TASC Vignette - Torbay

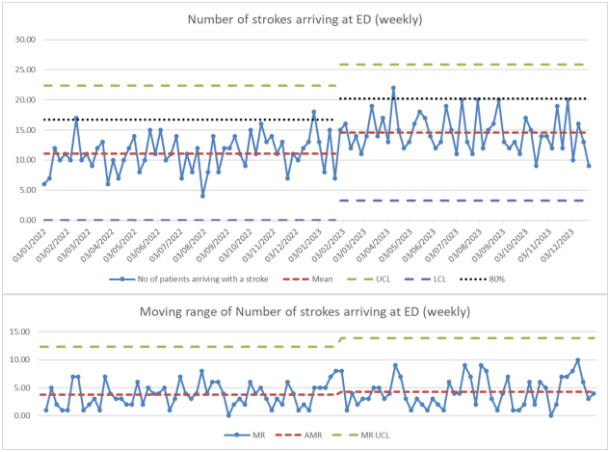
Thrombolysis in Acute Stroke Collaborative

Site Name: Torbay & South Devon NHS Foundation Trust

The TASC Principle:

Our Challenge

The Trust has an activity of approx. 650 stroke patients a year with 1-2 patients presenting a day. Data analysis demonstrated they should plan for 10-15 Strokes a week.



The operational plan is to have two HASU beds available at all times to receive stroke patients; this is a challenged by operational pressures and flow along the Urgent & Emergency care pathway.

The pathway is to have a direct to stroke unit pathway, either post thrombolysis or direct from CT where thrombolysis or thrombectomy are not indicated. Due to staffing on the stroke unit, this would only be between the hours of 08:00 and 15:00. Post 15:00, patients require medical clerking in the Emergency Department.

The local ISDN has a priority on thrombectomy and facilitating a networked approach to out of hours clinical support for thrombolysis. Also, a focus on standardising the rehab offer. A CQC visit updated November 2023 stated that overall.
The Trust "Requires Improvement" stating "*Outcomes for patients were not always positive and consistent and did not always meet national standards. Patients were not always admitted to a stroke unit within 4 hours and did not always spend 90% of their time on a stroke ward in line with national guidance".*

Upon joining the TASC network the team were identified as having an average thrombolysis rate per week of approx. 8% and had a depleted Stroke Nurse workforce.

Thrombolysis is delivered by the medical registrars. Between 08:00-20:00 there is specialist stroke nurse (SSN) support. Stroke Consultant support for decision making was available 09:00-17:00 Monday-Friday as standard. Out of hours this support was available from the on-call General Internal Medicine (GIM) consultant.

The team identified that there was:

- Decision making was focussed on "why should we thrombolyse" rather than thrombolysis as the default unless shown to be inappropriate.
- Gaps in Stroke Nurse rotas

- Inconsistency of approach across GIM consultants and medical registrar workforce.
- Lack of confidence amongst registrars in decision making
- Nuances re: stroke not always being identified in a timely way for some patients presenting to ED

What we did (the process)

- Agreed aims**:**
  1. To achieve a thrombolysis rate of 13% or higher which was the rate considered realistic based on local demographic – By March 2025.
  2. Decreased door to needle time (current 80 minutes)

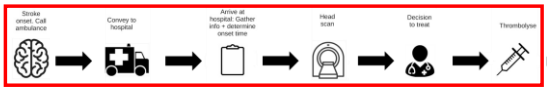
- Initially reviewed patients who had been thrombolysed to review processes, timings and identify any delays.
- Completed two in depth reviews of patients who did not receive thrombolysis and consider eligibility. This was completed alongside the SAMuel Tool to benchmark against the top thrombolysing sites.
  - First review patients identified by MT based on eligibility and timings.
  - Second review patients identified by MA. This cohort had a higher mRS and lower NIHSS score than the site would normally thrombolyse.
- They were reviewed and detailed data analysis identified that the timings were showing good door-to-scan and time of onset recording.
- The reviews identified good arrival to scan times even if the patient arrived out of hours, but a delay in reporting and a suspected lack confidence in some cases regarding decision making especially in registrars
- The consultant team also identified that they were rarely called for decision support by the registrars either in-hours or when they were the GIM on-call consultant

What actions we took:

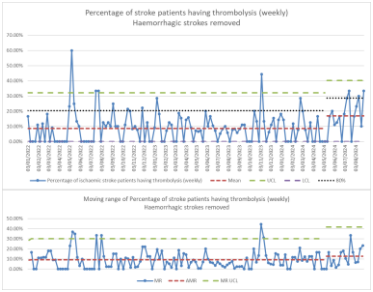
- Further development of a Registrar SIM training to support decision making and confidence.
- Registrars encouraged to contact the Stroke Consultants within hours for decision making support.
- Implemented monthly thrombolysis meetings; these are now twice monthly. Discussions around thrombolysed and non thrombolysed patients to prompt discussion and constructive challenge and to share learning.
- Aligned focus with shift in decision-making mindset to think “why not thrombolyse?” rather than “shall we thrombolyse?”.
- Line management of trainee ACP in Acute Stroke and a development plan was implemented.
- Ongoing breach analysis against the four hour to stroke unit target to identify process issues for targeted action.
- Reviews of all thrombolysed patients each month to identify and any delays in process that could be improved through targeted action.

What we achieved (the outcomes/data)

- The average thrombolysis rate per week since a step change in May 2024 was approx. 15%. This then improved to 18% up until the end of September. This was recognised by the local ISDN as the highest in Devon and Cornwall.
- Since this time rates have varied October – Dec 2024 improved again to an average rate of 19.3% but January to February dipped to an average of 9.8% alongside lower stroke admission rates.



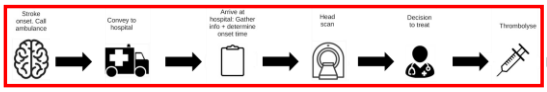
Percentage of ischaemic stroke patients having thrombolysis (weekly)- Haemorrhagic strokes removed



Pre middle third recalculation	
	% of patients
Average	8.64%
UCL	32.18%
80% Variation	20.41%
Average MR	8.85%

Middle third recalculation	
	% of patients
Average	18.01%
UCL	41.55%
80% Variation	29.78%
Average MR	12.46%

- The average thrombolysis rate per week since step change is approx. 18%
- This may vary by approx. +/- 13% per week
- Most weeks (80% variation) no more than 30% of patients will receive thrombolysis



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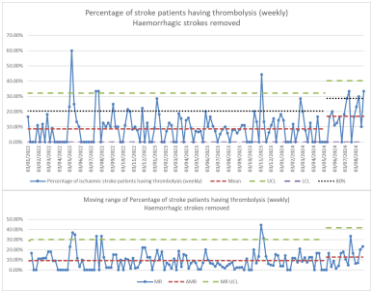

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Median door to needle time between October and December 2024 was 77 minutes, median time in January and February was 72.5 minutes.

Twice monthly thrombolysis meetings continue to take place with medical registrar and stroke nurse team attendance.

Anecdotally the consultant's report being approached more frequently by registrars for advice and having proactive discussions when the potential for learning re: decision is identified.

Key system contacts

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