# Research: at a glance

What we know

# Do London's stroke units provide 24/7 care? What do they do to achieve this?



## What we found

Evidence shows that stroke patients do better if they are treated in a specialist Stroke unit.

Some research suggests stroke patients who are admitted to hospital at night or at weekends are more likely to die, or get poorer care.

London has 8 Hyper Acute Stroke Units (HASUs) providing specialist care to all stroke patients for the first days following stroke. These units aim to provide "24/7" specialist care.

## What we did

#### **Quality of care and outcomes**

We looked at national data for 68,239 stroke patients, to see if patients who got to hospital at night or at the weekend had the same outcomes and quality of care as people who arrived during weekdays.

#### Working to provide care round-the-clock

We interviewed 76 people and watched the stroke units in action for 102 hours to learn:

- 1. How stroke unit staff worked to provide high quality care to all patients
- 2. What staff thought about care during the day, night and at the weekends

#### **Quality of care and outcomes**

The time of day that a patient reached a London hospital following a stroke **did not affect how likely they were to die** or be severely disabled.

London patients also received important care such as **scans and clot-busting treatments** whatever time of day they were admitted.

Patients sometimes waited longer to be assessed by stroke doctors and therapists, and care quality was generally worse on a Friday

Care was provided more consistently in London than in the rest of England

#### Working to provide care round-the-clock

- It was important to have a senior nurse in charge of the ward
- Stroke staff built strong relationships with other hospital departments to ensure rapid transfer from A&E and access to scans
- There were fewer senior doctors on the ward at night, and junior doctors tended to allow more patients who had not had a stroke onto the stroke units.
- Fewer therapists at weekends reduced what stroke staff could do at weekends, and made for additional work on Mondays
- It was harder to contact outside agencies, such as social services and other hospitals, at the weekend.

## What this means

- Our findings suggest that London's specialist Stroke units provide a good service, but there are still times when patients receive poorer care during the week.
- HASUs need suitable staffing for all professional groups across the day and week.
- HASUs are part of a wider system 24/7 work is limited by other services.



This project was funded by the NIHR Health Services and Delivery Research programme (project number 12/128/41).

The views and opinions expressed therein are those of the authors and do no necessarily reflect those of the HS&DR, NIHR, NHS or the Department of Health and Social Care.

## References

#### Black GB & Ramsay AIG et al

What does it take to provide clinical interventions with temporal consistency? A qualitative study of London hyperacute stroke units

*BMJ Open* 2019;**9:**e025367. doi: 10.1136/bmjopen-2018-025367

#### Melnychuk M et al

Variation in quality of acute stroke care by day and time of admission: prospective cohort study of weekday and weekend centralised hyperacute stroke unit care and noncentralised services

*BMJ Open* 2019;**9:**e025366. doi: 10.1136/bmjopen-2018-025366

# Find out more

Contact g.black@ucl.ac.uk

Website

https://www.ucl.ac.uk/dahr/research-pages/hasu

# National Institute for Health Research