

Clinical Guidelines for Stroke Management 2017

Public Consultation
Submissions Summary

No	Type of submission	Guideline altered in response to feedback	Discipline	Chapter	Topic	Feedback	Actions taken
1	Organisation	Yes	Health - NGO	Acute Medical and Surgical Management	Acute blood pressure therapy	<p>An expert member of the Heart Foundation hypertension guideline working group has reviewed the draft stroke guideline and provided the following additional comments relating to hypertension:</p> <p>1. Introduction – Scope</p> <p>In stating that the stroke guideline does not cover primary prevention, a reference/link is included to the Guidelines for the management of absolute cardiovascular disease risk (ARG) [3]. It is suggested that a link should also be provided to the Heart Foundation Guideline for the diagnosis and management of hypertension (HTG) in adults 2016 [2] for the following reasons:</p> <p>i. The ARG does not cover significant sections of the population, such as younger people, who may have extreme variations of single risk factors which are of clinical importance;</p> <p>ii. The HTG has been endorsed by the Stroke Foundation;</p> <p>iii. Taking the Absolute Risk (AR) approach, potentially leaves people who might be regarded overall as ‘low risk’, with quite extreme elevated blood pressure, for prolonged periods. For example, a 45-year-old woman with a systolic blood pressure (SBP) of 179 mmHg, who is a non-smoker, non-diabetic, with no left ventricular hypertrophy (LVH), Total Cholesterol (TC) 4.0 mmol/L and High Density Lipoprotein (HDL) of 1.0 mmol/L is low risk, and would not be treated for hypertension;</p> <p>iv. The ARG and the HTG are</p>	Agree. We have now referenced the Heart Foundation hypertension guideline.

						complementary guidelines, so it would be preferred that both are referenced.	
2	Organisation	No	Allied health	Acute Medical and Surgical Management	Dysphagia	DAA support that dysphagia should be detected early to ensure appropriate management can begin, given the poorer clinical outcomes associated with dysphagia. The guidelines should highlight that any patient with dysphagia should be referred to a dietitian (preferably an APD) as they are at an increased risk of dehydration and malnutrition.	Nil. Our position is not to specify who undertakes the intervention but what is required.
3	Individual	Yes	Nursing	Acute Medical and Surgical Management	Dysphagia	Patients with dysphagia on texture-modified diets and/or fluids should have their intake and tolerance to the modified diet monitored regularly (at least weekly while in hospital). This recommendation needs clarification – when a patient is in the acute / subacute phase of recovery I agree. Occasionally we have pts long term, for example awaiting nursing home placement where dysphagia has stabilised and the person is placed on texture mod diet/fluids long term, these pts don't need wkly review, discharge form dysphagia management is appropriate.	The recommendation was modified according to the suggestion.
4	Individual	Yes	Medical	Acute Medical and Surgical Management	Intracerebral haemorrhage	As a rural physician dealing with ICH the guidelines are unhelpful. As you acknowledge they are contradictory in terms of recommendations for supraentorial ICH against in one section then for in another for "selected cases "without any guidance to selection criteria. the European guidelines at least try to address this suggesting GCS of 9-12 and time to intervention < 8 hrs.	The recommendation was re-worded: "In previously independent patients with large supratentorial haemorrhage and deteriorating conscious state, haematoma evacuation may be a life-saving measure but consideration of the likely level of long term disability is required"

