Stroke Clinical Registry Initiative

Part A: Background

The Department of Health and Human Services and Clinical Registries

The Department of Health and Human Services (the department) recognises that clinical quality registries such as the Australian Stroke Data Tool (AuSCR) and the Victorian Cardiac Outcomes Registry (VCOR) are important approaches to monitoring and improving the safety, effectiveness, appropriateness and/or quality of health care. Through the Cardiac and Stroke Initiative the department has provided the AuSCR and the VCOR $250,000/year from 2013 to fund the Victorian implementation of these registries. The department recognises that Victorian health services require sustainable and efficient systems to support data collection for the purpose of monitoring the quality of patient care. The department encourages Victorian health services to participate in AuSCR and VCOR.

Victorian Clinical Networks

The Victorian clinical networks were established so that "the knowledge, wisdom and experience of clinicians is used to better plan and deliver more responsive, effective and efficient services across Victoria".

The Clinical Networks operate in partnership with clinicians, the department and other stakeholders to achieve a coordinated, integrated and responsive system that provides the highest standard of health care for all Victorians. Clinical Networks aim to facilitate the implementation of evidence-based care and reduce inappropriate variation in clinical practice, through projects such as encouraging the use of data collection and clinical registries.

The Victorian Stroke Clinical Network (VSCN) strives to achieve a coordinated, integrated and responsive system that provides the highest standard of health care for stroke survivors in Victoria.

For this project the VSCN and the VCCN are pleased to work in collaboration to support better information technology processes in order to facilitate health service participation in clinical quality registries.

The Australian Stroke Clinical Registry (AuSCR)

The AuSCR is a national collaborative effort to monitor, promote and improve the quality of acute stroke care. The collaborators on this project are the Florey Institute of Neuroscience and Mental Health (Stroke Division), the George Institute for Global Health, the National Stroke Foundation and the Stroke Society of Australasia (see www.auscr.com.au).

The AuSCR dataset includes high priority quality of care variables agreed by stroke clinicians to be credible and central to the provision of stroke care. Importantly, information about stroke unit care and thrombolysis (key elements of evidence-based acute stroke care) and outcomes at 3 months are collected. Participating health services input their data to the central register and can generate live reports of their data which can be used for local quality assurance activities and organisational improvements for acute stroke care. Many of the quality of care variables in the AuSCR dataset cannot be obtained from existing health service patient information management systems.

The Australian Stroke Data Tool

The Australian Stroke Data Tool (AuSDaT) developed by the Australian Stroke Coalition is a new online integrated data management system for clinical monitoring in stroke care. The tool has replaced the existing National Stoke Foundation (NSF) audit tool. From mid-2016 the AuSDAT will be used to collect patient data for the Australian Stroke Clinical Registry (AuSCR) and other stroke programs. Once fully operational, hospitals participating in one or more of the different stroke programs will be able to benefit from the significant reduction in data entry times by entering patient record data only once and not separately for each program. In preparation for the transition to AuSDAT it is recommended that all sites refer to the AuSDAT data dictionary which can be found at;
http://australianstrokecoalition.com.au/ausdat

Funding opportunity

In October 2014, the Innovation Fund coordinated by the Department's Office of the Chief Information Officer awarded the VSCN $450,000 to assist health services in the establishment (or improved implementation) of the AuSCR in 2015.

An additional allocation of $200,000 was made available in 2014-15 to augment this project.

Phase 1 of this initiative commenced in July 2015 and six health services received funding to support the implementation of the AuSCR. The successful health services are Alfred Health, Ballarat Health Services, Barwon Health, Eastern Health, Peninsula Health, and St Vincent's Hospital. These sites have been awarded a total funding commitment of $348,577. The allocation in this Phase2 round of funding is $301,423.

Expressions of Interest

Submissions are requested for Phase 2 funding to support AuSCR implementation in Victorian health services:

a. not currently participating in AuSCR, and

b. to improve the efficiency and sustainability of information technology (IT) processes in health services currently contributing to AuSCR with large patient volumes.

Priority will be given to the former category.

In applying for these funds, health services are expected to establish a reliable electronic data collection tool that

1. permits automatic extraction of demographic variables from the hospital patient information management system,

2. allows entry of clinical variables that measure quality of stroke care (such as stroke subtype, stroke severity, treatment with thrombolysis), and

3. enables upload of these data to the AuSCR web-based tool.

