



**Thames Valley Clinical Senate**

**Thrombectomy Service – FINAL report from the  
Stakeholder Forum**

NHS England and NHS Improvement



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## 1. Foreword

Patients requiring thrombectomy following a stroke form a small but significant minority of all patients. Critical timely decisions make the difference between poor and good quality of survival. Therefore, the thrombectomy pathway is crucial as well as complex.

This report examines the pathways and decision points and makes some recommendations to obtain the best possible outcomes for people in Thames Valley.

A handwritten signature in black ink that reads "Jane .". The signature is written in a cursive style with a period at the end.

Dr Jane Barret

Chair, Thames Valley Clinical Senate

## 2. Plain Language Summary

### Ischaemic Stroke

85% of strokes are ischaemic, resulting from a blood vessel to the brain becoming blocked leading to death of brain cells from a lack of oxygen and nutrients.

### Ischaemic stroke secondary to proximal anterior circulation occlusion

Ischaemic stroke is the most common type of stroke. It happens when an artery (blood vessel) is blocked by a blood clot, cutting off blood flow to part of the brain. Without a blood supply, brain cells can be damaged or destroyed because they may not receive enough oxygen. Symptoms may include numbness or weakness on one side of the body and problems with balance, speech and swallowing. Symptoms may range from mild and resolve, through to severe strokes that can lead to coma and death.

### Hyper Acute Stroke Unit (HASU)

Care for patients experiencing a stroke, or with a suspected stroke, has been centralised to hospitals with specialised units providing 24/7 care, a Hyper Acute Stroke Unit. Patients receive specialist services for treatment, including thrombolysis, and monitoring for up to the first 72 hours with high risk patients being admitted.

### Thrombolysis

Interventional treatment in up to 20% of patients involves drug treatment as soon as possible after the stroke to dissolve the blood clot (thrombolysis). Effective stroke care also includes specialist care and rehabilitation.

### Thrombectomy

Mechanical clot retrieval aims to restore normal blood flow to the brain, using a device to remove the blood clot blocking the artery. The patient first has cerebral angiography (a procedure using Computerised Tomography (CT) or Magnetic Resonance Imaging (MRI) scanning that shows blood flow through the arteries in the neck and brain) to see where the blood clot is. A thin tube called a catheter is inserted into an artery, usually in the groin, and fed to the site of the clot. The clot retrieval device is inserted through the catheter, catches the clot, and is then pulled out through the catheter.

This treatment - mechanical clot retrieval for treating acute ischaemic stroke - aims to remove the clot blocking the artery within the brain, restoring blood flow and minimising brain tissue damage. When used with other medical treatments such as clot-busting drugs, and care on a specialist stroke unit/rehabilitation, mechanical thrombectomy can significantly reduce the severity of disability caused by a stroke.

### **3. Introduction**

#### **Background to stroke services and location in TV**

Stroke services across the Thames Valley are delivered based on the 'London Model' which means that all patients with suspected stroke are taken direct to a hospital with a Hyper Acute Stroke Unit (HASU) where they receive early assessment and specialist services for treatment and monitoring. Until recently, the only treatment for stroke was intravenous thrombolysis. Up to 20% of people with ischaemic strokes are suitable for, and respond to intravenous thrombolysis. However, many of those treated will not benefit because the blood clot is too large and does not completely dissolve. In addition, some patients cannot receive the treatment due to contraindications such as recent surgery or being on anticoagulant (blood-thinning) drugs.

For an estimated 10% of stroke patients, the evidence suggests that mechanical thrombectomy performed within six hours of the onset of symptoms is an effective treatment that can reduce brain damage and prevent or limit long term disability. Evidence suggests that the quicker this intervention is delivered the greater the benefits. Other than established intravenous thrombolysis, there are no other acute interventions that have been shown to reduce the area of infarcted brain despite efforts to develop new and more effective thrombolytic agents or neuroprotective drugs.

#### **Commissioning a Thrombectomy Service**

The responsibility for the allocation of contracts to deliver a thrombectomy service sits with NHS England Specialised Commissioning. Only hospitals with a neuroscience centre can meet the requirements for the service and so the hospitals delivering the service will need to cover a wide geographical catchment.

