

Board of Directors' Meeting 8 December 2020

Agenda item	199/20			
Report	Extension of Mobile MRI Capacity			
Executive Lead	Chief Operating Officer			
	Link to strategic pillar:		Link to CQC domain:	
	Our patients and community	√	Safe	√
	Our people		Effective	√
	Our service delivery	√	Caring	
	Our partners		Responsive	
	Our governance		Well Led	
	Report recommendations:		Link to BAF / risk:	
	For assurance			
	For decision / approval	√	Link to risk register:	
	For review / discussion		Insufficient capacity to recover DM01 (Imaging)	
	For noting			
	For information			
For consent				
Presented to:	<p>SaTH Covid Silver – 16 November 2020; result approved Incident Room – 13 November 2020 Restoration /Recovery Steering Group; weekly monitoring Restoration/Recovery Diagnostic Working Group Finance & Performance Committee – 1 December 2020; Committee fully support</p>			
Dependent upon (if applicable):	Board of Directors approval			
Executive summary:	<ol style="list-style-type: none"> 1. In line with other Trusts nationally, approximately 30 - 50% pre-Covid CT, Ultrasound and MRI Imaging capacity at our Trust was lost as a result of the need for social distancing and infection control measures to keep patients safe. This has resulted in a backlog of patients waiting over 6 weeks in all modalities. 2. This paper focuses on MRI with approximately 50% pre-Covid MRI capacity lost, resulting in a backlog of 3,846 patients waiting for a scan by October. 3. In September this year, a business case was approved for 2 x mobile MRI scanners operating 7 days/week, 12h/day for 3 months, in order to address the growing backlog of patients pending a decision from NHSE/I on the allocation of Adapt & Adopt capital funding for additional scanning capacity. These 			

	<p>mobiles are planned to leave site on 28th December and 25th January respectively, when the current contract terminates.</p> <ol style="list-style-type: none"> 4. With recent confirmation of only 1 Imaging pod being awarded to the Trust, this will not provide sufficient MRI capacity to regain the national 6-week standard and maintain it at 99%. 5. Therefore 3 options for recovering the national standard in MRI have been considered together with the risk to patients from delayed diagnosis of unexpected pathology resulting in delayed treatment options and potential poor clinical outcomes. 6. This paper recommends that the MRI waiting list is eliminated as soon as possible by extending the contract for both mobile scanners to remain on site for a further 6 months. 7. This would enable the waiting list to be eliminated by July 2021 and sustained recovery of the national 6-week standard for MRI thereafter. 8. The cost of this option is £1.005m with the cost being spread across Q4 of 2020/21 and up to month 4 of 2021/22
Appendices	Appendix 1: PBC Extension to Mobile MRI Scanners based at SaTH

1.0 Introduction

- 1.1 Due to capacity constraints arising from Covid19 countermeasures, it was not possible for the Trust to achieve the national Phase 3 target for diagnostics, namely to recover 100% of pre-Covid activity by October 2020.
- 1.2 Therefore in order to address the growing backlog of patients awaiting routine MRI scans, a business case was approved by this committee in September for 2 mobile MRI scanners for 3 months, pending a decision from NHSE/I on the allocation of Adapt & Adopt capital funding for the 2 Imaging pods requested by the Radiology team.
- 1.3 In early November, NHSE/I confirmed funding for only 1 imaging pod containing 1 MRI scanner. This is unlikely to become operational before May/June 2021 due to demand for units and the capability of the supplier to deliver at an earlier date.

2.0 Options Available

- 2.1 Demand and capacity modelling indicates that the capacity provided by the Imaging pod alone is insufficient to eliminate the MRI backlog and sustain the national standard of a maximum 6-week wait for routine non-planned imaging unless we are able to eliminate the backlog in advance of it becoming operational in May/June.
- 2.2 In order to reduce the backlog, and recover and maintain the national 6-week standard, the relative merits of 3 options have been considered:
- 2.3 Option 1 - removal of both mobile scanners at the end of their current contract on 28th December and 25th January 2021 respectively.
- 2.4 Option 2 –retain both mobile scanners for 6 months from January 2021
- 2.5 Option 3 – retain both mobile scanners for 3 months from January 2021

