

AuSCR Research Task Group approved projects

Title	Integration of audit and registry data to monitor quality stroke care and outcomes
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AuSCR role	Data provision
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Status	In progress

Summary

Globally, stroke is a leading cause of death and disability. Having specific data available to understand the patient journey through the acute and rehabilitation continuum of care, and answer important questions relating to quality of care and outcomes is of value. Secondary use of linked data collected in two national programs, the Australian Stroke Clinical Registry (AuSCR) and the National Audit Program, will provide a deeper understanding of the patient journey through the entire continuum of care. This will enable questions to be answered on service delivery, and patient outcomes, with no additional burden for clinicians as the data already exists. However, linking the AuSCR data with data from the Acute and Rehabilitation Audit Program has not previously been achieved. Therefore, firstly assessing the feasibility of this process to create a comprehensive, useable dataset to measure the quality of care and outcomes for patients with stroke is important, and a novel way to cover the acute and sub-acute continuum of care and the association of longer term patient outcomes.

Aims

We aim:

- 1) To determine the feasibility and accuracy of merging patient level records between the AuSCR program and the respective Audit Programs (both acute and rehabilitation) using the statistical linkage key (SLK) and episode dates.
- 2) To determine whether there is an association between hospital resources, particularly the presence of stroke coordinator positions, and quality of care and longer term patient outcomes.
- 3) To assess the association of quality of care provided in the acute and rehabilitation settings and longer-term patient outcomes including self-reported outcome at 90-180 days and mortality up to one-year post stroke. Within this aim, specific research questions will be of focus including:
 - a. Does management of mood impairment in the acute and rehabilitation setting influence patient outcomes at 90-180 days?
 - b. Is management of incontinence after stroke associated with patient outcomes at 90-180 days?
 - c. Does documentation of care plans in the acute and rehabilitation setting affect long term outcomes?
 - d. What is the influence of goal setting in rehabilitation on 90-180 patient outcomes?
 - e. Is intensity of physical therapy in rehabilitation associated with patient outcomes at 90-180 days?

Proposed Methodology

Retrospective observational study using:

- prospectively collected data on quality of care and outcomes from hospitals contributing data to the AuSCR in 2016 and/or 2017, and
- cross-sectional organisational and clinical data from the 2017 Acute and 2016 Rehabilitation Audit Programs.

All data linkage for the project will be performed by the AuSCR National Data Manager, which are both collected via the Australian Stroke Data Tool.