In the Thames Valley, a contract to deliver a thrombectomy service was commissioned from the Oxford University Hospital Trust (OUH) in August 2015. The OUH developed its service, initially only for Oxfordshire patients but from February 2018 the service was extended to include patients from Berkshire, Buckinghamshire, Milton Keynes, Northamptonshire, Oxfordshire and Swindon. The service is currently available 9am-3pm.

The intention is for the service to become 24/7 and the Thames Valley Clinical Senate (Clinical Senate) was asked to provide clinical leadership to understand the issues from the different perspectives of the OUH, the HASUs and the patients and their families.

## 4. The Role of the Senate

When considering a service enhancement or reconfiguration, the role of the Clinical Senate is to work on a whole system basis to ensure that across the geography:

- the service will be sustainable
- the service will be accessible and of a high quality enhancing the patient experience
- any proposed service change clearly articulates the benefits to patients
- the service will be based on a clear clinical evidence base

The Clinical Senate reviewed the requirements for safe and effective delivery of a thrombectomy service and looked ahead to the potential delivery of a 24/7 service and the implications for the service in the interim. The work focussed on the 5 key areas below:

### 4.1 Identification and preparation of appropriate patients

The NHS England Thrombectomy Policy Proposition referred to the HERMES study (Saver et al. 2016) which identified that the absolute chance of being functionally independent (mRS 0-2) 90 days after thrombectomy diminish by 3.4% with each hour's delay to starting the procedure (arterial puncture). The probability of a beneficial reduction in disability (one point on the mRS at 90 days) fell by 5.3% for each hour's delay. Rapid identification and transfer of appropriate patients from the HASU's to the thrombectomy service is therefore essential. The HASU model is working well in Thames valley with patient's delivered direct under blue light. The focus was therefore on the identification of the right patients within the HASU and the diagnostics that are required to confirm this as well as the communication between the HASU and the OUH.

### 4.2 Safe and time critical transfer- ambulance protocol

An ambulance protocol for the patient transfers between the HASU and the OUH was already in place which had been developed by the South Central Ambulance Service (SCAS) and the OUH and had been adopted by South West Ambulance Service Trust (SWAST and East Midlands Ambulance Service (EMAS) though no formal commissioning arrangements were in place. One element of the protocol required HASUs to provide a nurse escort for patients during the ambulance transfer from the HASU to the OUH. Some concern had been expressed that the impact of this on the HASU had not be modelled.

### 4.3 Overall system impact and clinical governance of the pathway

The thrombectomy service is relatively new and it was noted that to promote learning and to develop the service in a safe way, it would be beneficial for there to be a networked clinical governance approach which had not yet been established. Thrombectomy activity is subject to review within the OUH and feedback from the OUH to the HASUs is taking place on an individual clinician to clinician basis but this does not provide the opportunity for learning across the thrombectomy network.

### 4.4 Repatriation

For the service to be effective, there is a need for patients to be discharged from the thrombectomy unit as soon as clinically appropriate to ensure that capacity is available for new referrals. A protocol for rehabilitation had not been discussed with the HASUs though on the currently low numbers, this

was being managed effectively on a case by case basis by discussion between the OUH and the receiving HASU.

#### **4.5 How do we bridge the gap until the OUH service is 24/7**

The longer term plan is to deliver the thrombectomy service 24/7. The plans for this extension had not been shared with the HASU network in terms of how or when the OUH would increase its capacity and capability to facilitate this. In the meantime, St Georges Hospital Trust in Tooting was already delivering 24/7 and Charing Cross Hospital had indicated its intention to be 24/7 by August 2018. Both of these Trusts are an equitable distance for HASUs in the south of the geography.

## **5. Stakeholder Forum**

The Clinical Senate hosted a Stakeholder Forum and posed these issues to an invited audience of:

- Senior clinicians from thrombectomy and radiology services at the OUH, St George's and Charing Cross.
- Senior stroke clinicians and medical directors from each of the HASUs within the thrombectomy network
- Medical directors and paramedics from the ambulance trusts within the thrombectomy network.
- NHSE South Specialised Commissioners responsible for commissioning the thrombectomy service and CCG commissioners, responsible for commissioning stroke services
- The patient voice was represented by invited patients with lived experience.

