

# HOW HAVE ACUTE STROKE CARE STAFFING LEVELS CHANGED BETWEEN 2019 AND 2021?

## Data from the Sentinel Stroke National Audit Programme (SSNAP)

M. Holloway 1, E. McMullen 1, A. Bhalla 1,2, A. Douiri 1, M. James 1,3, K. Stanley 1, C. Wolfe 1  
 1King's College London, United Kingdom  
 2Guy's & St Thomas' NHS Foundation Trust  
 3Royal Devon University Healthcare NHS Foundation Trust

### Background:

The Sentinel Stroke National Audit Programme (SSNAP) provides a biennial 'snap-shot' of the quality of stroke service organisation in acute settings. This acute organisational audit covers hospitals in England, Wales, and Northern Ireland.

The timing of the 2019 and 2021 audits, before and during the COVID-19 pandemic, provides an opportunity to assess its impact on acute stroke care services.

### Method:

A web-based proforma was used with in-built validations to ensure accuracy. This was sent to eligible acute hospitals for completion in 2019 and 2021, requesting details of the organisation of their acute stroke care services as at 3rd June 2019 and 1st October 2021.

In 2019, 183 acute services representing 169 sites and 4,847 acute beds were included. In 2021, 182 acute services were included representing 157 sites and 4,707 acute beds. This represents 100% participation of eligible acute providers.

### Conclusion:

A large majority of sites made changes in service provision due to COVID-19 and many of these remained in place in October 2021. Reductions in the number and availability of senior clinical staff over the pandemic are reflected in these changes over time, which may have implications for the recovery of services. Staffing demands have increased by the continued rise in the availability of therapy 7 days a week. This rise is promising and provision of at least two types of therapy over 7 days is one of the key recommendations from the 2021 acute organisational audit. Therapy assistants, if adequately trained can be a useful resource for helping sites provide 7-day therapy, which cannot simply mean spreading 5 days of therapy over 7 days.

Figure 1: Staffing availability between 2019 and 2021

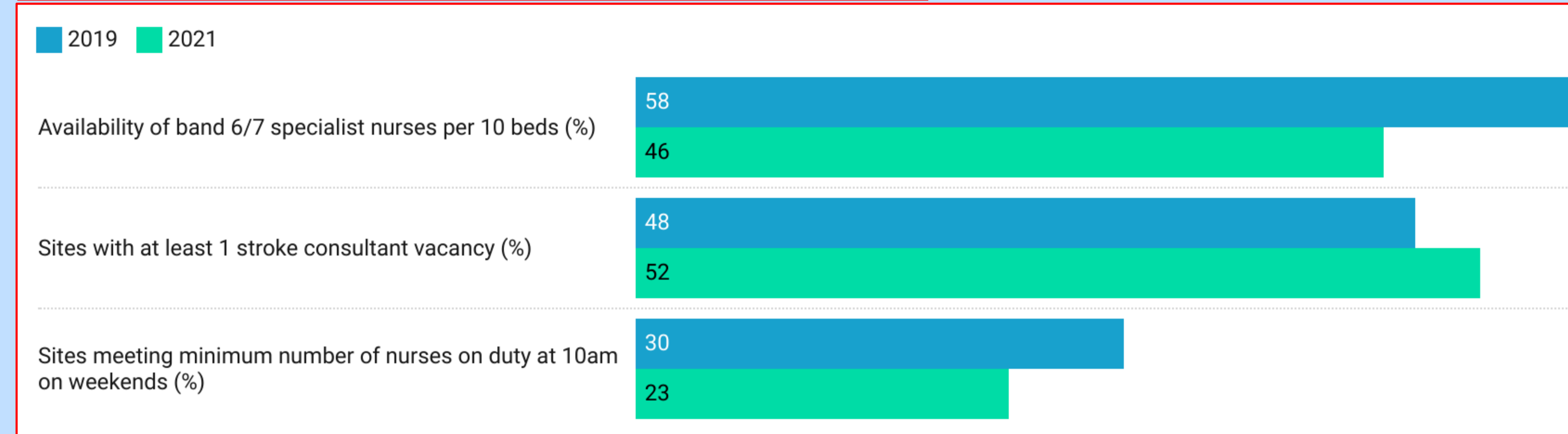


Figure 2: Percentage of sites providing 7-day therapy



### Results:

#### Staffing:

The number of sites reaching minimum staffing levels in several criteria fell. This includes the number of sites meeting the minimum number of nurses on duty at the weekend (30%-23%, p=0.13), and the availability of band six or seven specialist nurses per ten beds (58%-46%, p=0.03). The number of hospitals with a qualified psychologist per 30 beds remained low (7%-9%) and sites with at least one stroke consultant vacancy rose to 52%.

#### 7-day therapy

The number of sites providing at least 2 types of therapy on 7 days rose 38%-42% (p=0.46). The availability of qualified physiotherapy 7 days a week rose from 46% to 51% (p=0.36).

| Changes due to COVID-19  | % of sites           |
|--|----------------------|
| <b>Changes made as part of COVID response</b>                                | <b>82% (128/157)</b> |
| Virtual assessment by a stroke clinician in the pre-hospital setting         | 7% (9/128)           |
| 24/7 virtual assessment (on arrival at acute hospital) by a stroke physician | 4% (5/128)           |
| Tele-stroke network (across several hospitals) for virtual assessment        | 4% (5/128)           |
| Separate pathways for COVID-19 positive and negative stroke patients         | 71% (91/128)         |
| Virtual ward rounds or multidisciplinary team (MDT) meetings                 | 28% (36/128)         |
| Decision support software (AI) use   | 23% (29/128)         |
| Virtual triage of patients with suspected TIA or minor stroke                | 55% (71/128)         |
| Use of one-lead ECG devices to assess heart rhythm                           | 9% (12/128)          |
| Patient self-reporting of blood pressure readings                            | 20% (26/128)         |
| Other  | 24% (31/128)         |
| <b>As of 1 October 2021, changes are still in place</b>                      | <b>90% (115/128)</b> |