# **Complete Summary**

#### **GUIDELINE TITLE**

Organisation of care. In: Clinical guidelines for stroke rehabilitation and recovery.

## **BIBLIOGRAPHIC SOURCE(S)**

Organisation of care. In: National Stroke Foundation. Clinical guidelines for stroke rehabilitation and recovery. Melbourne (Australia): National Stroke Foundation; 2005 Sep 8. p. 7-10.

#### **GUIDELINE STATUS**

This is the current release of the guideline.

# **COMPLETE SUMMARY CONTENT**

SCOPE

METHODOLOGY - including Rating Scheme and Cost Analysis RECOMMENDATIONS EVIDENCE SUPPORTING THE RECOMMENDATIONS BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS QUALIFYING STATEMENTS IMPLEMENTATION OF THE GUIDELINE INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES IDENTIFYING INFORMATION AND AVAILABILITY

#### SCOPE

## **DISEASE/CONDITION(S)**

Stroke

**DISCLAIMER** 

Consequences of stroke

Note: While stroke is discussed broadly in these guidelines, it is recognised that there are different types of stroke. It is noted that haemorrhagic stroke (particularly subarachnoid haemorrhage) is often excluded from some studies. Furthermore the prevalence of ischaemic stroke has meant that the evidence is predominantly derived from, and focussed on, this type of stroke.

# **GUIDELINE CATEGORY**

Counseling Evaluation Management Rehabilitation

#### **CLINICAL SPECIALTY**

Family Practice

Geriatrics

Internal Medicine

Neurology

Nursing

Nutrition

Ophthalmology

Optometry

Pharmacology

Physical Medicine and Rehabilitation

Preventive Medicine

Psychiatry

Psychology

# **INTENDED USERS**

Advanced Practice Nurses

Allied Health Personnel

Dietitians

Emergency Medical Technicians/Paramedics

Health Care Providers

Health Plans

Hospitals

Nurses

Occupational Therapists

**Patients** 

**Pharmacists** 

Physical Therapists

Physician Assistants

**Physicians** 

**Podiatrists** 

Psychologists/Non-physician Behavioral Health Clinicians

Respiratory Care Practitioners

Social Workers

Speech-Language Pathologists

# **GUIDELINE OBJECTIVE(S)**

- To provide a series of evidence-based recommendations related to stroke rehabilitation and recovery
- To help health care workers improve the quality and effectiveness of the care they provide to stroke patients

# **TARGET POPULATION**

Adults hospitalized with stroke after the acute phase who require rehabilitation

## INTERVENTIONS AND PRACTICES CONSIDERED

- 1. Inpatient stroke unit care
- 2. Use of care pathways
- 3. Use of stroke care coordinator
- 4. Early supported discharge
- 5. Community rehabilitation
  - Center-based
  - Community-based
- 6. Long-term care planning
  - Discharge destination
  - Respite care
- 7. Ongoing review by stroke team following discharge

### **MAJOR OUTCOMES CONSIDERED**

- Rate of early supported discharge
- Rate of development of complications
- Rate of hospital readmission
- Rate of rehabilitation
- Time to rehabilitation
- Length of access to rehabilitation
- Mortality

#### **METHODOLOGY**

# METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

## DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

## **Systematic Searches and Literature Review**

The systematic identification of relevant literature was conducted according to National Health and Medical Research Council (NHMRC) standards between May and October 2004.

## **Question Formulation**

Clinical questions were developed by the Expert Working Group (EWG) to address interventions relevant to stroke rehabilitation and recovery. The questions generally queried the effects of a specific intervention and were developed in three parts: the intervention, the population and the outcomes. An example is "What is the effect of anticonvulsant therapy on reducing seizures in people with post-stroke seizures?" In this example, anticonvulsant therapy is the intervention, reduction of post-stroke seizures is the outcome, and the population is people with post-stroke seizures.

## **Finding Relevant Studies**

To avoid duplication, the systematic literature search was undertaken in conjunction with the Stroke Therapy Evaluation Program (STEP) team from Scotland, who have been instrumental in identifying, appraising and collating the evidence for stroke care. The STEP team have developed and maintain 'effectivestrokecare.org', a fully indexed, searchable, web-enabled database of evidence for stroke management. STEP works in conjunction with the Cochrane Stroke Group.

