Executive Summary

In June 2013 the Trust Board approved the temporary unification of hyper acute and acute stroke services at the Princess Royal Hospital in response to short term staffing challenges. During this unification there has been clear evidence of improved performance against key stroke indicators that provide a proxy for improved patient outcomes (e.g. admission to specialist stroke unit within four hours of arrival, 90% of time spent in acute stroke unit, access to CT).

It was therefore agreed with commissioners that the temporary unification should be extended for a further period so that the benefits and disadvantages of a unified hyper acute and acute stroke service could be reviewed further and a recommendation made for the provision of these services for the medium term (2014).

This review has concluded and this paper recommends that PRH continues to provide unified hyper acute stroke services during 2014, and that the longer term shape of stroke services (from 2015) should be agreed through the NHS Future Fit clinical services review of community and acute hospital services.

Subject to the decision of the Board, implementation arrangements would then be discussed and agreed with commissioners and other partners.

Strategic Priorities
☑ Quality and Safety
☐ Healthcare Standards
☐ People and Innovation
☐ Community and Partnership
☐ Financial Strength

Operational Objectives
QS1 Reduce avoidable deaths
QS8 Develop a long-term clinical services site strategy and wider health strategy for the optimal configuration of acute, community and primary care services
QS9 Focus on improving clinical outcomes particularly for stroke and fractured neck of femur
HS3 Deliver all key performance targets
<table>
<thead>
<tr>
<th>Board Assurance Framework (BAF) Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Deliver Safe Care or patients may suffer avoidable harm and poor clinical outcomes and experience</td>
</tr>
<tr>
<td>☐ Implement our falls prevention strategy to help prevent patients suffering serious injury</td>
</tr>
<tr>
<td>☑ Achieve safe and efficient Patient Flow or we will fail the national quality and performance standards</td>
</tr>
<tr>
<td>☑ Clear Clinical Service Vision or we may not deliver the best services to patients</td>
</tr>
<tr>
<td>☐ Good levels of Staff Engagement to get a culture of continuous improvement or staff morale and patient outcomes may not improve</td>
</tr>
<tr>
<td>☐ Appoint Board members in a timely way or may impact on the governance of the Trust</td>
</tr>
<tr>
<td>☑ Achieve a Financial Risk Rating of 3 to be authorised as an FT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Care Quality Commission (CQC) Domains</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Safe</td>
</tr>
<tr>
<td>☑ Effective</td>
</tr>
<tr>
<td>☑ Caring</td>
</tr>
<tr>
<td>☑ Responsive</td>
</tr>
<tr>
<td>☑ Well led</td>
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**Recommendation**

The Trust Board is asked to APPROVE the continuation of unified hyper-acute stroke services at the Princess Royal Hospital during 2014, with the longer term configuration to be agreed through the NHS Future Fit Clinical Services Review.
Stroke Services: Ensuring the best outcomes for patients and communities in the year ahead

Progress and Way Forward: February 2014

Version 2.0, 19 February 2014.
Summary

- The most important message for anyone with a suspected stroke is

  **“When Stroke Strikes, Act F.A.S.T.”**
  - FACE: Has their face fallen on one side? Can they smile?
  - ARMS: Can they raise both arms and keep them there?
  - SPEECH: Is their speech slurred?
  - TIME: Time to call 999 if you see any one of these signs

- The way that people access stroke services in an emergency has not changed. As now:
  - If you dial 999 you will be taken straight to the best place to provide your care.
  - If you are referred urgently by your GP then you will be referred straight to the best place to provide your care.
  - If you walk in to A&E or another urgent care service you will be assessed and they will arrange treatment or transfer to the best place to provide your care. Both hospitals continue to be able to provide stroke thrombolysis and TIA services.

