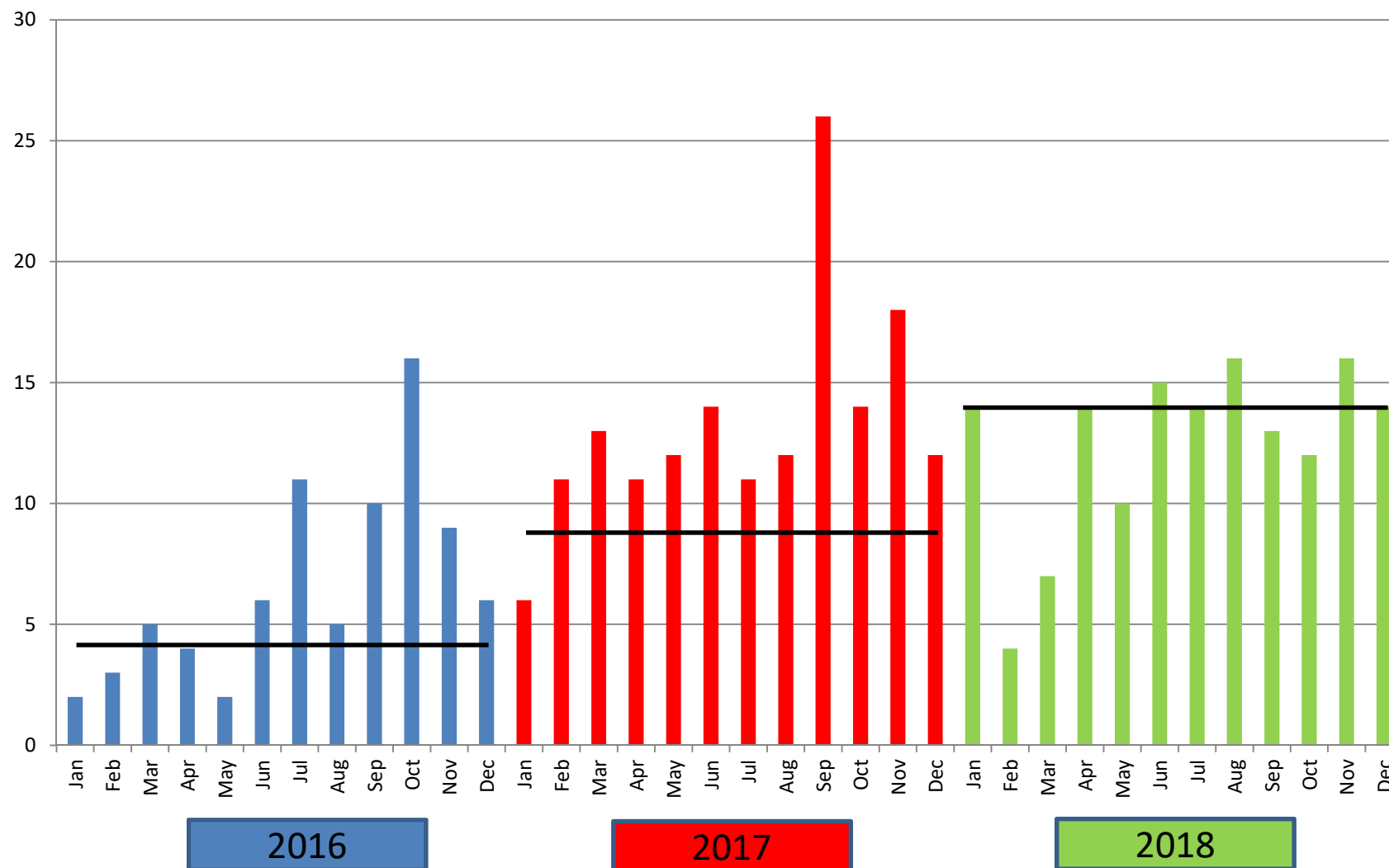


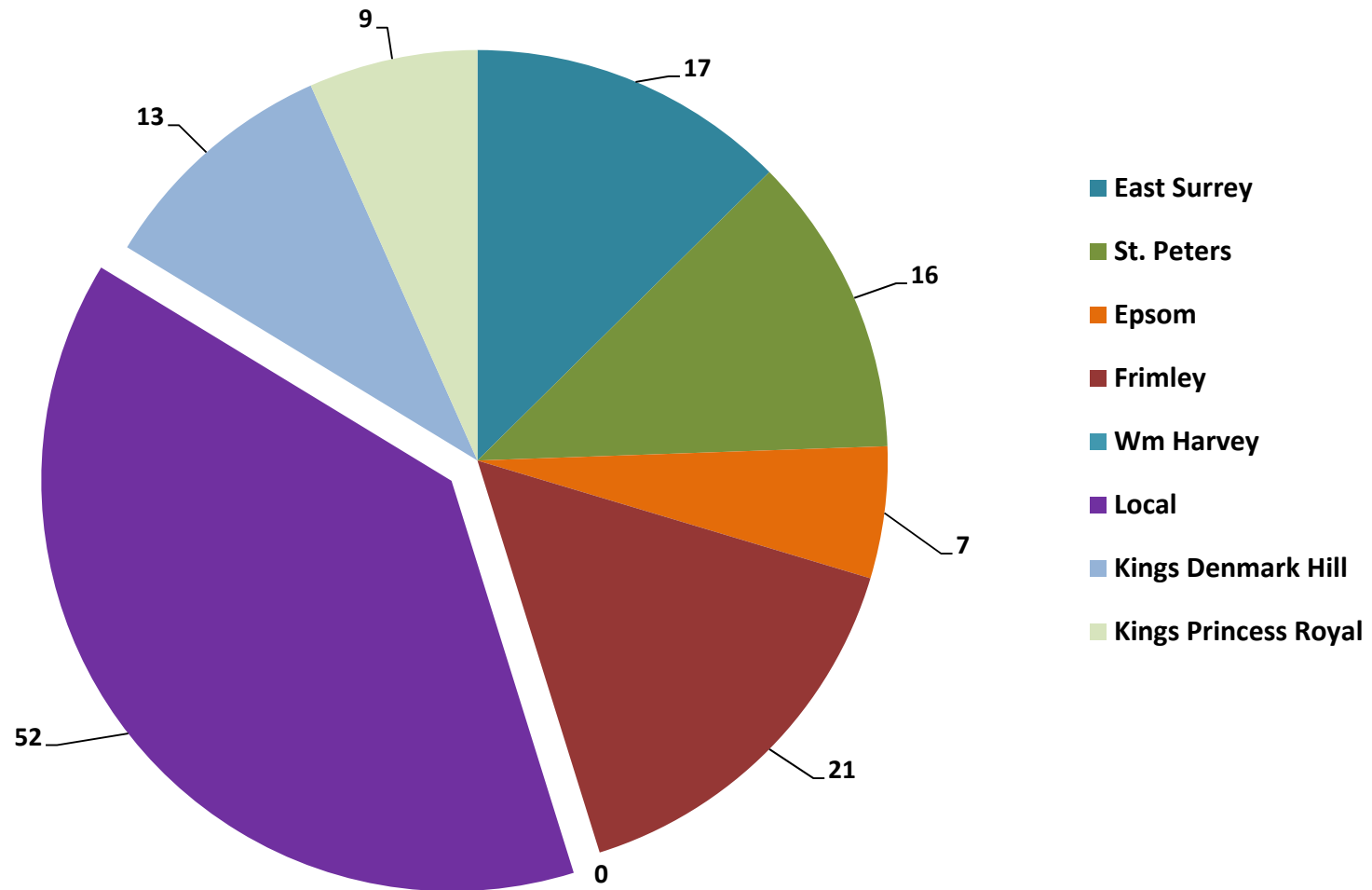
Thrombectomy- The Role of the Nurse

