleet (personal business mileage). There has been an increase of 300% over the past 5 years, with regular Green Fleet Reviews cementing the argument for change within the Trust.
- 8.7.3 The existing lease car scheme has a lack of oversight and audit, with the amount claimed by lease holders varying from 0 miles per year to 7,000. While at the conclusion of a 3 year lease, the Lease Car team sometimes examine the claimed mileage to see whether a lease should be renewed; there is no

examination of who should be eligible to receive a Lease Car in the first place. This results in some members of staff claiming up to 5,000 miles in a calendar year without being entered for a lease car. At the new AfC mileage rate, this represents a cost to the Trust of around £2,200

- 8.7.4 The Trust is putting into place, independent of this work, an electronic expenses system which went live last winter 2014. This will automatically record the mileage undertaken by claimants and enable reports to line managers to be sent automatically. It is anticipated that this will reduce a significant amount of over-claiming and mileage, thereby complementing the other measures in this package. The expenses system is estimated to save around £80,000 p/a from incorrectly claimed mileage.

9 Action Plan

Table 17: Implementation Timetable

Milestone	Completion date	Complete
Establish project structure/resources	Jan 2014	✓
Business Case to Executives	Feb 2014	✓
Delivery of Travel and Transport Plan	April 2014	✓
Approval of T&T by Trust Board	June 2014	✓
Operation of non-capital marketing elements	July 2014	✓
Implementation of capital cycling and walking elements	August 2014	✓
Opening of WCC	September 2014	✓
Undertake staff travel survey	May 2015	✓

Table 18: To Reduce Car Parking

Action	Responsibility	Timescale	Costs/Resources
Car Sharing			
Marketing and promoting car sharing website	TPC	Ongoing	TPC-Time
Running Events for car sharers, to provide the opportunity for potential car sharers to meet.	TPC	Through 2015	TPC-Time
Creation of additional car parking spaces for sharers	TPC / Estates	January 2016	Low cost
Other proposals			
Investigate opportunities to provide a park and ride scheme for hospital staff	TPC/ Public Transport Operators/Council	Autumn 2015	High Cost
Investigate opportunity to provide a Shuttle bus between sites.	TPC/Public Transport Operators/Council	Winter 2015	High cost
Investigate opportunities to provide dedicated motorcycle parking facilities in car park.	TPC/Estates	March 2016	Medium Cost
Pay as you Park system			
Explore best practice	TPC/ Facilities/ CP Plus	Ongoing	TPC -Time
Feasibility study of running on SaTH systems	CP Plus/ TPC/ IT/HR	Autumn 2015	Low/Medium cost

Table 19: Sustainable Modes - 5% mode share reduction by active travel

Action	Responsibility	Timescale	Costs/Resources
To Promote Cycling			
Continuous monitoring of current cycle parking facilities.	TPC/Estates/ Facilities	Ongoing	Low/TPC Time
Undertake improvements to existing cycle facilities.	TPC/Estates/Facilities	RSH –Sept 2015 PRH – Winter 2015 SBP – Mar 2016.	Capital Expenditure/LSTF Grants
Promote Cycle 2 Work Schemes	TPC/HR/Wheels to Work	October 2015 & April 2016	Low/TPC Time
Promotion of Workplace Challenges and Health & Wellbeing events	Local Authorities/Police Force/HR/TPC/Workplace Challenge of Shropshire	Ongoing	Low/TPC Time
Improving local cycling environment i.e. signage and lanes.	TPC/Estates/TWC	Continuing through 2015/16	Small-scale expenditure
Promote Cycle Security	TPC/Security/Estates/Local Police	Ongoing	TPC-Time
Investigate opportunities to provide discounts at cycling retailers	TPC/Health & Wellbeing	Ongoing	TPC-Time
Promotion of Adult Cycle Training	TPC/Cycle Experience	Ongoing	TPC-Time
Arrange cycle maintenance days ie Dr Bike	TPC/Council/Local cycle retailers		LSTF Grant/Low cost- £300 per session
Record current shower, changing and storage rooms around the sites and undertake improvements as required, i.e. signage, lockers, etc. Communicate to staff about changing room access and its use by staff.	TPC/Estates/Facilities	Ongoing PRH – Sept 2015.	Medium/ High cost

SaTH Framework Travel Plan

Action	Responsibility	Timescale	Costs/Resources
Develop a cycle map for staff showing all the above locations.	TPC/Communications/Estates	Ongoing	Medium cost
To Promote walking			
Enter into discussions with TWC re improved walking signage around the PRH, focussing on Silkin way and other routes	TPC/Communications/Estates/TWC	Ongoing	TPC-Time
Investigate opportunities to provide discounts at local walking and leisure shops	TPC/local retailers	Ongoing	TPC-Time
To provide support for the Country Park development plan	TPC/Redwood centre/Local Authorities/Volunteer Organisations	Ongoing	TPC-Time
To Promote Public Transport Use			
Promote public transport season tickets-Bus & Rail	TPC/ Public Transport Operators	Ongoing	TPC-Time
Offer Bus Tickets onsite	TPC/Finance/Public Transport operators	September 2015	TPC-Time
Investigate Real Time Passenger Information systems	TPC, Local Authorities	Winter 2015	Medium Cost
Discuss with T&WC & Network rail to improve walking and Cycling links with Wellington station	TPC, T&WC, Rail companies	March 2016	TPC-Time
Promotional Activities			
Improve and expand the content of the intranet and internet travel pages for staff & visitors of the trust. Providing links to Journey planning.	TPC/Comms team.	March 2016	TPC-Time
Investigate opportunities to work with other Partners in the neighbourhood to reduce car use.	CCG/Redwood centre	Ongoing	TPC-Time
Develop a Travel User group with regular updates and develop an	TPC	Ongoing	TPC-Time

SaTH Framework Travel Plan

Action	Responsibility	Timescale	Costs/Resources
recognisable identity			
Provide leaflets on sustainable travel options at various travel carousels in visitor/staff areas	TPC	Ongoing	Low Cost
Provide an Induction pack leaflet to new starters to the trust	TPC, Communications team/HR		Low Cost
Support Local Sustainable Transport Fund Bids from Local Authorities	TPC	2014-16	TPC-Time

Table 20: Reducing the need to Travel

Action	Responsibility	Timescale	Costs/Resources
Reform Grey and Pool Fleet			
Assess need for a centralised managed pool car fleet	TPC/Lease Car Manager	April 2014	TPC-Time
Integrate electronic expenses system with travel budgets	Procurement/HR/IT	April 2014	Software and running expenses
Solicit bids for centralised fleet system	TPC, Procurement, Lease Car Manager	Autumn 2015	High Cost
Trial fleet system	Departmental managers, trial departments	Autumn 2015	High Cost
Smarter driver training	Local Authorities/Carbon Trust	Rolling 2014-5	Medium cost
Review options for an inter-site Shuttle Bus	Local Authorities/TPC/All/Public transport operators.	Winter 2015	High Cost
Increase awareness of Tele-conferencing	IT/Comms team/TPC	Ongoing	High/Medium Cost
Lease Cars			
Rewrite lease car policy to remove inconsistencies	TPC/Workforce/ Lease Car Manager	May 2014	TPC-Time
Use new policy to evaluate need for leases as they expire	Lease Car Manager	Rolling	TPC-Time
Re-evaluate existing leases to find best value	TPC/Lease Car Manager/Payroll	Summer 2015	TPC-Time

10 Monitoring and review

- 10.1 The Travel Plan is to be updated at yearly intervals for 5 years after the opening of the WCC, the last update will be in October 2018. The purpose of the monitoring and review is to ensure that the Trust is complying with the conditions set forth in the planning consent or making a commitment to achieving them. Therefore, the monitoring process should include a travel survey for staff which includes questions on typical mode of travel to work along with location and typical site of work. This travel survey should aim to have a response rate of above 10%.
- 10.2 The travel survey will be issued by the Corporate Governance Directorate of SaTH in conjunction with the Communications department. The results of this survey will be presented to Telford and Wrekin Council on an annual basis. The Trust will also update the Health Overview and Scrutiny Committee and Patient Experience and Involvement Panel on the progress being made with regards to Transport.

Acknowledgements/Data Sources

Figures 1 and 4 are taken from OpenStreetMap, © OpenStreetMap contributors copyright details at: www.openstreetmap.org/copyright

Data used in Tables 1-6 was obtained from the 2011 report by Richard Armitage et al., 'Task Note 3: Walking, Cycling and Public Transport Accessibility Planning'

Figures 8-13 was obtained from the 2011 report by Richard Armitage et al., 'Task Note 3: Walking, Cycling and Public Transport Accessibility Planning'

Figure 14 was obtained from the 2011 report by Richard Armitage et al., Task Note 8 'Reconfiguration & Staff Travel: impact of changes'

Figure 15 was commissioned from Shropshire Council in December 2013 in conjunction with an assessment of the costs of the Reconfiguration of Services program.

Figures 16-19 in Appendix 4 originally commissioned as part of a staff travel survey in 2009 and were used in the 2011 report by Richard Armitage et al.

Tables 2-8 in Appendix 4 are originally from PTB Transport Statement 'Reconfiguration of Services at Princess Royal Hospital' section 3.0 'Revised Traffic Forecasts' and section 4.0 'Capacity Analysis'

APPENDIX 17a – Optimism Bias Forms

Appendix 17a

SaTH Sustainable Services Programme: Option B (Emergency Site at PRH, Planned Site at RSH)



OPTIMISM BIAS: CONTRIBUTORY FACTORS AND MITIGATION

Contributory Factor to Upper Bound	% Factor Contributes	Stage	Mitigation Factor	% After Mitigation
Progress with Planning Approval	4%	SOC	Opened discussion with planning authority, some engagement	3%
		OBC	Outline consent in place, with any Planning Conditions and requirements for Section 106 or similar agreements established, including any specific requirements of e.g. Environmental Agency	
		FBC	Full Consent in place. Judicial Review period passed	
Other Regulatory	4%	SOC	Degree of sign off from Fire Authority, HSE, transport authority, local government etc	4%
		OBC		
		FBC		
Depth of surveying of site/ground information	3%	SOC	Desktop study undertaken of own site	1%
		OBC	Investigations undertaken, historical records examined	
		FBC	Full survey of conditions, site services and topographics	
Detail of design	4%	SOC	Concept/masterplan/DCP	3%
		OBC	1:500s agreed and selected 1:200s	
		FBC	All 1:200s in place, key 1:50s (depends on procurement route)	
Innovative project/design	3%	SOC	Yes/No	0%
		OBC		
		FBC		
Design complexity	4%	SOC	This might include complex M&E solutions (requires further development)	2%
		OBC		
		FBC		
Likely variations from Standard Contract	2%	SOC	No contract chosen	2%
		OBC	Yes/No with measurement of scale variations	
		FBC		
Design Team capabilities	3%	SOC	Previous relevant experience of individuals involved. Capacity	0%
		OBC		
		FBC		
Contractor's capabilities	2%	SOC	Previous relevant experience of individuals involved. Capacity. Track record of delivery	1%
		OBC		
		FBC		
Contractor involvement	2%	SOC	Buildability. Opportunity to influence design	1%
		OBC		
		FBC		
Client capability and capacity	6%	SOC	Degree of team in place with relevant experience	2%
		OBC	Full team in place for procurement	
		FBC	Robust implementation plan in place	
Robustness of Output Specification	25%	SOC	Definition of scope and extent of services. Degree of outstanding decisions	15%
		OBC		
		FBC		

Involvement of Stakeholders, including Public and Patient Involvement	5%	SOC	Scope of stakeholders to be involved. Plan in place to engage	3%
		OBC	Implementation of Plan	
		FBC	Involvement demonstrated	
Agreement to Output Specification by stakeholders	5%	SOC	Letters of support from clinicians, Trade Unions, staff groups, patient representatives/groups	3%
		OBC		
		FBC		
New service or traditional	3%	SOC	Assessment of how innovative/new service model is at national/regional/local level. Has this ever been tried before?	1%
		OBC		
		FBC		
Local community consent	3%	SOC	Consideration of traffic noise/existence of protestors or pressure groups	3%
		OBC		
		FBC		
Stable policy environment	20%	SOC	Degree to which new policy/standards are applicable depending upon which stage is reached	8%
		OBC		
		FBC		
Likely competition in the market for the project	2%	SOC	Degree project has been marketed	0%
		OBC	Evidence of market interest	
		FBC	Mitigated	
TOTAL	100%			52%

Note: Across all contributory factors, mitigation would be expected to be greater the greater the extent of risk quantification and risk management (including the extent to which it is captured in contingencies)

OPTIMISM BIAS - UPPER BOUND CALCULATION



Lowest & Upper Bound
Mid %
Upper %
Actual % Upper Bound for this project

13%
40%
76%
33%

Build complexity			
<i>Choose 1 category</i>			
<i>Length of Build</i>	< 2 years	0.50%	
	2 to 4 years	1.00%	1.00%
	Over 4 years	4.00%	
<i>Choose 1 category</i>			
<i>Number of phases</i>	1 or 2 phases	0.50%	
	3 or 4 phases	2.00%	2.00%
	More than 4 Phases	5.00%	
<i>Choose 1 category</i>			
<i>Number of sites involved (i.e. before and after change)</i>	Single site	2.00%	
	2 sites	2.00%	2.00%
	More than 2 sites	5.00%	
Location			
<i>Green field</i>	New build	3%	
	<i>Brown field</i> New build	8%	
<i>Existing site</i>	New build	5%	
		<i>or</i>	
	Less than 15% refurb	6%	
	15% - 50% refurb	10%	10.00%
	Over 50% refurb	15%	
Scope of scheme			
<i>Choose 1 category</i>			
<i>Facilities Management</i>	Hard FM only	0.00%	0.00%
	TUPE whole service	2.00%	
	RoE whole service	2.00%	
<i>Choose 1 category</i>			
<i>Equipment</i>	Group 1&2 only	0.50%	0.50%
	Major medical equipment	1.50%	
	All equipment included	5.00%	
<i>Choose 1 category</i>			
<i>IT</i>	No IT implications	0.00%	
	Infrastructure	1.50%	1.50%
	Infrastructure & systems	5.00%	

<i>Choose more than 1 category if applicable</i>			
External stakeholders	Local NHS economy (e.g. DGH)	1.00%	1.00%
	Wider NHS economy (e.g. teaching DGH)	2.00%	
	NHS/Universities/Private/Vol sector	5.00%	
Service changes			
Stable environment, i.e. no change to service		5%	
Identified changes not quantified		10%	10%
Longer time frame service changes		20%	
Gateway			
<i>Choose 1 category</i>			
RPA Score	Low	0%	
	Medium	5%	5%
	High	10%	
		TOTAL	33.000%

CONTRIBUTION FACTORS AND MITIGATION	52%
UPPER BOUND CALCULATION	33%
TOTAL FACTOR TO APPLY TO ESTIMATE	17%

OPTIMISM BIAS: CONTRIBUTORY FACTORS AND MITIGATION

Contributory Factor to Upper Bound	% Factor Contributes	Stage	Mitigation Factor	% After Mitigation
Progress with Planning Approval	4%	SOC	Opened discussion with planning authority, some engagement	
		OBC	Outline consent in place, with any Planning Conditions and requirements for Section 106 or similar agreements established, including any specific requirements of e.g. Environmental Agency	3%
		FBC	Full Consent in place. Judicial Review period passed	
Other Regulatory	4%	SOC	Degree of sign off from Fire Authority, HSE, transport authority, local government etc	4%
		OBC		
		FBC		
Depth of surveying of site/ground information	3%	SOC	Desktop study undertaken of own site	1%
		OBC	Investigations undertaken, historical records examined	
		FBC	Full survey of conditions, site services and topographics	
Detail of design	4%	SOC	Concept/masterplan/DCP	3%
		OBC	1:500s agreed and selected 1:200s	
		FBC	All 1:200s in place, key 1:50s (depends on procurement route)	
Innovative project/design	3%	SOC	Yes/No	0%
		OBC		
		FBC		
Design complexity	4%	SOC	This might include complex M&E solutions (requires further development)	2%
		OBC		
		FBC		
Likely variations from Standard Contract	2%	SOC	No contract chosen	2%
		OBC	Yes/No with measurement of scale variations	
		FBC		
Design Team capabilities	3%	SOC	Previous relevant experience of individuals involved. Capacity	0%
		OBC		
		FBC		
Contractor's capabilities	2%	SOC	Previous relevant experience of individuals involved. Capacity. Track record of delivery	1%
		OBC		
		FBC		
Contractor involvement	2%	SOC	Buildability. Opportunity to influence design	1%
		OBC		
		FBC		
Client capability and capacity	6%	SOC	Degree of team in place with relevant experience	2%
		OBC	Full team in place for procurement	
		FBC	Robust implementation plan in place	
Robustness of Output Specification	25%	SOC	Definition of scope and extent of services. Degree of outstanding decisions	15%
		OBC		
		FBC		