It is anticipated that the system will result in efficiencies for the clinician entering the data by reduction of re-keying existing variables, improved accuracy of data collected through linkage with hospital data management systems, and simplicity of the data upload to AuSCR. The solution may include the use of real-time data entry by tablet/mobile device. There may be further flow-on advantages to the health service in terms of integration with other performance monitoring systems (such as Dr Foster, NSF audit and potentially the AusDAT tool), local research projects, and routine clinical activities (such as discharge summaries). It is also feasible that learnings from the AuSCR implementation may be utilised to streamline data entry for other clinical quality registries at the same health service. Health services must confirm their willingness and capacity to allocate resources to support ongoing participation in the AuSCR.

To this aim, Victorian health services routinely admitting patients with acute stroke may apply for grants between $20,000 and $75,000 for the implementation of IT systems to support data export from their site to AuSCR.

Specifically, these grants are intended to assist in improving data collection and extraction systems. Grants are expected to fund the development and implementation of appropriate solutions for data extraction from health service information systems, and streamline clinical data collection wherever possible. They will work directly with AuSCR staff to ensure that correctly formatted data extraction reports are able to be provided for import into the AuSCR and from July 2016 into the AusDAT. A robust system of mapping, record-keeping, storing and transmitting data is required. Such a process substantially reduces the burden of manual data entry to AuSCR (by about 60%), increasing capacity for participation and completing data entry. In addition, directly uploaded data are less prone to the errors inherent in manual data entry. Further details about the data importing requirements can be found on page 40 of the AuSCR Hospital User Manual (see www.auscr.com.au/wp-content/uploads/Hospital-User-Manual-Version-2.0.pdf). The AusDAT data dictionary should be referred to. The latest version can be found at http://australianstrokecoalition.com.au/ausdat

Funding submissions should clearly outline the IT tasks required within the health service to enable patient data extraction directly from the Patient Administration Systems and facilitate clinical data collection. It should then demonstrate appropriate processes for formatting and upload to AuSCR and provide a detailed cost justification. Additional information about the AuSCR database and the technical aspects of direct uploads can be provided by the AuSCR Victorian Data Manager ph: 9035 6301, email: kate.paice@florey.edu.au. The submission must provide evidence for health service commitment to participation in AuSCR and outline the resources to be allocated to ensure continuing participation. The submission should also outline how the health service will use the data collected for its own quality improvement purposes and how improvements will be monitored and implemented.

About the Stroke and Cardiac Clinical Registry Initiative

Project goals

To improve the quality of care provided to stroke patients at Victorian public health services through the collection, and evaluation of quality of care data via the AuSCR.

Project objectives

1. To develop efficient and sustainable data collection processes for Victorian hospitals;

2. To increase the number of health services participating in AuSCR to maximise data collection about stroke care and health outcomes;

3. To increase capability for monitoring quality of care; and

4. To enable implementation and monitoring of local and state-wide quality improvement activities.

Site objectives

1. To develop and implement appropriate IT solutions to minimise data entry burden to AuSCR To improve clinicians' skills in data management and clinical practice improvement methodologies (including the use of data for improvement) in stroke care; and

2. To develop a proof of concept for data extraction directly to the AuSCR that may be extended to other clinical registries.

Project scope

- This funding is targeted at Victorian public health services routinely providing acute care to ≥ 100 patients with stroke or transient ischemic attack (TIA), per annum.
- Multiple campuses of the same health service should be covered under a single application.
- Funding is provided to enable:
  - linkage with existing health service databases to prevent double data entry and therefore reduce burden,

- improve systems for collecting and storing key clinical variables that measure stroke performance,
- developing correctly formatted data export files to be uploaded into AuSCR/AusDAT .
- Funding is non-recurrent.
- Ongoing participation in AuSCR is to be resourced within the health service.
- All submissions should provide evidence of health service commitment to participation in AuSCR and include a plan for using the collected data for continuous quality improvement.

Exclusions

Only Victorian public hospitals will be considered.

Priority will be given to hospitals not currently participating in AuSCR. Hospitals with high stroke volumes currently submitting data to AuSCR may apply for funding, but will need to clearly outline solutions to current barriers to AuSCR data collection.

Project timeline Phase 2

The Stroke and Cardiac Clinical Registry phase 2 initiative will take the form of a 12-month IT implementation and clinician-training program, commencing in March 2016.

Table 1: Milestones and key dates

Milestone	Date
EOI form released	November 2015
Letter indicating intention to submit an EOI	16 December 2015
Stakeholder workshop	February 2016
Closing date for EOIs	29 February 2016
Services notified of successful application	Plus 2 weeks
Milestone report	June 2016
End-cycle report	By March 2017
Overview and evaluation	April 2017

Project funding

In October 2014 the Department of Health announced the $80,000,000 Innovation Fund. The funds were for significant information technology upgrades to keep health services at the forefront of the latest computer systems. The VSCN received $450,000 from the Fund to support health service uptake and implementation of the AuSCR. The AuSCR and the STROKE 123 initiative are also financial partners. An additional $200,000 has been allocated to this initiative.