- Where people receive some of their stroke care has changed for a temporary period:
  - Hyper acute stroke services are currently provided at the Princess Royal Hospital in Telford.
  - Acute stroke services and stroke rehabilitation in an acute setting continue to be provided at both the Royal Shrewsbury Hospital and the Princess Royal Hospital.
  - A&E services continue to be provided at the Princess Royal Hospital and the Royal Shrewsbury Hospital.

- Following the temporary changes to stroke services introduced in summer 2013 (which saw the Princess Royal Hospital become the Trust’s centre for hyper-acute stroke services on an interim basis) we have reviewed these changes on detail with a particular focus on quality and access for patients. This has identified a sustained improvement in overall access to definitive stroke care, which in turn is associated with improved outcomes for patients. There are longer travel times for some patients in the west of our catchment but significantly more patients are receiving CT scan within 1 hour of arrival and being admitted to an acute stroke unit within 4 hours of arrival at the unified PRH service compared with the RSH service for the same period the previous year.

- We therefore recommend that this model of service continues until the longer term shape of the county’s acute and community hospital services has been developed through the NHS Future Fit clinical services review.

- The decision to continue to provide unified hyper acute stroke services at the Princess Royal Hospital pending the NHS Future Fit clinical services review would not and could not prejudge the outcome of that review.

- This recommendation is based on detailed and ongoing review of quality, safety and outcomes for stroke patients across Shropshire, Telford & Wrekin and mid Wales. This process will continue so that the safety, outcomes, recovery and experience of our patients remains paramount.
1. Current Position

Patients and communities across Shropshire, Telford & Wrekin and mid Wales expect and deserve the highest standards of safe, high quality, up-to-date clinical care for stroke that:

- increases survival rates
- improves quality by reducing disability and shortening recovery times, and
- improves patient experience.

The Shrewsbury and Telford Hospital NHS Trust strives for the highest standards of care, and working with patients and partner organisations we have already begun to develop a vision for the future of stroke services in the county.

In response to short term staffing challenges during summer 2013, the Trust acted promptly to secure safe, dignified stroke services for our patients and communities. This included the temporary unification of hyper acute and acute stroke services at the Princess Royal Hospital in Telford.

During this unification there has been clear evidence of improved performance against key stroke indicators that provide a proxy for improved patient outcomes (e.g. admission to specialist stroke unit within four hours of arrival, 90% of time spent in acute stroke unit, access to CT).

The table below compares (a) current performance during the temporary unification with (b) local standards, (c) national averages and (d) prior period performance.

<table>
<thead>
<tr>
<th>(a) Data for period 1 July 2013 to 31 December 2013</th>
<th>(b) Local Standard</th>
<th>(c) National Average (1Jul-30Sep 13)</th>
<th>(d) Data for period 1 July 2012 to 31 December 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of stroke admissions to PRH</td>
<td>444</td>
<td>245</td>
<td>215</td>
</tr>
<tr>
<td>Number of discharges</td>
<td>435</td>
<td>232</td>
<td>214</td>
</tr>
<tr>
<td>% receiving thrombolysis</td>
<td>GREEN 13%</td>
<td>GREEN 11%</td>
<td>AMBER 7%</td>
</tr>
<tr>
<td>% admitted to Acute Stroke Unit within 4 hours of arrival</td>
<td>GREEN 85%</td>
<td>GREEN 85%</td>
<td>RED 48%</td>
</tr>
<tr>
<td>% receiving CT within 1 hr of arrival</td>
<td>AMBER 47%</td>
<td>AMBER 45%</td>
<td>RED 26%</td>
</tr>
<tr>
<td>% receiving CT within 24 hours of arrival</td>
<td>GREEN 94%</td>
<td>GREEN 91%</td>
<td>AMBER 81%</td>
</tr>
<tr>
<td>% spending 90% of their time on Acute Stroke Unit</td>
<td>GREEN 89%</td>
<td>GREEN 93%</td>
<td>AMBER 62%</td>
</tr>
<tr>
<td>Dysphagia Link Nurse (swallow) assessment within 4 hours</td>
<td>GREEN 70%</td>
<td>GREEN 78%</td>
<td>AMBER 65%</td>
</tr>
</tbody>
</table>

