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# Why patients are not receiving stroke unit care: Barriers and facilitators to stroke unit access?

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## Background

Stroke unit care (SUC) significantly reduces death and disability after stroke compared with conventional care in general wards for all people with stroke (odds ratio [OR] 0.82, 95% CI 0.73–0.92)[1].The 2009 National Audit of Acute Stroke Services reported an increase from 2007 in the number of stroke units (SUs) (36 in 2007 to 54 in 2009) and SU beds (391 in 2007 to 534 in 2009). However only 49% of patients received care on a SU (all hospitals) and 74% received care on a SU (stroke unit hospitals) .

The Australian Stroke Coalition (ASC)# identified two priorities: the need to increase the number of SUs and to improve access to existing stroke units.

## Aim

To identify the barriers and facilitators to SU access in Australia.

## Methods

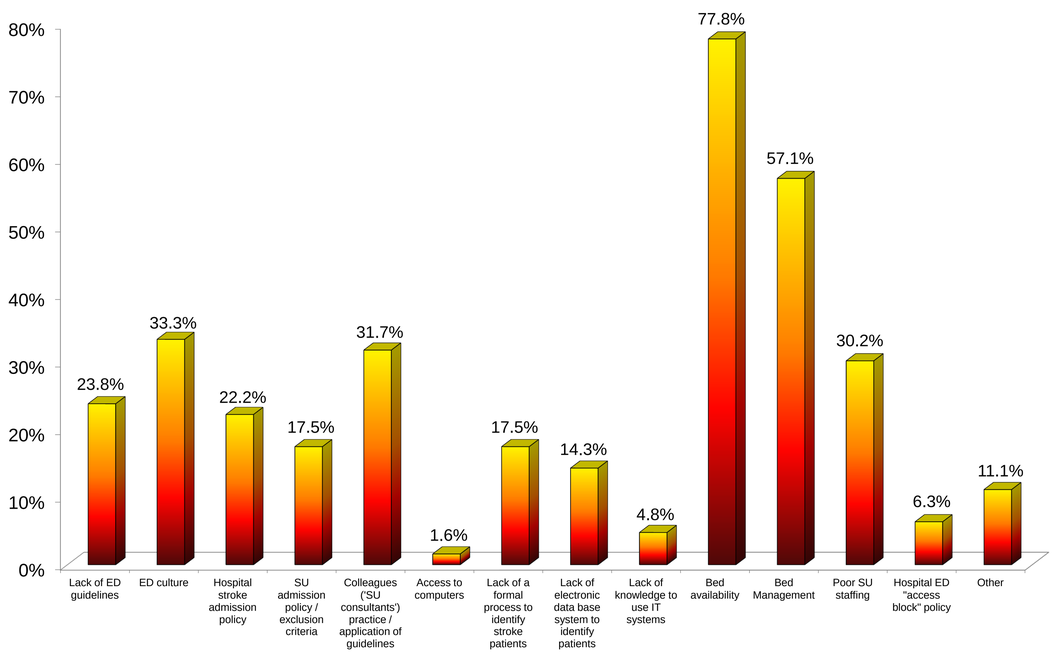
The ASC Access to Stroke Unit working group (WG) reviewed de-identified national audit data [2, 3] to determine which hospitals had “high” access rates to their SU’s and which had “low” rates of access. The WG developed a 12-question online survey to explore the barriers and facilitators to SU access. All 68 stroke unit hospitals across Australia were invited to participate. The survey aimed to better understand the processes that support good access and other processes that may relate to access issues, e.g. emergency department protocols, staffing levels, bed numbers, etc. The survey included closed and opened questions. The survey results were collated and the findings were then compared to SU access figures.

## Results

In total, 56 identified hospitals and 2 unidentified hospitals responded to the survey. 50 hospitals (89%) had SUs and 6 hospitals did not.

