

## AuSCR Research Task Group approved projects

<b>Title</b>	<b>Denial of stroke diagnosis in a national clinical quality registry population</b>
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<b>AuSCR role</b>	Data provision
<b>Approved</b>	18 March 2019
<b>Status</b>	In progress

### Summary

When patients with stroke or transient ischaemic attack (TIA) symptoms are admitted for treatment to a hospital that is participating in the AuSCR, their diagnosis, clinical and process of care data are entered into the registry. However, during registry follow-up processes it was noted that a subset of registrants were contacting the AuSCR to notify the registry that they had never been diagnosed with either a stroke or TIA ('stroke denials'). These notifications came via calls to the AuSCR 1800 number, or as part of follow-up data collection on either returned surveys, or during follow-up telephone calls.

In order to investigate the prevalence of stroke denials, and ensure that the registry contains only verified stroke/TIA admissions, the recording of all stroke denial communications was commenced. Stroke denials are periodically checked with the relevant AuSCR hospital to confirm the final diagnosis and determine eligibility to remain on the registry. Confirmation of the original diagnosis, or any change to the final diagnosis are also documented and ineligible episodes removed from the AuSCR. In 2017 more than 200 instances of stroke denial were documented out of a total of 14000 episodes entered into the AuSCR. However, the reasons underpinning stroke denials are largely unknown, along with any associated demographic or clinical characteristics.

The aims of this project are: to describe the demographic, and clinical characteristics of stroke denials; to determine the proportion of registrants with a confirmed and unconfirmed diagnosis of stroke/TIA; to compare patient, system, process of care and outcomes data between confirmed and unconfirmed stroke denial cases.

Descriptive statistics will be used to describe the stroke denial population, including who reported the stroke denial, the source of report (eg 1800 number, mail return or telephone follow-up), an alternative diagnosis (if provided), confirmation of a stroke/TIA diagnosis from the hospital (including ICD-10 codes) and subsequent actions taken by the AuSCR (eg to remove unconfirmed stroke/TIA episodes from the registry).

Demographic, clinical and treatment factors will be compared between stroke denials with a confirmed diagnosis of stroke/TIA and those with an unconfirmed diagnosis (Appendix A). These factors will include: patient characteristics (e.g. age, sex, Australian born, SEIFA); acute clinical characteristics (e.g. in-hospital stroke, type of stroke); processes of care (eg: admitted into a stroke unit, secondary prevention medications); health system (eg: location of hospital, metropolitan vs rural) and health outcome (eg: length of stay, HRQoL factors).

Univariable analyses will be used to compare the factors listed above by stroke denial status. Multi-level logistic regression modelling will be used to examine the association with these independent factors if statistically significant  $p < 0.15$  (or if clinically important), and stroke denial status.

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