The table demonstrates that:

- Performance against stroke standards has significantly improved compared with the service at RSH for the equivalent period in 2012.
- Performance against stroke standards has been maintained compared with the service at PRH during the equivalent period in 2012.
Note that these are access and time-to-treatment indicators that do not directly reflect the quality of care provided by doctors, nurses, therapists and wider hospital teams. A wider set of quality standards (e.g. relating to issues such as access to therapies) is also vital to the ongoing review and improvement of stroke services.

Based on these indicators and the wider experience of providing specialist stroke services from a single site, clinicians in the Trust asked for more time to review the service. Specifically, this included reviewing whether a return to two-site services, albeit only for the medium term pending decisions on the wider shape of acute and community hospital services through the NHS Future Fit review, may represent a retrograde step if this reduced our ability to offer our patients improved outcomes.

It was therefore agreed with commissioners that the unification should be extended for a further temporary period so that the benefits and disadvantages could be reviewed and a recommendation made for the provision of these services for the medium term (to 2014).

Improvements in access to stroke services during the temporary unification of hyper acute and acute stroke services at the Princess Royal Hospital in summer 2013 led to a request by hospital clinicians to review the potential benefits of continuing with a single site service for the medium term.

### 2. Longer Term Vision for Stroke Services

The recent review of stroke services across the Midlands and East of England recommended that hyper-acute stroke services should be provided by services seeing at least 600 stroke patient admissions each year, supported by a seven day a week specialist stroke workforce.

Locally, hyper-acute stroke services have been provided from two sites, each seeing in the region of 450 stroke patient admissions each year. There is a strong view amongst our clinical staff that moving to a single centre of excellence for hyper-acute and acute stroke services will create the conditions for improved clinical outcomes for stroke patients through increased survival, and increased quality by reducing disability and shortening recovery times. It will support the local NHS to develop and maintain a specialist 7-day workforce (currently 5-day) ensuring rapid and daily access to specialist expertise for stroke patients during a critical period of their treatment and recovery.

Providing services from two smaller sites reduces the ability of the local NHS to recruit and retain sufficient specialist workforce to develop and maintain a 7-day service. This has major implications for the capacity and resilience within the workforce to cover periods of short term vacancies and other leave. The recent short-term workforce challenges that faced our stroke services are a further indication of the potential benefits from moving to a single site service in the longer term.

However, any medium term changes do not and will not pre-judge the longer term decisions that will need to be made about a move to a permanent single site service (and the location of that service). Instead, the clinically-led recommendations developed with patient and community engagement following the Midlands and East Stroke Services Review need to be debated and tested more widely, and considered alongside wider challenges and opportunities for improving clinical outcomes, patient safety and patient experience in the county’s acute and community hospital services and beyond.

It is therefore recommended that the vision for stroke services beyond 2014 should be developed through the NHS Future Fit review of community and acute hospital services in Shropshire and Telford & Wrekin (involving all communities served by these hospitals in Shropshire, Telford & Wrekin and mid Wales).

The agreed long term vision for stroke services is a single site for hyper acute and acute stroke services, the location of which should be decided as part of the NHS Future Fit review.
3. The main features of the stroke service at the Princess Royal Hospital and the Royal Shrewsbury Hospital

The main features of the Trust’s stroke service are as follows:

- **Hyper Acute Stroke Units (HASU)** – Both the Princess Royal Hospital and the Royal Shrewsbury Hospital have facilities for a Hyper Acute Stroke Unit although currently this service is unified at the Princess Royal Hospital. These provide expert specialist clinical assessment, rapid imaging and the ability to deliver intravenous thrombolysis 24/7. Patients typically need this higher level of support for up to 72 hours after admission. During this period of their treatment, patients should typically receive an early multidisciplinary assessment, including screening of the ability to swallow and, for those that continue to need it, have prompt access to high-quality stroke care.