5	Organisation	No	Academic / researcher	Acute Medical and Surgical Management	Reperfusion therapies	Point 2: tPA and endovascular therapy in older adolescents As you will be aware there are instances in Australia where paediatric patients, particularly older adolescents, are admitted and treated in adult stroke units. There is currently no clear recommendations for professionals treating these patients. The ACSAC is currently reviewing this literature and would welcome the inclusion a practice statement around the management of these patients should they arrive at adult hospitals.	We have included reference to links to paediatric guidelines and will need to update the hyperlinks once published.
6	Individual	No	Stroke survivor	Acute Medical and Surgical Management		One week in hospital ct scan and mri	The author was contacted, thanking her for her feedback and provide information about enableme and other support services.
7	Individual	No	Nursing	Acute Medical and Surgical Management		Excellent very comprehensive	Noted
8	Individual	No	Allied health	Acute Medical and Surgical Management		Access to stroke unit care remains such a barrier in my setting. Pleasing to see a reco about all MDT members making rehab reco by Day 7 (often we aren't able to get involved til Day 3 or 4, plus weekend barriers). Also really pleasing to see some strong reco around the topic of palliation and prognosis - a real grey area for me in my setting as I don't think it is discussed and identified early enough (as I guess nobody wants to do that) but the study suggesting the needs of stroke carers and the challenges or them as elderly carers is so true. Great to get Pall Care on the guideline.	Noted
9	Organisation	No	Health - NGO	All	Clinical content	Overall the quality of this comprehensive guideline is acknowledged. The recommendations around the risk factors appear to be consistent with existing guidelines.	Noted

10	Individual	Yes	Nursing	All	General	There is no mention of decision making capacity assessment and management throughout the guidelines. The issue of whether a person has capacity to decide to self-discharge or refuse treatment is common within stroke acute and rehabilitation settings and recommendations to guide practice should be included.	Additional information regarding informed consent, patient-centred care and aphasia friendly processes has been included in the Chapter section text.
11	Organisation	No	Academic / researcher	All	General	Point 1: Reference to Clinical Guidelines for Diagnosis and Management of Childhood Stroke - 2017 Pending endorsement of the paediatric guidelines we kindly ask you to consider updating MAGIC to reference the childhood guidelines, particularly in the areas where clinical practice significantly differs between children and adults. These sections may include Chapter 2: Early assessment and diagnosis and, Chapter 3: Acute medical and surgical management. One barrier to successful implementation of paediatric stroke protocols is the merging with adult protocols in hospitals where paediatric units exist within adult infrastructure. By successfully aligning and referencing our protocols we may improve the diagnosis and care of children affected by stroke.	We have included reference to links to paediatric guidelines and will need to update the hyperlinks once published.
12	Organisation	Yes	Medical	All	Scope	Broadly speaking, we believe these draft guidelines are comprehensive and cover most spheres of stroke management, from early assessment and diagnosis, acute therapy, rehabilitation to long-term care. The RACP is of the view that the draft Clinical Guidelines could be further improved by inclusion of the following: • The National Vascular Disease Prevention Alliance's Guidelines for the management of absolute cardiovascular disease risk, as guidance for primary prevention of stroke.	The link to the Heart Foundation guidelines has been added.

						<ul style="list-style-type: none"> • The Heart Foundation's Guidelines for the diagnosis and management of hypertension in adults 2016, to canvass care for all sections of the population –specifically, the heterogeneous risk factors for cardiovascular disease, which are of clinical importance when it comes to treatment. However, a decision to treat should only be made after individual assessment and be based on individual risk and benefit. 	
13	Organisation	No	Health - NGO	All	Structure	<p>* The Stroke Foundation is commended for adopting the innovative MAGI Capp platform to develop the stroke guideline. As guideline developers, it is a challenge to maintain currency of guidelines once developed. We will watch with interest as to how this will be used to maintain and update the guideline going forward.</p> <p>* The use of GRADE methodology which includes WEAK and STRONG recommendations, and associated colour coding of these, were well received by reviewers. As was the layout of the sections and headings dictated by the MAGIC platform (which was similar to that used in the recent NHFA/CSANZ Australian Clinical Guidelines for the management of acute coronary syndromes 2016 [1]). However, in some respects the MAGIC platform has been perceived by reviewers to be difficult to navigate.</p> <p>* The preference would be to have had access to one complete document to review (rather than needing to open separate chapter pdfs, which was not user friendly).</p> <p>* Thank you for considering the comments provided regarding the draft Clinical Guidelines for Stroke management 2017. We congratulate the Stroke Foundation on the overall quality of the guideline, and on</p>	<p>A <i>Summary of all recommendations</i> is available. A PDF of all eight chapters would be in excess of 500 pages and not user friendly. The preferred option for viewing is online as this allows the viewer to choose the level of detail they wish to look at.</p>