Jen Corns- Stroke CNS

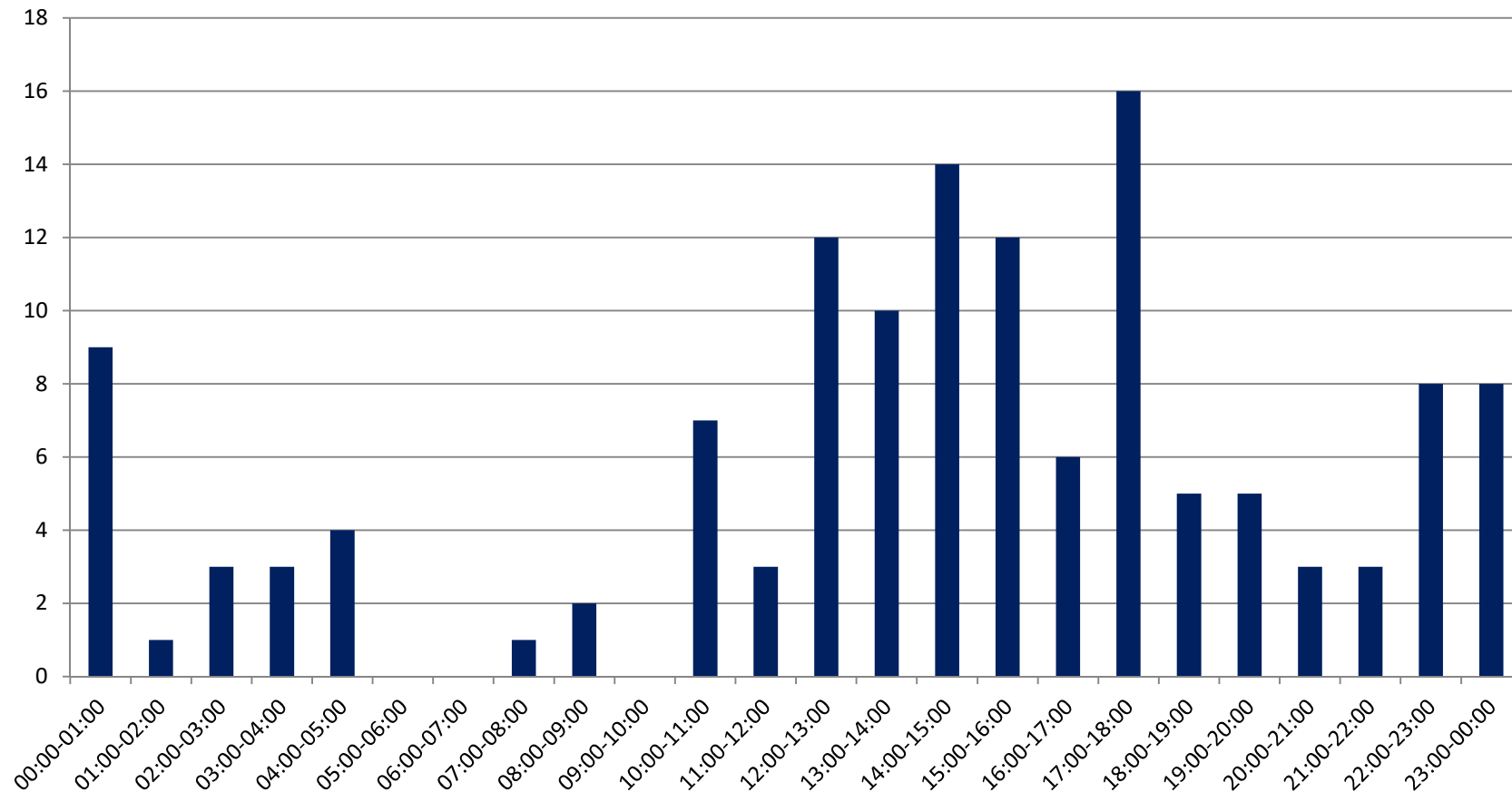
Monthly thrombectomy arrivals 2016-2018



