



Evidence Sources Acute Stroke Clinical Care Standard



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Disclaimer

The Australian Commission on Safety and Quality in Health Care has produced this Evidence Sources document to support the corresponding Clinical Care Standard. The Clinical Care Standard supports the delivery of appropriate care for a defined clinical condition and is based on the best evidence available at the time of development. Healthcare professionals are advised to use clinical discretion and consideration of the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian when applying information contained within the Clinical Care Standard. Consumers should use the information in the Clinical Care Standard as a guide to inform discussions with their healthcare professional about the applicability of the Clinical Care Standard to their individual condition.

Evidence Sources – Acute Stroke Clinical Care Standard

The quality statements for the Acute Stroke Clinical Care Standard were developed in collaboration with the Stroke Clinical Care Standard Topic Working Group and are based on best available evidence.

Literature searches were conducted by Commission staff at different stages of development of the Clinical Care Standard. The initial search took place between March 2013 and August 2013 after the key areas of care for potential quality statements were identified by the Stroke Clinical Care Standard Topic Working Group. A draft evidence summary was prepared which was later reviewed for completeness by the Stroke Clinical Care Standard Topic Working Group. A further search took place between August 2014 and September 2014 to identify any new evidence that may affect the relevance or validity of the final quality statements.

The initial search was aimed at reviewing the evidence-base for each potential quality statement. As set out below, several steps were involved. The first step was to locate national clinical practice guidelines; if relevant, current, based on best available evidence, developed using systematic methods and endorsed by key organisations, they would be the key sources of evidence. The second step was to locate other Australian guidelines, standards, policies, protocols, and international guidelines and standards. The third step was to identify high-level evidence published after the release of the national clinical practice guidelines.

Australian clinical practice guidelines, standards and policies were identified from:

- the clinical practice guideline portal of the National Health and Medical Research Council (NHMRC)
- web sites of professional colleges and organisations
- web sites of state and territory health departments and agencies
- internet search using various search engines .

International clinical practice guidelines were identified by searching:

- guideline clearing houses such as the Agency for Healthcare Research and Quality (AHRQ), and Guidelines International Network (GIN)
- web sites of guideline developers, such as the UK's National Institute for Health and Care Excellence (NICE), Scottish Intercollegiate Guideline Network (SIGN).

Other high-level evidence was identified by searching:

- the Cochrane Collaboration for systematic reviews and meta-analyses
- medical literature databases (Medline, Embase) for systematic reviews and meta-analyses.

A summary of evidence sources for each final quality statement is attached.

Quality Statement 1

A person with suspected stroke is immediately assessed at first contact using a validated stroke screening tool, such as the Face, Arm, Speech and Time (F.A.S.T) test.

EVIDENCE SOURCES

Australian Guideline

National Stroke Foundation. Clinical guidelines for stroke management. Melbourne: NSF, 2010 [cited August 2014]; Available from: <http://strokefoundation.com.au/health-professionals/tools-and-resources/clinical-guidelines-for-stroke-prevention-and-management>

International Guidelines

Intercollegiate Stroke Working Party. National clinical guideline for stroke, 4th edition. London: Royal College of Physicians, 2012 [cited August 2014]; Available from: <http://www.rcplondon.ac.uk/publications/national-clinical-guidelines-stroke>

Jauch EC, Saver JL, Adams HP, et al. Guidelines for the early management of patients with acute ischemic stroke: a guideline for healthcare professionals from the American Heart Association/American Stroke Association. Stroke 2013; 44: 870-947 [cited August 2014]; Available from: <http://stroke.ahajournals.org/content/early/2013/01/31/STR.0b013e318284056a.full.pdf+html>

Additional Sources

National Health and Medical Research Council, Emergency department stroke and transient ischaemic attack care bundle: information and implementation bundle. Melbourne: NHMRC, 2009 [cited August 2014]; Available from: http://www.nhmrc.gov.au/files_nhmrc/publications/attachments/cp116_complete.pdf

Ringleb PA, Boussier M-G, Ford G, et al. European Stroke Organisation (ESO)-Guidelines for the Management of Ischaemic Stroke and Transient Ischaemic Attack 2008. Cerebrovascular Diseases 2008;25: 457-507 [cited August 2014]; Available from: <http://www.karger.com/Article/Pdf/131083>

Quality Statement 2

A patient with ischaemic stroke, for whom reperfusion treatment is clinically appropriate and after brain imaging excludes haemorrhage, is offered a reperfusion treatment in accordance with the settings and timeframes recommended in the *Clinical guidelines for stroke management*.

EVIDENCE SOURCES

Australian Guideline

National Stroke Foundation. Clinical guidelines for stroke management. Melbourne: NSF, 2010 [cited August 2014]; Available from: <http://strokefoundation.com.au/health-professionals/tools-and-resources/clinical-guidelines-for-stroke-prevention-and-management>

International Guidelines

Intercollegiate Stroke Working Party. National clinical guideline for stroke, 4th edition. London: Royal College of Physicians, 2012 [cited August 2014]; Available from: <http://www.rcplondon.ac.uk/publications/national-clinical-guidelines-stroke>

Jauch EC, Saver JL, Adams HP, et al. Guidelines for the early management of patients with acute ischemic stroke: a guideline for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke* 2013;44:870-947[cited August 2014]; Available from: <http://stroke.ahajournals.org/content/early/2013/01/31/STR.0b013e318284056a.full.pdf+html>

Additional Sources

Wardlaw JM, Murray V, Berge E et al. Thrombolysis for acute ischaemic stroke. *Cochrane Database of Systematic Reviews* 2014; 7: CD000213

Emberson J, Lees KR, Lyden P, Blackwell L, Albers G, Bluhmki E, et al. Effect of treatment delay, age, and stroke severity on the effects of intravenous thrombolysis with alteplase for acute ischaemic stroke: a meta-analysis of individual patient data from randomised trials. *Lancet*. 2014. Epub 2014/08/12.