## Barriers

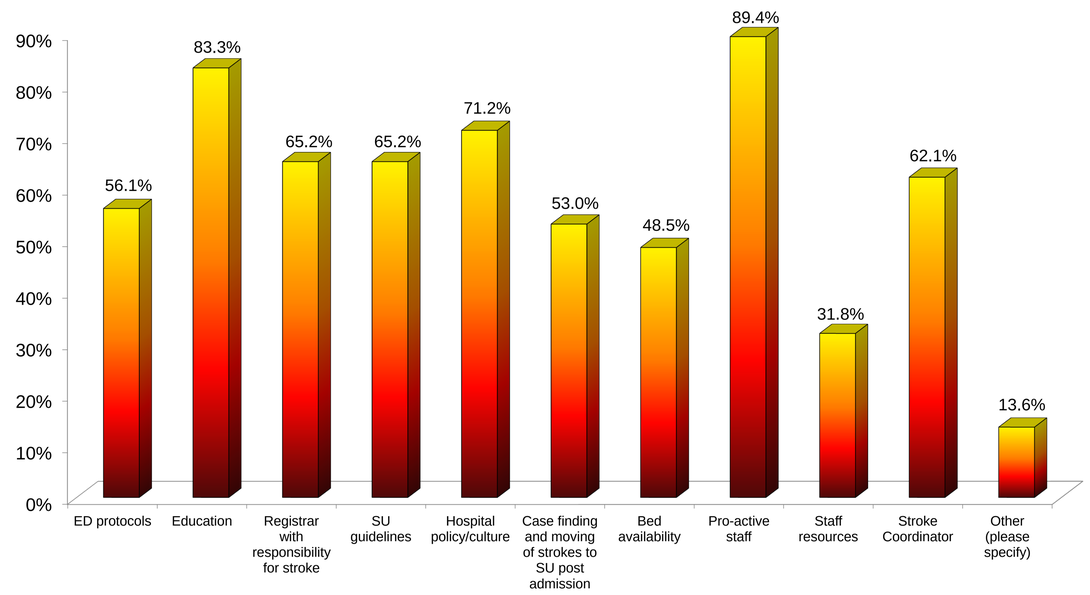
**Figure 1. Current barriers to stroke unit access**




***“Currently we are having more trouble getting people out of the stroke room in order to let a new stroke in. We have a policy for this, but further education is needed. Case conferencing usually helps identify when pts are ready to leave and therefore frees up beds.”***

## Facilitators

**Figure 2. Facilitators to stroke unit access**




***“I believe we have a supportive ED who are trying their best to support the quick assessment and management of stroke presentations. We are working to improve out clinical pathways with ED. As education increases amongst the nurses in ED, the time it takes for the stroke page to be activated decreases. Having close contact with the bed manager and the ward case manager also facilitates good planning for bed movements and can aide in quicker admission to the SU.”***

## Discussion

This survey has shown there are a number of reasons why stroke patients do not get access to SUC:
•Lack of resources (bed availability, poor stroke unit staffing, appropriate discharge facilities)
•poor use of existing resources (bed management, Hospital ED “access block”, ED culture, Colleagues ('SU consultants') practice/application of guidelines)
•poor systems (bed management, Hospital ED “access block policy”, lack of a formal process to identify stroke patients, hospital stroke admission policy, SU admission policy/exclusion criteria).

Hospitals with good SUA state the following reasons:
•appropriate resourcing (Registrar with responsibility for stroke, stroke coordinator, bed availability, staff resources)
•good use of existing resources (pro-active staff, hospital policy/culture, education)
•good systems (stroke guidelines, hospital policy/culture, ED protocols).

While the survey results provide an excellent view of SUs in Australia, they must be interpreted with caution. The self-reported survey was completed by a representative from the participating hospital and may be subject to individual and systems knowledge bias. These sites may also be subject to selection bias as those participating are likely to be actively involved in improving their stroke services.

## Conclusion

The Australian Stroke Coalition has identified access to SUC as a priority. There are numerous barriers and enablers identified by this survey. A systematic, evidence-based quality improvement approach to identifying and resolving barriers to SU access is clearly required to maximise the benefits of SUC.

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**# The Australian Stroke Coalition was established by the National Stroke Foundation and Stroke Society of Australasia on 11 July, 2008. The Coalition brings together representatives from groups and organisations working in the stroke field, such as clinical networks and professional associations/colleges. This group works together to tackle agreed priorities to improve stroke care, reduce duplication amongst groups and strengthen the voice for stroke care at a national and state level.**

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