- **Acute Stroke Units (ASU)** - Both the Princess Royal Hospital and the Royal Shrewsbury Hospital have facilities for an Acute Stroke Unit although currently this service is only provided at the Princess Royal Hospital. These provide care immediately following the hyper-acute phase, usually after the first 72 hours following admission (the hyper-acute phase) for 3 to 7 days. Acute stroke care services provide continuing specialist and multidisciplinary care, continued access to stroke trained consultant care, access to physiological monitoring and access to urgent imaging as required. In-hospital rehabilitation continues or is initiated, with rehabilitation goals identified to support planning for discharge from the acute hospital setting.

- **Stroke Rehabilitation** – Stroke rehabilitation is provided at the Princess Royal Hospital and the Royal Shrewsbury Hospital. This provides specialist rehabilitation tailored to the needs of the individual, supporting them to leave acute hospital.

Stroke services are supported by a wide range of other care professions including radiography, dietetics, speech and language therapy, occupational therapy, physiotherapy and many other specialties depending on individual needs.

A model of stroke services with two HASUs and two ASUs in Shropshire is not consistent with the long term vision.

| Before the current temporary unification of stroke services, HASU, ASU and stroke rehabilitation have been provided at both PRH and RSH. Stroke rehabilitation continues to be provided at both sites. |
4. Options for the Medium Term

The options for the medium term (pending the outcome of the NHS Future Fit review) are set out below. The medium term configuration would be in place until longer term options are developed through NHS Future Fit review of acute and community hospital services (currently expected by the beginning of 2015).

<table>
<thead>
<tr>
<th>Option</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Maintain single site hyper acute and acute stroke services for the medium term. Acute-based stroke rehabilitation continuing at both PRH and RSH.</td>
<td>This is consistent with the longer term vision for stroke services, and there is a strong clinical preference for a single site HASU and ASU in order to create the conditions for improving outcomes for stroke patients through increased survival, and increased quality by reducing disability and shortening recovery times. There is greater scope for maintaining the improvements in key stroke indicators that have been observed during the temporary single site service during Summer 2013. There is greater scope for accelerating development towards 7-day consultant access which is not feasible with a two-site model. Feasibility should be tested for both (1a) PRH and (1b) RSH.</td>
</tr>
<tr>
<td>(2) Return to two site hyper acute and acute stroke service until longer term vision for stroke services is developed as part of wider strategy for acute and community hospital services.</td>
<td>Under this option the service would return to the configuration as at June 2013. This is counter to the clinical preference and the longer term vision for stroke services which is for unification of hyper acute and acute stroke services. The benefits in terms of improvement in key stroke indicators are not expected to be maintained. There is public voice in support of maintaining stroke services as locally as possible, and also anxiety that medium term changes will drive the long term shape of stroke services. We can provide assurance that the location in the medium term does not and will not influence the longer term location of stroke services. Development towards 7-day consultant-delivered service would be delayed until the longer term configuration of stroke services is implemented.</td>
</tr>
</tbody>
</table>

There are two main options (plus sub-options) for the medium term and both options should be considered.

5. Options for the Longer Term

The preferred option for the longer term (from 2015) is set out below. This would be tested and developed further, including decisions on the location of services, through the NHS Future Fit review.

<table>
<thead>
<tr>
<th>Option</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single site hyper acute and acute stroke services at a location to be agreed. Acute-based stroke rehabilitation continuing at both PRH and RSH.</td>
<td>The longer term vision for stroke services is for a single site HASU and ASU in order to create the conditions for improving outcomes for stroke patients through increased survival, and increased quality by reducing disability and shortening recovery times. This also provides greater scope to strengthen early access to senior clinical-decision makers through the development and maintenance of new models of 7-day working including 7-day consultant access. Feasibility should be tested for both (a) Princess Royal Hospital and (b) Royal Shrewsbury Hospital.</td>
</tr>
</tbody>
</table>

