

Wirral University Teaching Hospital Vignette – Thrombolysis & Acute Stroke Care (TASC2)

Background

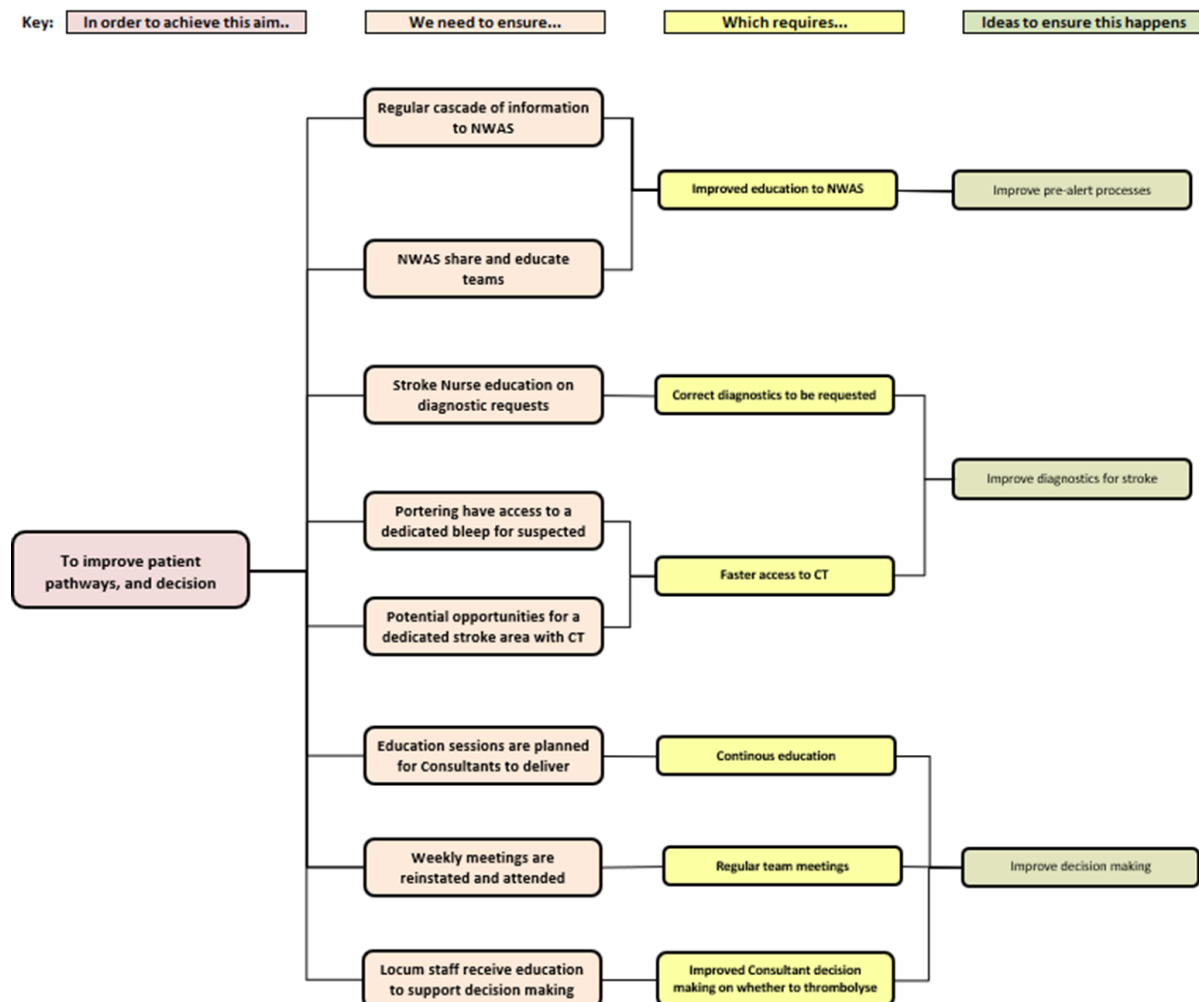
Wirral University Teaching Hospital (WUTH) historically struggled to meet national targets for thrombolysis in acute stroke care. Prior to joining the TASC Network their Thrombolysis rate was 9.8%. Challenges included delays in patient conveyance to CT, A&E pressures, lack of ring-fenced stroke beds, variation in decision-making, and workforce shortages.

