A data visualisation quality improvement tool to improve the provision of thrombolysis through the Sentinel Stroke National Audit Programme (SSNAP)

Victoria McCurran¹, Mark Kavanagh¹, Lizz Paley¹, Emma Vestesson¹, Alex Hoffman¹, Benjamin Bray², Geoffrey Cloud³, Martin James⁴, Pippa Tyrrell⁵, Anthony Rudd⁶, On behalf of the Intercollegiate Stroke Working Party and the SSNAP Collaboration


Contact: ssnap@rcplondon.ac.uk

Further details at: www.strokeaudit.org

BACKGROUND
SSNAP is the stroke register of England and Wales, with national participation from all admitting hospitals and an estimated 95% of stroke admissions entered on the register.

Thrombolysis (tPA) is a treatment administered to stroke patients which can break down and disperse a clot that is preventing blood from reaching the brain.

Evidence shows that tPA improves outcomes after stroke and the quicker it is given after stroke, the more effective it is.

National clinical guideline for stroke has made recommendations using this evidence. Current guideline recommendations are that patients should be thrombolysed within 3 hours if eligible and the upper limit of benefit being 4.5 hours if they are under 80 years.

SSNAP reports back to hospitals their performance and their adherence to the recommendations.

SSNAP has developed a quality improvement tool for tPA to identify who is not getting thrombolysed who should be and why, and the overall provision of tPA.

RESULTS
This tool has been used extensively by healthcare professionals, with 978 downloads of the tool in 2014 and 1709 downloads of the tool in 2015.

More eligible patients are receiving tPA. 85.6% of eligible patients in October to December 2015 received tPA compared to 74.7% in the comparable quarter in 2013 before the tool was produced.

The data visualisations better enable healthcare professionals to analyse their hospitals’ acute care.

Case study quote
“Thanks for the spreadsheet, it is very useful for the thrombolysis indicator”
Manager, King’s Mill Hospital

CONCLUSION
This tool explains hospitals’ provision of tPA and therefore hospitals can diagnose EXACT moments of the acute pathway where improvements can be made, and an improvement in care quality has been apparent since implementation. Similar quality improvement tools could be produced in other healthcare settings.