Feb-Dec 2018 referring hospitals

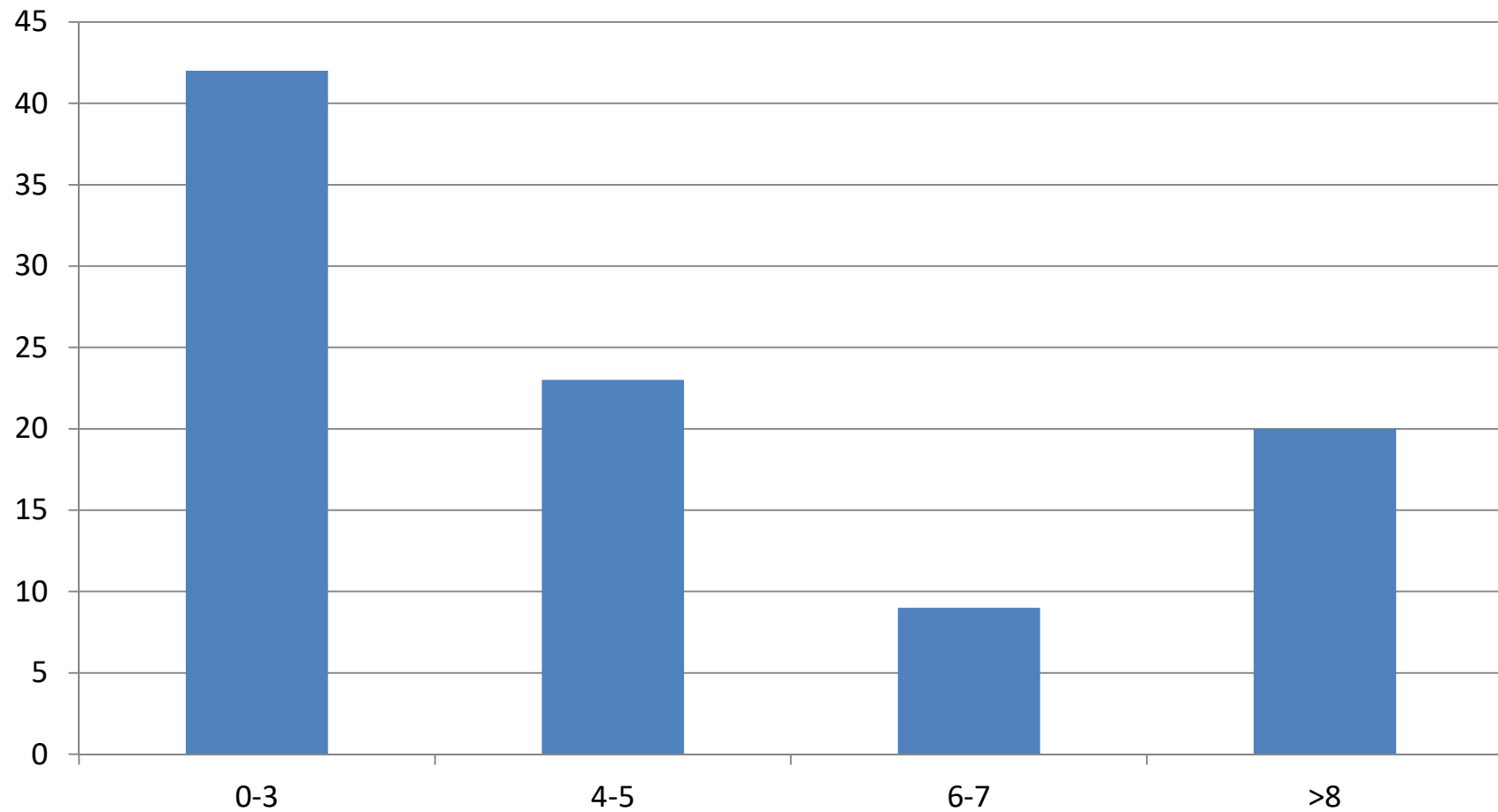


Secondary transfers – by time of day (SECamb service)

