

# SSNAP Quality Improvement (QI) Section

QI in healthcare is generally defined as a series of systematic approaches which use clear processes to promote good clinical practice (i.e. clinical care that is safe, timely, effective, efficient, patient-centred, and equitable). The QI section of the web tool has been updated to highlight the numerous exciting and innovative ways in which SSNAP can be used for quality improvement purposes, as well as showcasing previous successful QI projects from SSNAP users. The area is publicly available.



**QI Resources** – lists the many resources available that can be used to guide and support QI projects, including SSNAP reports, SSNAP tools and more general QI resources.

**Case studies and top tips** - this area contains case studies from SSNAP users and teams describing how SSNAP has been used for quality improvement, including those from past and present annual reports and case study

**Acute care case studies - Promoting quality improvement using data modelling techniques in the South West**

**Challenge**  
How to organise stroke services in a way which ensures that thrombolysis is provided as quickly as possible to those stroke patients who could benefit from it.

**Solution**  
Collaboration formed between SSNAP and the operational modelers at the South West Peninsula Collaboration for Leadership in Applied Health Research and Care (PenCLAHRC).

- Evaluated current state of play; compared individual site performance with national norms to highlight variations in thrombolysis provision.
- Established important performance measures: 3 parameters identified which focused on what would clinically benefit people with stroke if rates were improved; increasing the proportion of patients with a known onset time; shortening the door-to-needle time; increasing the proportion of patients that are treated having been scanned with 30 minutes remaining in the licence period for alteplase the clot busting drug used to administer thrombolysis.
- Highlighted potential gains from improving processes: the modelling team used SSNAP data from 7 acute stroke sites in the South West to model a potential three-fold increase in the number of stroke patients successfully thrombolysed and left with minimal disability compared to current practice.
- Used results to gain clinical buy in and build momentum.

This modelling work helped to foster a region wide acceptance of the improved patient outcomes that were possible by incrementally improving each metric, and acted as the stimulus to deliver a treatment rate that may not previously have been considered achievable.

**Impact**  
Targeted quality improvement activity in several of these sites in response to the thrombolysis modelling work is already delivering improved treatment rates and door-to-needle times; for example, at Bideford Hospital, Plymouth, they have increased their thrombolysis rate by a third (from 8.9% to 11.7%) over the last two years, with a corresponding fall in door-to-needle times of 24 miles from 69 minutes to 53 minutes). There is a growing acceptance now that relatively modest amendments to clinical practice and expectations can yield significant improvements in thrombolysis rates.

**Next steps**  
We intend to apply this same modelling analysis and quality improvement methodology to the increasing numbers of patients receiving mechanical thrombectomy- modelling processes and outcomes in the comprehensive stroke centres delivering the treatment as well as the new quality measure of 'open-in-door-out' time at referring primary stroke centres.

**Reflection**  
Quality improvement driven by national comparative audit offers the prospect of accelerating the implementation of a paradigm shift in the treatment of acute ischaemic stroke, and reaching the point where nearly 1,500 people with severe stroke annually are spared major disability with its enormous personal, health and social care costs.

This case study is written by Dr Martin James, consultant stroke physician at Royal Devon and Exeter NHS Foundation Trust.

**Rising to the Challenge** | The Fourth SSNAP Annual Report

Stroke care received between April 2016 to March 2017



**SSNAP Annual Report** – the focus of the 4<sup>th</sup> Annual Report is how regional and local hospital teams are using SSNAP data in QI initiatives to improve services across the patient journey.