Involvement of Stakeholders, including Public and Patient Involvement	5%	SOC	Scope of stakeholders to be involved. Plan in place to engage	3%
		OBC	Implementation of Plan	
		FBC	Involvement demonstrated	
Agreement to Output Specification by stakeholders	5%	SOC	Letters of support from clinicians, Trade Unions, staff groups, patient representatives/groups	3%
		OBC		
		FBC		
New service or traditional	3%	SOC	Assessment of how innovative/new service model is at national/regional/local level. Has this ever been tried before?	1%
		OBC		
		FBC		
Local community consent	3%	SOC	Consideration of traffic noise/existence of protestors or pressure groups	2%
		OBC		
		FBC		
Stable policy environment	20%	SOC	Degree to which new policy/standards are applicable depending upon which stage is reached	8%
		OBC		
		FBC		
Likely competition in the market for the project	2%	SOC	Degree project has been marketed	0%
		OBC	Evidence of market interest	
		FBC	Mitigated	
TOTAL	100%			51%

Note: Across all contributory factors, mitigation would be expected to be greater the greater the extent of risk quantification and risk management (including the extent to which it is captured in contingencies)

OPTIMISM BIAS - UPPER BOUND CALCULATION



Lowest & Upper Bound
Mid %
Upper %
Actual % Upper Bound for this project

13%
40%
76%
36%

Build complexity				
<i>Choose 1 category</i>				
<i>Length of Build</i>	< 2 years	0.50%		
	2 to 4 years	1.00%		
	Over 4 years	4.00%	4.00%	
<i>Choose 1 category</i>				
<i>Number of phases</i>	1 or 2 phases	0.50%		
	3 or 4 phases	2.00%	2.00%	
	More than 4 Phases	5.00%		
<i>Choose 1 category</i>				
<i>Number of sites involved (i.e. before and after change)</i>	Single site	2.00%		
	2 sites	2.00%	2.00%	
	More than 2 sites	5.00%		
Location				
<i>Green field</i>	New build	3%		
		8%		
<i>Brown field</i>	New build	5%		
		or		
		Less than 15% refurb	6%	
		15% - 50% refurb	10%	10.00%
		Over 50% refurb	15%	
Scope of scheme				
<i>Choose 1 category</i>				
<i>Facilities Management</i>	Hard FM only	0.00%	0.00%	
	TUPE whole service	2.00%		
	RoE whole service	2.00%		
<i>Choose 1 category</i>				
<i>Equipment</i>	Group 1&2 only	0.50%	0.50%	
	Major medical equipment	1.50%		
	All equipment included	5.00%		
<i>Choose 1 category</i>				
<i>IT</i>	No IT implications	0.00%		
	Infrastructure	1.50%	1.50%	
	Infrastructure & systems	5.00%		

<i>Choose more than 1 category if applicable</i>			
External stakeholders	Local NHS economy (e.g. DGH)	1.00%	1.00%
	Wider NHS economy (e.g. teaching DGH)	2.00%	
	NHS/Universities/Private/Vol sector	5.00%	
Service changes			
Stable environment, i.e. no change to service		5%	
Identified changes not quantified		10%	10%
Longer time frame service changes		20%	
Gateway			
<i>Choose 1 category</i>			
RPA Score	Low	0%	
	Medium	5%	5%
	High	10%	
		TOTAL	36.000%

CONTRIBUTION FACTORS AND MITIGATION	51%
UPPER BOUND CALCULATION	36%
TOTAL FACTOR TO APPLY TO ESTIMATE	18%

OPTIMISM BIAS: CONTRIBUTORY FACTORS AND MITIGATION

Contributory Factor to Upper Bound	% Factor Contributes	Stage	Mitigation Factor	% After Mitigation
Progress with Planning Approval	4%	SOC	Opened discussion with planning authority, some engagement	
		OBC	Outline consent in place, with any Planning Conditions and requirements for Section 106 or similar agreements established, including any specific requirements of e.g. Environmental Agency	3%
		FBC	Full Consent in place. Judicial Review period passed	
Other Regulatory	4%	SOC	Degree of sign off from Fire Authority, HSE, transport authority, local government etc	4%
		OBC		
		FBC		
Depth of surveying of site/ground information	3%	SOC	Desktop study undertaken of own site	1%
		OBC	Investigations undertaken, historical records examined	
		FBC	Full survey of conditions, site services and topographics	
Detail of design	4%	SOC	Concept/masterplan/DCP	3%
		OBC	1:500s agreed and selected 1:200s	
		FBC	All 1:200s in place, key 1:50s (depends on procurement route)	
Innovative project/design	3%	SOC	Yes/No	0%
		OBC		
		FBC		
Design complexity	4%	SOC	This might include complex M&E solutions (requires further development)	2%
		OBC		
		FBC		
Likely variations from Standard Contract	2%	SOC	No contract chosen	2%
		OBC	Yes/No with measurement of scale variations	
		FBC		
Design Team capabilities	3%	SOC	Previous relevant experience of individuals involved. Capacity	0%
		OBC		
		FBC		
Contractor's capabilities	2%	SOC	Previous relevant experience of individuals involved. Capacity. Track record of delivery	1%
		OBC		
		FBC		
Contractor involvement	2%	SOC	Buildability. Opportunity to influence design	1%
		OBC		
		FBC		
Client capability and capacity	6%	SOC	Degree of team in place with relevant experience	2%
		OBC	Full team in place for procurement	
		FBC	Robust implementation plan in place	
Robustness of Output Specification	25%	SOC	Definition of scope and extent of services. Degree of outstanding decisions	15%
		OBC		
		FBC		

Involvement of Stakeholders, including Public and Patient Involvement	5%	SOC	Scope of stakeholders to be involved. Plan in place to engage	3%
		OBC	Implementation of Plan	
		FBC	Involvement demonstrated	
Agreement to Output Specification by stakeholders	5%	SOC	Letters of support from clinicians, Trade Unions, staff groups, patient representatives/groups	3%
		OBC		
		FBC		
New service or traditional	3%	SOC	Assessment of how innovative/new service model is at national/regional/local level. Has this ever been tried before?	1%
		OBC		
		FBC		
Local community consent	3%	SOC	Consideration of traffic noise/existence of protestors or pressure groups	2%
		OBC		
		FBC		
Stable policy environment	20%	SOC	Degree to which new policy/standards are applicable depending upon which stage is reached	8%
		OBC		
		FBC		
Likely competition in the market for the project	2%	SOC	Degree project has been marketed	0%
		OBC	Evidence of market interest	
		FBC	Mitigated	
TOTAL	100%			51%

Note: Across all contributory factors, mitigation would be expected to be greater the greater the extent of risk quantification and risk management (including the extent to which it is captured in contingencies)

OPTIMISM BIAS - UPPER BOUND CALCULATION



Lowest & Upper Bound
Mid %
Upper %
Actual % Upper Bound for this project

13%
40%
76%
36%

Build complexity				
<i>Choose 1 category</i>				
<i>Length of Build</i>	< 2 years	0.50%		
	2 to 4 years	1.00%		
	Over 4 years	4.00%	4.00%	
<i>Choose 1 category</i>				
<i>Number of phases</i>	1 or 2 phases	0.50%		
	3 or 4 phases	2.00%	2.00%	
	More than 4 Phases	5.00%		
<i>Choose 1 category</i>				
<i>Number of sites involved (i.e. before and after change)</i>	Single site	2.00%		
	2 sites	2.00%	2.00%	
	More than 2 sites	5.00%		
Location				
<i>Green field</i>	New build	3%		
		8%		
<i>Brown field</i>	New build	5%		
		or		
		Less than 15% refurb	6%	
		15% - 50% refurb	10%	10.00%
		Over 50% refurb	15%	
Scope of scheme				
<i>Choose 1 category</i>				
<i>Facilities Management</i>	Hard FM only	0.00%	0.00%	
	TUPE whole service	2.00%		
	RoE whole service	2.00%		
<i>Choose 1 category</i>				
<i>Equipment</i>	Group 1&2 only	0.50%	0.50%	
	Major medical equipment	1.50%		
	All equipment included	5.00%		
<i>Choose 1 category</i>				
<i>IT</i>	No IT implications	0.00%		
	Infrastructure	1.50%	1.50%	
	Infrastructure & systems	5.00%		

<i>Choose more than 1 category if applicable</i>			
External stakeholders	Local NHS economy (e.g. DGH)	1.00%	1.00%
	Wider NHS economy (e.g. teaching DGH)	2.00%	
	NHS/Universities/Private/Vol sector	5.00%	
Service changes			
Stable environment, i.e. no change to service		5%	
Identified changes not quantified		10%	10%
Longer time frame service changes		20%	
Gateway			
<i>Choose 1 category</i>			
RPA Score	Low	0%	
	Medium	5%	5%
	High	10%	
		TOTAL	36.000%

CONTRIBUTION FACTORS AND MITIGATION	51%
UPPER BOUND CALCULATION	36%
TOTAL FACTOR TO APPLY TO ESTIMATE	18%

APPENDIX 17b – Business Case Forms

TRUST: The Shrewsbury and Telford Hospital NHS Trust

SCHEME: Sustainable Services Programme
Option B: PRH as the Emergency Site and RSH as the Planned Site

CAPITAL COSTS: Summary

	Cost £	V.A.T. (with recovery) £	Cost incl V.A.T £
1 Department Costs (from Form OB2)	107,228,016	20,040,003	127,268,019
2 On Costs (a) (from Form OB3)	18,847,020	3,769,404	22,616,424
3 Work Cost Total (1+2) at PUBSEC 195	126,075,036	23,809,407	149,884,443
4 Provisional location adjustment Shropshire	-2,767,185	-553,437	-3,320,622
5 Sub-Total (3+4)	123,307,851	23,255,970	146,563,821
6 Fees (c) (from Form OB4)	17,627,000	(d) xxxxxxxxxxxxxx	17,627,000
7 Non-Works Costs (e)	0 400,000	0 80,000	0 480,000
8 Equipment Cost (from OB2)	14,121,100	2,824,220	16,945,320
9A Planning contingencies 10%	13,559,200	2,711,840	16,271,040
9B Optimism Bias 17%	30,820,895	6,164,179	36,985,075
10 TOTAL (for approval purposes)(5+6+7+8+9a+9b)	199,836,046	35,036,209	234,872,255
11 Inflation Adjustments PUBSEC 195 to PUBSEC 214	12,284,234	2,456,847	14,741,081
12 FORECAST OUTTURN BUSINESS CASE	212,120,280	37,493,056	249,613,336

Cash Flow YEAR	EFL	SOURCE OTHER GOVERNMENT	PRIVATE	£ TOTAL
Total	0	0		0

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COST FORM OB2

TRUST: The Shrewsbury and Telford Hospital NHS Trust

SCHEME: Sustainable Services Programme
Option B: PRH as the Emergency Site and RSH as the Planned Site

CAPITAL COSTS: Departmental

FUNCTIONAL CONTENT	FUNCTION UNIT/SPACE REQUIREMENTS	COST /M2 £	COST ALLOWANCE £	EQUIPMENT COST £
Works at PRH				
SSP New Build			44,721,521	
SSP Refurbishment			1,402,500	
Estates Implications New Build			0	
Estates Implications Refurbishment			2,286,500	
Backlog New Build			0	
Backlog Refurbishment			6,121,500	
Works at RSH				
SSP New Build			758,302	
SSP Refurbishment			5,370,000	
Estates Implications New Build			0	
Estates Implications Refurbishment			2,064,500	
Backlog New Build			26,606,693	
Backlog Refurbishment			17,896,500	
All at PUBSEC 195				
Less abatement for transferred equipment if applicable (0.%) (4)				
Departmental Costs and Equipment Costs to Summary (Form OB1)		£	107,228,016	14,121,100

COST FORM OB3

TRUST: The Shrewsbury and Telford Hospital NHS Trust

SCHEME: Sustainable Services Programme
Option B: PRH as the Emergency Site and RSH as the Planned Site

CAPITAL COSTS: On-Costs

	Estimated Cost (exc. VAT)	Percentage of Departmental Cost
£		
1. Demolitions		
Demolitions at PRH	10,000	
Demolitions at RSH	250,000	
	260,000	0.24%
2. Abnormals		
Abnormals at PRH	9,317,220	
Abnormals at RSH	9,269,800	
	18,587,020	17.33%
All at PUBSEC 195		
Total On-Costs to Summary OB1	18,847,020	

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COST FORM OB4

TRUST The Shrewsbury and Telford Hospital NHS Trust

SCHEME Sustainable Services Programme
Option B: PRH as the Emergency Site and RSH as the Planned Site

CAPITAL COSTS: Fees and Non-works costs

	£	Percentage of Works Cost %
1. Fees (including "in-house" resource costs)		
a. Architects		}
b. Structural Engineers		}
c. Mechanical Engineers		}
d. Electrical Engineers		}
e. Quantity Surveyors		}
f. Project Management		}
g. Project Sponsorship		}
h. Legal Fees		}
i. Site Supervision		}
j. Others (specify)		}
Design fees at 13%	17,627,000	
Total Fees to Summary (OB1)	£ 17,627,000	16.4%

£

2. Non-Works Costs		
a. Land purchase costs and associated legal fees		
b. Land receipts		
c. Statutory and Local Authority charges		
d. Building Regulations and Planning Fees		400,000
e. Other (specify) e.g. decanting costs		
Non-Works Costs to Summary (OB1)	£	<u>400,000</u>

Notes:

** Delete as appropriate*

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COST FORM OB1

TRUST: The Shrewsbury and Telford Hospital NHS Trust

SCHEME: Sustainable Services Programme
Option C1: RSH as the Emergency Site and PRH as the Planned Site

CAPITAL COSTS: Summary

		Cost £	V.A.T. (with recovery) £	Cost incl V.A.T £
1	Department Costs (from Form OB2)	134,514,633	25,328,427	159,843,060
2	On Costs (a) (from Form OB3)	22,461,400	4,492,280	26,953,680
3	Work Cost Total (1+2) at PUBSEC 195	156,976,033	29,820,707	186,796,740
4	Provisional location adjustment Shropshire	-3,445,423	-689,085	-4,134,507
5	Sub-Total (3+4)	153,530,610	29,131,622	182,662,232
6	Fees (c) (from Form OB4)	21,947,300	(d) xxxxxxxxxxxxxx	21,947,300
7	Non-Works Costs (e)	0 400,000	0 80,000	0 480,000
8	Equipment Cost (from OB2)	16,238,400	3,247,680	19,486,080
9A	Planning contingencies 10%	16,882,600	3,376,520	20,259,120
9B	Optimism Bias 18%	40,372,922	8,074,584	48,447,506
10	TOTAL (for approval purposes)(5+6+7+8+9a+9b)	249,371,832	43,910,406	293,282,239
11	Inflation Adjustments PUBSEC 195 to PUBSEC 214	15,295,101	3,059,020	18,354,121
12	FORECAST OUTTURN BUSINESS CASE	264,666,933	46,969,427	311,636,360

Cash Flow
YEAR

	EFL	SOURCE OTHER GOVERNMENT	PRIVATE	£ TOTAL
Total	0	0		0

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COST FORM OB2

TRUST: The Shrewsbury and Telford Hospital NHS Trust

SCHEME: Sustainable Services Programme
Option C1: RSH as the Emergency Site and PRH as the Planned Site

CAPITAL COSTS: Departmental

FUNCTIONAL CONTENT	FUNCTION UNIT/SPACE REQUIREMENTS	COST /M2 £	COST ALLOWANCE £	EQUIPMENT COST £
Works at RSH				
SSP New Build			62,271,285	
SSP Refurbishment			4,047,000	
Estates Implications New Build			2,781,173	
Estates Implications Refurbishment			0	
Backlog New Build			25,929,355	
Backlog Refurbishment			22,418,300	
Works at PRH				
SSP New Build			4,170,520	
SSP Refurbishment			5,787,000	
Estates Implications New Build			0	
Estates Implications Refurbishment			400,500	
Backlog New Build			0	
Backlog Refurbishment			6,709,500	
All at PUBSEC 195				
Less abatement for transferred equipment if applicable (0.%) (4)				
Departmental Costs and Equipment Costs to Summary (Form OB1)		£	134,514,633	16,238,400

COST FORM OB3

TRUST: The Shrewsbury and Telford Hospital NHS Trust

SCHEME: Sustainable Services Programme
Option C1: RSH as the Emergency Site and PRH as the Planned Site

CAPITAL COSTS: On-Costs

	Estimated Cost (exc. VAT)	Percentage of Departmental Cost
£		
1. Demolitions		
Demolitions at RSH	560,000	
Demolitions at PRH	20,000	
	580,000	0.43%
2. Abnormals		
Abnormals at RSH	16,317,725	
Abnormals at PRH	5,563,675	
	21,881,400	16.27%
All at PUBSEC 195		
Total On-Costs to Summary OB1	22,461,400	

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COST FORM OB4

TRUST The Shrewsbury and Telford Hospital NHS Trust

SCHEME Sustainable Services Programme
Option C1: RSH as the Emergency Site and PRH as the Planned Site