Key words based on the components of the formulated question were used to guide searching. The search strategies were developed in partnership with the STEP team to ensure comparability of the outcomes of the searches. Relevant systematic reviews were initially identified. Where no systematic review was found, primary studies were searched. STEP was initially used for each question although additional searches were required. In these cases standardised methodological filters were used for MEDLINE, CINAHL or psycINFO electronic databases. Updated searches were conducted prior to the end of the consultation period (early February, 2005), with significant literature included in order to provide the most up-to-date evidence.

# **Cost Analysis**

Literature regarding the economic impact of stroke rehabilitation and recovery has been identified during the systematic development process of these guidelines. It is noted that the vast majority of the studies identified were conducted overseas and related to cost descriptions of individual factors or interventions, rather than economic evaluations comparing both the costs and effects of interventions.

## **NUMBER OF SOURCE DOCUMENTS**

Not stated

# METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus
Weighting According to a Rating Scheme (Scheme Given)

#### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

### **Levels of Evidence**

I	Evidence obtained from a systematic review of all relevant randomised controlled trials.
II	Evidence obtained from at least one properly designed randomised controlled trial.
III- 1	Evidence obtained from well-designed pseudo-randomised controlled trials (alternate allocation or some other method).
III- 2	Evidence obtained from comparative studies with concurrent controls and allocation randomised (cohort studies), case-control studies, or interrupted

	time-series with group.
	Evidence obtained from comparative studies with historical control, two or more studies, or interrupted time series without a parallel control group.
IV	Evidence obtained from case series, either post-test or pre-test and post-test.

#### **Clinical Practice Points**

**CPP** Recommended best practise based on clinical experience and expert opinion.

#### METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses Systematic Review with Evidence Tables

#### **DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE**

# **Appraising and Selecting Studies**

The Stroke Therapy Evaluation Program (STEP) team and the Expert Working Group (EWG) critically appraised the literature using a standardised checklist consistent with National Health and Medical Research Council (NHMRC) standards. The strength (study design and issues of quality), size of effect, relevance, applicability (benefits/harms) and generalisability were all considered. Examples of completed checklists can be found on the STEP website (<a href="https://www.effectivestrokecare.org">www.effectivestrokecare.org</a>). Where Level I or II evidence was unavailable the search was broadened to include lower levels of evidence.

#### METHODS USED TO FORMULATE THE RECOMMENDATIONS

**Expert Consensus** 

# DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The Clinical Guidelines for Stroke Rehabilitation and Recovery have been developed according to processes prescribed by the National Health and Medical Research Council (NHMRC) under the direction of an interdisciplinary Expert Working Group (EWG) (see Appendix 1 in the original guideline document). Consultation from other individuals and organisations was also included in the development process in line with NHMRC standards. The EWG has worked through a collaborative process, and networked with a number of formal and informal groups and individuals from around Australia and overseas.

#### **Consumer Involvement**

Consumer input has been a key component in the development process. Three consumers were included in the EWG and have been involved in every phase of the development process, including the development of the clinical questions to

guide the literature searching. In addition a number of consumer organisations participated in the consultation process including the State Stroke Associations, the Health Consumer Council of WA and the Carers Australia.

#### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

The level of the evidence (see "Rating Scheme for the Strength of the Evidence") highlights the methodology of the studies contributing to the evidence that underpins the recommendations. However this does not always translate into an equivalent strength of the recommendation for two reasons: studies vary in quality and different studies may produce conflicting results. The Expert Working Group (EWG) has therefore used 'may' or 'should' to indicate the strength of the recommendation. 'May' is used when the evidence is not clear cut or when there is a wide range of opinions relating to a specific intervention; 'should' is used when there is clear outcomes of all relevant research or a narrow range of opinion. Key references for each guideline are also included. Where no level I, II, III or IV evidence was available but there was sufficient consensus of the EWG, clinical practice points have been provided.

#### **COST ANALYSIS**

Section 5 *Resource Implications* in the original guideline document outlines the economic evidence for aspects of stroke recovery and rehabilitation. The section aims to be useful in guiding decisions about the structure of services and may be used by those who plan or organise care.