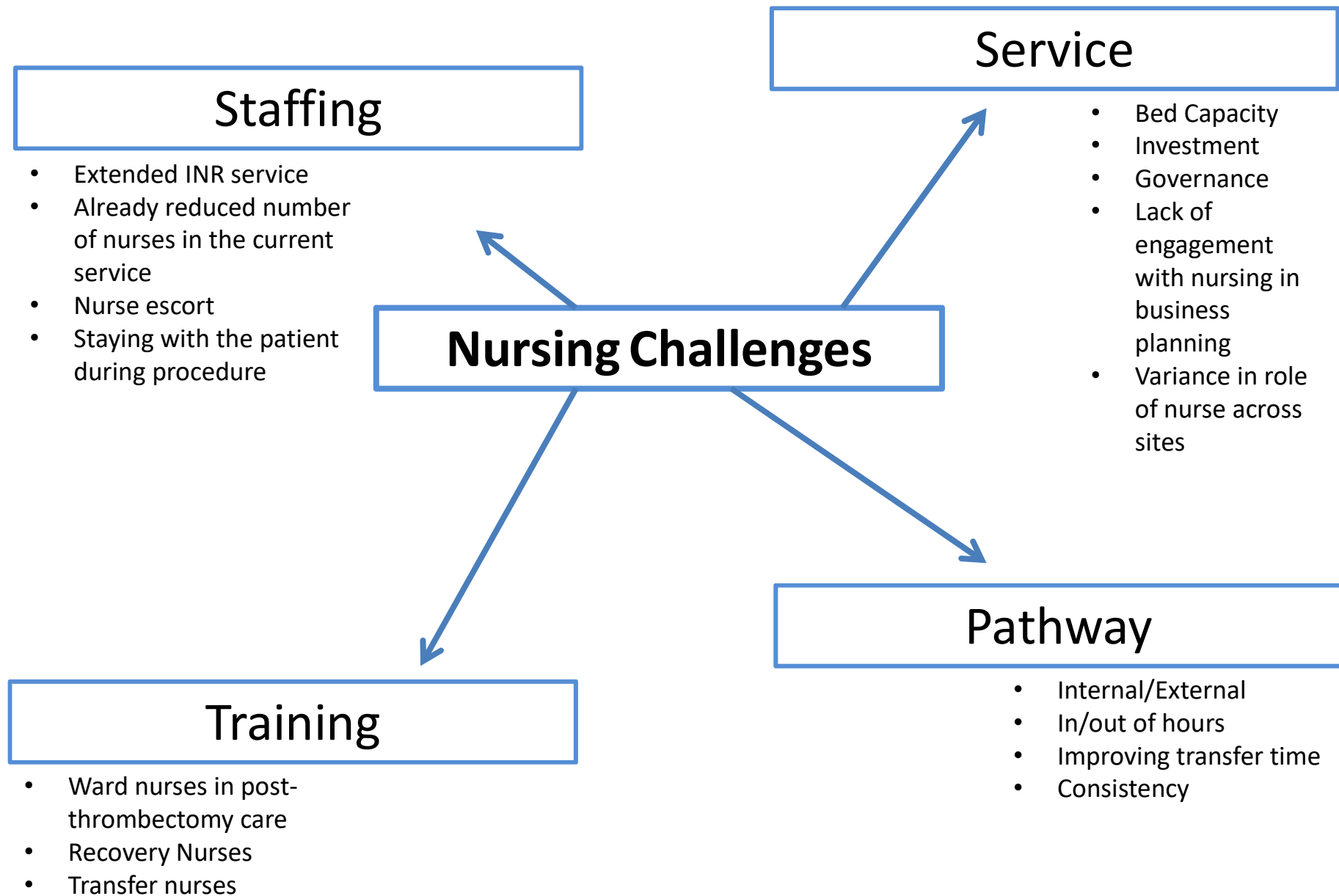


SECamb transfers Jul 2016-Dec 2018

LOS (days) at thrombectomy centre (n=94)