CAPITAL COSTS: Fees and Non-works costs

	£	Percentage of Works Cost %
1. Fees (including "in-house" resource costs)		
a. Architects		}
b. Structural Engineers		}
c. Mechanical Engineers		}
d. Electrical Engineers		}
e. Quantity Surveyors		}
f. Project Management		}
g. Project Sponsorship		}
h. Legal Fees		}
i. Site Supervision		}
j. Others (specify)		}
Design fees at 13%	21,947,300	
Total Fees to Summary (OB1)	£ 21,947,300	16.3%

	£	
2. Non-Works Costs		
a. Land purchase costs and associated legal fees		
b. Land receipts		
c. Statutory and Local Authority charges		
d. Building Regulations and Planning Fees		400,000
e. Other (specify) e.g. decanting costs		
Non-Works Costs to Summary (OB1)	£	<u>400,000</u>

Notes:

* Delete as appropriate

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COST FORM OB1

TRUST: The Shrewsbury and Telford Hospital NHS Trust

SCHEME: Sustainable Services Programme
Option C2: RSH as the Emergency Site and PRH as the Planned Site

CAPITAL COSTS: Summary

		Cost £	V.A.T. (with recovery) £	Cost incl V.A.T £
1	Department Costs (from Form OB2)	126,013,689	23,732,838	149,746,527
2	On Costs (a) (from Form OB3)	22,404,445	4,480,889	26,885,334
3	Work Cost Total (1+2) at PUBSEC 195	148,418,134	28,213,727	176,631,861
4	Provisional location adjustment Shropshire	-3,257,588	-651,518	-3,909,105
5	Sub-Total (3+4)	145,160,546	27,562,209	172,722,755
6	Fees (c) (from Form OB4)	20,750,800	(d) xxxxxxxxxxxxxx	20,750,800
7	Non-Works Costs (e)	0	0	0
		400,000	80,000	480,000
8	Equipment Cost (from OB2)	15,212,100	3,042,420	18,254,520
9A	Planning contingencies 10%	15,962,200	3,192,440	19,154,640
9B	Optimism Bias 18%	38,150,442	7,630,088	45,780,530
10	TOTAL (for approval purposes)(5+6+7+8+9a+9b)	235,636,088	41,507,158	277,143,246
11	Inflation Adjustments PUBSEC 195 to PUBSEC 214	14,461,254	2,892,251	17,353,505
12	FORECAST OUTTURN BUSINESS CASE	250,097,342	44,399,408	294,496,751

Cash Flow
YEAR

	EFL	SOURCE OTHER GOVERNMENT	PRIVATE	£ TOTAL
Total	0	0		0

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COST FORM OB2

TRUST: The Shrewsbury and Telford Hospital NHS Trust

SCHEME: Sustainable Services Programme
Option C2: RSH as the Emergency Site and PRH as the Planned Site

CAPITAL COSTS: Departmental

FUNCTIONAL CONTENT	FUNCTION UNIT/SPACE REQUIREMENTS	COST /M2 £	COST ALLOWANCE £	EQUIPMENT COST £
Works at RSH				
SSP New Build			41,573,157	
SSP Refurbishment			3,715,500	
Estates Implications New Build			2,781,173	
Estates Implications Refurbishment			0	
Backlog New Build			27,330,875	
Backlog Refurbishment			22,822,000	
Works at PRH				
SSP New Build			17,579,984	
SSP Refurbishment			4,860,000	
Estates Implications New Build			0	
Estates Implications Refurbishment			596,000	
Backlog New Build			0	
Backlog Refurbishment			4,755,000	
All at PUBSEC 195				
Less abatement for transferred equipment if applicable (0.%) (4)				
Departmental Costs and Equipment Costs to Summary (Form OB1)		£	126,013,689	15,212,100

COST FORM OB3

TRUST: The Shrewsbury and Telford Hospital NHS Trust

SCHEME: Sustainable Services Programme
Option C2: RSH as the Emergency Site and PRH as the Planned Site

CAPITAL COSTS: On-Costs

	Estimated Cost (exc. VAT)	Percentage of Departmental Cost
£		
1. Demolitions		
Demolitions at RSH	560,000	
Demolitions at PRH	0	
	560,000	0.44%
2. Abnormals		
Abnormals at RSH	15,621,375	
Abnormals at PRH	6,223,070	
	21,844,445	17.33%
All at PUBSEC 195		
Total On-Costs to Summary OB1	22,404,445	

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COST FORM OB4

TRUST The Shrewsbury and Telford Hospital NHS Trust

SCHEME Sustainable Services Programme
Option C2: RSH as the Emergency Site and PRH as the Planned Site

CAPITAL COSTS: Fees and Non-works costs

	£	Percentage of Works Cost %
1. Fees (including "in-house" resource costs)		
a. Architects		}
b. Structural Engineers		}
c. Mechanical Engineers		}
d. Electrical Engineers		}
e. Quantity Surveyors		}
f. Project Management		}
g. Project Sponsorship		}
h. Legal Fees		}
i. Site Supervision		}
j. Others (specify)		}
Design fees at 13%	20,750,800	
Total Fees to Summary (OB1)	£ 20,750,800	16.5%

£

2. Non-Works Costs		
a. Land purchase costs and associated legal fees		
b. Land receipts		
c. Statutory and Local Authority charges		
d. Building Regulations and Planning Fees		400,000
e. Other (specify) e.g. decanting costs		
Non-Works Costs to Summary (OB1)	£ 400,000	

Notes:

** Delete as appropriate*

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Date 25.10.16

APPENDIX 17c – High Level Cost Estimates



The Shrewsbury and Telford Hospital NHS Trust

Sustainable Services Programme

PRH Emergency Site /RSH Planned Site

High Level Cost Estimate

Option B OBC Issue

October 2016

**Rider Hunt Construction Consultants LLP
12 Tenterden Street
Bury
BL9 0EG**

The Shrewsbury and Telford Hospital NHS Trust
Sustainable Services Programme

Option B PRH Emergency Site/RSH Planned Site

Summary of Total Project Estimate for Potential Solution

Capital cost of Works at PRH	£126,790,000
Capital cost of works at RSH	£122,823,000
Total Capital Cost of Potential Solution	£249,613,000

Sustainable Services Programme

High Level Cost Estimate

NOTES AND CLARIFICATIONS

The estimated costs have been based on the AHR Architects Schedules of Areas with current revisions for all options, and the site wide implication drawings.

The new build areas scheduled include an allowance for circulation and engineering within the departments, communication is shown separately and Rider Hunt have added an allowance for main plant rooms based on guidance from DSSR.

The rates per m2 are calculated mainly from DoH HPCGs and adjusted accordingly for storey height, location factor and inflation to current prices

For refurbishment projects, a proportion of the new build rate has been taken based on the type of refurbishment indicated on the schedules, with reference to the refurbishment level matrix.

The estimates exclude the costs of multi-storey and surface level car parks at both sites as it has been assumed that these will be outsourced to a private firm, or be subject to a separate business case.

The capital cost of boilers, boiler houses, energy centres and the like has been excluded from the estimates, as the assumption for OBC is that the new energy centres will be outsourced to a private firm under an "energy supply agreement", similar to the current arrangements the Trust has in place.

The capital cost for the Chemotherapy Day Case Centre at PRH in all options is excluded from the estimate as this is anticipated to be funded through other Public Sector or Charitable organisations.

The capital cost for the Midwifery-led Unit (MLU) and any other associated legacy Women and Children's accommodation at RSH in all options has been excluded from this estimate as this is funded from the Public Dividend Capital (PDC) obtained from the previous Future Configuration of Hospital Services (FCHS) scheme.

It is assumed that the buildings are able to be constructed and areas can be refurbished as shown on the plans, but may be subject to further verification.

External works and drainage have been priced using areas from AHR's schedules and rates from similar projects. Cut and fill, retaining walls and ground improvement have been based on the Capita (Civil and Structural Engineers) report and priced using rates from similar projects

Demolitions have been calculated on a volumetric basis using a typical demolition rate from previous similar projects.

Vertical circulation amounts are for the lifts and escalators only and the space requirement is included in the communication space in the schedules.

The estimates include applicable upgrades associated with the SSP scheme (eg boilers, distribution, medical gases, sub-stations, back up generators etc.), as advised by DSSR, M&E Engineers.

The costs assume that sufficient space is available to construct the new buildings/ carry out the refurbishments, suitable and sufficient access is available for construction activity, and there are no unusual or difficult working conditions or restrictions

Allowances for on-costs, abnormals and site specific costs services costs are estimated based on DSSR schedules using rates from similar recent projects.

The costs have been adjusted to current levels (PUBSEC 214) but **NO ALLOWANCE** is included for inflation up to start on site or during the construction period.

An allowance of 13% for fees has been allowed for the project as discussed with the Trust, based on similar projects.

An allowance of 12% for equipment costs has been included, based on discussions with the Trust around recent projects.

The works costs have been adjusted by the location factor for 'Shropshire' as published by BCIS

An allowance has been made for Optimism Bias, based on the attached calculations totalling 17%.

Recovery on VAT has been assumed based on fees and refurbishment works as similar schemes. It is suggested the Trust seek specialist advice in order to pursue further recovery.

We have excluded any costs for:

- Hire of temporary buildings, works associated with temporary accommodation, or temporary diagnostics
- Costs for decanting, moves, moving equipment, and items moved off site (eg medical records)
- Contaminated land and remediation (Refer to SI for details of likely issues)
- Asbestos surveys and removal
- Land purchase/Site acquisition (none deemed to be required)
- Exceptionally poor ground conditions (general allowance only for poor ground conditions)
- Legal fees
- Trust internal costs and fees
- Costs associated with establishing a procurement vehicle
- Medical equipment and diagnostic equipment (CT, MRI, Ultrasound etc.) Equipment allowance on HPCG guidance only.
- Energy costs and bringing into use
- Additional or replacement offices (unless specifically identified)
- Unusual or difficult access or working conditions
- Prolongation or lengthened construction programme above a typical duration
- Unusual or restrictive planning conditions

Option B PRH as the Emergency Site

WORKS COSTS (1 of 2)

		Area (inc. plant)	Rate (HPCGs)	£	£	
<u>SSP Baseline</u>						
New building works						
1	Main Entrance and Retail	1,760 m2 @	£2,142 / m2	3,769,249	£44,721,521	
2	ED, UCC, AEC / CDU, Discharge Lounge	4,901 m2 @	£2,412 / m2	11,821,892		
3	Inpatient Ward	1,674 m2 @	£2,570 / m2	4,303,111		
4	Inpatient Ward	1,674 m2 @	£2,570 / m2	4,303,111		
5	Communication	74 m2 @	£1,691 / m2	125,285		
6	Communication	192 m2 @	£1,691 / m2	325,301		
11	Loading Bay	676 m2 @	£1,691 / m2	1,142,948		
12	Inpatient Ward	1,674 m2 @	£2,570 / m2	4,303,111		
13	Communication	618 m2 @	£1,691 / m2	1,044,039		
14	Critical Care	2,977 m2 @	£3,201 / m2	9,529,842		
22	Transitional Care	650 m2 @	£2,784 / m2	1,809,668		
23	Education Extension	910 m2 @	£2,254 / m2	2,051,445		
	Add for single storey construction	1,220 m2 @	£158 / m2	192,520		
Refurbishment works						
20	Education Centre	600 m2 @	£1,700 / m2	1,020,000		£1,402,500
21	Mortuary	225 m2 @	£1,700 / m2	382,500		
<u>Estates Implications</u>						
New building works						
<i>No new build works</i>						
Refurbishment works						
7	Imaging	115 m2 @	£1,700 / m2	195,500		£2,286,500
11a	Ward	1,230 m2 @	£1,700 / m2	2,091,000		
<u>Backlog</u>						
New building works						
<i>No new build works</i>						
Refurbishment works						
8	Day Surgery	120 m2 @	£1,900 / m2	228,000	£6,121,500	
9	Inpatient Ward	765 m2 @	£900 / m2	688,500		
10	Loading Bay	1,100 m2 @	£1,500 / m2	1,650,000		
15	Ward	500 m2 @	£300 / m2	150,000		
16	Inpatient Ward	500 m2 @	£900 / m2	450,000		
17	Inpatient Ward	1,000 m2 @	£900 / m2	900,000		
18	Theatres	750 m2 @	£1,900 / m2	1,425,000		
19	Admin / Offices	700 m2 @	£900 / m2	630,000		
<u>Other works</u>						
Demolitions						
£10,000						
Abnormals						
£9,317,220						
	Building Drainage			260,500		
	External Drainage			42,910		
	Attenuation			224,000		
	Drainage Diversions			250,000		
	Abnormal Ground (mass fill)			130,250		
	Abnormal Ground (Cut and fill and disposal)			1,358,000		
	Vertical Circulation Cores			720,000		
T1	Multi-storey Car Park			excluded		
T6	Feature Landscaping			129,735		
T7	Entrance Canopy			126,000		
S2	Service Yard Canopy			99,000		
T8	Bridge Link			67,500		
T10	Entrance Canopy			372,000		
T12	Retaining Wall			405,600		
T18	Car Parking			excluded		
T20	Breakthroughs			100,000		

Option B PRH as the Emergency Site

T23	Courtyard Landscaping	6,820	
T24	Courtyard Landscaping	6,855	
T26	Multi-storey Car Park	excluded	
T27	Structural Adaptations to existing Transitional Care	100,000	
	Buildings for Services Infrastructure	671,500	
	Abnormal Plant and Equipment	1,760,000	
	Services within Ducts / Trenches	627,500	
	Builderswork for Services Diversions	120,250	
	Services Diversions	166,800	
	Incoming Services	622,000	
	Fire Alarms	25,000	
	Photovoltaic Panels	275,000	
	New Generators	650,000	
			£63,859,241
	Adjust for inflation from PUBSEC 195 to PUBSEC 214 (4Q2016)		£6,222,182
			£70,081,423
	Adjust for location factor 0.98 Shropshire as BCIS 02/09/2016		-£1,401,628
			£68,679,795

TOTAL WORKS COST EXCLUDING VAT £68,679,795

TRUST COSTS

	Fees at 13% of Works Cost (from Trust)	8,928,400	
	Non-works costs, including planning fees (allowance based on "typical" building)	200,000	
	Equipment (say 12% of departmental costs) as discussed with Trust	7,181,400	
	Planning Contingencies (10% of Works Cost)	6,868,000	£23,177,800
			£91,857,595
	Add Optimism Bias - 17% of Capital Cost - see attached form		£15,615,791
			£107,473,386
			£107,473,386
	VALUE ADDED TAX - 20%		£21,494,700
			£128,968,086
	Potential VAT Recovery		
	Less: Fees (100% recovery assumed)	1,785,700	
	Extensions (no recovery assumed)	0	
	Refurbishment (20% recovery assumed)	392,400	-£2,178,100
			£126,789,986
			£126,789,986

PRH EMERGENCY TOTAL PROJECT ESTIMATE £ **£126,789,986**

For full set of notes, clarifications, and basis of costs refer to attached Notes Sheet

<u>Summary</u>	
WORKS COST (EXCL VAT)	£ 68,680,000
TOTAL CAPITAL (EXCL VAT)	£ 91,858,000
TOTAL CAPITAL (INCL OPTIMISM BIAS AND EXCL VAT)	£ 107,473,000
TOTAL CAPITAL (INCL VAT)	£ 128,968,000
TOTAL CAPITAL (INCL VAT AND POTENTIAL RECOVERY)	£ 126,790,000

Option B RSH as the Planned Site

WORKS COSTS (2 of 2)