The issues raised in section 3 were discussed by all present and summarised views were expressed as follows:

### **5.1 Identification and preparation of appropriate patients**

- The system seemed well prepared for making timely transfers from the HASU to the OUH and there was recognition that the baton phone and process at the OUH was working well
- Whilst PACS transfers were working well for most, it was noted that a few Trusts are working with different systems and there was a need to look at alternative options
- It was noted that patients being referred for thrombectomy required a CT angiogram (CTA) before transfer. Whilst some HASUs had developed a protocol to include CTA for potential thrombectomy patients, it was not consistent across the HASUs and work is required to understand the different policies and impact. This should include any potential staffing shortfall or training requirements. It was noted that this diagnostic was not included in the stroke tariff.
- It was noted that national work may be underway to unbundle the tariff and if so, there was a case to be made to separate the diagnostics from the treatment

### 5.2 Safe and time critical transfer- ambulance protocol

- Not all ambulances are manned by paramedics and the need to provide a safe transfer for the patient was paramount, but the blanket requirement to provide a nurse escort in every case was queried. The nurse teams are not large in the HASUs and the loss of one nurse can have a significant impact.
- It was felt that it would be helpful if a guideline could be developed which set out the specific skills required for the nurse escort and what equipment was needed as this may provide more flexibility for the HASUs
- A query was raised regarding the return of pumps if a patient was still receiving thrombolysis during the transfer. It was noted the presence of a nurse escort is an advantage in this situation as the nurse could return with the pump.
- For speed of transfer, there was a suggestion that the ambulance which delivered the stroke patient to the HASU, should wait to take the patient to the OUH. This was dismissed as unworkable given the amount of time the ambulance would be 'out of service' and therefore not available to the rest of the system
- It was noted that there was a planned review of the ambulance protocol and that this should include transfers into the London thrombectomy centres and whether any training is required for ambulance teams and escorts

### 5.3 Overall system impact and clinical governance of the pathway

- It was noted that the HASUs in the OUH thrombectomy network are all performing well and the system was in a good place to develop this service
- There is a requirement to instigate a data collection of pertinent information which would inform all parties regarding the delivery of the pathway and where there were areas for improvement. All parties should be included in the discussion to define the data set which was agreed should be only what is required and should be simple to collect - ideally automated
- It was noted that there is an effective internal process within the OUH to review the protocols and outcomes but there was a request for involvement of the system in a formal governance structure with monthly operational meetings established for rapid learning with a more formal network wide clinical governance process to be established with quarterly clinical governance meetings chaired by the commissioners

### 5.4 Repatriation

- It was noted that repatriation is currently working well due to the dedication of the clinicians and the close working of the bed managers in both the OUH and the HASUs. Patient records travel with the patient
- Questions were raised about the capacity of the HASUs and whether beds could be 'reserved' for the expected return of a patient from the thrombectomy centre. Whilst this could not be a guarantee it was felt that a workable protocol could be developed to agree notice requirements and commitments to bed availability. It was suggested that this should include a process whereby the HASUs can be aware of the status of their patients whilst at the thrombectomy centre

- Repatriation should be a planned process so that emergency demand is not put upon the ambulance service
- Concern was expressed that transfers may happen more quickly for this group of patients and it is important that the communication with the patient and their family/carer is undertaken at the right time so that the patient's location is always known by the family and they have the appropriate contact numbers
- It was noted that some patients may be discharged from the thrombectomy centre direct to a rehabilitation centre and as a result of the way the tariff is structured, this would have a negative financial impact on the HASUs

### **5.5 How do we bridge the gap until the OUH service is 24/7**

- The OUH advised that it was currently planning to move to a 24/7 service from January 2019 though it was noted that stretching its current hours from 8am to 10pm would open the service to the majority of patients. It was suggested that this interim step be considered
- It was noted that the OUH does not currently have the staffing necessary to extend the service to 24/7. It was agreed that this is a problem for the system rather than for the OUH in isolation and that discussions about how to address recruitment and funding should be held on a system wide basis
- Very few of the current thrombectomy centres are available 24/7 and it was noted that if the OUH is able to achieve it by January 2019, there is a potential that it would attract referrals from outside the defined network and some modelling would be required to understand the additional activity
- It would make sense for the thrombectomy centres in the south to work together to develop their plans for moving to 24/7 and to work collectively to provide interim support or rotas until it is feasible for all to be 24/7. It was noted that the national shortage of radiographers will present a challenge to the ambition.
- There should be a plan for the next 6 months leading up to 24/7 at the OUH so that HASUs are clear where they can refer their patients in the hours when the OUH service is closed
- There should be a move towards credentialing to make sure that staff have skills required regardless of job titles

