

TASC2 Engagement Vignette

Introduction

Northampton General Hospital (NGH) embarked on the *Thrombolysis in Acute Stroke Collaborative (TASC 2)* to redesign and improve its acute stroke thrombolysis pathway. The goal was to speed up assessment and treatment, enhance team functioning, improve patient experience, and increase safe thrombolysis delivery.

Aims of the TASC 2 Programme

The TASC 2 aim was explicit and measurable: *To improve the efficiency and quality of the thrombolysis pathway by achieving a minimum 10% improvement in key performance metrics over 12 months.* This included:

- Reducing door-to-needle (DTN) time
- Increasing the proportion of eligible patients receiving thrombolysis
- Improving adherence to national evidence-based guidance
- Enhancing patient and staff experience

What Was Done

○ Quality Improvement Methods & Interventions

- **PDSA Cycles** focused on:

- Prehospital Video Triage (PHVT)
- Code Stroke processes
- Team meetings & communication
- Self-presenting patient recognition
- Staff wellbeing
- Patient experience

- **Time & Motion Study:**

A QI coach shadowed the stroke team for a week to map inefficiencies, revealing:

- Delays created by lack of leadership during thrombolysis calls
- Inadequate space for assessment
- Duplication of tasks
- Disorganisation due to repeated information-sharing steps
- Portering improvements reduced scan-to-ward time

○ Workflow Redesign & Pathway Improvements:

- **Direct Access to CT**

A major success was achieving *faster access to CT* by using elective scanners, avoiding historic 10+ minute delays at non-elective scanners.

- **Code Stroke (24/7)**
NGH launched a 24/7 Code Stroke alert system to stratify roles, improve coordination, and reduce unwarranted variation between daytime and out-of-hours care.
- **Prehospital Video Triage**
PHVT was developed with go-live planned for Oct 2025 to improve pre-alert accuracy and prepare the team before patient arrival.
- **Stroke Nurse Bag**
A “quick win”, a nurse bag containing critical medication, reduced delays when treating patients with high BP or nausea requiring immediate correction.
- **Training for ED Self-Presenters**
Four 45-minute ED training sessions were delivered to improve early stroke recognition among streaming practitioners and triage nurses.
- **Nursing Team Development**
The nursing workshop explored role clarity, behaviours, leadership challenges, expectations, and multidisciplinary functioning. **Key points included:**
 - Nurses play a central role in rapid assessment, information collection, and influencing medical decision-making
 - Frequent changes in medical staff cause inconsistency, especially at night
 - Nurses highlighted the need for clearer expectations, formal teaching for juniors, streamlined documentation, and potential HCA support
- **Patient & Staff Experience (EBD):**
 - Staff felt motivated but burdened by admin tasks and inadequate breaks
 - Patients felt safe, supported, and happy
- **Learning From Case Review (Last 10 Patients):** A structured review of 6 recent thrombolysis-eligible cases identified:
 - Four patients *who were not thrombolysed at the time* would be thrombolysed today, reflecting changed thresholds (e.g., greater acceptance of treating low NIHSS, high glucose, or frailty).
 - Variation between in-hours and out-of-hours decision-making was pronounced.
 - Junior doctors often lacked confidence; senior advice wasn’t always sought.
 - MRI delays contributed to uncertainty in several pathways.

Recommendations from the review included:

- Registrar confidence training
- PDSA to measure training effect
- Review of MRI pathway delays
- Reducing consultant variation using red/green review models

Results & Impact

- **Core Performance Metrics** - NGH achieved significant improvements:

Metric	Improvement
Median door-to-needle time	Reduced by 10 minutes (to 44 minutes)
Median door-to-scan time	Reduced by 10 minutes for all patients
Thrombolysis rate	18.6% patient-centred; 15.6% team-centred
Improved pathway flow	Faster CT access & 24/7 Code Stroke

- **Cultural & Team Outcomes**
 - Strong nursing team alignment and philosophy
 - Improved MDT cohesion
 - Better clarity of roles emerging through workshops
 - Staff wellbeing survey revealed motivation but highlighted workload imbalance.
- **Clinical Learning Outcomes**
 - The case review demonstrated substantial learning, with newer evidence supporting broader thrombolysis eligibility.
 - Recognition that out-of-hours variation is a safety risk.

Challenges Identified: Several systemic and operational barriers remain:

- **Operational Delays**
 - CT waiting times, especially outside elective scanner access
 - Data collection burden, contributing to staff frustration
 - Frequent rotation of medical staff, reducing consistency of care
- **Workforce Gaps**
 - Lack of admin support increased stroke nurse workload
 - Night-time variation in senior decision-making
 - Potential need for HCA support for basic tasks (lifting, changing, vital signs, cannulation)
- **Process Variation**
 - Some doctors hesitant to call consultants
 - Variation between in-hours/out-of-hours thrombolysis decisions
 - Need for role cards, clearer escalation expectations, and structured MDT briefings

What's Next? (Future Plans): NGH has already identified next steps in:

- **Process Evaluation & Further QI**
 - Repeat the Time & Motion Study to evaluate the impact of Code Stroke
- **Workforce & Training**
 - Develop junior doctor handbooks
 - Deliver formal and informal education sessions
 - Introduce clear role expectations for MDT members
 - Explore HCA inclusion
- **System Redesign Priorities**
 - Strengthen PHVT for October 2025 go-live
 - Streamline data collection processes
 - Continue improving ED self-presenter stroke recognition
 - Reduce out-of-hours variation through registrar training & consultant involvement.

Conclusion

TASC 2 at NGH represents a highly productive quality improvement journey. The project delivered measurable improvements in time-critical metrics (DTN and door-to-scan times), increased pathway reliability, reduced variation, and strengthened nursing and MDT identity. Continued focus on training, workforce support, and system redesign will sustain and further accelerate progress, improving equity and outcomes for acute stroke patients.