$348,577 of these funds have already been allocated, leaving $301,423 available for this phase 2 funding round.

Ethics

This project will require ethics approval for data access and transfer for those sites not currently participating in AuSCR. Health services will be responsible for obtaining ethics approval as required. Governance of this process will be the responsibility of the nominated academic/quality sponsor. AuSCR will provide support for this process but overall responsibility will lie with the health service.

The AuSCR office staff can support and facilitate the ethics application process and ongoing governance applications for participation in the registry. For further information about ethics applications please contact AuSCR Office on 9035 7367 or see www.auscr.com.au/health-professionals/ethics.

Project methodology

Quality indicators

All sites will be required to collect the minimum quality indicator data set that constitutes the AuSCR. If sites wish to use project funds to expand on this data set this will only be considered if the commitment to the AuSCR data collection is clearly established. Funding for the expansion of the data set beyond AuSCR will be the responsibility of the health service.

Reporting requirements

Sites will be expected to submit:

- A project plan and initial audit data using the templates provided;
- A mid-cycle report, comprising:
  - A report, and
  - A brief summary of learnings, issues and solutions to date;
- An end of project report, comprising:
  - A final report, and
  - Project learnings, issues and solutions; and
- A completed project evaluation survey.

Note: templates will be provided for all aspects of the reporting, including the project plan.

Workshops

Purpose

The VSCN will host a workshop in February (date TBC)for health services indicating an intention to make a submission. The workshop will aim to provide:

- Clarification of project requirements and expectations;
- Education on project management and quality improvement methodology;
- Practical support for the ethics application process;
- Sharing of learnings and project outcomes from hospitals currently submitting data to AuSCR;
- A detailed discussion of the IT barriers encountered at one health service;
- A forum to brainstorm project issues and develop solutions; and
- A networking opportunity for participating sites.

Attendance

Workshop attendance by the proposed Project Lead is compulsory. It is expected that at least one to two other key stakeholders will attend, such as the IT Project Officer, Director of Stroke, Nurse Unit Manager, and a member of the hospital quality or redesign team.

Dates

To be confirmed.

Project roles and responsibilities

The VSCN will:

- Provide the agreed funding to participating sites at project commencement;

- Fund an IT/database manager who will coordinate the project across multiple sites until July 2016;
- Coordinate project workshops;
- Provide templates and support for sites drafting the project plan, and project reports;
- Work with participating health services to ensure overall state wide project objectives are met; and
- Share and spread information, results and resources regarding the project.

AuSCR will:

- Provide support for ethics applications and governance processes;
- Provide detailed specifications for data requirements;
- Share learnings from other sites and states;
- Provide detailed instructions for uploading data to the web-based portal; and
- Provide training to individual health services in data collection for AuSCR.
- Support health services in the transition of AuSCR data to the new AusDAT tool

All participating health services will be responsible for:

General responsibilities:

- Working effectively with key stakeholders within their organisation to communicate effectively, develop agreed project plans and deliver the outcomes;
- Regularly communicating through Project Leads about project progress in order to keep projects on track;
- Sharing knowledge and expertise including on data collection and analysis; and
- Meeting all reporting requirements.

Project responsibilities:

Preparation and planning

- Assemble a project team and identify a Project Lead;
- Support the Project Lead to attend the project workshop (release time, travel and accommodation);
- Develop local project reporting lines and timetable within the organisation;
- Gain hospital ethics approval as required; and
- Develop a project plan, based on the provided template.

Implementation of the project

- Complete the project within the specified project timelines;
- Develop a range of communication mechanisms to ensure stroke (and other) staff are aware of and engaged in the project;
- Develop a means to sustain the change; and
- Complete project feedback and reporting.

At the conclusion of the project

- Share results, tools and processes within your health service and with others; and
- Complete a follow up survey and participate in a workshop/interview to assess whether the project has achieved its objectives.

Priority for funding

Priority will be given to submissions from health services:
- Providing acute care to ≥ 100 patients with stroke or TIA, per annum;
- Demonstrating a commitment to ongoing participation in AuSCR and a plan for improvement in the quality of care for patients with stroke based on regular reviews of the local AuSCR data;
- Not currently participating in AuSCR, or exhibiting difficulties participating in AuSCR;
- Providing a clear outline of the work to be completed and the required budget.

