Clinical Guidelines for Stroke Management 2017

Summary – Psychology

This summary is a quick reference to the recommendations in the *Clinical Guidelines for Stroke Management 2017* most relevant to psychology.

This psychology summary is relevant for: psychologists, clinical psychologists, psychiatrists, and neuropsychologists.

While this summary focuses on relevant aspects of care, stroke care is the most effective when all members of an interdisciplinary team are involved. For the comprehensive set of recommendations that covers the whole continuum of stroke care, please refer to further information on InformMe https://informme.org.au/en/Guidelines/Clinical-Guidelines-for-Stroke-Management-2017.

The *Clinical Guidelines for Stroke Management 2017* is an update of the previous clinical guidelines published in 2010 and is based on the best evidence available. The new Clinical Guidelines use an internationally recognised guideline development approach called GRADE (Grading of Recommendations Assessment, Development and Evaluation) and an innovative guideline development and publishing platform known as MAGICapp (M**a**king Grade the Irresistible Choice). GRADE ensures a systematic process in developing recommendations, which are based on the balance of benefits and harms, quality of evidence, patient values, and resource considerations. MAGICapp enables transparent display of this process and access to additional practical information for recommendation implementation.

Recommendations

Each recommendation is given a strength based on GRADE. GRADE methodology includes four factors to guide the development of a recommendation and determine the strength of that recommendation:

- The balance between desirable and undesirable consequences
- Confidence in the estimates of effect (quality of evidence)
- Confidence in values and preferences and their variability (clinical and consumer preferences)
- Resource use (cost and implementation considerations).

The GRADE process uses only two categories for the strength of recommendations, based on how confident the guideline developers are in that the "desirable effects of an intervention outweigh undesirable effects […] across the range of patients for whom the recommendation is intended" (GRADE Handbook):

- **Strong recommendations**: where guideline developers are certain that the evidence supports a clear balance towards either desirable or undesirable effects; or
- **Weak recommendations**: where guideline developers are not as certain about the balance between desirable and undesirable effects as the evidence base isn't as robust.

These strong or weak recommendations can either be for or against an intervention. If the recommendation is AGAINST an intervention this means it is recommended NOT to do that intervention.

Consensus-based recommendations: statements have been developed based on consensus and expert opinion (guided by any underlying or indirect evidence) for topics where there is either a lack of evidence or insufficient quality of evidence on which to base a recommendation but it was felt that advice should be made.

Practice points: for questions outside the search strategy (i.e. where no systematic literature search was conducted), additional considerations are provided.

Key points

- A psychologist, clinical psychologist, psychiatrist and/or neuropsychiatrist are important members of the interdisciplinary stroke care team.

- Recent evidence has resulted in several changes in the 2017 recommendations, for example, stroke survivors with suspected altered mood (e.g. depression, anxiety, emotional lability) should be assessed by trained personnel using a standardised and validated scale, and diagnosis should only be made following clinical interview.

- Impairments (such as sensorimotor and cognition) and activities (such as physical activity and activities of daily living) should be assessed and rehabilitation commenced promptly (within 24-48 hours of admission), using interventions proven effective for the patient's conditions. Any stroke patient with identified rehabilitation needs should be referred to a rehabilitation service.

- Management of secondary complications resulting from primary impairments should commence in the acute phase, as well as being considered during sub-acute and long-term care. This includes prevention, early detection, and reduction strategies.

- Stroke survivors and their carers should be offered information, education, support and training throughout all phases of post-stroke recovery in order to enable safe discharge and successful reintegration into the community.

Recommendations are presented for the 2010 and 2017 versions to note changes easily, and are also presented in Chapter order for easier reference to the relevant section of the full Clinical Guidelines.

2010 Clinical Guidelines	2017 Clinical Guidelines
Chapter 4: Acute medical and surgical management	Chapter 3 of 8: Acute medical and surgical management
	Stroke unit care
	Strong recommendation All stroke patients should be admitted to hospital and be treated in a stroke unit with an interdisciplinary team.
	Assessment for rehabilitation
	Info Box Practice points New • Every stroke patient should have their rehabilitation needs assessed within 24–48 hours of admission to the stroke unit by members of the interdisciplinary team, using the Assessment for Rehabilitation Tool. • Any stroke patient with identified rehabilitation needs should be referred to a rehabilitation service. • Rehabilitation service providers should document whether a stroke patient has rehabilitation needs and whether appropriate rehabilitation services are available to meet these needs.
	Palliative care
	Strong recommendation Stroke patients and their families/carers should have access to specialist palliative care teams as needed and receive care consistent with the principles and philosophies of palliative care.

