SENTINEL STROKE NATIONAL AUDIT PROGRAMME (SSNAP)

KING'S College LONDON

UK Stroke Assembly Newsletter

This is a newsletter made by a project called the

Sentinel Stroke National Audit Programme (**SSNAP**).

King's College London (KCL) runs SSNAP.

SSNAP measures stroke care. It does this to **improve** the quality of stroke **care**.

This newsletter is for stroke survivors and their families.

Ambulance Project

SSNAP collects information from hospitals about the care provided to stroke patients from the time they **arrive at hospital** up until **6 months after their stroke**.

In April SSNAP started collecting data on patients arriving by **ambulance**. This includes:

- Time of call for help
- Time ambulance arrives at patient
- Time patient arrives at hospital

Acute Organisational Audit

In June SSNAP carried out an organisational audit of 189 hospitals.

The audit looks at how stroke services are **organised** within hospitals.

The information from each hospital was collected by the **hospital staff themselves**.

SSNAP will make a report to show how hospital stroke services in England, Wales and Northern Ireland are organised.

European Stroke Organisation Conference

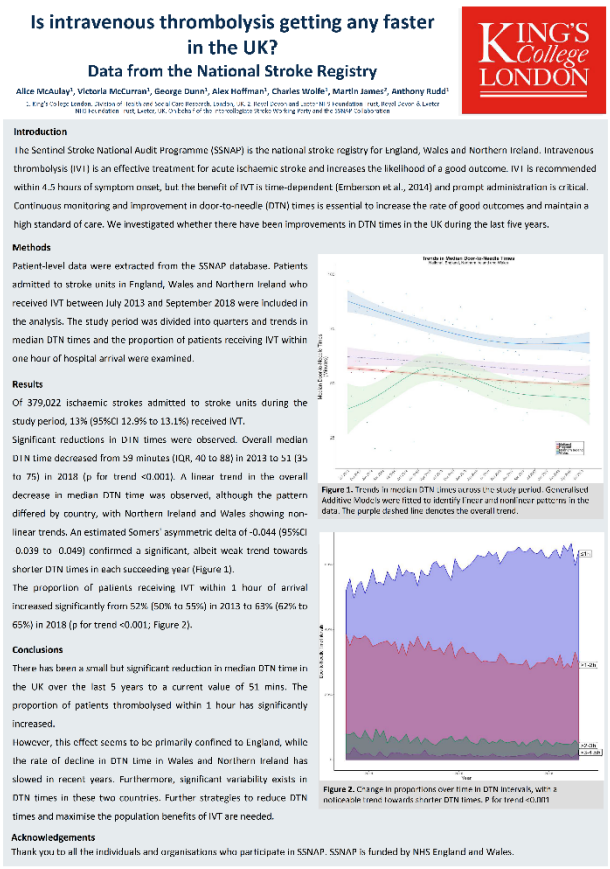
The European Stroke Organisation (**ESO**) aims to improve stroke care in Europe and the rest of the world.

Each year ESO hold a **conference** to share stroke research. This year the conference was in Milan. Over **4500 people** attended the conference this year. This included:

- people who work in stroke
- charities such as the Stroke Association
- people who have had a stroke

SSNAP presented **research** at the conference.

If you would like to see the posters and other research ask a SSNAP team member.



Is intravenous thrombolysis getting any faster in the UK?
Data from the National Stroke Registry

Alice McAulay[1], Victoria McCurran[1], George Dunn[1], Alex Hoffman[1], Charles Wolfe[1], Martin James[2], Anthony Rudd[1]

1. King's College London, Division of Health and Social Care Research, London, UK. 2. Royal Devon and Exeter NHS Foundation Trust, Royal Devon & Exeter NHS Foundation Trust, Exeter, UK. On behalf of the Intercollegiate Stroke Working Party and the SSNAP Collaboration

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Introduction

The Sentinel Stroke National Audit Programme (SSNAP) is the national stroke registry for England, Wales and Northern Ireland. Intravenous thrombolysis (IVT) is an effective treatment for acute ischaemic stroke and increases the likelihood of a good outcome. IVT is recommended within 4.5 hours of symptom onset, but the benefit of IVT is time-dependent (Emberson et al., 2014) and prompt administration is critical. Continuous monitoring and improvement in door-to-needle (DTN) times is essential to increase the rate of good outcomes and maintain a high standard of care. We investigated whether there have been improvements in DTN times in the UK during the last five years.

Methods

Patient-level data were extracted from the SSNAP database. Patients admitted to stroke units in England, Wales and Northern Ireland who received IVT between July 2013 and September 2018 were included in the analysis. The study period was divided into quarters and trends in median DTN times and the proportion of patients receiving IVT within one hour of hospital arrival were examined.

Results

Of 379,022 ischaemic strokes admitted to stroke units during the study period, 13% (95%CI 12.9% to 13.1%) received IVT.

Significant reductions in DTN times were observed. Overall median DTN time decreased from 59 minutes (IQR, 40 to 88) in 2013 to 51 (35 to 75) in 2018 (p for trend <0.001). A linear trend in the overall decrease in median DTN time was observed, although the pattern differed by country, with Northern Ireland and Wales showing non-linear trends. An estimated Somers' asymmetric delta of -0.044 (95%CI 0.039 to 0.049) confirmed a significant, albeit weak trend towards shorter DTN times in each succeeding year (Figure 1).

The proportion of patients receiving IVT within 1 hour of arrival increased significantly from 52% (50% to 55%) in 2013 to 63% (62% to 65%) in 2018 (p for trend <0.001; Figure 2).

Conclusions

There has been a small but significant reduction in median DTN time in the UK over the last 5 years to a current value of 51 mins. The proportion of patients thrombolysed within 1 hour has significantly increased.

However, this effect seems to be primarily confined to England, while the rate of decline in DTN time in Wales and Northern Ireland has slowed in recent years. Furthermore, significant variability exists in DTN times in these two countries. Further strategies to reduce DTN times and maximise the population benefits of IVT are needed.

Figure 1. Trends in median DTN times across the study period. Generalised Additive Models were fitted to identify linear and non-linear patterns in the data. The purple dashed line denotes the overall trend.

Figure 2. Change in proportions over time in DTN intervals, with a noticeable trend towards shorter DTN times. P for trend <0.001

Acknowledgements

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