

Impact of the COVID pandemic on Stroke Unit access in England, Wales and Northern Ireland: data from the SSNAP prospective stroke registry

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Background

Specialist Stroke Unit care initiated promptly after stroke onset **reduces** death, long-term disability and healthcare costs.

Methods

- The Sentinel Stroke National Audit Programme (SSNAP) is the national stroke registry covering **92%** of the UK population.
- Data for **178,956** stroke patients admitted between **April 2019 and March 2021** were extracted from SSNAP.
- Two key stroke unit access indicators were compared between quarters.
- Data for the COVID-19 waves in the UK were compared with the same time period the year before.

Results

Stroke unit within 4 hours

- The proportion of patients admitted to a Stroke Unit within 4 hours **increased** significantly during the **first wave** (April-June'20) from 56.3% in 2019 to **63.3%** in 2020 ($p < 0.01$).
- In the **second wave** (October-December'20 and

January-March'21), it **decreased** from 53.3%-54% in Oct/Dec'19-Jan/Mar'20 to **49.5%-49.9%** in Oct-Dec'20/Jan-Mar'21 ($p < 0.01$).

90% length of stay on a stroke unit

- The proportion of patients spending **>90%** of their stay on a Stroke Unit **increased** in the **first wave** from 83.6% in 2019 to **84.5%** in 2020 ($p < 0.05$).
- During the **second wave**, it notably **decreased** from 82.7%-83.1% in 2019-20 to **77.3%-78.7%** in 2020-21 ($p < 0.01$).

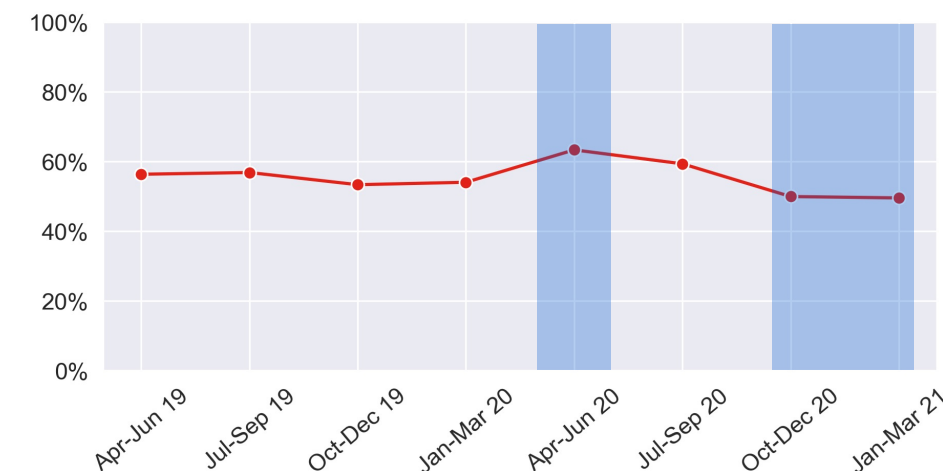
Conclusion

Stroke unit access **increased significantly** during the **first wave** at a time when **stroke admissions fell**, partly due to hospital avoidance and expedition of community discharges.

In contrast, during the **second wave** when **admissions were sustained**, access to stroke unit care **decreased to historical lows**.

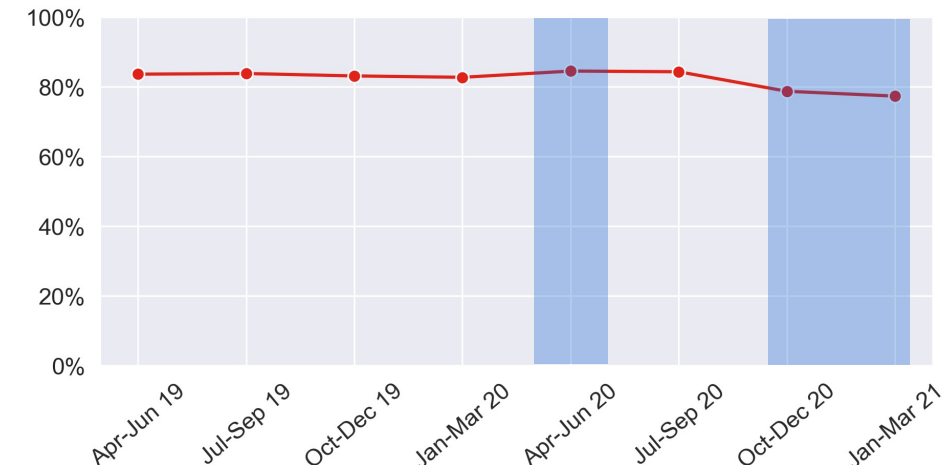
Non-COVID specialist care **deteriorated** during peak pressures on acute hospitals during the **second wave**.

Figure 1. Proportion of patients admitted to SU within 4 hours



Note: Blue shading reflects the two Covid waves.

Figure 2. Proportion of patients staying >90% on SU



Note: Blue shading reflects the two Covid waves.