There is one option for the long term, with two sub-options which should be developed and tested through the wider review of acute and community hospital services in the year ahead.
### 6. Consideration of Medium Term Options

The following factors have been considered in the review of options for stroke service configuration in the medium term:

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Description</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Outcomes and Access</td>
<td>A fast response to stroke, from onset of symptoms to definitive treatment, reduces the risk of mortality and disability. The identification of potential stroke patients and their timely admission to an appropriate stroke centre is a critical stage of the care pathway. Reduced door to needle time for stroke thrombolysis patients increases the chances of survival, recovery and reduced disability.</td>
<td>Reduced in-hospital delays to ensure prompt access to diagnosis and definitive treatment. Ambulance service transfer time from Shropshire, Telford &amp; Wrekin and mid Wales to Hyper Acute Stroke Service. Ability to maintain clinical outcomes at current levels if not better.</td>
</tr>
<tr>
<td>Patient experience</td>
<td>Our aspiration is to provide high standards of dignified care for every patient and the people who care for them, which includes maximising opportunities for joined up care.</td>
<td>Accessibility for carers and relatives. Satisfaction of joined up care between home, hospital, community. Number of steps in the pathway (e.g. same or separate locations for HASU/ASU and rehabilitation).</td>
</tr>
<tr>
<td>Feasibility and deliverability</td>
<td>It must be feasible to deliver the service for the medium term, taking into account factors such as capacity (e.g. physical space), capability (e.g. specialist skills) and business continuity (e.g. maintaining service standards during any period of change).</td>
<td>Capacity to accommodate the service. Effectiveness of business continuity plans. Opportunity cost.</td>
</tr>
<tr>
<td>Wider impact</td>
<td>The wider impact on other services inside and outside hospital must also be considered (for example, if another service would need to move to accommodate a single site stroke service then this will have additional risks and benefits)</td>
<td>Impact on safety and sustainability of other services.</td>
</tr>
</tbody>
</table>

Assessment of medium term options will consider clinical outcomes & access, patient experience, feasibility & deliverability, and wider impact.
7. Assessment of Medium Term Options

The Trust has ensured that clinical audits and reviews have taken place in relation to key areas of patient outcomes and experience of the stroke service. These have included:

- Access to CT scan
- Missed opportunities to provide thrombolysis, and time from onset to symptoms definitive treatment including impact of additional travel time
- Access to acute stroke unit
- Impact on ambulance service deployment

7.1 Access to CT scan

Receiving CT scan within 1 hour of arrival is an important process milestone for patients eligible for thrombolysis as it provides vital information to support the assessment of suitability of this treatment. A critical clinical question therefore is the proportion of patients eligible for thrombolysis who receive their CT scan within 1 hour.

The Trust has introduced a new performance measure to identify patients eligible for thrombolysis and record the number who received their CT scan within 1 hour of arrival. Since recording began in September 2013 up to the end of December 2013, 100% of patients eligible for thrombolysis have received their CT scan within 1 hour of arrival.

This indicates that the patients with the greatest clinical need for CT received this within one hour.

Additionally during the same period (1 September 2013 to 31 December 2013) nearly half of all patients (47%) received CT within 1 hour (broadly comparable with the national standard of 50% within 1 hour); and nearly all stroke patients (95%) received CT within 24 hours.

Challenges specific to PRH: There is a single CT scanner. Mitigation is provided through maintained access for urgent scans (e.g. stroke) during periods of planned maintenance, and through continued access to cross-site CT scan during unplanned maintenance.

Challenges specific to RSH: There are significant additional demands on CT scanning as the hospital is the main site for acute surgery. The presence of a second CT scanner provides some on-site resilience for planned maintenance. However, this scanner is designated for cancer services so reliance on this during unplanned maintenance can impact on other care pathways. There is also continued access to cross-site CT during unplanned maintenance.