		Area (inc. plant)	Rate (HPCGs)	£	£
<u>SSP Baseline</u>					
	New building works				£758,302
3a	MLU - EXCLUDED FROM SSP	1,690 m2 @	£0 / m2	0	
3b	Communications	449 m2 @	£1,691 / m2	758,302	
	Refurbishment works				£5,370,000
5	Main Entrance / Retail	1,300 m2 @	£1,900 / m2	2,470,000	
6	UCC	1,450 m2 @	£2,000 / m2	2,900,000	
<u>Estates Implications</u>					
	New building works				£0
	<i>No new build works</i>				
	Refurbishment works				£2,064,500
2	Stores	980 m2 @	£1,900 / m2	1,862,000	
11	Communication	135 m2 @	£1,500 / m2	202,500	
<u>Backlog</u>					
	New building works				£26,606,693
14	Inpatient Ward	1,674 m2 @	£2,570 / m2	4,303,111	
15	Communication	426 m2 @	£1,691 / m2	720,936	
16	Inpatient Ward	1,674 m2 @	£2,570 / m2	4,303,111	
22	Ward	1,674 m2 @	£2,570 / m2	4,303,111	
23	Communication	426 m2 @	£1,691 / m2	720,936	
24	Ward	1,674 m2 @	£2,570 / m2	4,303,111	
26	Ward	1,674 m2 @	£2,570 / m2	4,303,111	
27	Communication	426 m2 @	£1,691 / m2	720,936	
28	Ward	1,674 m2 @	£2,570 / m2	4,303,111	
	Deduct for multi-storey construction	8,712 m2 @	-£158 / m2	-1,374,784	
	Refurbishment works				£17,896,500
1	Path lab	1,220 m2 @	£1,000 / m2	1,220,000	
3	Outpatients' Clinic	920 m2 @	£900 / m2	828,000	
4	Outpatients' Clinic	1,220 m2 @	£900 / m2	1,098,000	
7	Path Lab	950 m2 @	£1,000 / m2	950,000	
8	Fracture Clinic	670 m2 @	£1,700 / m2	1,139,000	
9	Fertility	720 m2 @	£1,700 / m2	1,224,000	
10	Admin / Offices	1,825 m2 @	£900 / m2	1,642,500	
13	Outpatients' Clinic	615 m2 @	£1,800 / m2	1,107,000	
17	Day Case	500 m2 @	£1,900 / m2	950,000	
18	Theatres	1,193 m2 @	£2,100 / m2	2,505,300	
19	Admin / Offices	1,288 m2 @	£900 / m2	1,159,200	
25	Ward	3,780 m2 @	£900 / m2	3,402,000	
35	Admin / Offices	395 m2 @	£1,700 / m2	671,500	
<u>Other works</u>					
	Demolitions				£250,000
	Abnormals				9,269,800
	Building Drainage			277,300	
	External Drainage			69,500	
	Attenuation			52,500	
	Abnormal Ground (mass fill)			277,300	
	Abnormal Ground (Cut and fill and disposal)			100,000	
	Vertical Circulation Cores			400,000	
S2	Service Yard Canopy			52,500	
S3	Service Yard			82,500	
S7	Entrance Canopy			63,000	
S11	New road re-alignment of junction			56,250	
S13	General Landscaping			44,850	
S13a	General Landscaping			40,250	
S14	Entrance Canopy			183,750	
S15	Feature Landscaping			162,500	
	Sub-terranean Service Duct			1,080,000	
	Breakthroughs to Existing Buildings			100,000	
	Buildings for Services Infrastructure			1,004,700	
	Abnormal Plant and Equipment			2,773,000	

Option B RSH as the Planned Site

Services within Ducts / Trenches	620,500	
Builderswork for Services Diversions	80,000	
Services Diversions	164,400	
Incoming Services	225,000	
Fire Alarms	25,000	
Photovoltaic Panels	275,000	
New Generators	1,060,000	
		£62,215,795
Adjust for inflation from PUBSEC 195 to PUBSEC 214 (4Q2016)		£6,062,052
		£68,277,847
Adjust for location factor 0.98 Shropshire as BCIS 02/09/2016		-£1,365,557
		£66,912,290

TRUST COSTS

Fees at 13% of Works Cost (from Trust)	8,698,600	
Non-works costs, including planning fees (allowance based on "typical" building)	200,000	
Equipment (say 12% of departmental costs) as discussed with Trust	6,939,700	
Planning Contingencies (10% of Works Cost)	6,691,200	£22,529,500
		£89,441,790
Add Optimism Bias - 17% of Capital Cost - see attached form		£15,205,104
		£104,646,894
VALUE ADDED TAX - 20%		£20,929,400
		£125,576,294
Potential VAT Recovery		
Less: Fees (100% recovery assumed)	1,739,700	
Extensions (no recovery assumed)	0	
Refurbishment (20% recovery assumed)	1,013,200	-£2,752,900
		£122,823,394
		£122,823,394

For full set of notes, clarifications, and basis of costs refer to attached Notes Sheet

<u>Summary</u>	
WORKS COST (EXCL VAT)	£ 66,912,000
TOTAL CAPITAL (EXCL VAT)	£ 89,442,000
TOTAL CAPITAL (INCL OPTIMISM BIAS AND EXCL VAT)	£ 104,647,000
TOTAL CAPITAL (INCL VAT)	£ 125,576,000
TOTAL CAPITAL (INCL VAT AND POTENTIAL RECOVERY)	£ 122,823,000



The Shrewsbury and Telford Hospital NHS Trust

Sustainable Services Programme

RSH Emergency Site/PRH Planned Site

High Level Cost Estimate

Option C1 OBC Issue

October 2016

**Rider Hunt Construction Consultants LLP
12 Tenterden Street
Bury
BL9 0EG**

The Shrewsbury and Telford Hospital NHS Trust
Sustainable Services Programme

Option C1 RSH Emergency Site/PRH Planned Site

Summary of Total Project Estimate for Potential Solution

Capital cost of Works at RSH	£267,156,000
Capital cost of works at PRH	£44,481,000
Total Capital Cost of Potential Solution	£311,637,000

Sustainable Services Programme

High Level Cost Estimate

NOTES AND CLARIFICATIONS

The estimated costs have been based on the AHR Architects Schedules of Areas with current revisions for all options, and the site wide implication drawings.

The new build areas scheduled include an allowance for circulation and engineering within the departments, communication is shown separately and Rider Hunt have added an allowance for main plant rooms based on guidance from DSSR.

The rates per m2 are calculated mainly from DoH HPCGs and adjusted accordingly for storey height, location factor and inflation to current prices

For refurbishment projects, a proportion of the new build rate has been taken based on the type of refurbishment indicated on the schedules, with reference to the refurbishment level matrix.

The estimates exclude the costs of multi-storey and surface level car parks at both sites as it has been assumed that these will be outsourced to a private firm, or be subject to a separate business case.

The capital cost of boilers, boiler houses, energy centres and the like has been excluded from the estimates, as the assumption for OBC is that the new energy centres will be outsourced to a private firm under an "energy supply agreement", similar to the current arrangements the Trust has in place.

The capital cost for the Chemotherapy Day Case Centre at PRH in all options is excluded from the estimate as this is anticipated to be funded through other Public Sector or Charitable organisations.

The capital cost for the Midwifery-led Unit (MLU) and any other associated legacy Women and Children's accommodation at RSH in all options has been excluded from this estimate as this is funded from the Public Dividend Capital (PDC) obtained from the previous Future Configuration of Hospital Services (FCHS) scheme.

It is assumed that the buildings are able to be constructed and areas can be refurbished as shown on the plans, but may be subject to further verification.

External works and drainage have been priced using areas from AHR's schedules and rates from similar projects. Cut and fill, retaining walls and ground improvement have been based on the Capita (Civil and Structural Engineers) report and priced using rates from similar projects

Demolitions have been calculated on a volumetric basis using a typical demolition rate from previous similar projects.

Vertical circulation amounts are for the lifts and escalators only and the space requirement is included in the communication space in the schedules.

The estimates include applicable upgrades associated with the SSP scheme (eg boilers, distribution, medical gases, sub-stations, back up generators etc.), as advised by DSSR, M&E Engineers.

The costs assume that sufficient space is available to construct the new buildings/ carry out the refurbishments, suitable and sufficient access is available for construction activity, and there are no unusual or difficult working conditions or restrictions

Allowances for on-costs, abnormals and site specific costs services costs are estimated based on DSSR schedules using rates from similar recent projects.

The costs have been adjusted to current levels (PUBSEC 214) but **NO ALLOWANCE** is included for inflation up to start on site or during the construction period.

An allowance of 13% for fees has been allowed for the project as discussed with the Trust, based on similar projects.

An allowance of 11% for equipment costs has been included, based on discussions with the Trust around recent projects.

The works costs have been adjusted by the location factor for 'Shropshire' as published by BCIS

An allowance has been made for Optimism Bias, based on the attached calculations totalling 18%.

Recovery on VAT has been assumed based on fees and refurbishment works as similar schemes. It is suggested the Trust seek specialist advice in order to pursue further recovery.

We have excluded any costs for:

- Hire of temporary buildings, works associated with temporary accommodation, or temporary diagnostics
- Costs for decanting, moves, moving equipment, and items moved off site (eg medical records)
- Contaminated land and remediation (Refer to SI for details of likely issues)
- Asbestos surveys and removal
- Land purchase/Site acquisition (none deemed to be required)
- Exceptionally poor ground conditions (general allowance only for poor ground conditions)
- Legal fees
- Trust internal costs and fees
- Costs associated with establishing a procurement vehicle
- Medical equipment and diagnostic equipment (CT, MRI, Ultrasound etc.) Equipment allowance on HPCG guidance only.
- Energy costs and bringing into use
- Additional or replacement offices (unless specifically identified)
- Unusual or difficult access or working conditions
- Prolongation or lengthened construction programme above a typical duration
- Unusual or restrictive planning conditions

Option C1 RSH as the Emergency Site

WORKS COSTS (1 of 2)

		Area (inc. plant)	Rate (HPCGs)	£	£	
<u>SSP Baseline</u>						
New building works						
2	Ward	1,674 m2 @	£2,570 / m2	4,303,111	£62,271,285	
3	Ward	1,674 m2 @	£2,570 / m2	4,303,111		
8	Communication	839 m2 @	£1,691 / m2	1,417,695		
9	ED / UCC / AEC / Discharge	3,601 m2 @	£2,412 / m2	8,686,112		
10	Critical Care Unit	2,977 m2 @	£3,201 / m2	9,529,842		
11	MLU - EXCLUDED FROM SSP	1,495 m2 @	£0 / m3	0		
16	Main Entrance and Retail	1,817 m2 @	£2,254 / m2	4,096,127		
20	Communication	852 m2 @	£1,691 / m2	1,439,675		
22	Paediatrics Inpatients and Oncology	2,340 m2 @	£3,021 / m2	7,068,694		
23	POPD	620 m2 @	£2,299 / m2	1,425,872		
24	Communication	893 m2 @	£1,691 / m2	1,510,010		
25	Delivery / Theatres	1,690 m2 @	£2,784 / m2	4,705,136		
26	Neonatal	1,529 m2 @	£2,784 / m2	4,256,338		
27	Antenatal / Postnatal	2,214 m2 @	£2,784 / m2	6,163,728		
28	Transitional Care	650 m2 @	£2,784 / m2	1,809,668		
29	Communication	169 m2 @	£1,691 / m2	285,737		
34	CAU	553 m2 @	£2,299 / m2	1,270,431		
Refurbishment works						
4	Pharmacy Expansion	390 m2 @	£2,000 / m2	780,000	£4,047,000	
12	Inpatient Ward	1,065 m2 @	£1,800 / m2	1,917,000		
18	Gynae, EPAS & GATU	1,000 m2 @	£900 / m2	900,000		
19	W&C Support and Training	500 m2 @	£900 / m2	450,000		
<u>Estates Implications</u>						
New building works						
1	Stores	1,898 m2 @	£1,127 / m2	2,139,364	£2,781,173	
20a	Communications	172 m2 @	£1,691 / m2	290,133		
20b	Communications	208 m2 @	£1,691 / m2	351,676		
Refurbishment works						
<i>No refurbishment work</i>						
<u>Backlog</u>						
New building works						
35	Inpatient Ward	1,674 m2 @	£2,570 / m2	4,303,111	£25,929,355	
35a	Communication	848 m2 @	£1,691 / m2	1,433,081		
36	Inpatient Ward	1,674 m2 @	£2,570 / m2	4,303,111		
37	Inpatient Ward	1,674 m2 @	£2,570 / m2	4,303,111		
38	Inpatient Ward	1,674 m2 @	£2,570 / m2	4,303,111		
39	Inpatient Ward	1,674 m2 @	£2,570 / m2	4,303,111		
40	Inpatient Ward	1,674 m2 @	£2,570 / m2	4,303,111		
	Deduction for Multi-storey Construction	8,380 m2 @	-£158 / m2	-1,322,393		
Refurbishment works						
5	Staff Welfare / Offices	920 m2 @	£900 / m2	828,000		£22,418,300
6	Admin / Offices	1,220 m2 @	£900 / m2	1,098,000		
7	Pathology Lab	1,220 m2 @	£1,000 / m2	1,220,000		
13	Pathology Lab	950 m2 @	£1,000 / m2	950,000		
14a	Outpatients	630 m2 @	£900 / m2	567,000		
14b	Fracture Clinic	430 m2 @	£900 / m2	387,000		
14c	Outpatients	600 m2 @	£1,300 / m2	780,000		
15	Outpatients	1,825 m2 @	£900 / m2	1,642,500		
17	Ward	990 m2 @	£900 / m2	891,000		
21	Theatres	1,193 m2 @	£2,100 / m2	2,505,300		
32	Ward	2,365 m2 @	£900 / m2	2,128,500		
41	Admin / Offices	475 m2 @	£1,700 / m2	807,500		
47	Admin / Offices	515 m2 @	£1,700 / m2	875,500		
48	Admin / Offices	525 m2 @	£1,700 / m2	892,500		
49	Ward	290 m2 @	£900 / m2	261,000		
50	Ward	220 m2 @	£900 / m2	198,000		
51	Ward	415 m2 @	£900 / m2	373,500		

Option C1 RSH as the Emergency Site

52	Admin / Offices	105 m2 @	£900 / m2	94,500
53	Admin / Offices	540 m2 @	£900 / m2	486,000
54	Admin / Offices	495 m2 @	£1,700 / m2	841,500
55	Admin / Offices	140 m2 @	£900 / m2	126,000
56	Admin / Offices	65 m2 @	£900 / m2	58,500
57	Admin / Offices	535 m2 @	£900 / m2	481,500
58	Admin / Offices	490 m2 @	£1,700 / m2	833,000
59	Admin / Offices	130 m2 @	£900 / m2	117,000
60	Admin / Offices	60 m2 @	£900 / m2	54,000
61	Admin / Offices	545 m2 @	£900 / m2	490,500
62	Admin / Offices	625 m2 @	£1,700 / m2	1,062,500
63	Fertility	720 m2 @	£1,900 / m2	1,368,000

Other works

	Demolitions			£560,000
	Abnormals			£16,317,725
	Building Drainage			604,600
	External Drainage			115,000
	Attenuation			238,000
	Abnormal Ground (mass fill)			969,160
	Abnormal Ground (Cut and fill and disposal)			1,459,450
	Vertical Circulation Cores			1,420,000
S1	General Landscaping			40,500
S2	Service Yard Canopy			99,000
S3	Service Yard			171,000
S4	Road Realignment			14,400
S6	Multi-storey Car Park			excluded
	Petrol Interceptor			excluded
S7	Road Realignment			10,000
S8	General Landscaping			93,000
	Car Parking			excluded
S9	Entrance Canopy			56,000
S10	Entrance Canopy			105,000
S11	Entrance Canopy			252,000
S12	General Landscaping			31,500
S13	Road Realignment			180,000
S14	Sub-terranean Service Duct			1,080,000
S15	Blue Light Access and Roundabout Modifications			500,000
S18	Feature Landscaping			162,500
S20	Entrance Canopy			199,500
S23	Childrens Sky Garden Play Area			50,000
S24	General Landscaping			46,500
S25	Retaining Wall			736,050
S26	New Helipad			100,000
S27	Breakthrough to Existing Building			100,000
S28	General Landscaping			46,500
	Buildings for Services Infrastructure			1,309,765
	Abnormal Plant and Equipment			3,247,100
	Services within Ducts / Trenches			631,000
	Builderswork for Services Diversions			100,000
	Services Diversions			265,200
	Incoming Services			525,000
	Fire Alarms			25,000
	Photovoltaic Panels			275,000
	New Generators			1,060,000
				<hr/>
				£134,324,838
	Adjust for inflation from PUBSEC 195 to PUBSEC 214 (4Q2016)			<hr/>
				£13,088,061
				<hr/>
				£147,412,899
	Adjust for location factor 0.98 Shropshire as BCIS 02/09/2016			<hr/>
				-£2,948,258
				<hr/>
	TOTAL WORKS COST EXCLUDING VAT			£144,464,641

Option C1 RSH as the Emergency Site

TRUST COSTS

Fees at 13% of Works Cost (from Trust)	18,780,400	
Non-works costs, including planning fees (allowance based on "typical" building)	200,000	
Equipment (say 11% of departmental costs) as discussed with Trust	14,178,000	
Planning Contingencies (10% of Works Cost)	<u>14,446,500</u>	<u>£47,604,900</u>
TOTAL CAPITAL COST EXCLUDING VAT		£192,069,541
Add Optimism Bias - 18% of Capital Cost - see attached form		<u>£34,572,517</u>
TOTAL CAPITAL COST INCL OPTIMISM BIAS/EXCL VAT		£226,642,059
VALUE ADDED TAX - 20%		<u>£45,328,400</u>
		£271,970,459
Potential VAT Recovery		
Less: Fees (100% recovery assumed)	3,756,100	
Extensions (no recovery assumed)	0	
Refurbishment (20% recovery assumed)	<u>1,058,600</u>	<u>-£4,814,700</u>
PRH EMERGENCY TOTAL PROJECT ESTIMATE		£ <u><u>£267,155,759</u></u>

For full set of notes, clarifications, and basis of costs refer to attached Notes Sheet