Aim

To improve thrombolysis rates and decision-making consistency, reduce delays in imaging and treatment, and embed a culture of continuous improvement across stroke pathways.

What They Did

The Team started to meet regularly in a formalised manner and developed a driver diagram and planned tests of change to identify whether and how change led to improvements



PDSAs

Area of Focus	Action	Measure
Initial Patient Arrival	Improve relationships with NWS and establish pathway for pre-alert and PHVT (aiming to start mid-Oct) Meet with IT to improve pre-alert registration. IVT Stroke area with a CT scanner	% of patients where pre-alert is confirmed via NWS.
Arrival to CT	Continued work with Facilities team, to implement new stroke alert for porters, with appropriate clinical prioritisation of suspected stroke patients.	Time taken from arrival time to CT diagnostic performed
Decision Making	Weekly meetings reinstated Introduction of TNK Education sessions to be planned for consultants to deliver training to Stroke Nurses Education of Locum staff to support decision making	Time taken from imaging to thrombolysis to be administered Increased % thrombolysis – focus low NIHSS

Pre-hospital & Arrival Improvements:

- Worked with NWS to implement pre-alert and prepare for Pre-Hospital Video Triage (PHVT).
- Improved IT systems for pre-alert registration.
- Worked with Radiology to assure planned IVT stroke area with CT scanner access.

Imaging & Decision-Making:

- Introduced Tenecteplase (TNK) and 24/7 CT perfusion (CTP).
- Weekly patient journey review meetings reinstated.
- Delivered education sessions for consultants and locum staff to standardize decision-making.
- Developed trust-wide training for ED and community teams.

Operational Changes:

- Dedicated radiographer/porter bleep system for stroke alerts.
- Implemented SAMueL tool for thrombolysis compliance (achieved 100%).
- Monthly data analysis and SSNAP reporting to monitor progress.

Challenges

• Workforce:

- Stroke physician vacancies, sickness, and staff turnover (Band 7 and data analyst roles).
- Recruitment delays and reliance on locum support.

• System Pressures:

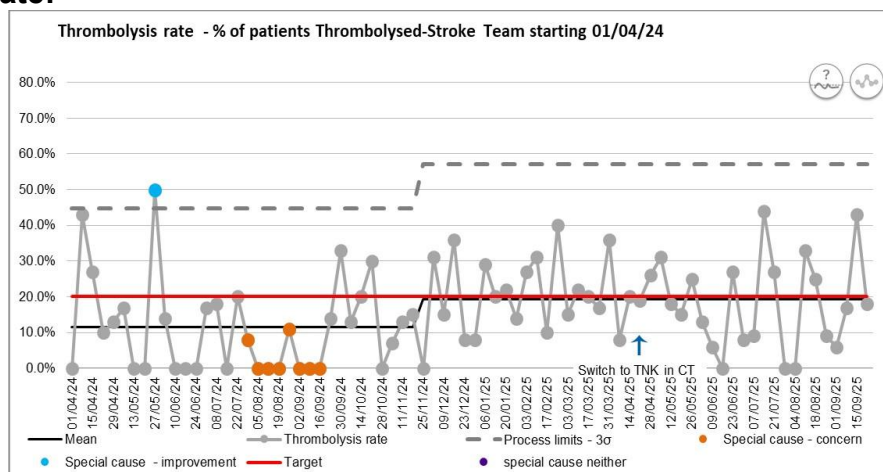
- A&E overcrowding and estate limitations.
- IT delays in implementing PHVT across regional trusts.
- Financial constraints and non-elective demand impacting capacity.

• Data & Measurement:

- Issues with SSNAP data accuracy (e.g., wake-up stroke figures).
- Loss of data analyst temporarily reduced capacity for reporting.