3.0 Risk

- 3.1 In Option 1, whilst being the most affordable, carries the highest risk of patient harm. By the end of October 2021, the predicted DM01 performance (MRI Imaging) is 42.3% routine non-urgent patients imaged within 6 weeks. The national standard is 99%. The size of the waiting list is predicted to be 2,782.
- 3.2 In Option 2, the mobile scanners currently on site are extended for 6 months until the end of June and July respectively. In this scenario, there is a more rapid reduction in the backlog which is removed completely by July 2021. At current predicted referral rates it is anticipated that the waiting list can then be sustained to maintain the imaging component of the DM01 standard at 99%. The cost of this option is £1.005m.
- 3.3 In Option 3, the mobile scanners could be extended for 3 months to the end of March and April respectively. This would be followed by a gap until the imaging pod comes on-line in July. In this case, the reduction in the backlog follows a slower trajectory with the Imaging component of the DM01 standard is recovered by 31st October 2021. The cost of this option is £0.409m

4.0 Risks and actions

- 4.1 Option 2 carries the least clinical risk for patients and enables the Trust to meet the national Phase 3 diagnostic recovery commitment by July 2021. It is also the most expensive option.
- 4.2 Both mobile units are currently in place and there are therefore no additional implications for Estates or Informatics.

5.0 Conclusion

- 5.1 The Trust will be unable to meet the commitment to return to pre-Covid levels of activity without investment in additional scanning capacity. This carries a significant risk of harm through the implications of delayed diagnosis of unexpected pathology and it is for this reason that it is recommended that Option 2 is approved.

Chief Operating Officer
November 2020

PRE BUSINESS CASE (PBC)

Appendix 1		Target dates	
Proposal (title)	Extension to Mobile MRI Scanners based at SaTH		
Objectives & aims	<ul style="list-style-type: none"> To mitigate the risk for patients who have been referred for a MRI scan who are not on a treatment pathway (referrals dating back to Jan 2020) and who have undiagnosed/ unmanaged pathology. To recover from the MRI backlog following COVID-19 pandemic in order to achieve sustainability of the national 6 week diagnostic standard for routine Imaging (forming part of the overall DM01). 		
Senior Responsible Officer	Chief Operating Officer	Implementation – target date	January 2021
Brief Details			
<p>1. Brief Description</p> <p>In line with other Trusts nationally, approximately 50% pre-Covid MRI capacity at our Trust was lost as a result of the need for social distancing and infection control measures to keep patients safe resulting in a backlog of patients waiting over 6 weeks for their scan.</p> <p>In September, a business case was approved for x2 mobile scanners for 3 months, pending a decision from NHSE/I on the allocation of Adapt & Adopt capital funding for the 2 Imaging pods requested. 1 mobile scanner became operational in October, the other in November and our backlog is beginning to improve. We currently have 2,676 events on our MRI waiting list (reduced from 3,846 since 05.10.20) with the oldest routine non-planned scan waiting since January 2020.</p> <p>MRI referrals are increasing as activity across the healthcare community is being restored and the safe utilisation of our existing scanners within all available staffing resource and COVID secure working has been maximised. Our current capacity on substantive scanners is 279 scans per week.</p> <p>The 2 mobile MRI scanners are staffed by 'InHealth'. This increases our scanning capacity by 266 slots per week and has allowed us to start scanning routine patients from the suspended COVID waiting list whilst maintaining the capacity we need on our fixed substantive scanners for acutely ill patients and complex imaging, including patients on cancer pathways.</p> <p>As patients attending the mobile scanners do not need to enter the hospital buildings, these services can continue regardless of the impact of the second wave of the pandemic now evident.</p> <p>In early November, it was confirmed that the Trust had secured funding for only 1 Imaging pod containing 1 MRI scanner and this is unlikely to become operational until May/June due to supplier constraints. Our capacity modelling indicates that the capacity provided by the Imaging pod, even if it is available in May, is insufficient to recover and maintain the national standard for Imaging unless we are</p>		<p>Potential costs (Financial & non-financial)</p> <p><u>Financial Costs: Assume commence Jan 2021 – June 2021</u></p> <p>From Monday 5th October</p> <p>Supplied by 'InHealth':</p> <p>Mobile MRI Siemens Symphony scanner with 2x MRI radiographers operating 12 hours per day, 7 days per week</p> <p style="text-align: right;">£2,250 per day + VAT = £2,700</p> <p>Oversized Mobile GE HD scanner with 2x MRI radiographers operating 12 hours per day, 7 days per week</p> <p style="text-align: right;">£1,950 per day + VAT = £2,340</p> <p>Cost for both scanners (note projected cost to end of 2020/21 is not a full 3 months of both scanners)</p> <p style="text-align: right;">£156,240 per month</p> <p style="text-align: right;">Total for 3 months = £487,350</p> <p style="text-align: right;">Total for 6 months = £ 974,700</p> <p>Generator (PRH):</p> <p>Whisper Generator</p> <p>£780</p> <p style="text-align: right;">£650 per week + VAT =</p> <p style="text-align: right;">Total for 3 months = £10,140</p> <p style="text-align: right;">Total for 6 months = £20,280</p> <p>Whisper Generator</p> <p>Delivery</p> <p>£540</p> <p style="text-align: right;">£450 + VAT =</p> <p>Removal</p> <p>£540</p> <p style="text-align: right;">£450 + VAT =</p> <p style="text-align: right;">Total = £1,080</p>	