## 6. Senate recommendations

- 6.1 Further work to be undertaken to consider whether CTA should be a routine diagnostic for stroke patients on arrival at a HASU and whether a protocol is required. If it is added to the standard protocol, there should be an assessment of the imaging capacity and skills at the HASUs – to be led by the Thames Valley Clinical Stroke Network
- 6.2 The planned review of the current ambulance protocol should be completed ensuring that it is system wide and that views from the HASUs in the network as well as the ambulance trusts are taken into account. There is a specific need to understand the clinical need for an escort and the skills required – to be led by SCAS
- 6.3 Work to be undertaken to define the data set which will inform the clinical governance process and a monthly operational network wide review meeting to be established to review operational issues with a quarterly formal clinical governance meeting open to the network to be set up. This work should include a review of the various systems for transfer of patient data from the HASU to the OUH. Lead to be determined.
- 6.4 Work to be undertaken to develop a system wide repatriation policy to cover the repatriation of a patient from the thrombectomy centre to a HASU or a separate service providing Early Supported Discharge. The policy should include communications with the patient and their family/carer – to be led by the Thames Valley Clinical Stroke Network.
- 6.5 Work to be undertaken to consider a south plan for the development of 24/7 thrombectomy centres with consideration given to stretched hours, interim support rotas between centres and a plan for the HASUs to indicate referral pathways – lead to be determined
- 6.6 There were several references relating to the partnership roles of the HASUs and the thrombectomy centre in the pathway and how this related to the tariff. There are instances when one partner is potentially disadvantaged – for example the cost of the additional diagnostics at the HASU. There is also the potential for double costs if a patient stay at the thrombectomy centre exceeds 48 hours before repatriation to the HASU. The Forum was notified that national work is underway to consider tariff issues and it is recommended that the NHS South Specialised Commissioners take forward the concerns expressed on behalf of the system.

## 7. Next Steps

The Clinical Senate will review progress in addressing the findings of the Forum and the recommendations set out above at its meeting in November 2018.

## 8. Appendix

### 8.1 Table 1 - Identification and preparation of appropriate patients

TABLE 1 - IDENTIFICATION AND PREPARATION OF APPROPRIATE PATIENTS	
<b>What's in place and working?</b>	<b>Comments</b>
1 Batton phone in the OUH	<ul style="list-style-type: none"> <li>At Charring Cross calls go to Interventional Neurology Radiology</li> <li>IEP? Stroke nodes?</li> </ul>
2 PACS image transfers (mostly)	<ul style="list-style-type: none"> <li>PACS does not work everywhere due to different systems in place. There is a need to look into other options, for example using the Cloud</li> </ul>
<b>What's missing or not working and needs resolving?</b>	
1 Commissioning and finance- extra costs for prepping (CTA and escort whilst being transferred)	<ul style="list-style-type: none"> <li>Would a move to bolus therapy help to reduce need for escort?</li> <li>With speed of transfer from HASU to OUH, HASUs may not meet 'best practice</li> <li>Need to unbundle spec comm tariff to separate diagnostics from treatment</li> </ul>
2 CTA protocol needs to be in place as standard	<ul style="list-style-type: none"> <li>Do the ambulance trust send a paramedic with the patient for the transfer?</li> <li>Could guidelines be developed to identify which patients need an escort- <a href="#">consider in review of ambulance protocol</a></li> </ul>
3 Clarification is needed on who will escort the patient in the ambulance, identify competency of the escort	<ul style="list-style-type: none"> <li>The Bristol system does not use escorts, there have been no major problems in the last 5 years. However, there is a need for formal data to ensure this is the</li> <li>How will the system ensure that the patient receives the same level of care in the ambulance during transfer as they would expect in the hospital/ward?</li> <li>Quite often nurses are taken from ED to escort patient during transfer</li> </ul>
4 Will paramedics stay on site?	
<b>Next steps/actions?</b>	
1 CTA should be standard protocol	<ul style="list-style-type: none"> <li><a href="#">Recommend that a protocol is developed</a></li> </ul>
2 Paramedics to stay with patient while waiting for transfer to HASU	
3 To define the role and specify competency standards of the escort as not every patient will need an escort	
4 Identify the cost and commissioning of prepping the patient	<ul style="list-style-type: none"> <li>Regional guidelines and support to be clear as to which patients are appropriate</li> <li>There are potential savings if the patient goes home directly from Oxford</li> </ul>
5 Map how images are transferred across the system - our and others	<ul style="list-style-type: none"> <li>Is there any learning from reviewing what happens elsewhere</li> </ul>