	Practice statement Consensus-based recommendations • For patients with severe stroke who are deteriorating, a considered assessment of prognosis or imminent death should be made. • A pathway for stroke palliative care can be used to support stroke patients and their families/carers and improve care for people dying after stroke.
Chapter 5: Secondary prevention	Chapter 4 of 8: Secondary prevention
Lifestyle modification	Lifestyle modification
Every stroke patient should be assessed and informed of their risk factors for a further stroke and possible strategies to modify identified risk factors. The risk factors and interventions include: • stopping smoking: nicotine replacement therapy, bupropion or nortriptyline therapy, nicotine • receptor partial agonist therapy and/or behavioural therapy • improving diet: a diet low in fat (especially saturated fat) and sodium but high in fruit and vegetables • increasing regular exercise • avoiding excessive alcohol (i.e. no more than two standard drinks per day).	**Info Box Practice point Updated** All people with stroke or TIA (except those receiving palliative care) should be assessed and informed of their risk factors for recurrent stroke and strategies to modify identified risk factors. This should occur as soon as possible and prior to discharge from hospital.
Interventions should be individualised and delivered using behavioural techniques such as educational or motivational counselling.	

	Smoking
	Info Box **Practice point** **New** People with stroke or TIA who smoke should be advised to stop and assisted to quit in line with existing guidelines, such as Supporting smoking cessation: a guide for health professionals.
	Alcohol
	Info Box **Practice point** **New** People with stroke or TIA should be advised to avoid excessive alcohol consumption (>2 standard drinks per day) in line with the Australian Guidelines to Reduce Health Risks from Drinking Alcohol.
Adherence to pharmacotherapy	**Adherence to pharmacotherapy**
Interventions to promote adherence with medication regimes are often complex and should include combinations of the following: • reminders, self-monitoring, reinforcement, counselling, family therapy, telephone follow-up, supportive care and dose administration aids • information and education in hospital and in the community.	**Weak recommendation** **Updated** Interventions to promote adherence with medication regimens may be provided to all stroke survivors. Such regimens may include combinations of the following: - reminders, self-monitoring, reinforcement, counselling, motivational interviewing, family therapy, telephone follow-up, supportive care and dose administration aids - development of self-management skills and modification of dysfunctional beliefs about medication.

Chapter 6: Rehabilitation	Chapter 5 of 8: Rehabilitation
	Goal setting
	Strong recommendation **Updated** • Health professionals should initiate the process of setting goals, and involve stroke survivors and their families and carers throughout the process. Goals for recovery should be client-centred, clearly communicated and documented so that both the stroke survivor (and their families/carers) and other members of the rehabilitation team are aware of goals set. • Goals should be set in collaboration with the stroke survivor and their family/carer (unless they choose not to participate) and should be well-defined, specific and challenging. They should be reviewed and updated regularly.
	Communication
	Assessment of communication deficits
All patients should be screened for communication deficits using a screening tool that is valid and reliable.	**Info Box** **Practice points** **New** • All stroke survivors should be screened for communication deficits using a screening tool that is valid and reliable. • Those stroke survivors with suspected communication difficulties should receive formal, comprehensive assessment by a specialist clinician to determine the nature and type of the communication impairment.
Those patients with suspected communication difficulties should receive formal, comprehensive assessment by a specialist clinician.	

Cognitive communication deficits	Cognitive communication disorder in right hemisphere stroke
Stroke patients with cognitive involvement who have difficulties in communication should have a comprehensive assessment, a management plan developed and family education, support and counselling as required.	**Practice statement** **Consensus-based recommendations** Stroke survivors with cognitive involvement who have difficulties in communication should have input from a suitably trained health professional including: • a comprehensive assessment, • development of a management plan, and • family education, support and counselling as required. Management may include: • Motoric-imitative, cognitive-linguistic treatments to improve use of emotional tone in speech production. • Semantic-based treatment connecting literal and metaphorical senses to improve comprehension of conversational and metaphoric concept.
Cognition	Cognition and perception
Assessment of cognition	Assessment of cognition
All patients should be screened for cognitive and perceptual deficits using validated and reliable screening tools.	**Info Box** **Practice points** • All stroke survivors should be screened for cognitive and perceptual deficits by a trained person (e.g. neuropsychologist, occupational therapist or speech pathologist) using validated and reliable screening tools, ideally prior to discharge from hospital. • Stroke survivors identified during screening as having cognitive deficits should be referred for comprehensive clinical neuropsychological investigations.
Patients identified during screening as having cognitive deficits should be referred for comprehensive clinical neuropsychological investigations.	