#### Stroke Unit Care

One systematic review identified three studies comparing the costs and outcomes of stroke units to that on a general ward. All three studies were based in Europe (United Kingdom, Sweden and Germany) and included costs of community and outpatient care. All three studies found modest cost savings (3-11%) using stroke unit care, however the figures failed to reach significance. The authors concluded that there was "some" evidence for the costs to be at least equivalent to conventional care.

Two subsequent published studies were also identified. One modelling study used the Markov model to predict the medium-term (5 year) impact of setting up stroke units in France. The study estimated a 12% increase in costs involved in setting up and running stroke units compared with conventional care. Furthermore, the study predicted an incremental cost-effectiveness ratio (ICER) for stroke units of 1,359 pounds per year of life gained without disability. The authors suggested this was well within the threshold (53,400 pounds) recognised by the international scientific community. However, only running costs were involved in the evaluation and further costs, such medical imaging, have not been considered.

The other subsequent trial-based study assessed three different models of providing coordinated stroke care compared to routine care in the Netherlands. Organised care was found be offered at similar costs while achieving improved health outcomes. Caution is required to apply the results of this study, as the health system model is significantly different to the Australian health care system.

In Australia, one researcher has demonstrated that when modelled over the lifetime of a cohort of first-ever stroke patients, stroke units when compared to conventional care produced considerable gains in terms of health benefits with these additional benefits entailing additional costs. There was an additional lifetime cost (in Australian dollars) of AUD\$1,288 per disability adjusted life years (DALY) recovered, or alternatively AUD\$20,172 per stroke averted or AUD\$13,487 per premature death averted. It was determined that the stroke unit intervention was cost-effective given the small additional costs per extra unit of benefit gained.

Currently only 19% of public hospitals report providing stroke unit care. 403 Stroke units improve outcomes for people with stroke (see section 1.1.1 in the original guideline document). Furthermore, the cost of providing stroke unit care once set up is only slightly higher, or at least equivalent, to general ward care. Although this literature does not specifically indicate the real costs of setting up a stroke unit, there is evidence that health services should be organised to provide stroke unit care and that considerable gains in terms of health benefits could be achieved.

## Early Supported Discharge (ESD)

One systematic review identified eight trials evaluating the economic implications of ESD compared with conventional care. Two studies were conducted in Australia with the remainder from Hong Kong (one), Canada (one), Sweden (two) and the United Kingdom (two). All but one of the studies compared ESD using homebased services compared to conventional services (noted to be either hospital rehabilitation or mix of hospital and community rehabilitation). Of the eight studies included, six studies were noted as having medium or high methodological quality. These studies reported a trend for reduced costs of between 4-30% with ESD, however this cost saving was found to be statistically significant in only one of the six studies. The authors concluded that there was "moderate" evidence that ESD services provided care at modestly lower total costs than conventional care. However the heterogeneity of the ESD care provided was noted along with the uncertain impact of ESD care on hospital readmission and informal carers. The review also concurred with the previous summary (see section 1.2.1 in the original guideline document) that ESD favours stroke survivors with mild or moderate disability.

One subsequent UK trial-based study assessed the outcomes and costs of early domiciliary care compared to hospital based care. A societal perspective for costs was used based on 1997/8 prices. Mean costs for health care and social care costs over 12 months were 6,840 pounds for domiciliary care compared to 11,450 pounds for stroke units. In terms of Quality Adjusted Life Years (QALYs) these were less for domiciliary care when compared to stroke unit care (0.221 versus 0.297). Cost effectiveness was calculated using incremental cost-effectiveness ratios (ICERs) for avoiding an additional 1% of deaths or institutionalisation that ranged from 496 pounds (without informal costs) to 1,033 pounds (with highest estimate of informal costs) for stroke unit care compared with domiciliary care. Based on each additional QALY gained the costs ranged from 64,097 pounds to 136,609 pounds. Hence in this study, health outcomes were lower using this ESD model but ESD was found to be cheaper.