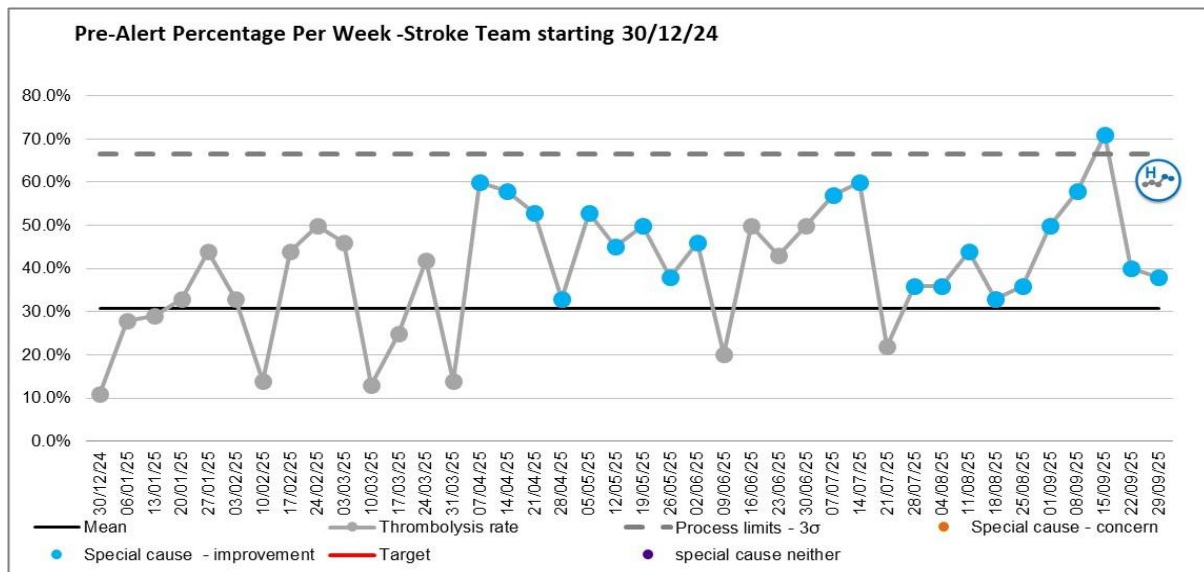
Outcomes

Thrombolysis Rate:



This Increased from 9.8% (Oct 2023) to 20% (May–Aug 2025). Above the SAMuel expectation that the Trust could reach 13

Pre-Alert PDSA concentrated upon assuring Ambulance and ED staff were able to pre-alert the team, resulting in increases in early referrals

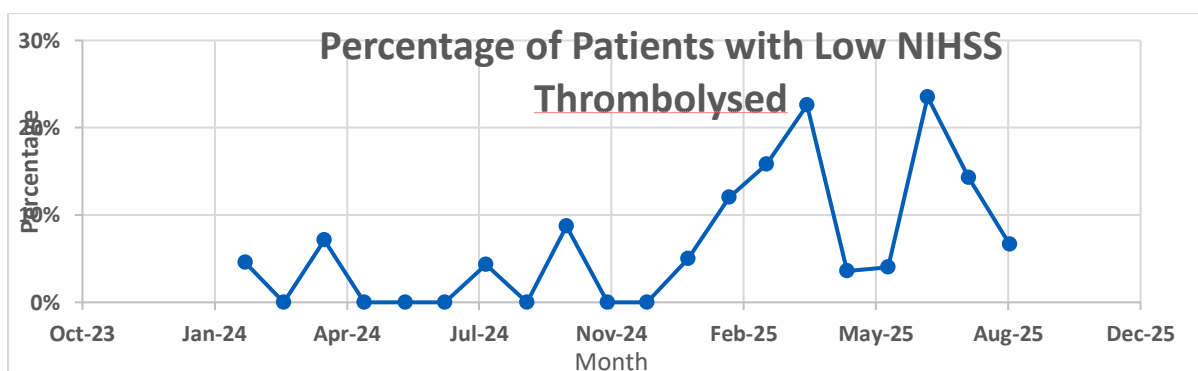


The regular meetings and education led to a change in the willingness to Thrombolyse from 4% to 24%. And there was a significant reduction in the variation in Decision-Making, especially out-of-hours. SAMuel tool was brought into every meeting and the team explored how they were performing against the top 25 hospitals and this supported them in their confidence and reducing variation in decisions.