7.2 Missed Opportunities to provide thrombolysis

Thrombolysis treatment for eligible patients is recommended up to 3 hours following onset of symptoms for individuals over 80 and up to 4.5 hours following onset of treatment for individuals under 80. Based on a review of patient notes, no missed opportunities to provide thrombolysis due to extended travel time have been identified during the temporary unification of hyper acute stroke services at the Princess Royal Hospital.

A review of patients where the time of onset of symptoms could be assessed has not identified any patients experiencing a pathway from onset to arrival greater than 3 hours (see overleaf). Note that individuals waking up with stroke symptoms are not included as the time of onset cannot be identified, and patients are therefore not normally eligible for thrombolysis.

Whilst some concerns have been expressed by members of the public about the potential impact of extended travel times on outcomes, no adverse outcomes or missed opportunities to provide thrombolysis have been
been identified and continued opportunities for reducing time from arrival to treatment can provide additional mitigation.

It is important to note that RSH has continued and will continue to maintain the facility and capability to deliver thrombolysis if required (e.g. a stroke identified in a patient already admitted with a different primary diagnosis)

![Onset to Arrival Vs Length of Stay (Outcome)](image)

**Figure 1: Onset to arrival time vs. Length of Stay (LoS) for a cohort of 15 stroke patients**

### 7.3 Access to Acute Stroke Unit

Early access to a dedicated acute stroke unit supports continuity of specialist care which in turn contributes to improved outcomes.

The median time from arrival at hospital to admission to acute stroke unit has reduced from over 9 hours at RSH during the period April-June 2013 to around 100 minutes in the period July-September 2013 in the unified service at PRH. This compares with a national average for the same period of 215 minutes. The Trust also currently has a median time from arrival at hospital to assessment by a stroke trained nurse of 12 minutes, compared with a national median of 155 minutes from arrival to assessment. The rapid times in the Trust are mainly due to our specialist nurse-led service with pre-alert system from ambulance and switchboard.

The longer access times in April-June 2013 mainly relate to capacity challenges at the Royal Shrewsbury Hospital where some patients experienced extended periods in non-stroke wards before a specialist bed became available. During this time they will have received specialist hospital care but not with the additional benefits from accommodation in a dedicated stroke ward. However, as highlighted in Table 1 there have also been significant improvements in the proportion of patients reaching an acute stroke ward within 4 hours (with 48% of patients at RSH with the two-site HASU and 85% of patients at PRH with a single-site HASU).

Capacity at PRH: Demand for inpatient medical services does not normally experience the same peaks of high intensity at the Princess Royal Hospital. Consequently there are normally fewer challenges in protecting the designated bed base for stroke services. This winter the levels of demand on PRH have been higher than
originally modelled in relation to the impact on unification of hyper acute stroke services, but despite this the levels of performance have been maintained at high levels.

Capacity at RSH: Significant additional work would be required in order to establish protected capacity at RSH to accommodate single site HASU and ASU at the hospital in the medium term. Returning to two site stroke services would also present some capacity challenges, and winter pressures have created some challenges in transferring patients to RSH for their ongoing care following the initial acute phase. Whilst there is scope to re-accommodate two-site HASU and ASU at RSH this will lose the current and future benefits from providing a unified hyper acute service.

Capacity in the longer term: In the longer term, wider service redesign in the context of the review of acute and community hospital services would provide scope to accommodate single site HASU and ASU at either PRH or RSH.