						how the new technology (MAGICApp) has been used.	
14	Individual	No	Allied health	All	Structure	<p>It would be very helpful to have the revisions from the previous stroke guidelines highlighted. This would allow the reader to review changes readily within this comprehensive document.</p> <p>A snapshot of "what's new?" or "what is the new evidence?" or similar highlighting would be appreciated in future to support clear understanding of current recommendations and implementation.</p>	<p>This is already noted in the Updated, New, No change feature in MAGICApp. We will include where this is in our "How to navigate MAGICApp" document which is being developed for implementation. A Plain English summary detailing "What's new" has been created.</p>
15	Individual	Yes	Allied health	All	Structure	<p>Well it's super long and a little daunting. But also thorough, a fabulous education tool and super detailed.</p> <p>Even with some of the titles you have chosen for the chapter heading I needed to read and scroll quite a bit to figure whether the headings that were chosen for the eight chapters would in fact have direct clinical relevance to me as an allied health clinician (with a reasonable level of experience but broken practice in stroke). The concept of early or acute therapy has ?what kind of timeframe - not necessarily a known timeframe for those who are not experts. The explanation about the graded evidence is very useful and necessary to explain what weak evidence means (to put it into perspective).</p> <p>I see that there are pages duplicate in each chapter so as to make sense if you are just to read the one chapter.</p> <p>Thanks for providing summaries of the chapters of evidence - a ready reference guide.</p> <p>I like the use of colour to highlight AGAINST recommendations opinions.</p> <p>I was really hoping that there would be a timeframe expectation for involvement of</p>	<p>We have reviewed the guideline and included definitions of time points in care and applied for consistency. This information is included in the Methodology section.</p>

						Occupational Therapists in acute stroke (as there is for SP and PT's). I am surprised that there are still so many gaps in evidence in the areas that I want to know more evidence about - cognition, perception, sensory retraining, ES use. I do look forward to becoming very familiar with the content and championing what I can in my two day a week role as a level 3 clinician.	
16	Organisation	No	Medical	All	Structure	The RACP acknowledges the significant work by the Stroke Foundation that has gone into developing these guidelines to support the delivery of high quality stroke care in Australia. However we have concerns that the sheer volume of information contained in the Clinical Guidelines may act as an impediment to clinicians accessing the important information within. We would encourage that consideration be given to developing an effective communication and adoption plan, to support their uptake.	Noted. A Dissemination and implementation plan has been developed.
17	Individual	No	Allied health	All	Structure	I thought the layout was good. The colours for the evidence grades was very helpful. I think the Clinical Question/ PICO section would be best as an appendix as it impedes the flow of the document when it is included with each section. everything up until the PICO section could stay in the main document though. More subheadings could be used for some sections. An example would be 8.1 Weakness. Useful sub-headings could be 'Resistance Training' and 'Electrical Stimulation' so that it is easier for the reader to see the change between sections.	Noted. The preferred method for viewing the guidelines is MAGICapp where the layered approach for presenting the evidence/recommendations and practical information is ideal. The guidelines will be available to export into a Word document in the very near future and this will enable the reader to change the way the information is presented if they choose to print it out.