Jan-Dec 2018



SGH Consultant accepts patient after discussion with Neurointerventionalist and advises:
"Level 1 (London)/ Immediate Threat to Life (Surrey)" transfer to Neuroradiology Dept,
2nd floor Atkinson Morley Wing via heart attack/thrombectomy entrance opposite ED

Referring hospital arranges transport to SGH (with nurse escort)

SGH Consultant contacts SGH SpR with details of patient accepted for transfer (BOX 1) and
if any further imaging planned on arrival

SGH SpR informs HASU nurse (Thrombectomy phone 0208 725 1670) of expected patient details
(HASU Nurse generates MRN and patient wristband)

SGH SpR contacts Referring Hospital Stroke (or ED) Nurse or medical SpR for information in BOX 2

*Referring Hospital contacts Thrombectomy phone with Actual Departure Time from Local Hospital
If SECAMB (Surrey), ETA can be tracked online using SECAMB CAD online (login details on HASU)
If LAS, estimated travel times: Kings 20 mins, PRUH 35 mins*

SpR photocopies completed
Thrombectomy form
and,
posts on thrombectomy board
(INR suite 2nd Floor AMW);

SpR retains original

HASU nurse informs Stroke SpR (#7317) &
Thrombectomy Suite (ext 4561) of
Actual Departure Time

HASU nurse takes wristband to Neuroradiology
and updates Thrombectomy form with
Departure Time

*Paramedics/ transfer nurse escort patient directly to Neuroradiology 2nd Floor AMW
thrombectomy team meet for handover (Thrombectomy Entrance code 2580)*

Stroke SpR leads structured handover to Thrombectomy team and invites handover from
paramedics/ transferring team re:

- Any neurological deterioration in transit?
- Any new issues/concerns en route? ABC stability?

*If any change (deterioration / improvement)
Stroke SpR should immediately
repeat NIHSS (start with limbs) and
discuss with InR if any repeat imaging is
required or to proceed*

WHO checklist (Neuro-radiology team)
InR completes Consent form
- if patient has capacity, InR completes;
- if no capacity, form 4 (SpR to complete
2nd signature only & assist with filling form)

Stroke SpR confirms all present in agreement to proceed
SpR clerks on iCLIP including prescribing, relevant timings & outcome procedure