Summary	
WORKS COST (EXCL VAT)	£ 144,465,000
TOTAL CAPITAL (EXCL VAT)	£ 192,070,000
TOTAL CAPITAL (INCL OPTIMISM BIAS AND EXCL VAT)	£ 226,642,000
TOTAL CAPITAL (INCL VAT)	£ 271,970,000
TOTAL CAPITAL (INCL VAT AND POTENTIAL RECOVERY)	£ 267,156,000

Option C1 PRH as the Planned Site

WORKS COSTS (2 of 2)

		Area (inc. plant)	Rate (HPCGs)	£	£
<u>SSP Baseline</u>					
New building works					
1	Main Entrance and Retail	1,850 m2 @	£2,254 / m2	4,170,520	£4,170,520
2	Chemotherapy Day Case Centre - EXCLUDED FROM SSP	1,430 m2 @	£0 / m2	0	
9	Chemotherapy Day Case Centre - EXCLUDED FROM SSP	1,430 m2 @	£0 / m2	0	
Refurbishment works					
4	UCC	1,200 m2 @	£1,800 / m2	2,160,000	£5,787,000
6	Breastcare	730 m2 @	£900 / m2	657,000	
13	Inpatient Ward	530 m2 @	£900 / m2	477,000	
14	Oscopy Suite	900 m2 @	£900 / m2	810,000	
15	Daycase and Daycase Theatres	1,530 m2 @	£1,100 / m2	1,683,000	
<u>Estates Implications</u>					
New building works					
	<i>No new building work</i>			0	£0
Refurbishment works					
8	Admin / Offices	445 m2 @	£900 / m2	400,500	£400,500
<u>Backlog</u>					
New building works					
	<i>No new building work</i>				£0
Refurbishment works					
5	Daycase	120 m2 @	£1,800 / m2	216,000	£6,709,500
7	Inpatient Ward	765 m2 @	£900 / m2	688,500	
10	Inpatient Ward	500 m2 @	£1,800 / m2	900,000	
11	Inpatient Ward	500 m2 @	£1,800 / m2	900,000	
12	Inpatient Ward	1,000 m2 @	£1,800 / m2	1,800,000	
16	Theatres	750 m2 @	£2,100 / m2	1,575,000	
17	Admin / Offices	700 m2 @	£900 / m2	630,000	
<u>Other works</u>					
Demolitions					
					£20,000
Abnormals					
	Building Drainage			85,000	5,563,675
	External Drainage			19,200	
	Attenuation			26,250	
	Drainage Diversions			250,000	
	Abnormal Ground (mass fill)			42,500	
	Abnormal Ground (Cut and fill and disposal)			343,000	
	Vertical Circulation Cores			160,000	
T1	Entrance Canopy			184,000	
T2	Feature Landscaping			86,400	
T3	Retaining Wall			106,600	
	Retaining Wall			74,750	
T4	Entrance Canopy			367,500	
T5	General Landscaping around UCC			17,500	
	Breakthrough to Existing Building			10,000	
	Buildings for Services Infrastructure			331,075	
	Abnormal Plant and Equipment			1,634,000	
	Services within Ducts / Trenches			639,000	
	Builderswork for Services Diversions			72,400	
	Services Diversions			115,500	
	Incoming Services			49,000	
	Fire Alarms			25,000	
	Photovoltaic Panels			275,000	
	New Generators			650,000	
					£22,651,195

Option C1 PRH as the Planned Site

Adjust for inflation from PUBSEC 195 to PUBSEC 214 (4Q2016)	£2,207,040
	£24,858,235
Adjust for location factor 0.98 Shropshire as BCIS 02/09/2016	-£497,165
TOTAL WORKS COST EXCLUDING VAT	£24,361,070

TRUST COSTS

Fees at 13% of Works Cost (from Trust)	3,166,900
Non-works costs, including planning fees (allowance based on "typical" building)	200,000
Equipment (say 11% of departmental costs) as discussed with Trust	2,060,400
Planning Contingencies (10% of Works Cost)	2,436,100
	£7,863,400

TOTAL CAPITAL COST EXCLUDING VAT £32,224,470

Add Optimism Bias - 18% of Capital Cost - see attached form £5,800,405

TOTAL CAPITAL COST INCL OPTIMISM BIAS/EXCL VAT £38,024,874

VALUE ADDED TAX - 20% £7,605,000

£45,629,874

Potential VAT Recovery	
Less: Fees (100% recovery assumed)	633,400
Extensions (no recovery assumed)	0
Refurbishment (20% recovery assumed)	515,900
	-£1,149,300

PRH EMERGENCY TOTAL PROJECT ESTIMATE £ £44,480,574

For full set of notes, clarifications, and basis of costs refer to attached Notes Sheet

<u>Summary</u>	
WORKS COST (EXCL VAT)	£ 24,361,000
TOTAL CAPITAL (EXCL VAT)	£ 32,224,000
TOTAL CAPITAL (INCL OPTIMISM BIAS AND EXCL VAT)	£ 38,025,000
TOTAL CAPITAL (INCL VAT)	£ 45,630,000
TOTAL CAPITAL (INCL VAT AND POTENTIAL RECOVERY)	£ 44,481,000



The Shrewsbury and Telford Hospital NHS Trust

Sustainable Services Programme

RSH Emergency/PRH Planned

High Level Cost Estimate

Option C2 OBC Issue

October 2016

**Rider Hunt Construction Consultants LLP
12 Tenterden Street
Bury
BL9 0EG**

The Shrewsbury and Telford Hospital NHS Trust
Sustainable Services Programme

Option C2 RSH Emergency Site/PRH Planned Site

Summary of Total Project Estimate for Potential Solution

Capital cost of Works at RSH	£227,109,000
Capital cost of works at PRH	£67,388,000
Total Capital Cost of Potential Solution	£294,497,000

Sustainable Services Programme

High Level Cost Estimate

NOTES AND CLARIFICATIONS

The estimated costs have been based on the AHR Architects Schedules of Areas with current revisions for all options, and the site wide implication drawings.

The new build areas scheduled include an allowance for circulation and engineering within the departments, communication is shown separately and Rider Hunt have added an allowance for main plant rooms based on guidance from DSSR.

The rates per m2 are calculated mainly from DoH HPCGs and adjusted accordingly for storey height, location factor and inflation to current prices

For refurbishment projects, a proportion of the new build rate has been taken based on the type of refurbishment indicated on the schedules, with reference to the refurbishment level matrix.

The estimates exclude the costs of multi-storey and surface level car parks at both sites as it has been assumed that these will be outsourced to a private firm, or be subject to a separate business case.

The capital cost of boilers, boiler houses, energy centres and the like has been excluded from the estimates, as the assumption for OBC is that the new energy centres will be outsourced to a private firm under an "energy supply agreement", similar to the current arrangements the Trust has in place.

The capital cost for the Chemotherapy Day Case Centre at PRH in all options is excluded from the estimate as this is anticipated to be funded through other Public Sector or Charitable organisations.

The capital cost for the Midwifery-led Unit (MLU) and any other associated legacy Women and Children's accommodation at RSH in all options has been excluded from this estimate as this is funded from the Public Dividend Capital (PDC) obtained from the previous Future Configuration of Hospital Services (FCHS) scheme.

It is assumed that the buildings are able to be constructed and areas can be refurbished as shown on the plans, but may be subject to further verification.

External works and drainage have been priced using areas from AHR's schedules and rates from similar projects. Cut and fill, retaining walls and ground improvement have been based on the Capita (Civil and Structural Engineers) report and priced using rates from similar projects

Demolitions have been calculated on a volumetric basis using a typical demolition rate from previous similar projects.

Vertical circulation amounts are for the lifts and escalators only and the space requirement is included in the communication space in the schedules.

The estimates include applicable upgrades associated with the SSP scheme (eg boilers, distribution, medical gases, sub-stations, back up generators etc.), as advised by DSSR, M&E Engineers.

The costs assume that sufficient space is available to construct the new buildings/ carry out the refurbishments, suitable and sufficient access is available for construction activity, and there are no unusual or difficult working conditions or restrictions

Allowances for on-costs, abnormals and site specific costs services costs are estimated based on DSSR schedules using rates from similar recent projects.

The costs have been adjusted to current levels (PUBSEC 214) but **NO ALLOWANCE** is included for inflation up to start on site or during the construction period.

An allowance of 13% for fees has been allowed for the project as discussed with the Trust, based on similar projects.

An allowance of 11% for equipment costs has been included, based on discussions with the Trust around recent projects.

The works costs have been adjusted by the location factor for 'Shropshire' as published by BCIS

An allowance has been made for Optimism Bias, based on the attached calculations totalling 18%.

Recovery on VAT has been assumed based on fees and refurbishment works as similar schemes. It is suggested the Trust seek specialist advice in order to pursue further recovery.

We have excluded any costs for:

- Hire of temporary buildings, works associated with temporary accommodation, or temporary diagnostics
- Costs for decanting, moves, moving equipment, and items moved off site (eg medical records)
- Contaminated land and remediation (Refer to SI for details of likely issues)
- Asbestos surveys and removal
- Land purchase/Site acquisition (none deemed to be required)
- Exceptionally poor ground conditions (general allowance only for poor ground conditions)
- Legal fees
- Trust internal costs and fees
- Costs associated with establishing a procurement vehicle
- Medical equipment and diagnostic equipment (CT, MRI, Ultrasound etc.) Equipment allowance on HPCG guidance only.
- Energy costs and bringing into use
- Additional or replacement offices (unless specifically identified)
- Unusual or difficult access or working conditions
- Prolongation or lengthened construction programme above a typical duration
- Unusual or restrictive planning conditions

Option C2 RSH as the Emergency Site

WORKS COSTS (1 of 2)

	Area (inc. plant)	Rate (HPCGs)	£	£
<u>SSP Baseline</u>				
New building works				£41,573,157
2	Ward - Short Stay	1,674 m2 @	£2,570 / m2	4,303,111
3	Ward - Short Stay	1,674 m2 @	£2,570 / m2	4,303,111
8	Communication	839 m2 @	£1,691 / m2	1,417,695
9	ED / UCC / AEC / Discharge Lounge	4,901 m2 @	£2,412 / m2	11,821,892
10	Critical Care Unit	2,977 m2 @	£3,201 / m2	9,529,842
11	Inpatient Ward	1,674 m2 @	£2,784 / m3	4,661,704
16	Main Entrance and Retail	1,817 m2 @	£2,254 / m2	4,096,127
20	Communication	852 m2 @	£1,691 / m2	1,439,675
Refurbishment works				£3,715,500
4	Pharmacy Expansion	390 m2 @	£2,000 / m2	780,000
12	Inpatient Ward	1,065 m2 @	£1,700 / m2	1,810,500
18	Admin, Welfare and Catering	1,250 m2 @	£900 / m2	1,125,000
19	Paediatrics Inpatient Ward - EXCLUDED FROM SSP	560 m2 @	£0 / m2	0
19a	CAU - EXCLUDED FROM SSP	500 m2 @	£0 / m2	0
21a	MLU - EXCLUDED FROM SSP	1,150 m2 @	£0 / m2	0
<u>Estates Implications</u>				
New building works				£2,781,173
1	Stores	1,898 m2 @	£1,127 / m2	2,139,364
20a	Communication	172 m2 @	£1,691 / m2	290,133
20b	Communication	208 m2 @	£1,691 / m2	351,676
Refurbishment works				£0
<i>No refurbishment work</i>				
<u>Backlog</u>				
New building works				£27,330,875
22	Inpatients Ward	1,674 m2 @	£2,570 / m2	4,303,111
23	Inpatients Ward	1,674 m2 @	£2,570 / m2	4,303,111
24	Inpatients Ward	1,674 m2 @	£2,570 / m2	4,303,111
25	Communications	894 m2 @	£1,691 / m2	1,512,208
26	Inpatients Ward	1,674 m2 @	£2,570 / m2	4,303,111
27	Inpatients Ward	1,674 m2 @	£2,570 / m2	4,303,111
28	Inpatients Ward	1,674 m2 @	£2,570 / m2	4,303,111
Refurbishment works				£22,822,000
5	Staff Welfare / Offices	920 m2 @	£900 / m2	828,000
6	Admin / Offices	1,220 m2 @	£900 / m2	1,098,000
7	Pathology Lab	1,220 m2 @	£1,000 / m2	1,220,000
13	Pathology Lab	950 m2 @	£1,000 / m2	950,000
14a	Outpatients	630 m2 @	£900 / m2	567,000
14b	Fracture Clinic	430 m2 @	£900 / m2	387,000
14c	Outpatients	600 m2 @	£900 / m2	540,000
15	Outpatients	1,825 m2 @	£900 / m2	1,642,500
17	Ward	1,288 m2 @	£900 / m2	1,159,200
21	Theatres	1,193 m2 @	£2,100 / m2	2,505,300
32	Ward	3,050 m2 @	£900 / m2	2,745,000
40	Admin / Offices	1,800 m2 @	£1,700 / m2	3,060,000
41	Admin / Offices	1,800 m2 @	£1,700 / m2	3,060,000
42	Admin / Offices	1,800 m2 @	£1,700 / m2	3,060,000
<u>Other works</u>				
Demolitions				£560,000
Abnormals				£15,621,375
	Building Drainage		448,000	
	External Drainage		79,300	
	Attenuation		238,000	
	Abnormal Ground (mass fill)		969,160	

Option C2 RSH as the Emergency Site

	Abnormal Ground (Cut and fill and disposal)	1,459,450	
	Vertical Circulation Cores	980,000	
S1	General Landscaping	36,450	
S2	Service Yard Canopy	99,000	
S3	Service Yard	171,000	
S4	Road Realignment	14,400	
S6	Multi-storey Car Park	excluded	
	Petrol Interceptor	excluded	
S7	Road Realignment	10,000	
S8	General Landscaping	93,000	
	Car Parking	excluded	
S9	Entrance Canopy	56,000	
S10	Entrance Canopy	105,000	
S11	Entrance Canopy	252,000	
S12	General Landscaping	31,500	
S13	Road Realignment	180,000	
S14	Sub-terranean Service Duct	1,080,000	
S15	Blue Light Access and Roundabout Modifications	500,000	
S18	Feature Landscaping	162,500	
S20	Entrance Canopy	199,500	
S23	Childrens Play Area	20,000	
S23a	Childrens Play Area	20,000	
S24	General Landscaping	46,500	
S25	Retaining Wall	736,050	
S26	New Helipad	100,000	
S27	Breakthrough to Existing Building	50,000	
S28	General Landscaping	46,500	
	Buildings for Services Infrastructure	1,309,765	
	Abnormal Plant and Equipment	3,247,100	
	Services within Ducts / Trenches	631,000	
	Builderswork for Services Diversions	100,000	
	Services Diversions	265,200	
	Incoming Services	525,000	
	Fire Alarms	25,000	
	Photovoltaic Panels	275,000	
	New Generators	1,060,000	
			<hr/>
			£114,404,080
	Adjust for inflation from PUBSEC 195 to PUBSEC 214 (4Q2016)		<hr/>
			£11,147,064
			<hr/>
			£125,551,144
	Adjust for location factor 0.98 Shropshire as BCIS 02/09/2016		<hr/>
			-£2,511,023
			<hr/>
	TOTAL WORKS COST EXCLUDING VAT		£123,040,121
TRUST COSTS			
	Fees at 13% of Works Cost (from Trust)	15,995,200	
	Non-works costs, including planning fees (allowance based on "typical" building)	200,000	
	Equipment (say 11% of departmental costs) as discussed with Trust	11,857,200	
	Planning Contingencies (10% of Works Cost)	12,304,000	
			<hr/>
	TOTAL CAPITAL COST EXCLUDING VAT		£163,396,521
	Add Optimism Bias - 18% of Capital Cost - see attached form		<hr/>
			£29,411,374
			<hr/>
	TOTAL CAPITAL COST INCL OPTIMISM BIAS/EXCL VAT		£192,807,895
	VALUE ADDED TAX - 20%		<hr/>
			£38,561,600
			<hr/>
			£231,369,495
	Potential VAT Recovery		
	Less: Fees (100% recovery assumed)	3,199,000	
	Extensions (no recovery assumed)	0	
	Refurbishment (20% recovery assumed)	1,061,500	
			<hr/>
			-£4,260,500
			<hr/>
	PRH EMERGENCY TOTAL PROJECT ESTIMATE	£	£227,108,995
			<hr/>

Option C2 RSH as the Emergency Site

For full set of notes, clarifications, and basis of costs refer to attached Notes Sheet

Summary	
WORKS COST (EXCL VAT)	£ 123,040,000
TOTAL CAPITAL (EXCL VAT)	£ 163,397,000
TOTAL CAPITAL (INCL OPTIMISM BIAS AND EXCL VAT)	£ 192,808,000
TOTAL CAPITAL (INCL VAT)	£ 231,369,000
TOTAL CAPITAL (INCL VAT AND POTENTIAL RECOVERY)	£ 227,109,000