Data specific to the Australian context was included in the previous review and warrants further discussion. The data from a meta analysis of ESD (12 trials, N=1277, search date March 2001) was used to apply costs from the Australian health system. Hospital costs were taken from the Australian National Hospital Cost Data for 1998/1999, domiciliary rehabilitation costs were taken from a single study of domiciliary rehabilitation care (Adelaide stroke study) and costs related to other community services were taken from the Australian Department of Health and family Services Report, 1996/1997. Using a cost minimisation analysis (i.e., health outcomes were found to be equivalent) ESD was found to be 15% lower regarding overall mean costs (in Australian dollars (\$A16,016 versus \$18,350). Cost estimates were based over a 12-month period and did not include any indication of set up costs. It was highlighted that the included studies were all based in urban centres confirming the view that ESD should only be considered where appropriate resources are available to provide effective domiciliary care. A small shift of costs from the secondary sector to primary section was noted (more general practitioner [GP] visits with ESD care) however no difference was found in the cost of routine community and outpatient services. Overall ESD was found to provide a cost saving alternative to conventional care and the authors concluded that it therefore should be considered for certain subgroups of people with stroke.

The above studies provide limited evidence regarding the cost-effectiveness of ESD in Australia. It can be concluded from these studies that ESD may produce equivalent outcomes at potentially a reduced cost for urban settings.

# **Community Rehabilitation**

Economic evaluations of community rehabilitation are limited to cost-description studies. One systematic review identified four trials comparing different models of community care and found conflicting results. Three studies were undertaken in the United Kingdom and one in Sweden. Two studies comparing home-based rehabilitation to a day hospital or outpatient rehabilitation models reported consistent increases in costs for home-based care between 26-27%; however, this increase was not found to be significant. Another study found physiotherapy services were 38% lower (statistically significant) for home-based care compared to a day hospital. The fourth study found community rehabilitation (home-based) was of similar costs in the first twelve months when compared to hospital rehabilitation. Two included studies noted that the cost burden was shifted from hospital services to home help or social services. The authors of the review, however, stated that no conclusions could be drawn.

From this literature it is not possible to make conclusions regarding the cost effectiveness of any one model of community rehabilitation and whether or not any additional costs that may be incurred result in more health gains than current practice.

#### **METHOD OF GUIDELINE VALIDATION**

External Peer Review Internal Peer Review

# **DESCRIPTION OF METHOD OF GUIDELINE VALIDATION**

Public consultation was undertaken, with the draft document circulated to relevant professional bodies, interested individuals, consumers and consumer organisations. A public notice was also published in *The Australian* newspaper. Feedback received during consultation was considered by the Expert Working Group (EWG) and the draft document amended. A formal letter of reply was sent to all individuals and organisations that provided feedback during this period outlining the response taken by the EWG.

The outcomes of the consultation period suggested:

- Greater focus on person-centred care
- Greater focus on rural and remote issues
- Minor clarification on relevant literature
- Revision of the roles of stroke team members

Many points made during consultation related to grammatical or semantic interpretations and the EWG was able to make changes to correct or clarify certain points. In one instance, an additional study was identified. Overall the consultation process provided valuable assistance by increasing the accuracy and comprehensiveness of the document.

These guidelines were approved by the National Health and Medical Research Council at its 158th Session on 8 September 2005, under section 14A of the National Health and Medical Research Council Act 1992.

#### RECOMMENDATIONS

#### **MAJOR RECOMMENDATIONS**

The levels of evidence supporting the recommendations (I-IV) and clinical practice points (CPP) are defined at the end of the "Major Recommendations" field.

## **Stroke Unit Care**

All people admitted to hospital with stroke and who require rehabilitation should be treated in a comprehensive or rehabilitation stroke unit with an interdisciplinary team. (**Level I**, [Stroke Unit Trialists Collaboration, 2001])

If no stroke unit is available, consideration should be given to transferring the person with stroke (when medically stable) to the nearest stroke unit, or a hospital that most closely meets the criteria for stroke unit care. **(CPP)** 

### Inpatient Integrated Care Pathways

There is insufficient evidence to support recommendations about routine use of care pathways. If used, care pathways should be flexible enough to meet the heterogeneous needs of people with stroke. (**CPP**)