able to eliminate the backlog by retaining the mobiles from January to June (see D&C model data below).

At current referral rates, it is anticipated that the implementation of the additional MRI capacity provided by the Imaging pod, assuming availability of staff will mean there will be no need for mobile scanners.

2. D&C modelling data at 13.11.2020

The modelling which follows shows the impact on the backlog/DM01 (Imaging) of:

Option 1 - removal of both mobile scanners on 28/12 and 25/1

Option 2 –retaining both mobile scanners for 6 months

Option 3 – outlines the impact of retaining both mobile scanners for 3 months

Option 1

In this scenario, the mobile scanners leave site at the end of December and January, with the “pod”

Sound Proof Panelling Charge for PRH Unit from 1st Feb 21 to 31st July 21
£310 + VAT =

£372

Total = £9,672

Fuel to be charged at the prevailing rate per litre at time of usage

Existing RSH Pad – no additional charge

Estates and IT costs - already covered as extension to contract

TOTAL for 3 months to Mar 31st = £408,816 plus fuel

TOTAL for 6 months to Jun/Jul = £1,004,652 plus fuel

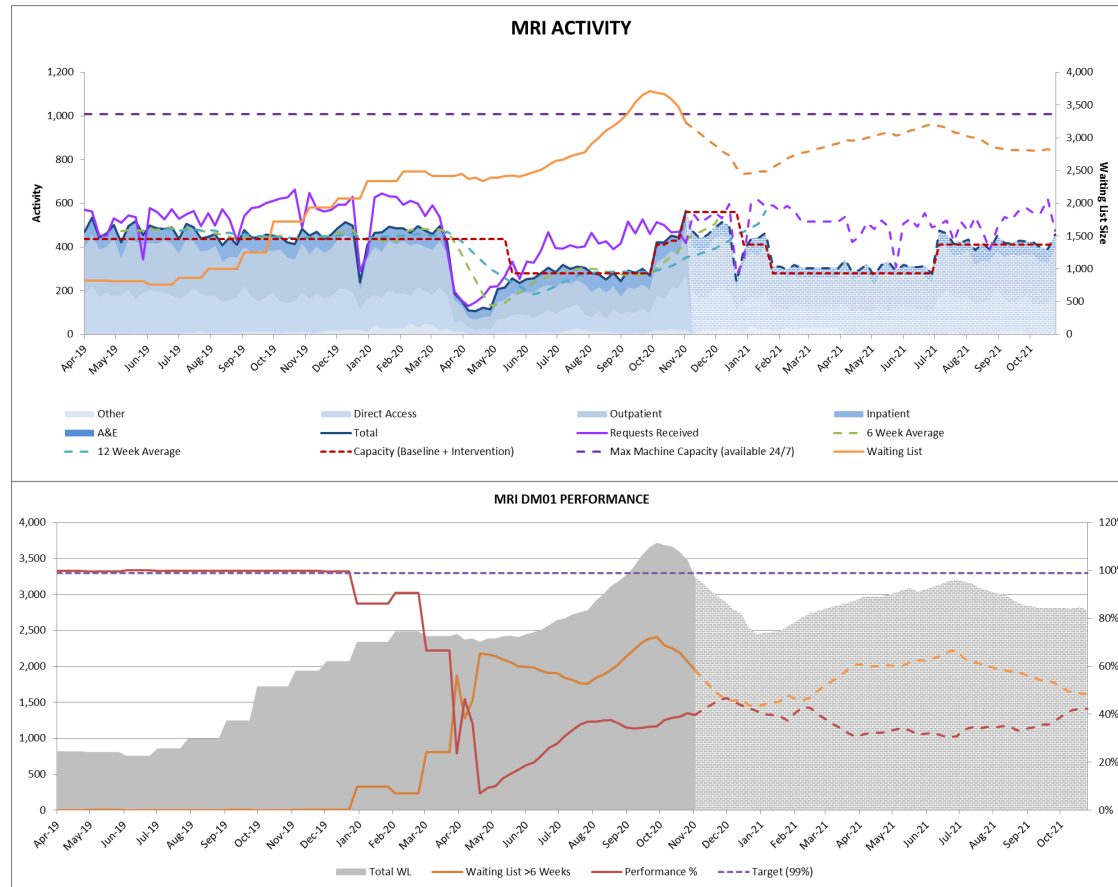
Radiology reporting to be managed on local level via current escalation process.