Option C2 PRH as the Planned Site

WORKS COSTS (2 of 2)

	Area (inc. plant)	Rate (HPCGs)	£	£
<u>SSP Baseline</u>				
New building works				£17,579,984
1	Main Entrance and Retail	1,850 m2 @	£2,254 / m2	4,170,520
2	Chemotherapy Day Case Centre - EXCLUDED FROM SSP	1,430 m2 @	£0 / m2	0
3	Treatment Centre (including Breast and Oscopy Suite)	1,899 m2 @	£2,784 / m2	5,287,849
5	Communication	202 m2 @	£1,691 / m2	340,686
6	Communication	195 m2 @	£1,691 / m2	329,697
12	Inpatient Ward	1,762 m2 @	£2,480 / m2	4,368,113
13	Communication	494 m2 @	£1,691 / m2	835,231
14	Chemotherapy Day Case Centre - EXCLUDED FROM SSP	1,430 m2 @	£0 / m2	0
20	Transitional Care	650 m2 @	£2,784 / m2	1,809,668
	Add for single storey construction	2,777 m2 @	£158 / m2	438,220
Refurbishment works				£4,860,000
9a	UCC	1,200 m2 @	£1,800 / m2	2,160,000
15	Inpatient Ward	500 m2 @	£1,800 / m2	900,000
16	Communication	500 m2 @	£1,800 / m2	900,000
16a	Day Case Ward	500 m2 @	£1,800 / m2	900,000
<u>Estates Implications</u>				
New building works				£0
	<i>No new building work</i>			0
Refurbishment works				£596,000
4	Admin / Offices	445 m2 @	£900 / m2	400,500
7	Imaging	115 m2 @	£1,700 / m2	195,500
<u>Backlog</u>				
New building works				£0
	<i>No new building work</i>			
Refurbishment works				£4,755,000
7a	Inpatient Ward	765 m2 @	£1,800 / m2	1,377,000
8	Day Surgery	120 m2 @	£1,900 / m2	228,000
17	Inpatient Ward	500 m2 @	£900 / m2	450,000
18	Theatres	750 m2 @	£1,900 / m2	1,425,000
19	Admin / Offices	750 m2 @	£1,700 / m2	1,275,000
<u>Other works</u>				
Demolitions				£0
Abnormals				£6,223,070
	Building Drainage			85,000
	External Drainage			19,200
	Attenuation			26,250
	Drainage Diversions			250,000
	Abnormal Ground (mass fill)			42,500
	Abnormal Ground (Cut and fill and disposal)			343,000
	Vertical Circulation Cores			480,000
T1	Multi-storey Car Park			excluded
T7	Entrance Canopy			184,000
T8	Bridge Link			202,500
T6	Feature Landscaping			86,400
T3	Retaining Wall			106,600
	Retaining Wall			74,750
T10	Entrance Canopy			183,750
T11	General Landscaping			133,145
T18	Car Parking			excluded
T19	New Pedestrian Crossing			5,000
T20	Breakthrough to Existing Building			100,000
T26	Multi-storey Car Park			excluded
T27	Transitional Care Roof Alterations			100,000

Option C2 PRH as the Planned Site

Breakthrough to Existing Building	10,000	
Buildings for Services Infrastructure	331,075	
Abnormal Plant and Equipment	1,634,000	
Services within Ducts / Trenches	639,000	
Builderswork for Services Diversions	72,400	
Services Diversions	115,500	
Incoming Services	49,000	
Fire Alarms	25,000	
Photovoltaic Panels	275,000	
New Generators	650,000	

£34,014,054

Adjust for inflation from PUBSEC 195 to PUBSEC 214 (4Q2016) £3,314,190

£37,328,244

Adjust for location factor 0.98 Shropshire as BCIS 02/09/2016 -£746,565

TOTAL WORKS COST EXCLUDING VAT £36,581,679

TRUST COSTS

Fees at 13% of Works Cost (from Trust)	4,755,600	
Non-works costs, including planning fees (allowance based on "typical" building)	200,000	
Equipment (say 11% of departmental costs) as discussed with Trust	3,354,900	
Planning Contingencies (10% of Works Cost)	3,658,200	£11,968,700

TOTAL CAPITAL COST EXCLUDING VAT £48,550,379

Add Optimism Bias - 18% of Capital Cost - see attached form £8,739,068

TOTAL CAPITAL COST INCL OPTIMISM BIAS/EXCL VAT £57,289,447

VALUE ADDED TAX - 20% £11,457,900

£68,747,347

Potential VAT Recovery		
Less: Fees (100% recovery assumed)	951,100	
Extensions (no recovery assumed)	0	
Refurbishment (20% recovery assumed)	408,400	-£1,359,500

PRH EMERGENCY TOTAL PROJECT ESTIMATE £ £67,387,847

For full set of notes, clarifications, and basis of costs refer to attached Notes Sheet

<u>Summary</u>	
WORKS COST (EXCL VAT)	£ 36,582,000
TOTAL CAPITAL (EXCL VAT)	£ 48,550,000
TOTAL CAPITAL (INCL OPTIMISM BIAS AND EXCL VAT)	£ 57,289,000
TOTAL CAPITAL (INCL VAT)	£ 68,747,000
TOTAL CAPITAL (INCL VAT AND POTENTIAL RECOVERY)	£ 67,388,000

APPENDIX 18a – Risk Register

SaTH Sustainable Services Programme											
RISK REGISTER											
Risk Ref.	Risk Category	Date Raised	Date Revised/ Removed	Risk Description	Risk Owner	Project Impact Score (A)	Likelihood Score (B)	Overall Risk Rating (AxB)	Key Date	Risk Management / Mitigation Strategy	Current Status - progress to date
1 Risk to be removed	Programme Delivery	6.05.16		Lack of Critical Care and Physician support of the balanced site model resulting in a delay in progress and confusion for staff and patients	KE/MC	4	1	4 Green	Oct-16	Development of detailed clinical pathways, SOPs and workforce needs	Robust clinical engagement and discussions on-going. Bed modelling completed to inform the impact on delivering patient care and the required workforce. Meeting held between Critical Care and Physician consultants to understand support and cover on the planned care site. Support for clinical model agreed and leadership in place
2	Programme Delivery	11.05.16		No dedicated PAs for Medical Directors to support the SSP leading to slower progress and challenges in wider clinical engagement	KS	2	4	8 Amber	Apr-17	Meetings arranged outside core hours. Adhoc meeting arranged with leads (AT,KE,MC) as and when they are available.	Commitment and engagement good despite the challenge for leads to attend at times and feedback/comment on work undertaken. On-going review required. Planning for consultation to begin. Medical Directors time commitment to be understood and mapped
3	Programme Delivery	11.05.16		Lack of progress of Community Fit leading to non approval of the OBC	NN	4	4	16 Green	Nov-16	Facilities impact included within optimum bias in SOC and to be included in OBC All approaches to be utilised to support progression of Community Fit	Sensitivity undertaken to calculate the impact on beds and workforce if Community Fit does not deliver. Clinical leads engaging in work on pathways and how LTC could be managed in the community. Meetings arranged to discuss Community provisions. Progress remains a challenge in terms of pace and the Trust's timeframes for approval of the OBC Trust leadership of new pathways to be progressed. CCG caveats to support focus on assumptions and shift of activity and finance - Trust response included in the OBC
4	Programme Delivery	12.09.16		Complexity of understanding and impact of appraisal process, formal guidance and decision making processes leading to confusion and challenge	NN	4	4	16 Green	Nov-16	Setting out of formal process and timelines required and agreed	Discussions continue. CCG Boards meeting to agree their decision making process. Non-financial and financial appraisal concluded. Future Fit Programme Board meeting on 30 November 2016
5	Programme Delivery	11.05.16		Changes to Commissioner and Future Fit Boards resulting in delays and knowledge and understanding	NN	2	4	8 Amber	Dec-16	On-going engagement with changes required. Impact analysis and mitigation to be implemented as issues arise	Further changes to the CCG structure. Final STP submitted 21 October.
6	Programme Delivery	11.05.16		Delays in the delivery of other projects that impact on SSP and enabling work streams resulting in cost and project delay.	KS	3	2	6 Green	Apr-17	Dedicated Transformation Team project support for the delivery of the Medical Records and other enabling workstreams	Early stages of scoping and discussions underway

SaTH Sustainable Services Programme

RISK REGISTER

Risk Ref.	Risk Category	Date Raised	Date Revised/ Removed	Risk Description	Risk Owner	Project Impact Score (A)	Likelihood Score (B)	Overall Risk Rating (AxB)	Key Date	Risk Management / Mitigation Strategy	Current Status - progress to date
7	Communication and Engagement	11.05.16		Lack of communication and engagement leading to misinterpretation and uncertainty internally and externally	JC	3	2	6 Green	Apr-17	JC responsible for Communications. Alignment of Communication and Transformation Team in place	Proactive communication plan being implemented by the Trust with positive feedback to date. Internal staff focus in progress - visits to all areas of the Trust completed. Discussions in support of public consultation commenced
8	Communication and Engagement	11.05.16		Political impact leading to delay and uncertainty	NN	3	3	9 Amber	Dec-16	Communication with patient, public groups and MPs	SW met with MPs . Consultation planning event undertaken with reconfiguration institute to advise of approach. Stakeholder analysis undertaken and plan in place

APPENDIX 18c – Benefits Management Plan

Benefits Management Plan
Appendix 18c

Number	Benefit	How	Measurement	Owner
1	To be able to offer comprehensive access to all surgical and medical sub-specialties within the county	<ul style="list-style-type: none"> § Consolidation of services § Same day admission § Optimisation of resource § Reducing length of stay § Centres of excellence 	<ul style="list-style-type: none"> § Standard Mortality Rate § Activity § Levels of transfers 	Clinical Directors
2	To continually improve clinical outcomes as a result of higher volumes of patients through a consolidated service	<ul style="list-style-type: none"> § Consolidated services increase volumes which improves outcomes § All patients managed through a standardised recovery system § Co-location of skills and 	<ul style="list-style-type: none"> § Standard Mortality Rate § Length of Stay § Re-admission rates 	Clinical Directors
3	To be able to provide an urgent response for emergency, surgery and critical care	<ul style="list-style-type: none"> § Protected bed base § Out of hours theatre teams § Scheduling and theatre utilisation § Improving workforce recruitment and retention 	<ul style="list-style-type: none"> § Emergency admission to surgery rates § Out of hours activity rates § Compliance with intensivist national standards 	Clinical Directors
4	To deliver a sustainable 18 week RTT across the surgical sub-specialities	<ul style="list-style-type: none"> § Protected bed base § Job planning § Scheduling and theatre utilisation § Waiting list pool 	<ul style="list-style-type: none"> § 18 week RTT Length of stay 	Clinical Directors
5	To maintain expertise and skills with high levels of recruitment and retention in the county	<ul style="list-style-type: none"> § Consolidation of services § Co-location of teams § Robust and shared teaching 	<ul style="list-style-type: none"> § Levels of recruitment Staff turn-over § Access to training 	Clinical Directors
6	To provide a flexible range of services based on clinical need	<ul style="list-style-type: none"> § Ambulatory care § 23 hour stay facility § Further shift to day case 	<ul style="list-style-type: none"> § Activity § Day case rates § Length of stay 	Clinical Directors
7	Repatriation of clinical activity to within the county	<ul style="list-style-type: none"> § Creation of centres of excellence; Cardiology, Bariatric and Breast services 	<ul style="list-style-type: none"> § Activity § Services available § Length of stay 	Clinical Directors
8	Sustainable future for the Trust and acute services for the county	<ul style="list-style-type: none"> § Sustainable financial position for the Trust § Estates maintenance backlog addressed § Modernisation of facilities and services 	<ul style="list-style-type: none"> § Financial performance § Ability to generate internal capital for reinvestment 	Clinical Directors

APPENDIX 18d – Communications and Engagement Plan

Stakeholder Groups

A. Patients, Service Users

Involvement to focus on pathways and what this means for patients as part of OBC development. Reconfiguration Institute advice: engagement should focus on “how should we consult with you later this year” only.

B. Members, Public, Communities

See A

C. Media

We need to ensure the media provides balanced coverage and gives SATH an opportunity to state the case for change and why no is not an option

D. Staff, Partners

This audience needs to be engaged with the development of the OBC and opportunities explored for those staff and partners who support the case for change to be involved in communications

E. Planners, Commissioners

This audience needs to be engaged with the development of the and opportunities explored for those staff and partners who support the case for change to be involved in communications

F. Political

This audience needs to be kept informed. There is a risk, particularly moving closer towards the FBC stage, that the Shrewsbury v Telford debate comes further to the fore, which will need careful management.

Programme Arrangements



Messages

- SATH’s Strategic Outline Case (SOC) for its Sustainable Services Programme describes potential solutions to the challenges of Accident & Emergency and Critical Care provision in Shropshire at a high level.
- The SOC describes the Trust’s plans to address the significant challenges to the safety and sustainability of patient services specifically in Emergency and Critical Care.
- It’s a relatively brief preliminary document that introduces a basic project concept and contains enough detail to support progression to an Outline Business Case. It is effectively the first stage of a project and no final decisions are made at this point.
- For a project to become a reality after a SOC, we would produce an Outline Business Case – which would include more detail and analysis – and the Full Business Case which would include the final proposals.
- Our SOC demonstrates that there are potential solutions which address the Trust’s workforce challenges in A&E, Critical Care and Acute Medicine by developing a single Emergency Centre, a single Critical Care Unit and a Diagnostic and Treatment Centre with Urgent and Planned Care service provision at both the Princess Royal Hospital in Telford and the Royal Shrewsbury Hospital.
- This is in line with the NHS Future Fit Clinical Model and the options developed in partnership with clinicians, staff, patients and the general public. The proposed solutions describe an alternative way of implementing the options previously identified within NHS Future Fit. Previous solutions proved unaffordable.
- The revised solutions provide a much more evenly balanced distribution of services which would deliver recognisable, vibrant hospital sites 24/7 within the communities we serve.
- We acknowledge and recognise the impact these changes will have on patients and the public and are committed to working hard to understand and mitigate this impact where possible over the coming months. However, we believe we have identified solutions that could address our most significant workforce challenges, be affordable and maintain and improve patient experience in vibrant hospital services in both Shrewsbury and Telford.

Outcomes

- The Case for Change is clearly outlined and engaging
- Staff and public feel engaged with the overall project (SBC—OBC—FBC).
- Negative perceptions and inaccurate statements over the SOC and the proposals are counteracted.
- Support grows for the project and onward progression.
- Public consultation proves a success with widespread responses.

Key Risks / Benefits

	L	C	LxC	Mitigation
Staff and public are not engaged in the process				Ensuring elements of each phase are carried out and public and staff are kept informed at each stage, and any concerns addressed as soon as possible
SOC continues to be misinterpreted and used to generate negative campaigning / media messages				Phase 1 should help to mitigate this. Off-the-record conversations and face-to-face conversations with media should address this
Proactive communications becomes catalyst for media to approach campaigners for negative follow-up news items				Need to ensure any communication released is robust (e.g. if statistics or case studies are used, ensuring the data is robust and does not have negative connotations)

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Strategic Outline Care	Outline Business Case	Consultation*	FBC Comms Planning	Full Business Case
<ul style="list-style-type: none"> First person piece from Chief Executive outlining the SOC and what it is Open letter from A&E Consultants explaining why no change is not an option Letter from senior Clinicians—not just SATH but wider health system—explaining why change is needed and why they support SOC Meeting between CEO and Editor of Shropshire Star to outline position and ensure balanced coverage Radio Shropshire hotseat with CEO Regular CEO column in Shropshire Star FAQs/Q&As outlining the case for change and what the SOC is Short video from clinicians about the case for change and SOC/OBC Web and intranet presence Use social media to promote messages Supporting statements from patients/case studies/partner organisations/independent organisations Proactive media releases ahead of various milestones; ahead of meetings where decisions will be made on SOC Design logo for Sustainable Services so it has its own branding Staff engagement events CEO meetings with politicians to keep them updated 	<ul style="list-style-type: none"> Reinforce elements from Phase 1 Day in the life at A&E: invite media to shadow senior clinician to show what situation is like now Create infographics/visuals to highlight the proposals Photos/social media presence of staff holding up cards supporting OBC and the case for change; explaining why Patient stories and case studies Posters around both sites explaining the case for change—visual Staff engagement events needed Short video clips from clinicians about the case for change Press release and media briefing about the OBC before it goes to any Board meetings First person articles from wider clinical team—e.g. nurses and HCAs—about the case for change Meet the staff who work in A&E—different role each time (e.g. Consultant, Ward Clerk, Emergency Centre Manager, Matron etc). Weekly series in print and radio 	<ul style="list-style-type: none"> Reinforce elements from Phases 1 and 2 Leaflet drop to all residents Public consultation events Press adverts Radio adverts TV adverts Increased use of social media and websites to promote this Regular press releases—particularly highlighting timescales for people to get involved and exactly how people will get involved Short video clips on Instagram and consider use of other social media to spread the word far and wide (e.g. Snapchat/Pinterest) Articles in newsletters—including A Healthier Future, our members newsletter, and Putting Patients First, our main newsletter for the public and staff Prepare case studies which support the proposals 	<ul style="list-style-type: none"> Reinforce elements from phases 1, 2 and 3 Careful planning needed to launch the FBC before it goes to Board Comms needs to have patients at the heart and explain how we have taken views on board when coming to the final decision Staff engagement needed: workshops; care groups encouraged to send representatives; dissemination of information Messages of support from partner organisations / patients or patient groups First person pieces from clinicians Seek support from key people in Shropshire—businesses, politicians etc saying why this should be supported 	<ul style="list-style-type: none"> Reinforce elements from phases 1, 2, 3 and 4 Director-level support across the health economy for this explaining how we got to FBC and why this is the solution.
April—July 2016*	August—November 2016*	December 2016-February 2017*	March-August 2017*	September 2017*

*Dates are subject to change

APPENDIX 18e – Management of Organisational Change Policy

HR Policy No. HR38

Management of Organisational Change

Additionally refer to: HR11 Protection of Pay
HR13 Travel Expenses
HR60 Agenda for Change Job Evaluation

Sponsor: Head of HR in conjunction with Director of Compliance and Risk Management

Date agreed by TNCC: June 2011 and March 2013

Date agreed by Board: June 2011

Date of next review: September 2015

Version: 3

The original expiry date of this policy has been extended in agreement with staff side as we transition into a new policy consultation process.