#### **Inpatient Stroke Care Coordinator**

A stroke coordinator may be used to foster coordination of services and assist in discharge planning. (**CPP**)

# **Early Supported Discharge**

Where comprehensive interdisciplinary community rehabilitation services and carer support services are available, early supported discharge services may be provided for people with mild to moderate disability. (**Level I**, [Langhorne et al., 2005; Teasell et al., 2003; Anderson et al., 2002; Early Supported Discharge Trialists, 2002])

# **Community Rehabilitation**

Rehabilitation for people with stroke in the community is equally effective if delivered in the hospital via outpatients or day hospital, or in the community. (**Level I,** [Outpatient Service Trialists, 2002; Britton & Andersson, 2000; Forster, Young, & Langhorne, 1999])

### **Discharge Destination**

Decisions about discharge destination (home versus residential care) should be made in the context of availability of supportive services and the wishes of the stroke survivor and carer. (**CPP**)

# **Respite Care**

People with stroke and their carers should have access to respite care. This may be provided in their own home or an institution. (**CPP**)

# **Ongoing Review**

People with stroke should have regular and ongoing review by a member of a stroke team, including at least one specialist medical review following discharge. (**CPP**)

#### **Definitions:**

# **Levels of Evidence**

I	Evidence obtained from a systematic review of all relevant randomised controlled trials.
II	Evidence obtained from at least one properly designed randomised controlled trial.
III- 1	Evidence obtained from well-designed pseudo-randomised controlled trials (alternate allocation or some other method).
III- 2	Evidence obtained from comparative studies with concurrent controls and allocation randomised (cohort studies), case-control studies, or interrupted time-series with group.

- Evidence obtained from comparative studies with historical control, two or more studies, or interrupted time series without a parallel control group.
- **IV** Evidence obtained from case series, either post-test or pre-test and post-test.

### **Clinical Practice Points**

**CPP** Recommended best practise based on clinical experience and expert opinion.

## **CLINICAL ALGORITHM(S)**

None provided

## **EVIDENCE SUPPORTING THE RECOMMENDATIONS**

#### REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

#### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

#### **POTENTIAL BENEFITS**

- Appropriate planning and coordination of services for, and provision of rehabilitation services for hospitalized acute stroke patients
- Reduction in the inpatient length of stay and adverse events (e.g., readmission rates)
- Increased likelihood of being independent and living at home

## **POTENTIAL HARMS**

Risks relating to carer strain might be expected with early supported discharge, but there is too little evidence to demonstrate whether or not this is the case.

## **QUALIFYING STATEMENTS**

# **QUALIFYING STATEMENTS**

 This document is a general guide to appropriate practice, to be followed subject to the clinician's judgement and the patient's preference in each individual case. The guidelines are designed to provide information to assist decision-making and are based on the best evidence available at the time of publication. • The guidelines should not be seen as an inflexible recipe for stroke care; rather, they provide a framework that is based on the best available evidence that can be adapted to local needs, resources and individual circumstances.

## **IMPLEMENTATION OF THE GUIDELINE**

#### **DESCRIPTION OF IMPLEMENTATION STRATEGY**

Reviewing the evidence and developing evidence-based recommendations for care involves only the first steps to ensuring that evidence-based care is available. Following publication of the *Clinical Guidelines for Stroke Rehabilitation and Recovery*, the guidelines must be disseminated to all those who provide care of relevance to stroke rehabilitation and recovery, who may then identify ways in which the guidelines may be taken up at a local level.

Strategies by which guidelines may be disseminated and implemented include:

- Distribution of education materials for example: mailing of guidelines to members of the target audience.
- Educational meetings for example: interdisciplinary conferences.
- Educational outreach visits for example: one on one visits by trained educators for short periods of time or visits by trained educators for longer periods of time; local opinion leaders (with brief training, they may provide covering letters for guidelines mailed to colleagues or host meetings; with training for longer periods of time, they may head task forces, etc).
- Audit and feedback for example: regular, frequent e-mails to clinicians with computer generated reports on compliance with guidelines.
- Reminders for example: computer generated alerts and flags.