## 8.2 Table 2 - Safe and time critical transfer – Ambulance Protocol

TABLE 2 - SAFE AND TIME CRITICAL TRANSFER - AMBULANCE PROTOCOL	
What's in place and working?	Comments
<ol style="list-style-type: none"> <li>1 SCAS, EMAS and SWAST are working to the same protocol, even though they are not commissioned to</li> <li>2 A nurse accompanying the patient works well (anaesthetists too?) <a href="#">for the ambulance service</a></li> <li>3 Ambulance transfer to different centres has no impact on the ambulance service, even if the transfer is out of area <a href="#">Note: this is different to John Black's view</a></li> </ol>	<ul style="list-style-type: none"> <li>• Does the impact of a nurse escort need to be modelled for the HASU?</li> <li>• Is the view of all ambulance services? Does the impact need to be modelled?</li> </ul>
What's missing or not working and needs resolving?	
<ol style="list-style-type: none"> <li>1 Clarity is needed on the return of the HASU's nurse and pump once patient has been transferred</li> <li>2 More nurses need to be employed to sustain services at the HASU and be present during ambulance transfers</li> <li>3 The equipment needed by the nurse during transfer needs to be clarified</li> <li>4 Is there a need for nurses to be transfer trained?</li> <li>5 OUH to organise a taxi back for nurse</li> <li>6 Standardise treatment in transit</li> <li>7 Jonathan Benger- mapping urgency of transfers. How to ensure rapid response 'life threatening' can't (or should it be can) be treated where they are?</li> <li>8 It is not possible to keep ambulance at the HASU once patient has been transferred to the unit</li> <li>9 Ambulance needs to be ordered when HASU makes their decision to refer patient</li> </ol>	<ul style="list-style-type: none"> <li>• Discuss need for the nurse to still be present once Thrombolysis is finished</li> <li>• <a href="#">Should the nurse return immediately on handover?</a></li> <li>• <a href="#">Would there be some merit in a TV wide pool of pumps?</a></li> <li>• <a href="#">There is not enough slack in the system to facilitate nurse escorts</a></li> <li>• <a href="#">Protocol required</a></li> <li>• <a href="#">What skills does the escort need?</a></li> <li>• <a href="#">Develop protocol for redeployment</a></li> <li>• Blue light transfer?</li> </ul>

#### Next steps/actions?

- 1 SCAS, EMAS and SWAST to review protocol to ensure it is working
  - Need to ensure protocol for transfer to London and 'Out of Area'
  - HASU to amend procedure to order ambulance and stand down
  - [Review of protocol must be system-wide](#)
- 2 Training needs to be provided for nurses and possibly paramedics
  - [After roles are defined](#)
- 3 If ambulances are to wait at the HASU to transfer the patient to OUH, payment needs to be made to transferring ambulance service
  - [Links to the requirement to unbundle the tariff](#)
- 4 What are the costs to the transferring ambulance service
- 5 Clarify the different escalation procedures in and out of hours (?)