18	Individual	No	Allied health	All	Structure	<p>The guidelines are not user friendly, difficult to navigate and time consuming in location of information. Our team have spent longer than a clinician would trying to locate information regarding aphasia treatment, with little success.</p> <p>The practice points should be referenced. We are concerned that some practice points e.g., aphasia friendly information, are not referenced at all (despite the presence of some evidence). If there is no room within the GRADE system to make specific recommendations, then the practice points need to provide more specific guidance, which is able to be audited.</p> <p>The lack of specificity in recommendations (beyond the Cochrane Review of SLT) makes the recommendations unlikely to provide useful or practical guidance to clinicians and consumers.</p> <p>It is unclear what the difference is between "practice points" and "practice statements". There should be clear explanation of the GRADE levels of evidence which can be accessed via a link near each recommendation.</p> <p>Are there any plans to summarise the guidelines for individual disciplines.</p> <p>We (the Aphasia Research Team at The University of Queensland) would be happy to consult on further versions of the guidelines.</p>	<p>Noted. It is disappointing that you found MAGICapp difficult to use. We found from our survey feedback that (90%) rated MAGICapp "somewhat easy" to "extremely easy" to use to navigate information and only 6.5% of respondents indicating that it took them a lot more time than expected to find the information they needed. We will ensure that information about how to use MAGICapp is included in our implementation materials.</p> <p>It is not a requirement from NHMRC or the GRADE system for Practice points to be referenced.</p> <p>There is a clear description of the difference between Practice points and Consensus-based recommendations in the Methodology section in each chapter. There is also a clear explanation of GRADE with appropriate web links.</p> <p>GRADE is also explained in MAGICapp. Just click on the STRONG or WEAK recommendation heading.</p> <p>Yes, there will be concise guidelines for various disciplines.</p> <p>Thank you for the offer to consult on future guideline updates. We will be in touch when this occurs.</p>
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19	Individual	Yes	Medical	All	Summary of recommendations	Please incorporate the references in your PDF summary document	The <i>Summary of recommendations</i> document already has in-text citations. A reference list was not included as it would add to the length of the document. Readers should go to the full guideline for comprehensive information on evidence and references.
20	Individual	No	Allied health	All	General	I prefer level A, B, C, D grading of evidence rather than strong and weak recommendation as it is less clear. The clinician therefore needs to refer to the quality of evidence. In some places such as shoulder strapping there are strong statements based on low quality evidence. Not all statements in the 2010 guidelines have been reinforced or negated and totally neglected in some areas. Therefore at present we need to refer to both 2010 and 2017 guidelines. It would be beneficial that all recommendations and statements in the 2010 guidelines are referred to so the 2017 guidelines are one comprehensive stand alone document.	We have decided to use GRADE to be consistent with international guidelines. As in previous years, when a new guideline is published the previous guideline (in this case 2010) will be obsolete. Clear guidance about using the guideline will be provided in the implementation guide.
21	Individual	Yes	Allied health	All	General	Can you please clarify if the 2010 guidelines level of evidence is still applicable for areas that have not been mentioned in the 2017 guidelines. Not all statements in the 2010 guidelines have been addressed, some have been left out and or not made reference to. This makes it unclear is expected to refer to both 2010 and 2017 guidelines be referred to? It would be good to have in one document both as there are missed out in the 2017 guidelines. Some of the conclusions in shoulder strapping and ES and FES are contradictory.	As in previous years, when a new guideline is published the previous guideline (in this case 2010) will be obsolete. Clear guidance about using the guideline will be provided in the implementation guide. All references to FES have been changed to ES.

						It is confusing when referring to ES and FES what are the guidelines referring to. There is no definition as to if it is actually ES or if it is FES or does the writer mean they are the same?	
22	Individual	No	Allied health	All	Various	<p>* There are several sections which have recommendations around lifestyle changes, but do not address issues of patients/families having difficulties/barriers to goal setting or implementation. There is also little direction about how to effectively work with families and clients to establish said goals.</p> <p>* The guidelines refer to practical aspects of change in work/activities for clients following stroke, but it is recommended that the potential psychological issues such as loss of independence, identity, self-esteem, etc following a stroke are also included.</p> <p>* Although the guidelines refer to the “inter-disciplinary / multi-disciplinary team”, they are predominantly bio-medically focused and further information should be included regarding the psychosocial care requirements for this patient cohort.</p> <p>* There is some reference to Allied Health disciplines as core components of the multi-disciplinary team but, although Psychology is alluded to (e.g. counselling and motivational interviewing are mentioned as ways to improve medication adherence; and it is suggested that patients and families have the opportunity to “identify and discuss their post-discharge physical, emotional, social etc needs with relevant members of the multidisciplinary team”) there is no specific reference to the disciplines that would be best placed to provide that support (Nursing, Social Work, Psychology, OT).</p> <p>* There is inconsistency throughout the</p>	<p>There is a section on goal setting in the Rehabilitation chapter providing recommendations and guidance. This has been cross-referenced in other sections. The Practical info section provides guidance about SMART goals. This has been cross-referenced in other sections.</p> <p>Noted</p> <p>Noted</p> <p>Noted</p> <p>Noted. We have reviewed and attempted to be consistent.</p>