A systematic review of dissemination and implementation strategies found that there was insufficient evidence of the effectiveness of these interventions. Methodological weaknesses, poor reporting of the study setting and uncertainty about the generalisability of the results were the prime reasons that made interpretation difficult. The review also indicated that single interventions may or may not be as effective as multifaceted interventions and there is no relationship between the number of interventions and the effect of the interventions.

All of the above strategies may therefore be considered and used where appropriate for implementation of the *Clinical Guidelines for Stroke Rehabilitation and Recovery*. Health professionals are encouraged to identify the barriers and facilitators to evidence-based care within their environment when determining the best strategy for local needs. Implementation of the Guidelines may be supported by existing resources and networks. These include:

- The Stroke Services in Australia report, which outlines how stroke services may be organised in different parts of Australia and the resources that may be needed to do this (available at <a href="https://www.strokefoundation.com.au">www.strokefoundation.com.au</a>).
- The Stroke Care Pathway, which provides a checklist addressing key processes of care as outlined in both documents (Acute, and Rehabilitation and Recovery) and a guide to developing local protocols.

• The Australasian Stroke Unit Network: comprising health professionals from acute and post-acute settings across Australasia from different disciplines who are interested in stroke care (see <a href="https://www.asun.com.au">www.asun.com.au</a>).

The following principles, relating to the *Clinical Guidelines for Stroke Rehabilitation* and *Recovery*, are essential to the planning and delivery of rehabilitation and recovery services and should be considered when implementing the evidence in a local setting:

- Focus on and respect for the individual needs of each person with stroke, with care tailored specifically to those needs.
- Inclusion of the person with stroke and, where relevant, the family in the interdisciplinary team and, in particular, in setting realistic and achievable rehabilitation goals in order to facilitate informed decision-making, empowerment, autonomy and person-centred care.
- Recognition that the person with stroke is part of a family and a community, with all the demands, needs and strengths that this entails.
- Respect for cultural and other differences and the different service delivery needs that these may entail. Care, and particularly information, should be provided using an appropriate language and format.
- Equity of access, across geographic, cultural, linguistic and socioeconomic groups, to the full range of rehabilitation services.
- Continuity of care across acute, rehabilitation and community services, to enable each person with stroke to move smoothly from one to another.

See the original guideline document for further discussion of the implications for service equity.

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

### **IMPLEMENTATION TOOLS**

Patient Resources Quick Reference Guides/Physician Guides

For information about <u>availability</u>, see the "Availability of Companion Documents" and "Patient Resources" fields below.

# INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

# **IOM CARE NEED**

End of Life Care Getting Better Living with Illness

#### **IOM DOMAIN**

#### **IDENTIFYING INFORMATION AND AVAILABILITY**

# **BIBLIOGRAPHIC SOURCE(S)**

Organisation of care. In: National Stroke Foundation. Clinical guidelines for stroke rehabilitation and recovery. Melbourne (Australia): National Stroke Foundation; 2005 Sep 8. p. 7-10.

#### **ADAPTATION**

Not applicable: The guideline was not adapted from another source.

#### **DATE RELEASED**

2005 Sep 8

# **GUIDELINE DEVELOPER(S)**

National Stroke Foundation (Australia) - Private Nonprofit Organization

# **SOURCE(S) OF FUNDING**

Australian Government Department of Health and Ageing

#### **GUIDELINE COMMITTEE**

**Expert Working Group** 

#### **COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE**

Group Members: Dr Michael Pollack (Co-chair) Director, Hunter Stroke Service; Rehabilitation Physician, John Hunter Hospital; Dr Erin Lalor (Co-chair) Chief Executive Officer, National Stroke Foundation; Dr Louise Ada, Physiotherapist, University of Sydney; Prof Justin Beilby, Professor of General Practice, University of Adelaide; Dr Janice Collier, Physiotherapist, National Stroke Research Institute; Ms Cindy Dilworth, Speech Pathologist, Royal Brisbane and Women's Hospital; Ms Louise Gustafsson, Occupational Therapist, University of Queensland; Mr Kelvin Hill, Project Manager, National Stroke Foundation; Ms Louise Jordan, Manager of Clinical Service Delivery, Hunter Stroke Service; Dr Sharon Kilbreath, Physiotherapist, University of Sydney; Prof Richard Lindley, Professor of Geriatric Medicine, University of Sydney; Geriatrician, Westmead Hospital; Mr Ian Murdoch, Consumer Representative, Queensland Stroke Association; Mr John Norton, Consumer Representative, Bendigo; Ms Debra O'Conner, Director of Health Promotion, Dianella Community Health; Ms Jane Phelan, Consumer Representative, Melbourne; Ms Jenny Pilgram, Nurse Educator, Royal District Nursing Service, Melbourne; Dr Rene Pols, Deputy Director of Human Behaviour