### 8.3 Table 3 – Overall system impact and clinical governance of the pathway

TABLE 3 - OVERALL SYSTEM IMPACT AND CLINICAL GOVERNANCE OF THE PATHWAY	
What's in place and working?	Comments
<ol style="list-style-type: none"> <li>1 Robust HASU Centres are in place and good recognition of patients suitable for transfer to HASU by ambulance</li> <li>2 Processes in place to review in place protocols and refine these as patient numbers increase</li> </ol>	<ul style="list-style-type: none"> <li>• Internal meetings work well</li> </ul>
<b>What's missing or not working and needs resolving?</b> <ol style="list-style-type: none"> <li>1 Data needs to be collected more succinctly, so it can be shared easily. Collecting data in this way will show continuity across the centres. E.g. Kpi for thrombectomy centres</li> <li>2 The gap in staffing in order to provide a 24/7 thrombectomy service at the OUH</li> <li>3 Nationally short of 24/7 Thrombectomy services- there is a risk of current services being overwhelmed if extended to 24/7</li> <li>4 Lack of staffing to access CTA's out of hours</li> </ol>	<ul style="list-style-type: none"> <li>• SSNAP to modify and include Door In door Out (DIDO), LHCRE bid (?) HIE (?)</li> <li>• Time taken from call for request of ambulance to ambulance arriving to collect patient needs to be recorded</li> <li>• Data collection instrument that is designed digitally. Most to be populated automatically</li> <li>• Request to collect only what we need to collect and to do it simply</li> <li>• Need to define what info is needed</li> <li>• What are the plans to close the gap? Presentations and discussions need to include both the HASU and</li> <li>• Thrombectomy centre's perspective to include the interventional radiologists</li> <li>• Needs whole system involvement</li> <li>• How do we make sure we use thrombectomy centres around Thames Valley in terms of capacity, choice and outcome</li> <li>• System level conversations about money spent for increasing staffing and/or radiographers- saved by the system</li> <li>• OUH 24/7 - How will demand from outside the patch be managed?</li> <li>• Training for CTA and maintaining competencies</li> <li>• Ability to detect/read scans at HASUs - whole system impact</li> <li>• Artificial Intelligence for reporting CTA</li> <li>• What do HASUs need to do to be 24/7 compliant?</li> </ul>

5 The level of demand on ambulance services is increasing - potential loss of resources to achieve transfers

- Can book in patients before they arrive. Ambulance
- Time to call ambulance arriving
- What are the implications for organisations and the ambulance service

6 Other

- Clinical meetings should take place more regularly - monthly. [Is there a governance structure?](#)
- Quarterly meetings should take place for review, the host of these meetings needs to be clarified - [governance](#)
- Whole system governance meetings should take place it is recommended that these be chaired by commissioners. However, clarity is needed as to how often they should take place - [governance](#)
- workforce challenge- impact on other services
- CTA: should all stroke units to offer as standard or keep the pathway simple, do CT and repeat radiology exposure as needed?
- Call to groin puncture as agreed KPI. [Is this a KPI that we need? Request to only collect data that supports the process](#)

#### Next steps/actions?

1 Training new staff and upskilling current staff

- Wessex has a training programme for CTA. Although OUH have completed a training day, they could do more to cast a broader net
- [What are the transferrable skills required? Make them generic](#)

2 Improve capacity for triaging in the HASU's

3 Other

- Impact of thrombectomy need to change, diagnostics for all stroke patients - now requiring
- Commissioning for whole pathway needed

## 8.4 Table 4 – Repatriation

TABLE 4 - REPATRIATION	
What's in place and working?	Comments
<ol style="list-style-type: none"> <li>1 Transfer records go with the patient during repatriation</li> <li>2 Repatriation process at OUH is clear around thrombectomy</li> <li>3 Bed managers liaise with each other informing them of the repatriation</li> </ol>	<ul style="list-style-type: none"> <li>• Impressed with OUH repatriation within 48 hours due invested clinicians and very committed staff</li> </ul>
<b>What's missing or not working and needs resolving?</b> <ol style="list-style-type: none"> <li>1 Lack of availability of the beds at the HASU</li> <li>2 Not all patients require a return to the HASU and some could go straight to rehab - <a href="#">a protocol could be developed to cover all these points</a></li> <li>3 Early supported discharge (ESD) is not always consistent taking patients back on referral if it's a different county</li> </ol>	<ul style="list-style-type: none"> <li>• Why can't the bed at the HASU be reserved (<a href="#">for a limited period</a>) if the HASU is aware of the time-frames after thrombectomy?</li> <li>• <a href="#">Develop protocol for communication regarding return of patients and timescales</a></li> <li>• How do carers and family know where the patient is during repatriation?</li> <li>• If the patient is able to go directly home, where do the records go during repatriation and what is the timeline?</li> <li>• Patients arrival at 08.00 in the morning is not right for the patient</li> <li>• Some of the Trusts don't have contacts with ambulance transfers as a part of repatriation</li> <li>• Requests for transfer are coming late to the Patient transport service and it impacts on emergency patients</li> <li>• If patients cannot be transferred back to the HASU it impacts on tariff</li> </ul>
<b>Next steps/actions?</b> <ol style="list-style-type: none"> <li>1 Consultant to consultant or clinician to clinician handover</li> <li>2 A process is required which informs HASUs about status of their patients at the OUH to enable them to plan their beds and 'hold' a bed when appropriate</li> </ol>	<ul style="list-style-type: none"> <li>• <a href="#">What happens now?</a></li> <li>• If the patient is expected to be returned to HASU within 24 hours and a bed hasn't been 'held', the patient should be delivered to the local trusts' A&amp;E</li> <li>• What are the plans when numbers increasor during winter? Need a plan to address as A&amp;E is likley to be blocked with patients in corridors</li> <li>• A common repatriation process need to be agreed for all sites</li> <li>• HASUs need to maintain ring fenced beds for returning patients</li> <li>• Process map for potential difficulties during repatriation which is inclusive of impact on carers/family. To include contact numbers</li> <li>• Review Dublin model where patients are immediately repatriated</li> <li>• Each HASU to designate single point of contact for OUH</li> </ul>

