Clinical Guidelines for Stroke Management 2017

Summary – Dietetics

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

Dietitians hold a qualification in nutrition and dietetics, recognised by national authority[s]. They apply the science of nutrition to the feeding and education of people and individuals in health and disease. Dehydration and malnutrition are common in patients with stroke in hospital and this is associated with poor outcomes. Dietitians make recommendations on hydration and nutrition, recognising that patients at risk of malnutrition or who require tube feeding or dietary modification and are involved in assessment, advice and monitoring. Dietitians also cover the role of nutrition in the secondary prevention of stroke, recognising that long-term adherence to cardioprotective diets, when combined with other lifestyle modifications, may reduce stroke recurrence.

While this summary focuses on these 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 dietitian is an important member of the interdisciplinary stroke care team. Dietitians work with someone after a stroke to ensure appropriate hydration and nutrition requirements are achieved and patients/carers are adequately informed/educated.

- Recent evidence has resulted in several changes in the 2017 recommendations, for example, people with stroke or TIA should be advised to manage their dietary requirements in accordance with the Australian Dietary Guidelines, and all stroke survivors should be referred to an Accredited Practising Dietitian who can provide individualised dietary advice.

- 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 3: Early assessment and diagnosis	Chapter 2 of 8: Early assessment and diagnosis
Transient ischaemic attack	Transient ischaemic attack
	Practice statement Consensus-based recommendations New • All patients and their family/carers should receive information about TIA, screening for diabetes, tailored advice on lifestyle modification strategies (smoking cessation, exercise, diabetes optimisation if relevant), return to driving and the recognition of signs of stroke and when to seek emergency care. • All health services should develop and use a local TIA pathway covering primary care, emergency and stroke specialist teams to ensure patients with suspected TIA are managed as rapidly and comprehensively as possible within locally available resources.
Chapter 4: Acute medical and surgical management	Chapter 3 of 8: Acute medical and surgical management
Dysphagia	Dysphagia
	Strong recommendation Updated For stroke survivors with swallowing difficulties, behavioural approaches such as swallowing exercises, environmental modifications, safe swallowing advice, and appropriate dietary modifications should be used early.

Dysphagic patients on modified diets should have their intake and tolerance to diet monitored. The need for continued modified diet should be regularly reviewed. Patients with persistent weight loss and recurrent chest infections should be urgently reviewed. All staff and carers involved in feeding patients should receive appropriate training in feeding and swallowing techniques.	**Practice statement Consensus-based recommendations Updated** • Until a safe swallowing method is established for oral intake, patients with dysphagia should have their nutrition and hydration assessed and managed with early consideration of alternative non-oral routes. • Patients with dysphagia on texture-modified diets and/or fluids should have their intake and tolerance to the modified diet monitored regularly due to the increased risk of malnutrition and dehydration. • Patients with dysphagia should be offered regular therapy that includes skill and strength training in direct therapy (with food/fluids) and indirect motor therapy which capitalises on the principles of neural plasticity to improve swallowing skills. • Patients with persistent weight loss, dehydration and/or recurrent chest infections should be urgently reviewed. • All staff and carers involved in feeding patients should receive appropriate training in feeding and swallowing techniques. • All staff should be appropriately trained in the maintenance of oral hygiene, including daily brushing of teeth and/or dentures and care of gums.
Chapter 5: Secondary prevention	Chapter 4 of 8: Secondary prevention
	Diet
	Info Box Practice points New • People with stroke or TIA should be advised to manage their dietary requirements in accordance with the Australian Dietary Guidelines. • All stroke survivors should be referred to an Accredited Practising Dietitian who can provide individualised dietary advice.

	Obesity
	Info Box **Practice point** **New** People with stroke or TIA who are overweight or obese should be offered advice and support to aid weight loss as outlined in the Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults, Adolescents and Children in Australia.
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.
Chapter 7: Managing complications	Chapter 6 of 8: Managing complications
Nutrition and hydration	Nutrition and hydration - Early hydration
All stroke patients should have their hydration status assessed, monitored and managed.	**Strong recommendation** **Updated**

Appropriate fluid supplementation should be used to treat or prevent dehydration.	• All stroke patients should have their hydration status assessed, monitored, and managed throughout their hospital admission. • Where fluid support is required, crystalloid solution should be used in preference to colloid solutions as the first option to treat or prevent dehydration.
	Nutrition and hydration - Early feeding
All patients with stroke should be screened for malnutrition.	**Strong recommendation** **Updated** All stroke patients should be screened for malnutrition at admission and on an ongoing basis (at least weekly) while in hospital.
Nutritional supplementation should be offered to people whose nutritional status is poor or deteriorating.	**Strong recommendation** For stroke patients whose nutrition status is poor or deteriorating, nutrition supplementation should be offered.
Nasogastric tube feeding is the preferred method during the first month post-stroke for people who do not recover a functional swallow.	**Weak recommendation** **Updated** • For stroke patients who do not recover a functional swallow, nasogastric tube feeding is the preferred method of feeding in the short term. • For stroke patients, there is no preference with regard to continuous pump (meaning using a pump for greater than or equal to 16hrs out of 24hrs for less than or equal to 80ml/hr) feeding versus intermittent bolus feeding (meaning 250-400mls/hr for 4-5times/day) therefore practical issues, cost and patient preferences should guide practice.
	Weak recommendation **AGAINST** **New** For stroke patients who are adequately nourished, routine oral nutrition supplements are not recommended.

Food intake should be monitored for all people with acute stroke. Patients who are at risk of malnutrition, including those with dysphagia, should be referred to a dietitian for assessment and ongoing management.	**Info Box Practice points Updated** • For patients with acute stroke food and fluid intake should be monitored. • Stroke patients who are at risk of malnutrition, including those with dysphagia, should be referred to an Accredited Practising Dietitian for assessment and ongoing management.
Screening and assessment of nutritional status should include the use of validated nutritional assessment tools or measures.	-
	## 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.
Support	Support
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. 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.	**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.

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.	• 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.
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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.