Thrombolysis in Acute Stroke Collaborative Update

August 2025

Introduction

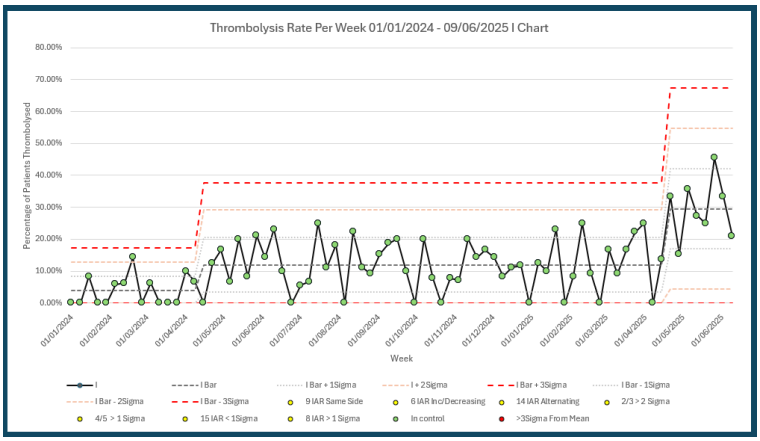
Welcome to the August 2025 edition of the Thrombolysis in Acute Stroke Collaborative (TASC) Newsletter.

This month, we're proud to spotlight two sites, Blackpool Teaching Hospitals and The Princess Royal University Hospital (PRUH), Bromley, whose commitment to continuous improvement has led to remarkable gains in stroke care delivery. From Blackpool's transformative journey of small, practical changes yielding a threefold increase in thrombolysis rates, to PRUH's data-driven refinement of team roles and pre-registration processes, these stories exemplify the power of collaboration, innovation, and shared learning.

We hope these insights inspire your teams to reflect, adapt, and continue pushing boundaries in stroke care excellence.

Spotlight on Blackpool: Small Changes, Big Gains

Before joining TASC, Blackpool Teaching Hospitals had a thrombolysis rate of 9.4%, with SAMueL predicting a potential of 21%. Today, after a mindset shift and targeted pathway improvements, the team is achieving an average rate of 30%, a remarkable transformation.



Rather than focusing on extra staff or resources, Blackpool examined what they could directly influence. A key breakthrough was challenging assumptions about thrombolysing minor strokes, building shared confidence and consistency among clinicians.

Early challenges included:

- **Ambulance handover delays and variation in pre-alerts** make it harder to gather onset times.
- **Role ambiguity** between ED and stroke teams, slowing observations, cannulation, and key tasks.
- **Imaging and decision-making bottlenecks**, such as paper-based CT requests and Brainomix upload delays.
- **Environmental barriers**, like cramped treatment spaces and thrombolysis drugs stored far from the bedside.

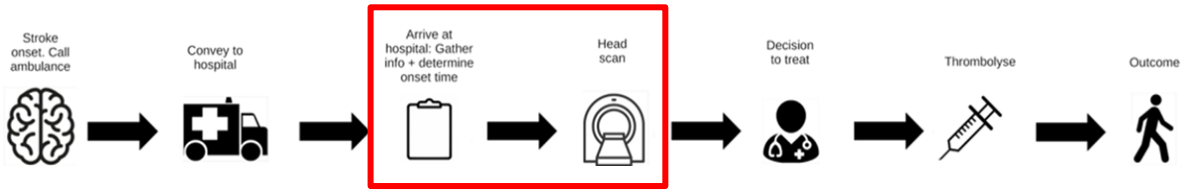
These issues were critical, as analysis showed 76% of pathway time occurred between consultant decision-to-thrombolysis (50%) and scan-to-Acute Stroke and Rehabilitation Unit (ASRU) transfer (26%).

Key changes included:

- **PITSTOP pathway**, with a four-person team (Nurse Consultant, ACP, Stroke Specialist Nurse, HCA) working in parallel on pre-hospital details, NIHSS assessments, cannulation, and CT coordination.
- **Weekly case reviews** to embed learning, and extended ACP cover to 8 pm to manage multiple calls.
- **Smarter tech**, including iPads for instant access to Electronic Patient Records (EPR), AI imaging, and Ambulance EPR to facilitate pre-arrival CT requests. ED and North West Ambulance Service (NWAS) training improved early triage and handovers.
- **Environmental improvements**, like a redesigned thrombolysis room, a bedside drugs cupboard, and decluttered spaces save valuable minutes.
- **Team engagement**, with *BEFAST* posters and success celebrations, keeping morale high.

The team is now working to refine out-of-hours practices and maintain improvements during periods of high demand. Blackpool's experience highlights how small, practical adjustments underpinned by a shared commitment can lead to significant impact and, most importantly, better outcomes for stroke patients.

Spotlight on PRUH PDSA 3: Enhancing Stroke Pathway Efficiency



The third Plan-Do-Study-Act (PDSA) cycle for the stroke pathway at PRUH has delivered promising results, showcasing the impact of structured role allocation and pre-registration on the speed of door to scan for suspected stroke patients. Conducted over five days during standard working hours (09:00–17:00), the study reviewed nine stroke cases, tracking how quickly each patient's journey was through the front-door pathway.

Team presence and role allocation

All nine patients were seen by a fully present and designated stroke response team, comprising of:

- **Band 6 Stroke Nurse**
- **On-call Stroke Junior Doctor**
- **ED Senior Doctor (Consultant or SpR)**
- **ED Nurse allocated to Resus**

This 100% team attendance, with clear role ownership and designated responsibilities, resulted in smooth coordination, and faster patient throughput.