Non-Financial Costs (No action):

- Late/ missed diagnosis of pathology.
- Delay in patient pathways impacting on services across the healthcare economy.
- Potential litigation.
- Breach of DM01 with no recovery plan
- Potential financial penalties due to missed national targets.
- Damage to the reputation of the Trust with potential media interest.

becoming operational from July 2021:-
 RSH – (w/c) 05/10/2020 – 28/12/2020
 PRH – (w/c) 02/11/2020 – 25/01/2021
 Pod – (w/c) 05/07/2021 →

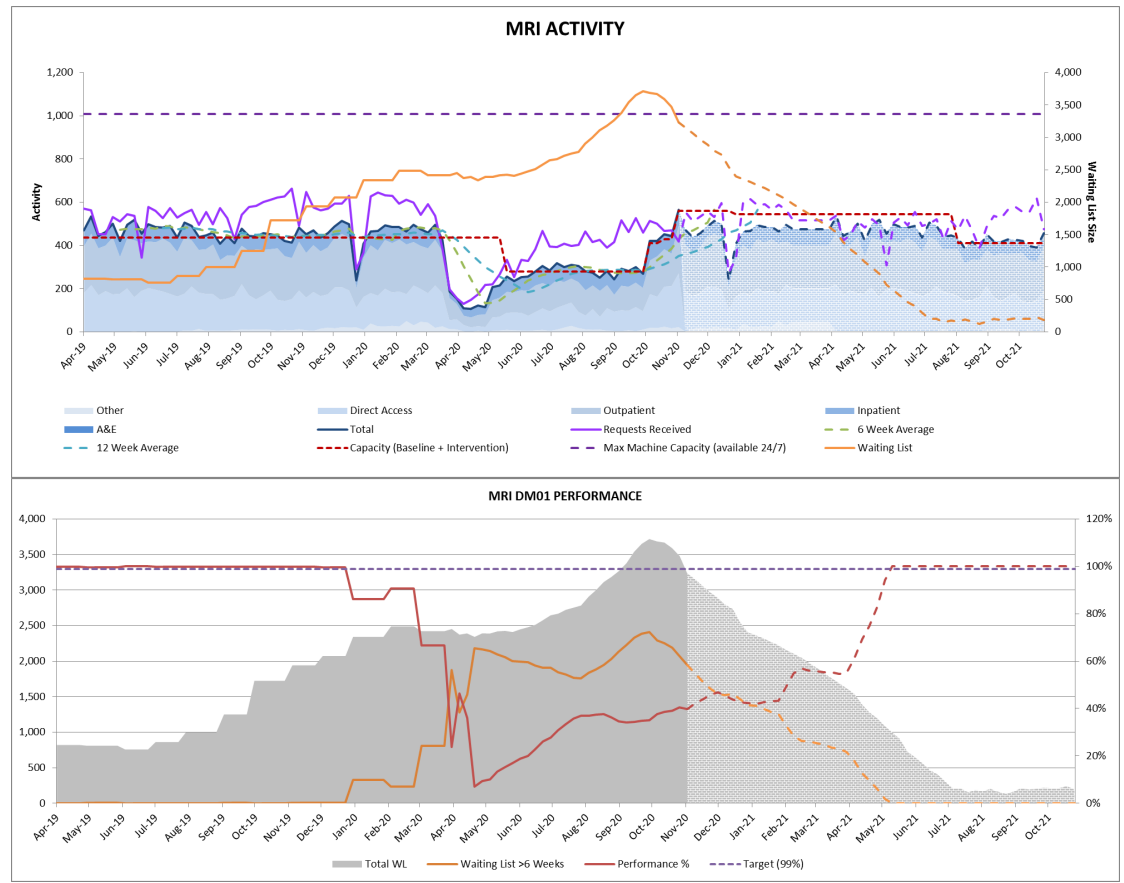
In this scenario, the waiting list starts to increase immediately from January and continues to rise until July, when it begins to fall gradually with implementation of the Imaging pod. However by the end of October 2021, the waiting list remains at 2,782, with a predicted DM01 performance (Imaging) of only 42.3% routine non-urgent patients imaged within 6 weeks. The national standard is 99%.