## 8.5 Table 5 - Bridging the gap to 24/7

TABLE 5 - BRIDGING THE GAP TO 24/7	
What's in place and working?	Comments
<ol style="list-style-type: none"> <li>1 SCAS already transfers patients to Thrombectomy centres out of area</li> <li>2 Out of area Thrombectomy Centres do accept our patients</li> <li>3 24/7 service is only currently available in Stoke and St George's with Charring Cross going 24/7 in August 2018</li> </ol>	<ul style="list-style-type: none"> <li>• This can have a negative impact on patients and resource</li> <li>• Query the sustainability of this</li> <li>• OUH plan is to be 24/7 by Jan 19 so a 6 month gap to fill</li> </ul>
<p><b>What's missing or not working and needs resolving?</b></p> <ol style="list-style-type: none"> <li>1 Transparency about why OUH services are currently 8.00 - 15.00 (based on the operating hours of the current INR services)</li> <li>2 Ownership of the risk across the system</li> <li>3 Who will fill the gap until Charring Cross and OUH are 24/7?</li> <li>4 Lab staff recruitment and rotas plus training</li> </ol>	<ul style="list-style-type: none"> <li>• The system need to be involved in understanding the situation (transparency??)</li> <li>• Can the hours be stretched? - <a href="#">before going to 24/7</a></li> <li>• System risk management required</li> <li>• <a href="#">If the thrombectomy service goes at risk ahead of Jan'19, the system has to bear the risk</a></li> <li>• Will Charring Cross only provide the whole service (ie not only OOH)</li> <li>• Birmingham and St Georges are part of the solution. <a href="#">Southampton will not be 24/7 by January '19</a></li> <li>• Risk of different thrombectomy centres having different in and out of hours solutions</li> <li>• Are HASUs ready to send patients 24/7?</li> <li>• The Dept of Health should be challenged re training radiologists - <a href="#">6 year training. Do they have to be the ones to undertake thrombectomy?</a></li> <li>• Solution to work for the whole region TV+</li> <li>• Variation on impact on INR and why are they the only resource?</li> <li>• How do we ensure that each service doesn't get swamped as it goes 24/7?</li> <li>• More gaps than just Oxford to be filled</li> <li>• From 1st Jan, what is the clear referral pathway TV+ wide</li> <li>• What happens with demand from outside the area once 24/7?</li> </ul>

### Next steps/actions?

- 1 We have a short term plan which is safe but unsustainable - lessons from St George's. We need a Plan B to get us to Jan '19
- 2 Redundancy in the services - need to make sure that in the next 6 months have enough space
  - Interim and long term and co-ordination as each 24/7 starts up
  - Clear plan for next 6 months for HASUs to transfer patients to the appropriate place
  - Training reviews?
- 3 Could there be collaboration between Charing Cross and OUH to share the 24/7 ramp up so that they achieve 24/7 at the same time? And other collaborators?
  - Is there an opportunity for a hybrid solution between any 24/7 centre?
  - [Clear comms for the public about why there has to be an interim and end solution](#)
- 4 Individual review of improvements to current service provision and processes
  - [All the system partners to look jointly for a system solution](#)
- 5 Credentialising - make sure people have the skills for the job required regardless of their job title
  - with patients in the room
  - Locum workforce to co-ordinate across the wider geography