Executive functions	Executive function
Patients considered to have problems associated with executive functioning deficits should be formally assessed using reliable and valid tools that include measures of behavioural symptoms.	**Info Box Practice points** • Stroke survivors considered to have problems associated with executive functioning deficits should be formally assessed by a suitably qualified and trained person, using reliable and valid tools that include measures of behavioural symptoms. • For stroke survivors with impaired executive functioning, the way in which information is provided should be tailored to accommodate/compensate for the particular area of dysfunction.
In stroke survivors with impaired executive functioning, the way in which information is provided should be considered.	
External cues, such as a pager, can be used to initiate everyday activities in stroke survivors with impaired executive functioning.	**Weak recommendation Updated** For stroke survivors with cognitive impairment, meta-cognitive strategy and/or cognitive training may be provided.
Attention and concentration	**Attention and concentration**
Cognitive rehabilitation can be used in stroke survivors with attention and concentration deficits.	**Practice statement Consensus-based recommendation** For stroke survivors with attentional impairments or those who appear easily distracted or unable to concentrate, a formal neuropsychological or cognitive assessment should be performed.
	Weak recommendation For stroke survivors with attention and concentration deficits, cognitive rehabilitation may be used.
	Weak recommendation New For stroke survivors with attention and concentration deficits, exercise training and leisure activities may be provided.

Memory	Memory
Any patient found to have memory impairment causing difficulties in rehabilitation or adaptive functioning should: • be referred for a more comprehensive assessment of their memory abilities • have their nursing and therapy sessions tailored to use techniques which capitalise on preserved memory abilities • be assessed to see if compensatory techniques to reduce their disabilities, such as notebooks, diaries, audiotapes, electronic organisers and audio alarms, are useful • be taught approaches aimed at directly improving their memory • have therapy delivered in an environment as like the patient's usual environment as possible to encourage generalisation.	**Practice statement Consensus-based recommendations** Any stroke survivor found to have memory impairment causing difficulties in rehabilitation or adaptive functioning should: • be referred to a suitably qualified healthcare professional for a more comprehensive assessment of their memory abilities; • have their nursing and therapy sessions tailored to use techniques that capitalise on preserved memory abilities; • be assessed to see if compensatory techniques to reduce their disabilities, such as notebooks, diaries, audiotapes, electronic organisers and audio alarms are useful; • have therapy delivered in an environment as similar to the stroke survivor's usual environment as possible to encourage generalisation; • be taught strategies aimed at assisting their memory, e.g. using a notebook, diary, mobile phone/audio alerts, electronic calendars and/or reminders; • be taught approaches aimed at directly improving their memory, e.g. computerised memory training games and learning mnemonic strategies.
Chapter 7: Managing complications	Chapter 6 of 8: Managing complications
Fatigue	Fatigue
Therapy for stroke survivors with fatigue should be organised for periods of the day when they are most alert.	**Practice statement Consensus-based recommendations Updated** • Therapy for stroke survivors with fatigue should be organised for periods of the day when they are most alert. • Stroke survivors and their families/carers should be provided with information and education about fatigue.

Stroke survivors and their families/carers should be provided with information and education about fatigue including potential management strategies such as exercise, establishing good sleep patterns, and avoidance of sedating drugs and excessive alcohol.	• Potential modifying factors for fatigue should be considered including avoiding sedating drugs and alcohol, screening for sleep-related breathing disorders and depression. • While there is insufficient evidence to guide practice, possible interventions could include exercise and improving sleep hygiene.
Mood disturbance	Mood disturbance
Identification	Mood assessment
All patients should be screened for depression using a validated tool.	**Info Box Practice points Updated** • Stroke survivors with suspected altered mood (e.g. depression, anxiety, emotional lability) should be assessed by trained personnel using a standardised and validated scale. • Diagnosis should only be made following clinical interview.
Patients with suspected altered mood (e.g. depression, anxiety, emotional lability) should be assessed by trained personnel using a standardised and validated scale.	
Diagnosis should only be made following clinical interview.	
	Treatment for Emotional distress
	Weak recommendation Updated For stroke survivors with emotionalism, antidepressant medication such as selective serotonin reuptake inhibitors (SSRIs) or tricyclic antidepressants may be used.