Version Control Sheet

Document Lead/Contact:	Sara Hayes
Document ID	HR38
Version	3
Status	In draft to TNCC Policy Group
Date Equality Impact Assessment completed	June 2011
Issue Date	June 2011 Amended XXX 2013 Amended 2016 (Flowchart added)
Review Date	September 2015
Distribution	Please refer to the intranet version for the latest version of this policy. Any printed copies may not necessarily be the most up to date
Key Words	Management of change, change, consultation, staff involvement, communication, job band, redeployment, redundancy, suitable alternative employment, protection of pay, training, appeals
Dissemination	Staff Quarterly Briefing; HR pages of the Intranet

Version history

Version	Date	Author	Status	Comment
3	February 2013	Sara Hayes	Draft	Amendment to section 6.14 following legislative changes regarding statutory consultation periods Addition of Version Control table and subsequent changes to contents page numbering

Contents

		Page Number
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1. INTRODUCTION

1.1 Service change and continuing organisational development are integral and ever-present features of working life in the Trust as we improve both the services we provide to our stakeholders and the quality of working life for our staff.

1.2 The purpose of this policy is to set out a framework and principles for the management of organisational change within the Trust which reflect current legislation and good management practice. The aim is to provide a positive and transparent approach that will facilitate the timely and successful implementation of change to enable services to be provided in the most effective and efficient way.

1.3 The policy addresses:

- the management of change
- consultation with staff and their representatives
- suitable alternative employment
- protection of pay
- redundancy

1.4 Confidentiality

It is recognised that tensions may arise between the need for openness in consultations with staff representatives and the need for confidentiality (e.g. of commercial and service consequences). The way forward in such discussions will be based on both sides recognising the sensitivity of such information and keeping such information in confidence.

1.5 Staff Representation

1.5.1 Trade Union/Professional Organisation (TUPO) representatives will be involved in the consultation process for all management of change proposals covered by this policy. In addition, staff have the right to be accompanied by an accredited staff representative or by a colleague employed by the Trust at any formal meeting under this policy. The purpose of these discussions will be to provide information, guidance and support, review the individual's personal situation, obtain their ideas, preferences, concerns and needs in relation to the change and to provide information. The line Manager (or, where appropriate, the designated HR Advisor) is responsible for keeping all staff informed as to their personal situation throughout the change management process.

1.5.2 Staff have the right to be accompanied by an accredited staff representative or by a colleague employed by the Trust at any formal meeting where amendments to their terms and conditions of employment are to be discussed.

1.5.3 It is the responsibility of the individual concerned to arrange such representation and at least seven calendar days' notice of meetings will be given to allow time for this. Meetings will not be re-arranged more than once because of failure to identify a representative or because of the unsuitability of the proposed dates and re-scheduled meetings will be held normally no more than fourteen calendar days after the original date. In accordance with the Trust's Recognition Agreement, reasonable time off will be granted to enable trade union representatives to provide representation to their member. Where difficulties in arranging meetings persist, the matter should be referred by the representative to the Director of Human Resources.

2. SCOPE

- 2.1 This policy applies to all staff employed by the Trust, excluding Trust Board Directors. It does not apply to agency staff, external secondees temporarily working with the Trust or other individuals who are not directly employed by the Trust.
- 2.2 In implementing this policy, Managers must ensure that all staff are treated fairly and within the provisions and spirit of the Trust's Equality & Diversity Policy (HR01). Special attention should be paid to ensuring the policy is understood when using it for staff new to the NHS or Trust, by staff whose literacy or use of English is weak or for persons with little experience of working life.
- 2.3 Not every change which takes place in procedures, systems or practices, whether on a ward or in an office or department, will involve a formal plan being developed or necessitate formal consultation with staff and their TUPO representatives.
- 2.4 This policy does not cover changes such as:
- the implementation of changes to national terms and conditions
 - changes initiated by an individual
 - matters that should be handled by personal consultation to vary an individual's terms and conditions
 - the normal and ongoing changes initiated by management to the allocation of duties within a team or variation to an individual's terms and conditions e.g. following changes in the team membership, service needs, to meet training plans etc.
 - changes to accommodation within a single hospital site, such as within the RSH site.
 - change of the reporting line for a service or part of a service or an individual that does not otherwise affect roles and responsibilities within that service
 - changes covered by TUPE or a Transfer Order (see section 3).
- 2.5 Organisational change that will have an impact on a group of staff must be initiated and effected on a consultative and planned basis through TNCC. Such changes include:
- alterations to working arrangements
 - changes in the services to be provided by the Trust
 - changes in skill mix
 - change in hours of work or shift patterns for a group of staff
 - change that may result in redundancy.
- This list is not intended to be exhaustive.
- It is expected that all changes affecting groups of staff will be consulted on through TNCC.
- 2.6 If there is any doubt as to whether or not this policy is applicable to a proposed change, the manager should seek advice from the HR Advisory team at the earliest opportunity. Individuals should seek advice from a TUPO representative or a member of the HR Advisory team.

3. CHANGE OF SERVICE PROVIDER

- 3.1 From time to time changes will be made as to which organisation provides a service. In some cases these will be changes made as a result of decisions by government or service commissioners and in others it will be the Trust's decision. The associated Transfer of Undertakings (Protection of Employment) Regulations (commonly referred to as "TUPE") and resulting case law is complex and the applicability of TUPE has to be determined on the circumstances of each case. **Accordingly, Managers MUST refer all such potential transfers, whether into or out of the Trust or between external providers, to HR for guidance as early as possible and before any action is taken.**
- 3.2 This policy does **not** apply to situations in which staff are to transfer to a new employer under TUPE or a Transfer Order.
- 3.3 Whilst this policy does not apply to staff transferring to an alternative employer under TUPE or a Transfer Order, they will have the right to be formally consulted with regarding the changes and will be entitled to be accompanied by an accredited staff representative or by a colleague employed by the Trust at any formal meeting with management relating to such a change.

4. ROLES AND RESPONSIBILITIES

- 4.1 **Managers** are responsible for:
- liaising at an early stage on the proposal within the area/department directly affected.
 - liaising on the proposal with colleagues in other service areas who may be affected directly or indirectly by the change being considered
 - agreeing the proposal in principle with their line Centre Chief/Head of Service before entering into change management with their staff
 - planning the change process in conjunction with their HR Advisory team
 - presenting the proposal to staff representatives at TNCC or LNC
 - ensuring that all individuals directly affected by changes are given a copy of the change paper
 - consulting with employees and staff representatives
 - allowing sufficient time for consultation, training and implementation
 - involving staff at the earliest opportunity in the planning processes needed to deliver the change
 - identifying and managing staff training needs resulting from the change
 - implementing the change in accordance with the principles of equal treatment being afforded to each individual affected by the change
 - keeping all staff directly affected by the change informed as to their personal situation throughout the change management process (including those on secondment within or outside the Trust and those who are absent from the workplace, e.g. on long term sickness, maternity leave, career breaks etc)
 - ensuring that individuals are advised of their right to be accompanied by a TUPO representative or a colleague employed by the Trust in formal meetings. This should be supported by appropriate release to prepare for and attend the meetings.

- 4.2 The **Human Resources** team is responsible for:
- advising managers on the application of this policy to the proposed change
 - supporting managers in planning for the change and the development of consultation papers
 - coordinating the formal consultation process where a major change affects the job security or the terms and conditions of a group of staff covering more than one department
 - coordinating any support to staff displaced by change or under notice of redundancy
 - providing all necessary redundancy notifications to the relevant government department and other statutory bodies.
- 4.3 **Staff representatives** are responsible for:
- ensuring that, wherever possible, they attend scheduled meetings at which changes are to be discussed
 - (where appropriate) reminding managers to consult through the formal processes set out in this policy or referring the matter to the HR Advisory team.
- 4.4 **Employees** are responsible for:
- participating in the management of change process
 - making all reasonable efforts to attend any formal meetings arranged in accordance with this policy
 - raising with their line manager and/or staff representative, at the appropriate time, any issues associated with the change in line with this policy.

5. **PLANNING FOR CHANGE**

- 5.1 When an organisational change covered by this policy is being planned, the Manager will liaise with their HR Advisory team and, where appropriate, develop a proposal that summarises the key elements of the change required. Where a change to organisational structure, skill mix or other major change is being planned, the proposal should be approved in principle by the line Centre Chief/Head of Service **before** it is presented to staff or their representatives.
- 5.2 At this early stage, the line Manager should liaise with HR on the staff involvement and formal consultation plans. HR will advise and support the Manager in the development of the formal change management proposals to be presented to staff and their representatives.
- 5.3 A communications and implementation plan should be developed covering:
- the key milestones and timetable for the change process
 - the briefing and involvement of the staff directly affected
 - the briefing of and consultation with TUPO representatives
 - notification of the changes to other service areas and staff affected by the change
 - arrangements for the required training of staff
 - review of the effectiveness of the new arrangements once implemented.

6. STAFF INVOLVEMENT AND CONSULTATION

- 6.1 A programme of transparent and regular communication with staff and their representatives is a feature of a successful change management project.
- 6.2 The change management proposal will be the platform for the formal consultation and communication process with staff and their representatives. The ideal is an agreed change programme but, even where full agreement cannot be reached, an open dialogue will ensure all parties have a full understanding of the decisions taken.
- 6.3 Consultation will, as a matter of principle, provide a real opportunity to influence decisions and their application. Effective consultation is also the opportunity to:-
- create shared agendas - binding together partial, differing and opposed views and feelings
 - create a common objective - ensuring common goals are developed and understood
 - create a climate of creativity - generating ideas and creative solutions through direct involvement and participation
 - create the capacity for change - ensuring that appropriate systems, processes and resources are in place
 - ensure that people are able to handle change competently and confidently.
- 6.4 The purpose of the consultation will be to discuss:
- what the actual change will be
 - who will be affected by it
 - the process for implementing the change
 - the appointment process for roles in the new structure, including any ring-fencing of jobs and slotting in of individuals to posts.
- 6.5 The formal and recognised forums for joint consultation are the TNCC or the LNC (for matters solely affecting medical and dental staff). Management will consult directly with staff and their representatives on any and all changes covered by this policy. Formal consultation will start with a discussion on the proposal with staff representatives, normally at a TNCC or LNC meeting, except where a "Consultation Group" has been established through Human Resources with the TNCC/LNC Staff Side Chair (see below).

Consultation Groups

- 6.6 To facilitate a change a "Consultation Group" may be set up under the auspices of the TNCC (or LNC), comprising the Manager(s) initiating the change, a Human Resources Advisor and representatives nominated by the Staff Side Chair.
- 6.7 Such Consultation Groups should be established early in the planning process, in order that staff, through their representatives (as well as through direct involvement), can assess the management proposals and feed their ideas, improvements, concerns, perceived difficulties and needs into management thinking, so as to assist in the implementation process.

- 6.8 The Manager responsible for effecting the change will request Human Resources to liaise with the TNCC/LNC Staff Side Chair to:
- determine the TUPO representatives for a Consultation Group,
 - ensure that any proposals are presented to TNCC, and
 - ensure that any subsequent agreements or arrangements achieved through the Consultation Group(s) are duly ratified by the TNCC/LNC
 - agree a communications strategy.

Redundancy

- 6.9 Where an organisational change may result in redundancies, the Trust will undertake a formal consultation through TNCC in accordance with the statutory requirements for disclosure of information and notification to representatives. The following paragraphs summarise these requirements.
- 6.10 Examples of measures the Trust will consider to limit the number of redundancies required include:
- redeployment;
 - restricting recruitment;
 - natural wastage;
 - reducing overtime working;
 - limiting the use of temporary staff including bank, agency and locum staff;
 - changing working patterns;
 - voluntary reductions in contracted hours;
 - voluntary retirement.
- 6.11 The consultation will begin in good time, will be with a view to reaching agreement with the representatives and will include ways of: -
- avoiding dismissals,
 - reducing the number of staff to be dismissed and
 - mitigating the consequences of the dismissals.
- 6.12 The date on which this formal redundancy consultation is deemed to have started is the date on which formal written notification is given to the TNCC representatives.
- 6.13 The information to be provided **in writing** to the appropriate representative(s) will include in all cases: -
- the reasons for the proposed changes,
 - the numbers and descriptions of the staff that are at risk of redundancy,
 - the numbers and descriptions of the total number of such staff employed by the Trust at the site affected by the change,
 - the proposed method of selection for redundancy,
 - the method of carrying out dismissals and their timings, and
 - the proposed method of calculating any redundancy payments to be made.

6.14 The statutory requirement is that:

- where there are between 20 and 99 proposed redundancies at one establishment within a period of 90 days or less there is a minimum consultation period of 30 days, or
- where there are 100 or more proposed redundancies at one establishment within a period of 90 days or less there is a minimum consultation period of 45 days

before the first of the dismissals takes effect.

There is also a requirement that the relevant government department be informed and that this notification is also confirmed in writing to TNCC representatives at the start of the consultation period.

6.15 The Trust may invite applications for voluntary redundancy as an alternative to making compulsory redundancies. In such cases, it will be for the Trust to decide which requests can be approved. However, it is unlikely that the Trust will agree to applications where the individual has skills that are still required by the Trust. The reasons for not accepting a request for voluntary redundancy will be notified in writing to the individual concerned.

6.16 Where applications for voluntary redundancy are invited, and where requested to do so by the individuals concerned, the Manager/HR Advisor will provide an *estimate* of redundancy payments to staff who wish to consider voluntary redundancy. The request for such information does not imply a decision to apply for voluntary redundancy on the part of the individual and any estimate will be given “without prejudice”.

7. IMPLEMENTATION OF CHANGES WHICH WILL NOT RESULT IN REDEPLOYMENT, CHANGE OF JOB BAND OR REDUNDANCY

Where the proposed organisational changes will not result in redeployment, change of job band or redundancy, for example a change to shift patterns, the responsible manager should follow the steps set out below:

- The manager will prepare for the changes in accordance with Section 5.
- The manager will then discuss the need for change and outline the proposals informally with the workforce to obtain views and ideas. (This does NOT form part of the consultation process.)
- The manager will then produce and present a formal change paper outlining the proposals and implications to staff and TNCC representatives (LNC if medical staff only), explaining the background for the change, clarifying any issues raised and setting out the consultation and implementation timetable.
- Individuals will be entitled to 1:1 meetings with the manager.
- During the consultation period, employees and their representatives will consider the proposals and provide feedback/alternative proposals, which the manager will consider, holding further meetings to discuss as required.
- The outcome of consultation, together with details of the implementation plan and timescales will be confirmed to TNCC meeting and to the staff affected by the change.
- The implementation plan will be effected as soon as possible thereafter.

8. IMPLEMENTATION OF CHANGES WHICH MAY RESULT IN REDEPLOYMENT, CHANGE OF JOB BAND OR REDUNDANCY

8.1 Process overview

In implementing change, the responsible manager should follow the steps set out below:

- The manager will prepare for the changes in accordance with Section 5, ensuring that the change has the support of the Centre Chief/Head of Service.
- The manager will then discuss the outline proposal with the Director of Human Resources.
- The Director of Human Resources will advise the manager as to whether it is appropriate to discuss the need for change and outline the proposals informally with members of the workforce to obtain views and ideas prior to the start of formal consultation.
- The manager will then produce and present a formal change paper outlining the proposals and implications to staff and TNCC representatives (LNC if medical staff only), explaining the background for the change, clarifying any issues raised and setting out the consultation timetable and the indicative implementation timetable; this should be developed with the support of the HR Advisory team.
- The Manager responsible for implementing the change will ensure that all individuals who are potentially directly affected by the proposed changes receive written details of the proposals.
- Individuals will be entitled to 1:1 meetings with the manager.
- During the consultation period, employees and their representatives will consider the proposals and provide feedback/alternative proposals, which the manager will consider, holding further meetings to discuss as required.
- The outcome of consultation, together with details of the implementation plan and timescales will be confirmed to TNCC meeting and to the staff affected by the change.
- The implementation plan will be effected as soon as possible thereafter.

