

Do patients take longer to arrive on a specialist stroke unit in winter? Data from the national stroke registry for England, Wales and Northern Ireland

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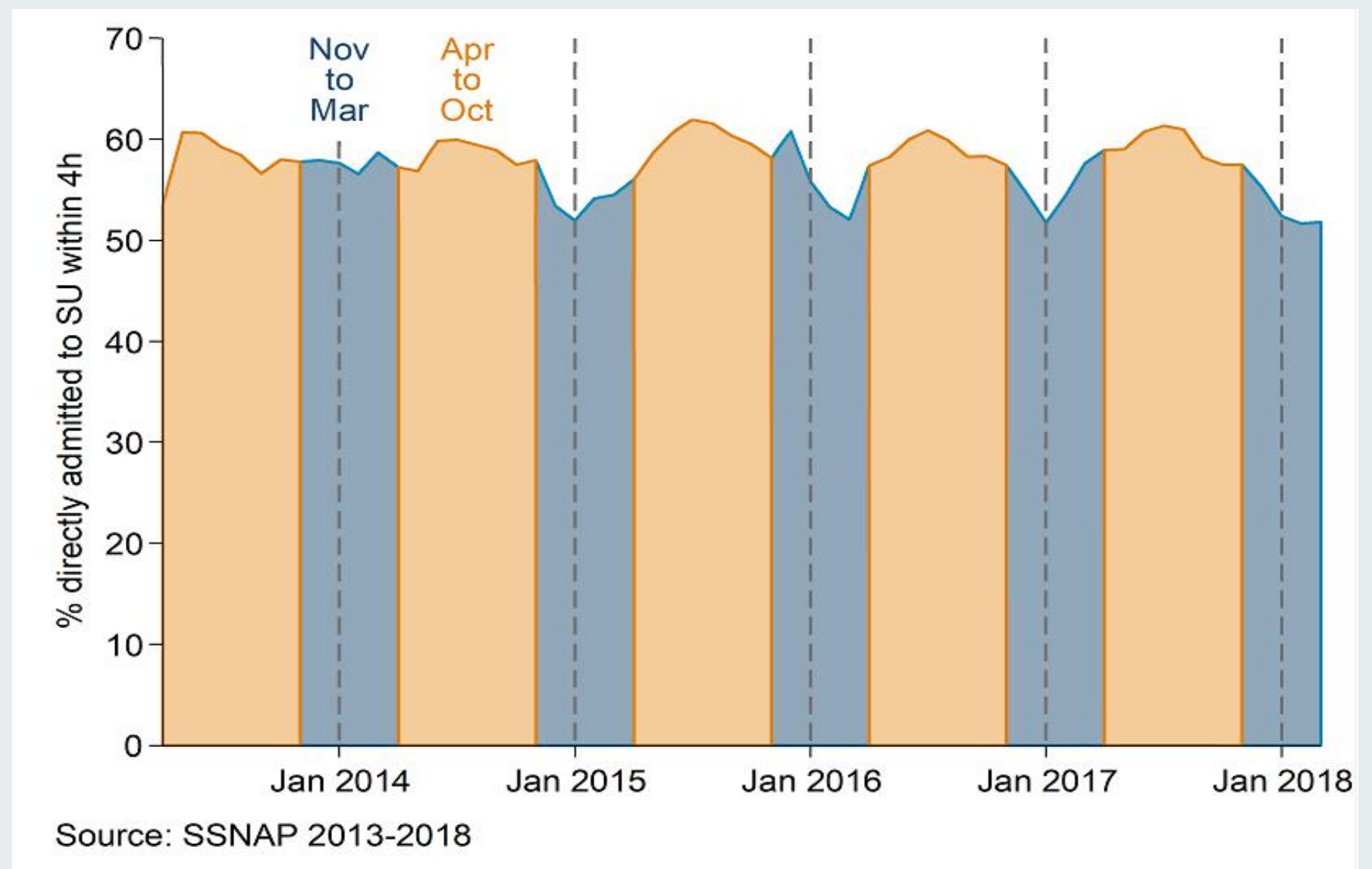
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Introduction

Direct admission to a specialist stroke unit (SU) is a vital intervention for acute stroke patients - those who receive care on a stroke unit are more likely to be alive, independent, and living at home one year after stroke (Stroke Unit Trialists' Collaboration, 2013). However, hospital overcrowding, particularly during the winter months, may reduce or delay access to SU care for patients with acute stroke.

Methods

Data from the Sentinel Stroke National Audit Programme (SSNAP), the national quality register for England, Wales and Northern Ireland, were analysed for the 5 years from April 2013-March 2018. SSNAP collects data on over 95% of hospital admissions for acute stroke.



Results

Data were included for 397,298 patients admitted over 5 years to 218 stroke units. The admission rate within 4 hours of hospital arrival averaged 60% and did not change significantly over the 5-year period, but with a mean difference of 8% between winter and summer (Figure); the most pronounced difference being between winter and summer 2015 with a 10% absolute difference. The median time to SU arrival over the 5-year period was 3 hours 39 mins, varying between 3 hr 49 min (winter 2015) and 3 hr 28 min (summer 2015). These seasonal fluctuations in access resulted in an absolute difference between winter and summer of 5% in the proportion of patients spending most (90%) of their in-patient stay on a specialist unit, representing approx 1000 patients/winter quarter.

Conclusions

Our SSNAP national registry data show a significant seasonal variation in timely access to specialist stroke care, and confirms data from the Swedish national stroke registry RIKS-STROKE that specialist access is adversely affected by hospital overcrowding (Darehed et al, 2017). In the UK, variation in access of 10% between summer and winter periods equates to at least 9,000 affected patients over the 5-year period of study. Given the broad applicability of SU care in preventing death and disability after stroke, providers of acute stroke care need to concentrate on maintaining access to specialist units even during times of winter pressures and hospital overcrowding.

References

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