						<p>guidelines when referring to cognitive assessment. In some sections "formal neuropsychological OR cognitive assessment" is recommended, in other sections it is suggested that "comprehensive assessment should take place". This suggests that disciplines other than neuropsychology might be performing cognitive assessments. If neuropsychology assessment is required this could be better defined as " formal neuropsychological assessment of cognition" or "comprehensive cognitive assessment with a neuropsychologist".</p>	
23	Individual	Yes	Allied health	Community participation and long-term care	Driving	<p>The guidelines around returning to drive do not reference the option of referring to neuropsychology - "If a person who has had a stroke is deemed medically fit but has residual motor, sensory or cognitive changes that may influence driving, they should be referred for an occupational therapy driving assessment". While neuropsychology assessment is not required for every patient, assessment for fitness to drive is a common reason for referral to neuropsychology and this assessment typically comes before a referral for an occupational therapy driving assessment.</p>	<p>We have now mentioned neuropsychology assessment in the background section text.</p>
24	Individual	Yes	Nursing	Community participation and long-term care	Driving	<p>I understand that there has been comparatively more research literature on use of driving simulators in stroke rehabilitation than on-road driver rehabilitation with an occupational therapy driving assessor. However, the evidence for simulator rehab improving driving at the functional level is very weak and on-road rehabilitation remains the most common form of driving rehabilitation. I would be concerned this recommendation may encourage change in practice to simulator</p>	<p>New practice point added which reads "On-road driving rehabilitation may be provided by health professionals specifically trained in driving rehabilitation".</p>

						rehabilitation with very little evidence to support it.	
25	Individual	Yes	Allied health	Community participation and long-term care	Return to work	With regard to Return To Work, it is recommended that assessment and assistance should be given but does not give any specifications about who or how or when this should occur. Neuropsychology is frequently referred cases for assessing capacity to return to work.	There is insufficient information to enable us to draw any conclusions about who should undertake the assessment or when this should occur. Based on the lack of evidence, a decision should be made based on the individual. We have included a statement to this effect in the Rationale.
26	Individual	Yes	Stroke survivor, researcher	Community participation and long-term care	Return to work	More guidance and support for stroke survivors returning to work, especially young stroke survivors (see Word document FEEDBACK re RETURN TO WORK - Wolfendon)	Many thanks for your detailed feedback. Some additional information was added to the background and practical advice sections to provide greater guidance to clinicians. The recommendation was reworded slightly to add the requirement for assessment of needs of all stroke survivors.
27	Individual	No	Allied health	Community participation and long-term care	Self-management	All people who have had a stroke or TIA should be involved in lifestyle interventions to reduce recurrence of stroke and cardiovascular disease.	This is covered in the existing recommendations.
28	Individual	No	Stroke survivor	Discharge planning and transfer of care		Nothing sent home had home help which I organised	The author was contacted thanking her for her feedback and provided information about enableme and other support services.
29	Individual	No	Nursing	Discharge planning and transfer of care		Example of a well structured, validated discharge care plan template that can be incorporated into a medical / nursing / AH discharge summary would be really useful. The my stroke journey booklet is too hard to complete in an acute setting as they get taken home	We will add templates and links to tools in future iterations of any living guidelines.