8.2 Variations to Terms and Conditions of Employment

8.2.1 To ensure that the impact of change on individuals is minimised and that appropriate skills are retained in roles following implementation of the change, the Trust will assess to what extent individuals who are displaced match roles in the new structure.

8.2.2 Individuals will be “slotted in” to a changed role and issued with a letter confirming a variation to their employment contract where responsibilities of a post in the new structure are substantially unchanged from those in the previous structure and ALL the following principles apply:

- the banding of the post is the same, and
- the individual(s) meet(s) the principal essential criteria for the post as defined in the new person specification, and
- there are the same or a greater number (WTE) of such posts in the new structure as in the previous structure, and
- their personal circumstances and capability do not prevent them being able to fulfil the requirements of the role e.g. the working hours required in the new post.

- 8.2.3 Where the number (WTE) of posts in the new structure is less than in the old structure but for some reason (e.g. a vacancy in the old structure) there are the same number of individuals working the number of WTE hours that will be available in the new structure, those individuals may be “slotted in” to the new roles, provided that all other criteria set out above apply.
- 8.2.4 Assessment of posts against these criteria will normally be undertaken by a joint staff-side and management panel. The final decision rests with management.
- 8.2.5 Members of staff who are to be slotted in will attend a formal meeting to discuss the changes.
- 8.2.6 Staff who are dissatisfied with a decision taken by the joint assessment panel may lodge an appeal with the Director of Human Resources not later than 14 calendar days from date of the letter confirming the decision. Such appeals will be heard by a second assessment panel comprising a Director and a senior manager who has not been involved in the process at any stage. The decision of the appeal panel is final.

8.3 Displaced Staff

- 8.3.1 Any individual whose post is disestablished as a result of organisational change or where the number of staff required in the role is to reduce will be notified in writing that they are to be displaced from their existing role. The individual will become displaced at the point when the role is to change or is no longer required. This notification will be given following consultation once a decision to implement the change has been made. The HR team will be responsible for arranging the issue of letters to staff.
- 8.3.2 Individuals who are displaced from their existing role will be placed on the Redeployment Register so that suitable alternative employment can be sought at the earliest opportunity.
- 8.3.3 The Trust will seek to ensure that those staff who are displaced are retained in employment within the Trust or within the NHS and will give preferential consideration to such staff for vacancies within the Trust (see below). However, displaced staff will not be given preferential consideration for jobs at a higher band than their current status but may apply for such vacancies in competition with other applicants.
- 8.3.4 Displaced staff will normally be required to complete a form and/or provide a curriculum vitae within a specified timescale to the HR Department; this form will cover their skills profile and personal details, together with any special personal circumstances that the individual wishes to be taken into account. Staff who require assistance in completing the form should liaise with their Manager.
- 8.3.5 Where an individual is displaced, they will be expected to undertake work within their competence that is offered to them as an interim measure until a permanent resolution to the situation is found. The responsible line manager must ensure that:
- the individual is appropriately deployed so that their skills are maintained and
 - they undertake regular reviews with the individual to keep them up-dated on the situation and resolve any issues that may arise.

8.4 Notice of Redundancy

8.4.1 **Approval in principle must be obtained from the Director of Human Resources as soon as it is identified that redundancies may be necessary and, in all cases, before any notices of termination are issued.**

8.4.2 Individuals who are displaced following the slotting in process will be issued notice of redundancy. Notice will be issued in writing by the HR Department. Being given notice of redundancy does not mean that an individual will ultimately be made redundant.

8.4.3 Other than in circumstances beyond the control of the Trust, consultation with staff and their representatives will take place in accordance with this policy before any notice of dismissal is issued.

8.4.4 Where it is necessary to select individuals for redundancy the pool of staff from which the selections will take place will be those staff who are displaced.

8.4.5 The precise criteria to be used to select individuals for redundancy will be based on the circumstances of the change required. Consultation will take place on the factors proposed to be used. Management will ensure that the criteria to be used are not unfairly discriminatory when applied to the particular group(s) of staff affected.

8.4.6 During the notice period the Trust will make all efforts to identify suitable alternative employment for all individuals under notice of redundancy.

8.4.7 As soon as they are issued notice, individuals must notify the Trust immediately of any other NHS employment they hold as special redundancy arrangements may apply (Managers MUST liaise with HR in all cases).

8.4.8 If subsequent developments in the planned change programme mean that an individual is no longer under notice of redundancy, then (s)he will be notified of this in writing and his/her name removed from the Redeployment Register. Otherwise individuals will remain on the register until they are redeployed to another role or until the date of termination of employment.

8.4.9 To assist staff who are under notice of redundancy the Trust will provide appropriate support in their search for alternative employment (reasonable paid time off work will be granted but the schedule has to be agreed with the line Manager):

8.5 Ring-fencing

8.5.1 Posts deemed to be potentially suitable alternative employment will be ring-fenced for individuals on the Redeployment Register.

8.5.2 Where an organisational change centres on a particular department or a particular group of staff, posts within that department or staff group may, in the first instance, be ring-fenced to those individuals employed there prior to the change.

8.5.3 The extent of the ring-fencing will be determined through the consultation process for each management of change.

8.6 Redeployment process for those under notice of redundancy

8.6.1 All vacancies (whether or not they arise from the planned management of change programme) will be reviewed by the Human Resources Department to assess whether they may be considered suitable alternative employment for individuals on the Redeployment Register before being advertised. Appropriate vacancies will be ring-fenced for the redeployment of staff on the Redeployment Register. Individuals will be notified by the HR Department when a potential redeployment opportunity for them is identified.

8.6.2 Staff who are under notice of redundancy are required to identify and apply for jobs within the Trust and the wider NHS that may constitute suitable alternative employment (see section 9). In addition, they are responsible for:

- confirming (in writing when requested to do so) their interest in any vacancy notified to them under this procedure, and
- notifying the Trust (in writing when requested to do so) of any post they see advertised for which they wish to be considered (including jobs in other NHS organisations), and
- informing the Trust of any other NHS employment as special redundancy arrangements may apply (Managers MUST liaise with HR in all cases).

This information is to be sent to the named Manager/HR Adviser within the specified timescale.

8.6.3 In all cases, candidates will be shortlisted for interview based on the requirements of the post. Any candidate who is not selected for a post will be offered feedback on the reasons for this from the appointing Manager. Where only one individual on the Redeployment Register meets the principal essential criteria for a ring-fenced post, (s)he will be appointed to the post. Where two or more staff are identified as meeting the person specification for a vacant post, a competitive selection process will determine who is to be appointed.

8.6.4 Staff under notice of redundancy may choose to apply for a post lower than their present band, provided that they possess the basic requirements for the post and there are no suitable posts at their own level.

It should be noted that protection of pay in such cases will only apply where the Trust considers that an employee has been redeployed to suitable alternative employment. This should be discussed with the individual prior to them making their decision.

8.6.5 If an individual does not regard a proposed post as potentially suitable alternative employment (s)he should notify their line Manager as soon as possible. A meeting will then be arranged between the individual, their line manager and an HR representative where the reasons will be clarified and the outcome will be confirmed in writing, together with the individual's right of appeal. The individual will be entitled to be accompanied at this meeting by a Trade Union representative or work colleague if they wish.

9. SUITABLE ALTERNATIVE EMPLOYMENT

9.1 The Trust will consider with employees who are under notice of redundancy whether there are suitable alternative roles for them within the Trust. In deciding whether a post is suitable the Trust will consider whether it:

- offers the same terms and conditions as the existing contract or
- is suitable in relation to the individual, which will include such factors as:
 - provides similar earnings (taking into account pay protection - see Section 10),
 - has the same or similar status,
 - is within the employee's specialism or capability, taking account of the need for reasonable training,
 - whether the post would result in loss of "special class" status under the terms of the NHS Pension Scheme,
 - reasonably fits with the individual's personal circumstances (see below), although staff will be expected to be reasonably flexible.

This is not an exhaustive list.

9.2 In considering whether a post is suitable alternative employment, due regard will be given to the personal circumstances of the individual. For example, some shift patterns or changes to a different location may be considered unsuitable if they fail to take account of the individual's personal circumstances as they relate to travel arrangements, disability or carer's responsibilities. Staff will, however, be expected to show some flexibility by adapting their domestic arrangements where possible. It is recognised that the working environment in the new role may be especially important for those employees who suffer a health complaint or disability.

9.3 Where the employee has the basic skills, knowledge, educational attainment or experience required for a particular vacancy as defined by the person specification or is considered by management to have the potential to acquire those factors within a reasonable timescale and cost, appropriate further training should be provided. This will be discussed with the individual concerned and the training and support to be provided to them to aid re-skilling will be made clear, especially where they are expected to undertake a role for which they have had little or no previous experience.

9.4 Where staff either do not express interest in a vacancy or where no appointment is made as a result of the selection process, the Trust reserves the right to make a formal offer of suitable alternative employment to an individual who is under notice of redundancy.

9.5 All offers of alternative employment will be confirmed in writing setting out:

- the post,
- the work location,
- the terms and conditions of the post, including any pay protection,
- the trial period that will apply ,
- the date from which the new position is effective.

9.6 Staff who are redeployed to another work location, whether on trial or into a substantive role, will be eligible for additional travel costs for a limited period under Trust policy HR13 Travel Expenses.

9.7 If the individual does not regard a proposed post as suitable alternative employment, they have the right to appeal in accordance with this policy below.

Trial Periods for staff under notice of redundancy (see Section 8)

- 9.8 Where an individual under notice of redundancy is offered redeployment into a new post with different responsibilities, (s)he will have a right to a four week trial period to allow both the individual and the Trust to decide if the work provides a suitable alternative. The offer letter should spell out the period of the trial and the employee's terms and conditions in the new job. The letter will also spell out the consequence if the trial does not work.
- 9.9 Where a significant training requirement is identified, the four week period may be extended by mutual agreement; all such extensions must be confirmed in writing and will not adversely affect the individual's entitlement to redundancy pay.
- 9.10 Where an individual's notice period is due to end during the trial period (i.e. where their employment is due to be terminated), the notice period will be extended to the end of the trial period.
- 9.11 During the trial period there should be a minimum of two review meetings (usually at the end of weeks one and three but these can be requested at any time by either party) between the employee and the line manager to assess how things are going. Where trial periods are longer than four weeks more reviews will be needed. The outcomes of the review meetings will be confirmed in writing with both parties retaining a copy of that letter. Any variation to the trial period must be documented.
- 9.12 At the end of the trial period, one of the following will normally apply:
- the individual will be confirmed in the post (the written confirmation must be made before the individual's notice of dismissal expires) or
 - further suitable employment will be sought (where the trial ends before the end of the individual's notice period) or
 - the employee will be dismissed on the grounds of redundancy.

The line manager, supported where appropriate by the nominated HR Advisor, will meet with the individual and will confirm in writing the outcome at the end of the trial period, placing a copy of this letter in to the individual's personal file.

- 9.13 Once an individual has been confirmed into a post they will be regarded as having been placed permanently into the new role and are therefore no longer under notice of redundancy. The terms and conditions applicable to the new post will be confirmed to them in writing and they will be removed from the Redeployment Register and not be considered for other posts.
- 9.14 If the employee is dismissed during the trial period for a reason unconnected with the fact that (s)he was on trial for a new job, the employee will NOT be entitled to a redundancy payment.

10. REDUNDANCY TERMS

- 10.1 All individuals whose employment is to be terminated on the grounds of redundancy will be notified of this in writing and are entitled to their contractual period of notice.

- 10.2 Staff who are to be/have been given notice of redundancy (whether voluntary or compulsory) will normally meet with their Manager/HR Advisor, who will confirm the redundancy notice and inform the individual of any entitlement to a redundancy payment, which at this stage will be the *estimated* redundancy payment. The employee will also be advised of the conditions that apply to any redundancy payment. The Trust cannot give NHS Pension forecasts but the individual may request this information from the Pensions Officer.
- 10.3 An individual's entitlement to a redundancy payment will be calculated in accordance with, and will be subject to, the national conditions of service.
- 10.4 The *actual* redundancy payment will be calculated by the Trust at the time of termination and notified to the individual in writing. Any payment due will be made following termination of employment. Anyone who feels that their payment is incorrect must write to the Director of Human Resources within 21 calendar days of the date of payment.
- 10.5 Staff under formal notice of termination are required to apply for suitable posts with other NHS employers. Staff who unreasonably refuse to apply for or accept suitable alternative employment within the Trust or with another NHS employer will normally forfeit their right to redundancy pay.
- 10.6 In accordance with national conditions of service, any individual who, at the date of the termination of the contract has obtained without a break, or with a break not exceeding four weeks, suitable alternative employment with the same or another NHS employer, will forfeit their right to a redundancy payment or will be required to repay it if already in receipt.
- 10.7 Staff will normally be expected to work their notice period although the line Trust Board Director or the Director of Human Resources may use their discretion to allow „redundancy leave“. During „redundancy leave“ staff remain employees of the Trust but, at the Trust's discretion, are not required to be available for duty.
- 10.8 In exceptional cases an individual under notice may request, in writing, to waive their entitlement to notice and leave on a mutually agreed earlier date with redundancy pay calculated up to the revised date of termination. All such requests should be referred to the HR Advisor.
- 10.9 Reference should be made to Human Resources if an individual gives counter notice during a trial period as this may affect the individual's entitlement to redundancy pay.

Facilities for Staff under Notice of Redundancy

- 10.10 Where appropriate, career transition counselling will be provided, including job search, writing applications, developing a curriculum vitae and interview preparation.
- 10.11 All staff under notice of redundancy are entitled to reasonable paid time off work during the period of notice to look for other employment (e.g. to attend interviews with potential employers) or to undertake training for future employment. Staff wishing to take time off for this purpose must obtain the prior permission of their Manager. Requests for time off will not be unreasonably refused but staff may be required to show prior evidence of appointments or interviews.

11. PROTECTION OF PAY

- 11.1 As an element of good change management practice, the Trust provides for the safeguarding of the pay of those individuals whose terms and conditions are adversely affected by organisational change. Full details are set out in policy HR11 Protection of Pay (Trust Reorganisations).
- 11.2 There is no automatic right to protection of pay under this policy as an alternative to redundancy. Protection will only apply where it is considered by the Trust that an employee has been redeployed to a suitable alternative post.

12. TRAINING

- 12.1 All displaced staff and those under notice of redundancy will continue to have access to training opportunities and are encouraged to take up opportunities that are appropriate. Individuals should refer to their Manager, the HR Advisor, the Development and Training team or to their professional development lead.
- 12.2 It is recognised that some staff may move from one area of speciality to another and will, therefore, be moving into areas of work not fully covered by their training or recent experience. In these circumstances, appropriate preparatory training, induction and on-the-job supervised development on the basis of an agreed personal development plan will be provided.
- 12.3 It is not envisaged that staff will be required to undertake extensive re-training for new professional or occupational qualifications/registration. However, staff who wish to pursue such opportunities should raise this with their Manager/HR Advisor.

13. APPEALS PROCEDURE

- 13.1 Staff will have the right of appeal in accordance with this procedure if:
- they feel that they have been unfairly selected for redundancy, or
 - they feel that they have not been properly considered for a post within the Trust where they have been in competition with another employee, or
 - they have been offered a post deemed by management as suitable alternative employment, which they do not consider to be suitable.

Any individual wishing to lodge an appeal must do so in writing to their line Trust Board Director not later than 14 calendar days of the act complained of.

- 13.2 Wherever possible, appeals will be heard within 14 calendar days of the appeal being lodged. The appeal will be heard by the line Trust Board Director or nominee, who will be advised by a member of the HR Department. No panel member will have previously been involved in the decision complained of.

Where the appeal is made by an individual in pay band 8 or 9 or by a doctor or dentist the Appeals Panel will include at least one Trust Board Director.

The employee will be notified in writing of their right to be accompanied at the hearing by their accredited staff representative or by a colleague from within the Trust.

- 13.3 The decision of the Trust's Appeals Panel is final.

14. MONITORING AND REVIEW

- 14.1 The impact of change management plans under this policy and any consequent decisions will be monitored by the HR Department and by the recognised staff organisations to ensure its application is consistent with the Trust's commitments to diversity and equality of opportunity in employment.
- 14.2 The policy will also be reviewed periodically to reflect the changing needs of the Trust and its staff.

Appendix 1 – Approach to Managing Change (Agreed with Staff side Chair and Head of HR and Projects in March 2015)