Thrombectomy
Phone No:
02087251670



THROMBECTOMY
SERVICE



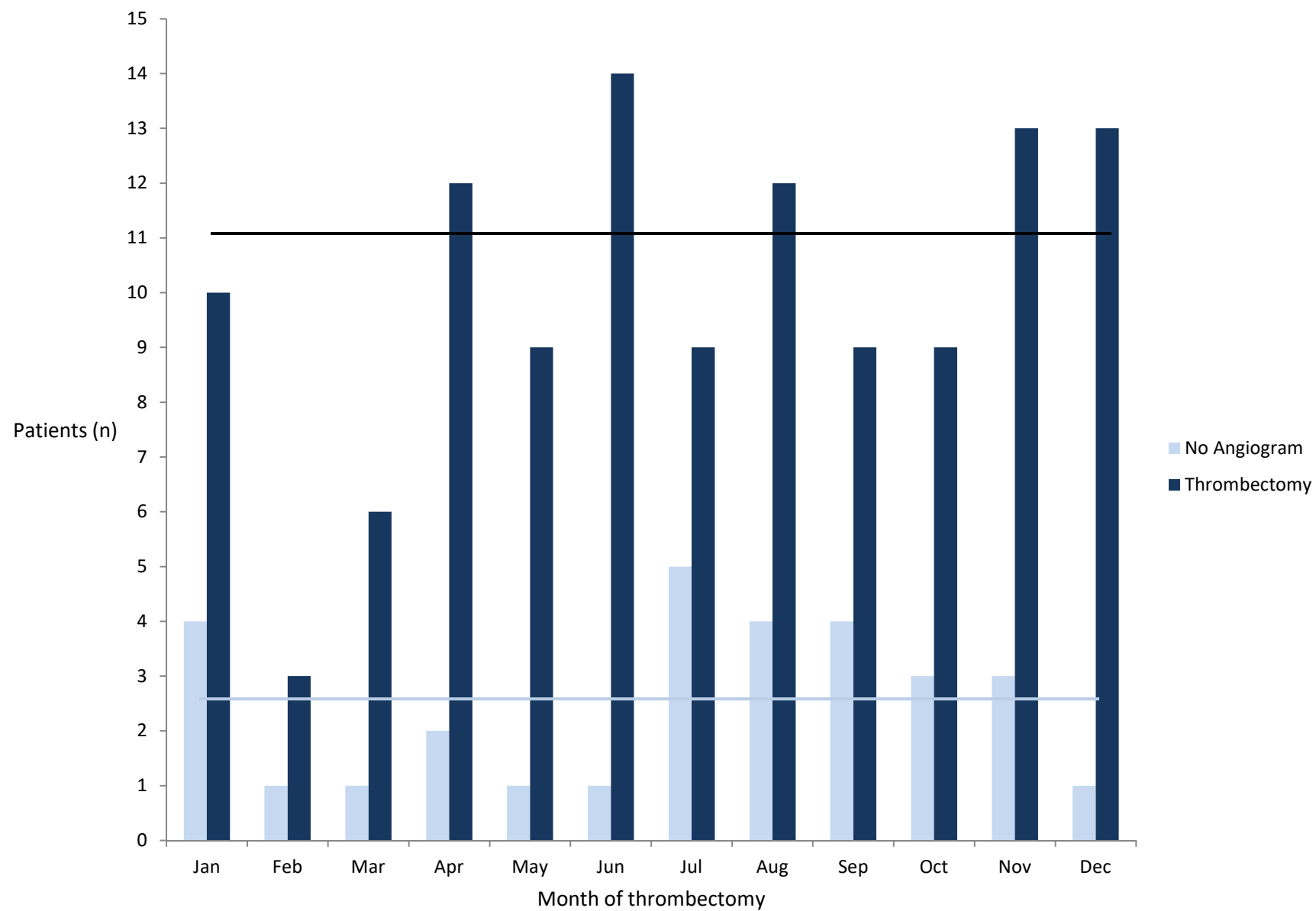
Competence

Knowledge	Self-assessment	Minimum standard for achievement	Expected date of achievement	Evidence submitted	Date of completion	Level achieved	Mentor Sign-off (print and sign)
Describe the evidence for mechanical thrombectomy in stroke		Competent					
List inclusion and exclusion criteria for mechanical thrombectomy		Competent					
Understand local and national guidelines and/or protocols		Competent					
Describe post-thrombectomy side-effects and complications		Competent					

Tpa Call

- Efficient proactive process
- Book the correct transport ASAP
- Guessing weight?
- Prep the patient
- Prep the NOK
- Prep yourself and your service
- Prep for the journey

Thrombectomy arrivals 2018 – thrombectomy versus no angiogram



In Transit

- You are in charge
- Observations
- Staying safe
- Making contact with the receiving site- new thrombectomy phone/ ambulance tracking
- Transfer checklist

HSIB report on critically ill transfers



- Report published Jan 2019
- This investigation found:
 - there was a variance of care during patient transfers due to a lack of national guidance for emergency transfers

Recommendation 2019/025

- “The Department of Health and Social Care should co-ordinate the development of national guidance... for the transfer of critically ill adults, both in planned and emergency situations.”

Arrival at the INR suite

- New signposting
- Handover- systematic
- Has anything changed?
- NOK
- Pt advocate
- Sim training

Mechanical Thrombectomy

This leaflet explains more about Mechanical Thrombectomy, including the benefits, risks and any alternatives and what you can expect when you come to hospital.

If you have any further questions, please speak to a doctor or nurse caring for you.

Why should I have Mechanical Thrombectomy?

A Stroke is an EMERGENCY. You have had a stroke due to a blood clot blocking an artery and cutting off blood flow to the brain. The doctor can see this blocked artery on the CT scan you had with the injection of dye.

What is Mechanical Thrombectomy?

St Georges Hospital offers an emergency treatment for this type of stroke, which has to be done quickly. This is called a Thrombectomy.

What happens during Mechanical Thrombectomy?

When you arrive in the department you will be assessed to see if this treatment is still appropriate - it isn't always. The treatment takes place in the x-ray department. You will have an x-ray with dye to check the blood vessels (an angiogram). You may be given some sedation or even an anaesthetic. A radiology doctor will insert a small wire and tube ("catheter") into an artery in your groin and guide the wire into the blocked artery.

If the artery is still blocked, the doctor will try to remove the clot, either by suction or by pulling it out with a special device called a stent retriever. This treatment opens the artery in about 70% of cases.

What are the risks?

1. There can be some bruising or swelling at the groin where the catheter goes in
2. The angiogram can cause stroke (1% of patients)
3. Bleeding in the brain can occur. This can be serious (<4% of patients) and may even lead to death
4. There is a very small risk of tearing the artery (<1%)
5. There is a very small risk of infection

Are there any alternatives?