### 7.4 Impact on ambulance service deployment

Alongside internal feasibility and service impact we are also working with ambulance services in Wales and West Midlands to understand impact along the emergency pathway. Agreement has been reached between ambulance services and commissioners in relation to 2013/14 and will form part of the normal contracting round for 2014/15.
# 8. Updated summary appraisal of options

The following table summarises the current interim appraisal of options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| (1a) Maintain single site hyper acute and acute stroke services for the medium term – service at PRH Acute-based stroke rehabilitation continuing at both PRH and RSH | • Based on ambulance journeys for suspected stroke patients between 1 July 2011 and 30 June 2012, 92% live within 1 hour of the Princess Royal Hospital. No missed opportunities to treat have been identified since the unification of hyper acute stroke services at the Princess Royal Hospital.  
• There is clear evidence of improved performance since unification, which has continued into the winter months.  
• There is scope to maintain single site HASU and ASU at PRH, and the service could be accommodated here with minimal impact on delivery and continuity of other clinical services.  
• Maintaining a single site model provides scope to continue to deliver benefits for patients and move towards greater seven-day services with earlier and ongoing access to senior clinical decision-makers. **Option 1a is recommended as it will maintain the clinical benefits for patients across Shropshire, Telford & Wrekin and mid Wales and it is feasible.** |
| (1b) Maintain single site hyper acute and acute stroke services for the medium term – service at RSH Acute-based stroke rehabilitation continuing at both PRH and RSH | • Based on ambulance journeys for suspected stroke patients between 1 July 2011 and 30 June 2012, 99% live within 1 hour of the Royal Shrewsbury Hospital.  
• Stroke access performance was previously significantly lower at RSH, predominantly due to wider capacity and demand issues facing the hospital. There have been significant improvements in overall stroke access performance during the temporary single site hyper acute stroke service at the Princess Royal Hospital.  
• There are considerable feasibility challenges in accommodating a single site service at RSH, particularly without further clinical and/or financial impact on other services. It has not been possible to identify an alternative service to be relocated from the Royal Shrewsbury Hospital, nor to identify additional short term clinical accommodation on the site, in order to accommodate single site stroke services.  
• Maintaining a single site model provides scope to continue benefits realisation and move towards greater seven-day services. **Option 1b is not recommended as it is not feasible.** |
| (2) Return to two site hyper acute and acute stroke service until longer term vision for stroke services is developed as part of wider strategy for acute and community hospital services | • Under this option the service would return to the configuration as at June 2013.  
• This is counter to the clinical preference and the longer term vision for stroke services, which is for unification of hyper acute and acute stroke services.  
• The recent benefits in terms of improvement in key stroke indicators are not expected to be maintained.  
• There is public voice in support of maintaining stroke services as locally as possible, and anxiety that the medium term location will pre-judge the longer term shape of stroke services. We can provide assurance that medium term location does not and will not drive long term location of stroke services. **Option 2 is not recommended as it will not maintain the clinical benefits for patients across Shropshire, Telford & Wrekin and mid Wales.** |

**Option 1a (maintaining single site hyper acute stroke services at the Princess Royal Hospital pending the outcome of the NHS Future Fit clinical services review) is recommended as the preferred option**
9. Impact Assessment

Quality
Implementing Option 1a is expected to continue to deliver the improvements in quality that have been experienced during the temporary unification of hyper acute stroke services at the Princess Royal Hospital.

Embedding this as the agreed model for the medium term will enable further quality improvements through, for example, the agreement and implementation of new pathways for direct transfer from PRH to Newtown of Powys patients who are deemed to be viable for Early Supported Discharge without the need for an additional stay within RSH.

Whilst the feedback from patient surveys has generally been positive, with an agreed model for the medium term the Trust can work with patients and community groups to continue to strengthen pastoral care. For example, a “welcome pack” has been suggested including approaching local businesses such as hotels and restaurants to offer discounts for people who now need to travel further than under the previous service model.

Based on an assessment of ambulance transfers to PRH or RSH between 1 July 2011 and 30 June 2012, around 99 out of every 100 patients lived within a 1 hour ambulance transfer of a HASU at either PRH or RSH. With the proposed model for the medium term approximately 92 out of every 100 patients will live with a 1 hour ambulance transfer of the nearest HASU at PRH. Additional pastoral support should therefore be provided for patients and their families & carers who live further than 1 hour ambulance journey from the HASU at PRH. Postcode mapping should be used to identify source addresses (e.g. SY16, LD7).

