

Developing composite quality measures for stroke care in England

Lizz Paley¹, Benjamin Bray², Alex Hoffman¹, Geoffrey Cloud³, Martin James⁴, Pippa Tyrrell⁵, Anthony Rudd⁶, On behalf of the Intercollegiate Stroke Working Party and the SSNAP Collaboration

 Royal College of Physicians, London, United Kingdom 2. University College London, London, United Kingdom 3. St George's NHS Foundation Trust, London, United Kingdom 4. Royal Devon and Exeter NHS Foundation Trust, Exeter, United Kingdom 5. University of Manchester, Manchester, United Kingdom 6. Guy's and St Thomas NHS Foundation Trust, London, United Kingdom

Contact: ssnap@rcplondon.ac.uk Further details at: www.strokeaudit.org

BACKGROUND

Healthcare quality has **many dimensions** and no single measure of quality can capture the full **complexity** of "what good care looks like". There is a growing interest in the development of **composite quality markers**, which combine a variety of individual measures into a **single** high level **indicator** or score. Composite measures help with the **transparent reporting** of healthcare performance and outcomes to the general public.

The Sentinel Stroke National Audit Programme (SSNAP) has developed the first composite measure of care quality to be used by NHS England to publicly report quality of clinical services in England.

METHOD

The key aspects of the composite score:

- Close clinical engagement and multidisciplinary input (including by stroke survivors) important for buy in and validity
- Covers whole pathway of patient care from acute domains such as brain scanning, to later processes such as
 discharge planning and the provision of early supported discharge services
- Absolute measures of performance, not relative to the performance of other hospitals allows improvements
 over time to be identified
- As close to real time as possible contemporaneous and relevant to current care
- Aspirational measuring for excellence and not just the minimal
- · Takes account of data quality
- · Easily broken down into the individual components to identify areas where improvement is needed



Domain 1: Scanning





Domain 5: Occupational Therapy

Domain 6: Physiotherapy

RESULTS

Although the audit has set **stringent criteria** for **top-level** performance, and a level "A" hospital equates to world-class service, an improvement in the number of teams achieving the top levels, and a **reduction** in the proportion **of teams receiving bands E and D** has been evident (Figure 1).

Since March 2015, the **composite SSNAP score** has been **published on myNHS** (an NHS website advocating patient choice) (Figure 2). It is the **first clinical area** to have **published a composite measure** in the **NHS** in England. This approach is now being considered for use by cardiac care, mental health and musculoskeletal services.



Figure 2. Performance Table showing the myNHS composite score and $\,$ components

Domains of stroke care

- 1. Scanning
- 2. Stroke Unit Access
- 3. Thrombolysis (clot busting treatment)
- 4. Specialist Assessments
- 5. Occupational Therapy
- 6. Physiotherapy
- 7. Speech and Language Therapy
- 8. Multidisciplinary Team Working
- 9. Standards by Discharge
- 10. Discharge Processes



Domain 8: Multidisciplinary team working

SSNAP overall score 80% 80% 40% Oct-Dec 2014 Jan-Mar 2015 Apr-June 2015 July-Sep 2015

Figure 1. Changes in SSNAP score over time

Case study quote

"For some time our Stroke Service has performed at SSNAP Level D. Focused improvement work over 6 months utilising the SSNAP key indicator framework, has resulted in achieving SSNAP Level B.

Reporting Quarter

Alongside clinical improvement projects, the team has embraced SSNAP and now has a much better understanding of how it can be used to demonstrate delivery of high quality stroke care, and of its use as a tool to drive improvement."

The Royal Bournemouth and Christchurch Hospitals

Discussion

The composite SSNAP score is a comprehensive summary of a hospital's performance across the whole of stroke care, whilst the individual domain scores allow hospitals to identify areas of weaknesses to focus quality improvement on. The inclusion of a wide range of indicators ensures that improvements on one aspect of care are not made at the expense of other aspects of care.

A clear improvement in performance has been demonstrated across the range of levels, with a reduction in the proportion of teams receiving the lowest two bands, and an increase in the proportion of teams achieving the top two bands.