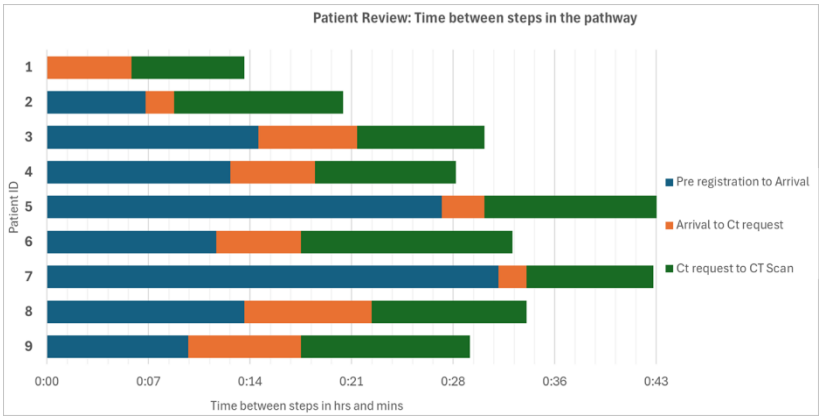
Pre-registration impact

A notable **88.9% of patients were pre-registered**, enabling early completion of administrative tasks such as label printing, wristband preparation, and CT scan requests via EPIC. This proactive approach reduced delays upon arrival at the ED.

PDSA 3: Front door time measurement

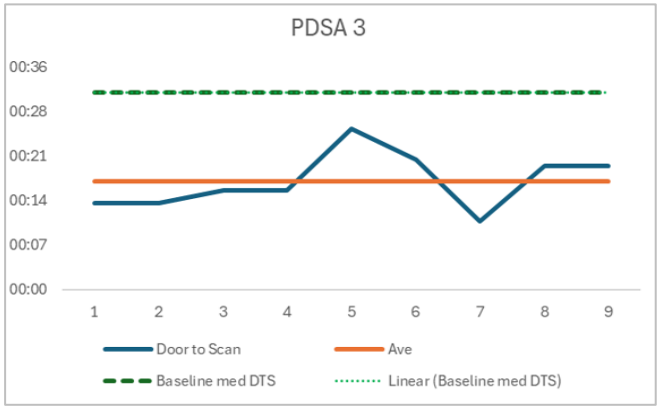
The time between each stage of the front door process is summarised below (each individual patient's journey is summarised in the graph, right):

- **Pre-registration to arrival**: Average of **13 minutes** (range: 0 to 34 mins)
- **Door to CT Request**: Average of **5 minutes** (range: 2 to 9 mins)
- **CT Request to CT Scan**: Average of **12 minutes** (range: 8 to 23 mins).



Statistical significance

All patients had **unusually fast door to scan (DTS) times**, with an average of **17 minutes** (range: 11 to 26 mins), **well below the 32-minute baseline average** (see graph, right). Statistically, the likelihood of this occurring by chance is just **1 in 512**, strongly indicating improvements in DTS time are due to the intervention, rather than random variation.



These figures place the team comfortably within the **SSNAP benchmark of ≤20 minutes** for DTS time.

Next steps

Building on this success, the PRUH plans to:

1. Test the process over a **24-hour period** to determine if improvements are sustainable around the clock.
2. Trial a 'straight-to-CT' approach to further reduce door-to-scan times.

Would you like to be the next Site Spotlight? If you have a learning or improvement story to share in the next TASC update, speak with your QI Associates or email us at networksinfo@elect.nhs.uk

Learning and Development Opportunities - Upcoming Webinars

• **Fireside Chat with Dr David Hargroves: Exploring the conundrums of stroke care – direct to CT & CTP usage**	20 Aug	12:30-13:30	Register here
• **Pre-Hospital Video Triage in Stroke – Insights from the East of England**	01 Sep	12:30-13:30	Register here
• **The Hospital Frailty Risk Score Tool**	03 Sep	12:30-13:30	Register here
• **World Café Session: Unlocking flow across the thrombolysis pathway- why the back door holds the key**	11 Sep	12:30-14:30	Register here
• **Spread & Scale Webinar**	01 Oct	13:00-14:30	Register here

Join the Conversation: Your Input Matters (all sites Cohorts 1 & 2)

TASC drop-in networking session: Join our monthly drop-in session to share your improvement work, exchange ideas, and collaborate with others from across the network to continue enhancing thrombolysis practices in stroke care. **This session takes place on the 4th Thursday of every month, 12:30-13:30. Drop us an email on networksinfo@elect.nhs.uk if you would like to be added to the diary invite or click here to access.**

Next Steps for All Sites

To build on the momentum and learning shared in this edition, we encourage all sites to consider the following actions:

Reflect and Review

- Examine your current thrombolysis pathway and identify areas where small changes could yield big results.
- Use the **SAMueL Web App** to benchmark your performance and explore improvement opportunities

Engage Your Team

- Share this newsletter with your stroke, radiology, Ambulance and ED teams to spark discussion and ideas.
- Celebrate successes and encourage open dialogue around challenges and opportunities.

PDSA Test and Analyse

- Conduct PDSA cycles to test pathway changes and measure impact.
- Use key measures, such as door to first assessment, door-to-scan times, scan to needle, and door to needle, to understand how your stroke pathway works now and to see if your improvement PDSA tests are making an impact.

Closing Remarks

Thank you for your commitment to improving stroke care. For support, questions, or to share your stories, contact us at **networksinfo@elect.nhs.uk**.