Prevention	Prevention of depression
Routine use of antidepressants to prevent post-stroke depression is NOT recommended.	**Weak recommendation AGAINST** For stroke survivors, routine use of antidepressants to prevent post-stroke depression is not recommended.
Psychological strategies (e.g. problem solving, motivational interviewing) can be used to prevent depression after stroke.	**Weak recommendation** For stroke survivors, psychological strategies (e.g. problem solving, motivational interviewing) may be used to prevent depression.
Intervention	**Treatment for depression**
Antidepressants can be used for stroke patients who are depressed (following due consideration of the benefit and risk profile for the individual) and for those with emotional lability.	**Strong recommendation Updated** For stroke survivors with depression or depressive symptoms, antidepressants, which includes SSRIs should be considered. There is no clear evidence that particular antidepressants produce greater effects than others and will vary according to the benefit and risk profile of the individual.
	Weak recommendation New For stroke survivors with depression or depressive symptoms, structured exercise programs, particularly those of high intensity, may be used.
	Weak recommendation New For stroke survivors with depression or depressive symptoms, acupuncture may be used.
	Weak recommendation AGAINST New For stroke survivors with depression, non-invasive brain stimulation (transcranial direct stimulation or repetitive transcranial magnetic

	stimulation) should not be used in routine practice and only used as part of a research framework.
Psychological (cognitive-behavioural) intervention can be used for stroke patients who are depressed.	-
Behavioural change	Not included in the scope of these Clinical Guidelines.
	Chapter 7 of 8: Discharge planning and transfer of care
	Information and education
	Strong recommendation **New** • All stroke survivors and their families/carers should be offered information tailored to meet their individual needs using relevant language and communication formats. • Information should be provided at different stages in the recovery process. • An approach of active engagement with stroke survivors and their families/carers should be used allowing for the provision of material, opportunities for follow-up, clarification, and reinforcement.
	Discharge care plans
	Strong recommendation **New** Comprehensive discharge care plans that address the specific needs of the stroke survivor should be developed in conjunction with the stroke survivor and carer prior to discharge.

	Info Box Practice point New Discharge planning should commence as soon as possible after the stroke patient has been admitted to hospital.
	Practice statement Consensus-based recommendations To ensure a safe discharge process occurs, hospital services should ensure the following steps are completed prior to discharge: • Stroke survivors and families/carers have the opportunity to identify and discuss their post-discharge needs (physical, emotional, social, recreational, financial and community support) with relevant members of the multidisciplinary team. • General practitioners, primary healthcare teams and community services are informed before or at the time of discharge. • All medications, equipment and support services necessary for a safe discharge are organised. • Any necessary continuing specialist treatment required has been organised. • A documented post-discharge care plan is developed in collaboration with the stroke survivor and family and a copy provided to them. This discharge planning process may involve relevant community services, self-management strategies (i.e. information on medications and compliance advice, goals and therapy to continue at home), stroke support services, any further rehabilitation or outpatient appointments, and an appropriate contact number for any post-discharge queries. • A locally developed protocol or standardised tool may assist in implementation of a safe and comprehensive discharge process.

	Patient and carer needs
	Practice statement Consensus-based recommendation Hospital services should ensure that stroke survivors and their families/carers have the opportunity to identify and discuss their post-discharge needs (including physical, emotional, social, recreational, financial and community support) with relevant members of the interdisciplinary team.
	Carer training
	Weak recommendation Relevant members of the interdisciplinary team should provide specific and tailored training for carers/family before the stroke survivor is discharged home. This training should include, as necessary, personal care techniques, communication strategies, physical handling techniques, information about ongoing prevention and other specific stroke-related problems, safe swallowing and appropriate dietary modifications, and management of behaviours and psychosocial issues.
Chapter 8: Community participation and long-term recovery	Chapter 8 of 8: Community participation and long-term care
Self-management	Self-management
Stroke survivors who are cognitively able should be made aware of the availability of generic self-management programs before discharge from hospital and be supported to access such programs once they have returned to the community.	**Weak recommendation New** • Stroke survivors who are cognitively able and their carers should be made aware of the availability of generic self-management programs before discharge from hospital and be supported to access such programs once they have returned to the community.