Ongoing review of outcomes, safety and experience should continue including our internal quality review processes, monthly reports to commissioners and quarterly review meetings.

Performance
Implementing Option 1a will enable the Trust to sustain the improvements in access and performance that have been experienced during the temporary unification of hyper acute stroke services at the Princess Royal Hospital.

It is clear from Table 1 and from the wider reviews of access and quality that there have been significant improvements, and our current assessment is that increases in the time from home to hospital have been addressed through reductions in time from the hospital door to specialist nurse assessment, diagnosis, referral to acute stroke ward etc.

Workforce and Finance
Of itself, the decision to sustain unified hyper acute stroke services at the Princess Royal Hospital has minimal workforce or financial impact for the Trust. The initial move to unified services was a response to critical work issues which stem from the wider challenges to the acute medical workforce locally and nationally.

The Trust is already engaged in the NHS Future Fit clinical services review which aims to develop the long term vision for the county’s acute and community hospital services. Alongside this, our Operational Plan for 2014/15 to 2015/16 is expected to include the further development of the Trust model for acute medical services and care of the elderly. This work may have a workforce and/or financial impact which would be presented to the Board in due course.
10. Implementation and Ongoing Review

If this recommendation is supported by the Trust and commissioners, the programme of implementation and ongoing review will include:

<table>
<thead>
<tr>
<th>Review of quality and outcomes</th>
<th>Continuation of the quality review programme which includes:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Continued ongoing clinical review by the Trust</td>
</tr>
<tr>
<td></td>
<td>SATH</td>
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<td></td>
<td>• Continued robust incident reporting to identify and review any issues of concern</td>
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<td></td>
<td>• Continued monthly quality and performance indicator reports for review at commissioner level</td>
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<td></td>
<td>• Continued quarterly review meetings</td>
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<td></td>
<td>SATH, Ambulance Services, Commissioners</td>
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<tr>
<td>Workforce</td>
<td>Formalisation of the staffing model (medical, nursing, therapies, diagnostics) for the coming year to maintain and improve cross-site working and make further progress towards seven day working, in the context of wider plans across the Trust towards seven day working.</td>
</tr>
<tr>
<td>Vision for medical services</td>
<td>Development of the above in the context of the wider model for acute medical services in the medium term</td>
</tr>
<tr>
<td>Pathways</td>
<td>Formalisation of pathway for direct transfer of patients from PRH to Newtown Hospital (e.g. those assessed as ESD-viable)</td>
</tr>
<tr>
<td></td>
<td>Continuing to work with Ward 22S/R at RSH to strengthen and reinforce the vital role of stroke rehabilitation within the stroke pathway</td>
</tr>
<tr>
<td></td>
<td>Sustained access to TIA including development of plans for seven day working.</td>
</tr>
<tr>
<td>Engagement &amp; Communication</td>
<td>Communication and engagement with our communities, including clarity on the clinical basis for this decision and reiterating to our communities and commissioners that the long term shape of the county’s hyper-acute stroke services will be agreed through the NHS Future Fit review.</td>
</tr>
<tr>
<td>Patient and Carer Experience</td>
<td>Work with patient and community partners to continue to strengthen pastoral support for families and carers</td>
</tr>
<tr>
<td>Contracting</td>
<td>Reflect medium term model for hyper acute stroke services in contracting process</td>
</tr>
</tbody>
</table>
Contact details for feedback:

In writing: Dr Edwin Borman, Medical Director, The Shrewsbury and Telford Hospital NHS Trust, Royal Shrewsbury Hospital, Mytton Oak Road, Shrewsbury SY3 8XQ

By email: consultation@sath.nhs.uk
Stroke Services: Ensuring the best outcomes for patients and communities in the year ahead

Has their face fallen on one side?
Can they smile?

Can they raise both arms and keep them there?

Is their speech slurred?

Time to call 999 if you see any one of these signs

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