Option 2

In this scenario, the mobile scanners are extended for 6 months to the end of June and July respectively,

the Imaging pod coming on-line at the beginning of July:-
 RSH – (w/c) 04/01/2021 – 20/06/2021
 PRH – (w/c) 01/02/2021 – 25/07/2021



In this scenario, allowing for 1 month potential slippage in the delivery of the Imaging pod, there is a more rapid reduction in the backlog which is removed by July 2021. At predicted referral rates it is anticipated that the waiting list can then be sustained to recover the Imaging component of the DM01 target at 99%.

Option 3

In this scenario, the mobile scanners could be extended for 3 months to the end of March and April

<p>Respectively. This is followed by a gap until the Imaging pod comes on-line in July.</p> <p>In this case, the reduction in the backlog slows during April when the first scanner leaves site and then rises quickly during May after the second mobile leaves. This improves again when the Imaging pod arrives and it is expected that we will not regain the Imaging component of the DM01 standard until October 2021.</p>	
<p>Potential benefits (Financial & non-financial)</p> <ul style="list-style-type: none"> • Option 2 (extension of both mobiles for 6 months each) demonstrates full recovery of the outstanding waiting list and recovery of the Imaging component of DM01 performance target in the second half of 2021. This carries the least risk to patients from delayed diagnosis. • Option 3 (extension of both mobiles for 3 months each) is more affordable, but has a slower recovery rate and therefore presents greater risk of delayed diagnosis of unexpected pathology, delayed treatment and potentially poor clinical outcome. • Option 1 is more affordable than Option 3. In comparison, while Option 1 indicates a levelling off of the waiting list from July 2021, there is a considerable volume remaining with no capacity for further improvement. It presents the greatest risk of delayed diagnosis and poor clinical outcomes. <p>Recommendation: The recommendation is to approve Option 2 to extend both mobiles for 6 months.</p> <p>The summary of cost is set out in the table below for Q4 of the current financial year and Q1 and July of Q2 of 2021/22.</p>	<p>Potential sources of funding. Although the contracting position may change in the future, at present there is no scope to improve efficiency through higher productivity or attract additional income through increased activity.</p> <p>Other considerations (HR/Estates/IT/ Legal/Commercial)</p> <p>These scanners are already in situ and so set up costs have already been covered.</p>

Initial numbers	£000s	£000s	£000s	£000s	£000s
	Y1	Y2	Y3	Y4	Y5
Estimated costs	(409)	(596)			
Estimated incomes/savings					
Net Benefit	(409)	(596)			

Comparative analysis
Performance against the Imaging component of the DM01 is tracked weekly and performing as expected against the plan for MRI, including use of mobile capacity.