Stroke-specific programs for self-management should be provided for those who require more specialised programs. A collaboratively developed self-management care plan can be used to harness and optimise self-management skills.	• Stroke-specific self-management programs may be provided for those who require more specialised programs. • A collaboratively developed self-management care plan may be used to harness and optimise self-management skills.
Leisure	**Leisure**
Targeted occupational therapy programs can be used to increase participation in leisure activities.	**Weak recommendation** For stroke survivors, targeted occupational therapy programs including leisure therapy may be used to increase participation in leisure activities.
Return to work	**Return to work**
Stroke survivors who wish to work should be offered assessment (i.e. to establish their cognitive, language and physical abilities relative to their work demands), assistance to resume or take up work, or referral to a supported employment service.	**Weak recommendation** • All stroke survivors should be asked about their employment (paid and unpaid) prior to their stroke and if they wish to return to work. • For stroke survivors who wish to return to work, assessment should be offered to establish abilities relative to work demands. In addition, assistance to resume or take up work including worksite visits and workplace interventions, or referral to a supported employment service should be offered.
Sexuality	**Sexuality**
Stroke survivors and their partners should be offered: • the opportunity to discuss issues relating to sexuality with an appropriate health professional • written information addressing issues relating to sexuality post stroke.	**Practice statement Consensus-based recommendations** Stroke survivors and their partners should be offered: • the opportunity to discuss issues relating to sexual intimacy with an appropriate health professional; *and*

Any interventions should address psychosocial aspects as well as physical function.	• written information addressing issues relating to sexual intimacy and sexual dysfunction post stroke. Any interventions should address psychosocial as well as physical function.
Support	Support
Peer support	Peer support
Stroke survivors and family/carers should be given information about the availability and potential benefits of a local stroke support group and/or other sources of peer support before leaving hospital and when back in the community.	**Weak recommendation** Stroke survivors and their families/carers should be given information about the availability and potential benefits of a local stroke support group and/or other sources of peer support before leaving hospital and when back in the community.
Carer support	Carer support
Carers should be provided with tailored information and support during all stages of the recovery process. This includes (but is not limited to) information provision and opportunities to talk with relevant health professionals about the stroke, stroke team members and their roles, test or assessment results, intervention plans, discharge planning, community services and appropriate contact details.	**Strong recommendation** Carers of stroke survivors should be provided with tailored information and support during all stages of the recovery process. This support includes (but is not limited to) information provision and opportunities to talk with relevant health professionals about the stroke, stroke team members and their roles, test or assessment results, intervention plans, discharge planning, community services and appropriate contact details. Support and information provision for carers should occur prior to discharge from hospital and/or in the home and can be delivered face-to-face, via telephone or computer.

Carers should be offered support services after the person's return to the community. Such services can use a problem-solving or educational-counselling approach.	**Practice statement Consensus-based recommendations Updated** • Carers should receive psychosocial support throughout the stroke recovery continuum to ensure carer wellbeing and the sustainability of the care arrangement. Carers should be supported to explore and develop problem solving strategies, coping strategies and stress management techniques. The care arrangement has a significant impact on the relationship between caregiver and stroke survivor so psychosocial support should also be targeted towards protecting relationships within the stroke survivors support network. • Where it is the wish of the stroke survivor, carers should be actively involved in the recovery process by assisting with goal setting, therapy sessions, discharge planning, and long-term activities. • Carers should be provided with information about the availability and potential benefits of local stroke support groups and services, at or before the person's return to the community. • Assistance should be provided for families/carers to manage stroke survivors who have behavioural problems.
Where it is the wish of the person with stroke, carers should be actively involved in the recovery process by assisting with goal setting, therapy sessions, discharge planning, and long-term activities.	
Carers should be provided with information about the availability and potential benefits of local stroke support groups and services, at or before the person's return to the community.	
Assistance should be provided for families/carers to manage stroke survivors who have behavioural problems.	

For access to the full Clinical Guidelines and further information refer to InformMe https://informme.org.au/en/Guidelines/Clinical-Guidelines-for-Stroke-Management-2017.