The alternative is having no treatment, or for some people Intravenous medication (an injection) alone.

- Without Mechanical Thrombectomy on average there is 26% chance of regaining independence.
- With this Mechanical Thrombectomy on average there is 45% chance of regaining independence.

How can I prepare for Mechanical Thrombectomy?

You do not need to do anything to prepare, the Doctor and Nurse looking after you will make sure everything is ready.

Asking for your consent

It is important that you feel involved in decisions about your care. You or your next of kin may be asked to sign a consent form for this treatment or it may be carried out in your best interest if you are unable to do so. You can withdraw your consent at any time, even if you have said 'yes' previously. If you would like more details about our consent process, please ask for a copy of our policy.

Will I feel any pain?

You may experience a small amount of discomfort in your groin or head, but most patients do not remember this.

What happens after Mechanical Thrombectomy?

The procedure takes on average 20-30 minutes. After the procedure you will most likely go to the Hyper Acute Stroke Unit on William Drummond Ward. There you will be monitored closely by specialist stroke nurses. Some people go to our intensive care unit. If you are not local to St Georges you will be transferred to your local Stroke Unit as soon as it has a bed available - this may be the very next day.

Contact us

If you have any questions or concerns about Mechanical Thrombectomy please ask any member of the team who will be very happy to help.

William Drummond Ward
020 8725 1326
020 8725 1327
3rd floor, Atkinson Morley Wing, St George's Hospital

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough Wing (near the lift foyer).

Tel: 020 8725 2453 Email: pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

Web: www.nhs.uk

NHS 111

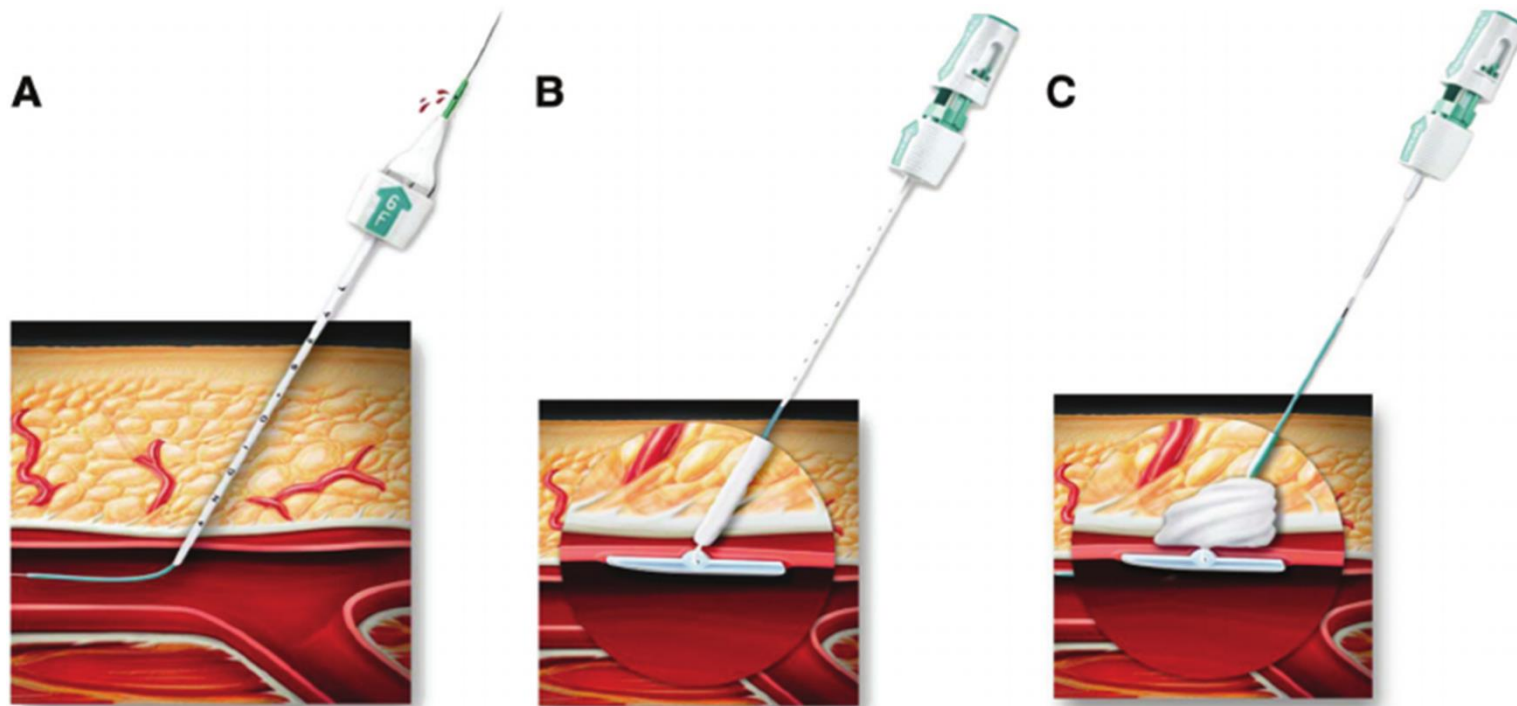
You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