Quality Statement 3	A patient with stroke is offered treatment in a stroke unit as defined in the <i>Acute stroke services framework</i>.
EVIDENCE SOURCES	
Australian Guideline	
National Stroke Foundation. Clinical guidelines for stroke management. Melbourne: NSF, 2010 [cited August 2014]; Available from: http://strokefoundation.com.au/health-professionals/tools-and-resources/clinical-guidelines-for-stroke-prevention-and-management	
International Guidelines	
Intercollegiate Stroke Working Party. National clinical guideline for stroke, 4 th edition. London: Royal College of Physicians, 2012 [cited August 2014]; Available from: http://www.rcplondon.ac.uk/publications/national-clinical-guidelines-stroke	
Jauch EC, Saver JL, Adams HP, et al. Guidelines for the early management of patients with acute ischemic stroke: a guideline for healthcare professionals from the American Heart Association/American Stroke Association. Stroke 2013;44:870-947 [cited August 2014]; Available from: http://stroke.ahajournals.org/content/early/2013/01/31/STR.0b013e318284056a.full.pdf+html	
Ringleb PA, Bousser M-G, Ford G, et al. European Stroke Organisation (ESO)-Guidelines for the Management of Ischaemic Stroke and Transient Ischaemic Attack 2008. Cerebrovascular Diseases 2008;25: 457-507[cited August 2014]; Available from: http://www.karger.com/Article/Pdf/131083	
Additional Sources	
Stroke Unit Trialists' Collaboration. Organised inpatient (stroke unit) care for stroke (Review). Cochrane Database of Systematic Reviews; 2013;9.	
National Stroke Foundation. Acute Stroke Services Framework: NSF; 2011; Available from: http://strokefoundation.com.au/health-professionals/clinical-tools/acute_stroke_framework_services_2011/ .	

Quality Statement 4	A patient's rehabilitation needs and goals are assessed by staff trained in rehabilitation within 24–48 hours of admission to the stroke unit. Rehabilitation is started as soon as possible, depending on the patient's clinical condition and their preferences.
EVIDENCE SOURCES	
Australian Guideline	
National Stroke Foundation. Clinical guidelines for stroke management. Melbourne: NSF, 2010 [cited August 2014]; Available from: http://strokefoundation.com.au/health-professionals/tools-and-resources/clinical-guidelines-for-stroke-prevention-and-management	
International Guideline	
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Quality Statement 5

A patient with stroke, while in hospital, starts treatment and education to reduce their risk of another stroke.

EVIDENCE SOURCES

Australian Guideline

National Stroke Foundation. Clinical guidelines for stroke management. Melbourne: NSF, 2010 [cited August 2014]; Available from: <http://strokefoundation.com.au/health-professionals/tools-and-resources/clinical-guidelines-for-stroke-prevention-and-management>

International Guidelines

Intercollegiate Stroke Working Party. National clinical guideline for stroke, 4th edition. London: Royal College of Physicians, 2012 [cited August 2014]; Available from: <http://www.rcplondon.ac.uk/publications/national-clinical-guidelines-stroke>

Ringleb PA, Boussier M-G, Ford G, et al. European Stroke Organisation (ESO)-Guidelines for the Management of Ischaemic Stroke and Transient Ischaemic Attack 2008. Cerebrovascular Diseases 2008;25: 457-507 [cited August 2014]; Available from: <http://www.karger.com/Article/Pdf/131083>

Quality Statement 6	A carer of a patient with stroke is given practical training and support to enable them to provide care, support and assistance to a person with stroke.
EVIDENCE SOURCES	
Australian Guideline	
National Stroke Foundation. Clinical guidelines for stroke management. Melbourne: NSF, 2010 [cited August 2014]; Available from: http://strokefoundation.com.au/health-professionals/tools-and-resources/clinical-guidelines-for-stroke-prevention-and-management	
International Guideline	
Intercollegiate Stroke Working Party. National clinical guideline for stroke, 4 th edition. London: Royal College of Physicians, 2012 [cited August 2014]; Available from: http://www.rcplondon.ac.uk/publications/national-clinical-guidelines-stroke	

Quality Statement 7

Before a patient with stroke leaves the hospital, they are involved in the development of an individualised care plan that describes the ongoing care that the patient will require after they leave hospital. The plan includes rehabilitation goals, lifestyle modifications and medicines needed to manage risk factors, any equipment they need, follow-up appointments, and contact details for ongoing support services available in the community. This plan is provided to the patient before they leave hospital, and to their general practitioner or ongoing clinical provider within 48 hours of discharge.

EVIDENCE SOURCES

Australian Guideline

National Stroke Foundation. Clinical guidelines for stroke management. Melbourne: NSF, 2010 [cited August 2014]; Available from: <http://strokefoundation.com.au/health-professionals/tools-and-resources/clinical-guidelines-for-stroke-prevention-and-management>

International Guideline

Intercollegiate Stroke Working Party. National clinical guideline for stroke, 4th edition. London: Royal College of Physicians, 2012 [cited August 2014]; Available from: <http://www.rcplondon.ac.uk/publications/national-clinical-guidelines-stroke>