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# FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

# **ENDORSER(S)**

Australasian Faculty of Rehabilitation Medicine - Professional Association
Australasian Stroke Unit Network - Professional Association
Australian College of Rural and Remote Medicine - Professional Association
Australian Physiotherapy Association - Medical Specialty Society
Australian Society for Geriatric Medicine - Medical Specialty Society
Dietitians Association of Australia - Professional Association
Occupational Therapy Australia - Professional Association
Royal Australian and New Zealand College of Psychiatrists - Professional
Association
Royal Australian and New Zealand College of Radiologists - Professional
Association
Royal College of Nursing - Professional Association
Speech Pathology Australia - Medical Specialty Society
Stroke Society of Australasia - Disease Specific Society

## **GUIDELINE STATUS**

This is the current release of the guideline.

#### **GUIDELINE AVAILABILITY**

Electronic copies: Available in Portable Document Format (PDF) from the <u>National Stroke Foundation (Australia) Web site</u>.

Print copies: Available from the National Stroke Foundation (Australia), Level 7, 461 Bourke Street, Melbourne Victoria 3000, Australia.

# **AVAILABILITY OF COMPANION DOCUMENTS**

The following are available:

- Physiotherapy. Concise guidelines. Stroke rehabilitation and recovery.
   Melbourne (Australia): National Stroke Foundation; 2008 Mar. 4 p.
- Speech pathology. Concise guidelines. Stroke rehabilitation and recovery. Melbourne (Australia): National Stroke Foundation; 2005 2 p.
- Occupational therapy. Concise guidelines. Stroke rehabilitation and recovery. Melbourne (Australia): National Stroke Foundation; 2008 Mar. 4 p.
- Dietetics. Concise guidelines. Stroke rehabilitation and recovery. Melbourne (Australia): National Stroke Foundation; 2008 Mar. 2 p.

Electronic copies: Available in Portable Document Format (PDF) from the <u>National Stroke Foundation (Australia) Web site</u>.

Print copies: Available from the National Stroke Foundation (Australia), Level 7, 461 Bourke Street, Melbourne Victoria 3000, Australia.

#### **PATIENT RESOURCES**

The following are available:

- Driving after stroke. Fact sheet 1. Melbourne (Australia): National Stroke Foundation; 2008 July. 4 p.
- Sexuality after stroke. Fact sheet 2. Melbourne (Australia): National Stroke Foundation: 2008 July. 2 p.
- Depression after stroke. Fact sheet 3. Melbourne (Australia): National Stroke Foundation; 2008 July. 2 p.
- Fatigue after stroke. Fact sheet 4. Melbourne (Australia): National Stroke Foundation; 2008 July. 2 p.
- Medication after stroke. Fact sheet 5. Melbourne (Australia): National Stroke Foundation; 2008 July. 4 p.
- Thinking and perception after stroke. Fact sheet 6. Melbourne (Australia): National Stroke Foundation; 2008 July. 4 p.
- Diet after stroke. Fact sheet 7. Melbourne (Australia): National Stroke Foundation; 2008 July. 2 p.
- Movement and exercise after stroke. Fact sheet 8. Melbourne (Australia): National Stroke Foundation; 2008 July. 2 p.
- Communication after stroke. Fact sheet 9. Melbourne (Australia): National Stroke Foundation; 2008 Sept. 4 p.

Electronic copies: Available in Portable Document Format (PDF) from the <u>National Stroke Foundation (Australia) Web site.</u>

Print copies: Available from the National Stroke Foundation (Australia), Level 7, 461 Bourke Street, Melbourne Victoria 3000, Australia.

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#### **NGC STATUS**

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