Post procedure

- Groin puncture care
 - Angioseal
 - Femstop
- Pulse assessment
 - Femoral
 - Popliteal
 - Dorsalis Pedis

Achieving Haemostasis (1)

- Angioseal
 - Collagen Plugs
 - Reabsorbs in 4-6 weeks
 - Allows for early ambulation and hospital discharge



Achieving Haemostasis (2)

- Femstop
 - Alternative to manual compression of the femoral artery.
 - Use if persistent oozing
 - Manometer controlled pressure
 - Allows clear visualisation of the puncture site.



Post Procedure

- GA/sedation
- Monitored bed. Neuro Obs & Vital signs
- Bed rest 24 hours post thrombolysis
- 2 hours supine
- Nursing care plan
- 24 hour CT and NIHSS
- NOK care
- Repatriation- nurse escort

Data Collection

- SSNAP is improving with data started at originating hospital
- Local thrombectomy database developed and maintained
- Allows local collection and analysis of timings, clinical outcomes, LOS etc.
- Need to develop regional dashboards of data

MECHANICAL THROMBECTOMY DATA FORM

Date of Procedure:

Radiologist(s):

Patient Name:

Nurses:

Hospital Number:

Radiographer(s):

DOB:

Anaesthetist(s):

NHS Number:

ODP:

Referring Consultant:

STG or DGH Referral (please specify if DGH): _____

Admission NIHSS Score:

NIHSS Score immediately pre-thrombectomy:

CT Perfusion Y / N (please circle one)

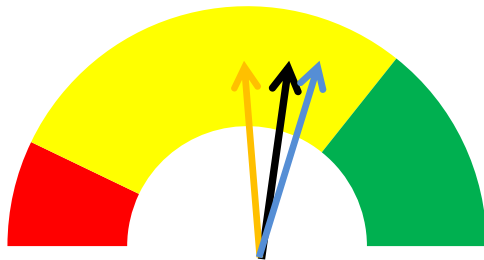
MRI Y / N (please circle one)

Metric	Time	Comment
Stroke onset (or TLSW) please <u>specify</u>)		
Arrival at STG		
CT head (DGH)		
CT head STG		
CTA (if done)		
IV <u>tPA</u> start (if given)		
Patient in <u>Neuroradiology Dept</u>		
GA induction (if given)		
Patient on table		
Groin puncture		
Catheter in arch		
First angiogram		
1 st pass of stent or aspiration		
Time recanalization		
End of procedure		

Governance

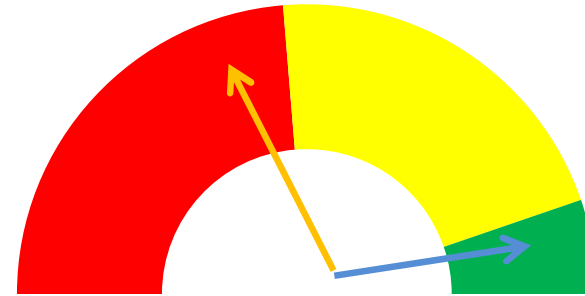
- Quarterly stroke nurse meetings
- Monthly Consultant tpa/thrombectomy governance meetings- individual cases
- Engagement of INR's, neuroradiology team and neuro-anaesthesia
- Regular regional governance meetings
- Regular data review
- Engagement with the Coroner's office for any deaths whether related to thrombectomy or not
- Monthly mortality meeting

HASU admission <4 hrs



February	64%
January	53.4%
National	58.7%

**Median CTH-Groin Puncture
February (mins)**



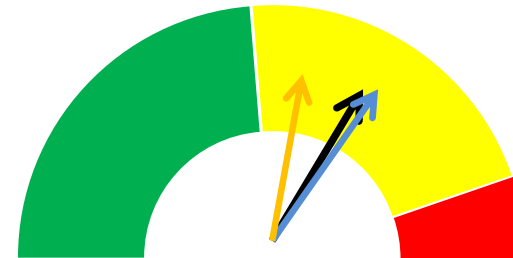
Internal Patients (1)	41 mins
External referrals (2)	191 mins

% patients swallow screened <4 hours



February	66.7%
January	63%
National	76.3%

Median door to needle time



February	51 mins
January	45 mins
National	50 mins

Conclusion

- Developing and maintaining a 24/7 thrombectomy service takes significant investment – in time, processes and service improvement (the business case is the start!)
- Changing pathways and processes takes time and organisation across multiple providers
- New collaborative relationships essential
- Your learning and challenges will be different