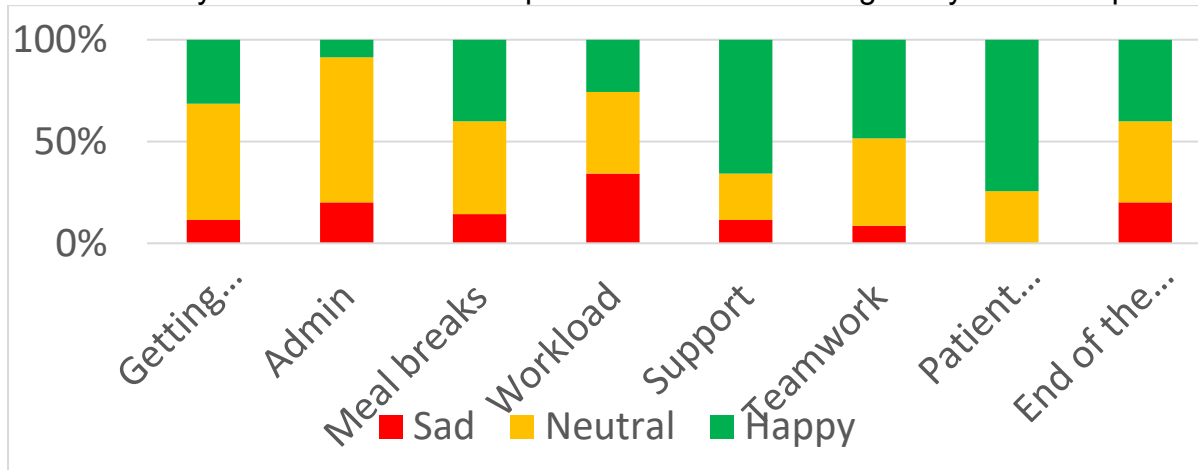
Cultural Change:

The work led to improved communication across teams (ED, radiology, ambulance service). Greater confidence in treating mild strokes and using AI/CTP for decision-making. As well as enhanced collaboration and morale through weekly meetings and shared learning.

A Last ten patient Review resulted in the Team reviewing the NIHSS of patients thrombolysed and staff began to explore whether they should be looking at low NIHSS and whereas in the past may have not thrombolysed started to explore in more detail patients with low NIHSS whom in retrospect would have benefitted from Thrombolysis. At this point staff willingness to Thrombolyse increased



A Staff Survey was undertaken to explore areas where change may lead to improvement



As a Result, a Task & Finish group was set up focused on staff wellbeing, training, education, and morale. The plan was to use the output from the first staff EBD survey to identify areas for improvement before repeating the survey, with the intention to develop interventions based on staff feedback (e.g., training and morale initiatives) and then run a second cycle of staff EBD later in the year (spring/summer). The group also used this to look at embedding cultural changes and improving communication and confidence in decision-making.

Actions & Plans for the Future

- Fully implement TNK in scanner 24/7.
- Establish PHVT pathway and review door-to-needle times (target: Oct 2025).
- Complete patient and staff Evidence-Based Design (EBD) surveys (digital or paper-based).
- Develop live dashboard for real-time performance monitoring.
- Explore patient outcome measures (e.g., modified Rankin scores at discharge and 6 months).
- Continue cultural and educational initiatives to sustain improvements.

Reflections on TASC Programme

Participation in TASC provided:

- **Dedicated time and space** away from operational pressures to focus on improvement.
- **Peer support and shared learning** across sites facing similar challenges.
- **Framework and accountability** for measurement and progress tracking.
- Resulted in **unexpectedly high improvement rates**, contributing to national recognition with NHS Elect at the HSJ Patient Safety Award.

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