State Government Victoria

Expression of Interest (EOI) process

Eligibility

All Victorian public health services providing acute inpatient care for stroke patients are eligible to apply. Applications from health services with multiple campuses will be considered. Participating health services will be selected through an EOI process coordinated by the VSCN. Sites will be selected based on the quality of their application and to ensure appropriate geographical distribution. Preference will be given to sites who manage ≥ 100 stroke patients per annum.

Expectations

Participating hospitals are expected to meet local quality standards in the delivery of care, along with occupational health and safety and workplace relations requirements.

Evaluation of submissions

Sites will be selected for AuSCR support based on the quality of their application, organisational readiness to undertake the project, and to ensure appropriate geographical/organisational and stroke population distribution of participating sites. The project control group will will independently evaluate all submissions. Health services with successful submissions will be informed within 3 weeks of submission.

The following criteria will be used to evaluate submissions and determine successful applicants:

1. Completeness and clarity of the application with respect to meeting the stated objectives, scope and priorities for this project;

2. Demonstrated health service commitment to quality improvement in stroke care;

3. Evidence of appropriate project governance and stakeholder engagement;

4. Ability to complete the project and submit a final report within the timeline; and

5. Potential to sustain changes and maintain participation in the Clinical Registries at the conclusion of the project.

Application process

A letter of intention to submit an EOI describing your health services commitment to participation in AuSCR, your health services stroke capacity and signed by the proposed project clinical lead and ICT lead submitted via email to Paulette Kelly, Victorian Stroke Clinical Network at paulette.kelly@dhhs.vic.gov.au by **Wednesday 16th December 2015**. Health services indicating an intention to make a submission will be requested to attend a workshop in February 2016. The workshop will demonstrate systems developed at phase 1 health services to support AuSCR data collection.

To apply to participate in the project please complete the Expression of Interest Application Form and Risk Register and submit via email to Paulette Kelly, Victorian Stroke Clinical Network at paulette.kelly@dhhs.vic.gov.au.

EOI **applications close at 5pm on Monday 29 February 2016.**

Further information

Please direct enquiries about the project requirements, eligibility, or expectations to:

Paulette Kelly

Victorian Stroke Clinical Network
Email: paulette.kelly@dhhs.vic.gov.au
Phone: 03 9096-1771

Department of Health & Human Services

State Government Victoria

PART B: SPECIFICATIONS AND EVALUATION

Service specifications

- Submissions should address the objectives and priorities described in Part A of this brief.
- A submission pro forma in Word format is attached to this document. Submissions do not need to be on the pro forma but must include all the required information.

Costs and budget

- Costs quoted should be competitive and commensurate with the key activities and outcomes proposed in the submission.
- Costs quoted should be **exclusive** of Goods and Services Tax (GST).

Evaluation of submissions

Although this is not a tender process, the project control group will independently evaluate all submissions. Health services with successful submissions will be informed within 3 weeks of submission.

The following criteria will be used to evaluate submissions and determine successful applicants:

1. Completeness and clarity of the application with respect to meeting the stated objectives, scope and priorities for this project;

2. Demonstrated health service commitment to quality improvement in stroke care;

3. Evidence of appropriate project governance and stakeholder engagement;

4. Ability to complete the project and submit a final report within the timeline; and

5. Potential to sustain changes and maintain participation in the Clinical Registries at the conclusion of the project.

Initially, submissions will be scored against the following scale:

Evaluation	Score
Exceeds all aspects of the selection/evaluation criteria	4
Exceeds some aspects of selection/evaluation criteria (and meets all other aspects of the selection/evaluation criteria)	3
Meets the selection criteria	2
Fails some aspects of the selection criteria	1
Fails all aspects of the selection criteria.	0

PART C: CONDITIONS APPLYING TO THIS SUBMISSION PROCESS

General conditions

- Work on IT changes must commence no later than April 2016 and be completed no later than 12 months from project commencement.
- No additional funds to support ongoing participation in AuSCR
- Funds will not be provided to support ethics committee applications.
- Payment will be cashflowed to successful health services in April 2016, part payments may be made pending the project proposals with subsequent payments according milestone delivery.
- All proposals must have endorsement from the Chief Executive Officer (CEO) or executive delegate.
- Monitoring of project performance will be undertaken through liaison with successful health services. A brief progress report, submitted via email will be required at the mid-point of the project.
- All funded organisations will be expected to produce a final project report detailing the process and outcomes of the funding and detailing the health service plan for sustainability. The report should provide brief information on the user acceptance testing and live data uploads including upload data, number of patients and number of episodes.

State Government Victoria