30	Organisation	No	Allied health	Discharge planning and transfer of care		Special diets, malnutrition risk and secondary prevention (lifestyle modification) should all be considered in education and discharge planning.	The education and discharge planning section does not detail all things to be considered by all professionals as it is beyond the scope. The discharge planning section does link to lifestyle modifications, which includes diet for secondary preventions.
31	Organisation	No	Allied health	Discharge planning and transfer of care		DAA agree with the strong recommendation that discharge plans should be tailored to meet individual needs and that carers should be actively involved in these processes.	Noted.
32	Organisation	No	Allied health	Discharge planning and transfer of care		Dietitians (preferably APDs) should be a part of the multidisciplinary team involved in developing discharge plans, especially for those with nutrition concerns. Given the ongoing support required for patients with dysphagia or those who are, or at risk of malnutrition, APDs should be involved in the ongoing care. APDs can also be involved in the ongoing care of stroke patients who need to make dietary changes or reduce weight for secondary prevention.	Noted. Generally , we do not state which professional groups should do what especially where the intervention can be carried out by multiple disciplines. Our focus is on what needs to be done rather than which individual discipline should do it.
33	Organisation	No	Academic / researcher	Dissemination and implementation plan		Point 3: Dissemination and Implementation Plan The ACSAC will develop educational tools, and protocols specific for the paediatric stroke population, however would welcome the opportunity to liaise with the Stroke Foundation in the terminology and messaging, where appropriate, of paediatric material.	Noted
34	Individual	No	Nursing	Early assessment and diagnosis		Excellent very comprehensive	Noted Thank you.

35	Individual	No	Allied health	Early assessment and diagnosis		This guideline helped me to reflect more so on who takes on the risk factor identification and education around FAST, advice to prevent future strokes . I am interested in any future evidence/working party agreement about the precise relevant time to pull in Occ Therapists during the early assessment phase. The diagnostics take priority but mild strokes potentially still need to be screened before discharge dates are set. I see evidence in the guide about SP involvement with dysphagia management and PT with respects to timing of physical ax/ early mobilisation recommendations. There's no clear cut evidence for OT role. Perhaps it's because we may be best from Day 3 onwards ! I would like to contact my local area stroke service re stroke audit at my facility to consider the relevant OT auditable measures.	Noted
36	Organisation	Yes	Allied health	Managing Complications	Early feeding	Section 4.2 Early feeding. Whilst the section is titled 'Early feeding' the practice points (copied below) should specifically highlight that the recommendations, particularly the first, do only relate to short term feeding options. For those with long term feeding requirements, PEG placement is the preferred route.	Recommendation modified.
37	Individual	Yes	Allied health	Managing Complications	Contracture	Your Strong recommendation AGAINST, "the routine use of splints or prolonged positioning of upper or lower limb muscles in a lengthened position" is misleading. The evidence cited to support this recommendation is the meta analysis published by Katalanic, et al., 2010. When the three specific studies that report effects of splinting the wrist and hand post stroke are reviewed, your recommendation inflates the results. The two studies that focus on the wrist and hand only discovered that the	In reference to all comments on the recommendation against the use of splints and/or stretch during rehabilitation (upper limb activity section) and for preventing contracture (complications chapter), these were considered as a whole. All suggested additional references were sourced and analysed. Some additional

					<p>routine use of</p> <ul style="list-style-type: none"> (1) ONE modified resting splint design (with wrist position changes between the studies) (2) worn at night only (3) for four of seven night per week in the (4) early phases of recovery for the (5) short duration of the studies when (6) combined with routine upper limb therapy during the day had no effect on (7) contracture and wrist pain. Usual occupational therapy practice when prescribing a wrist-hand orthosis for people post stroke is guided by careful analysis of the presenting problems in the wrist and hand. Several splint designs may be selected. The wearing regime would rarely be four nights a week. The long term risks and benefits (beyond the time frame of these studies) is considered. Instructions for incorporating the splint into routine therapy that involves active hand training or passive hand involvement would be provided. Finally, the purpose for choosing to splint extends beyond management of contracture or pain. In my opinion, the impact of your similar 2010 recommendation against splinting post stroke has been detrimental to occupational therapy practice. The limited evidence reported above and cited in your 2010 Guidelines appears to have resulted in the widespread abandonment of splinting as an intervention for people post stroke who are now living with contracted, painful and non-functional wrists and hands. I urge you to re-word your recommendation, perhaps by creating a separate and realistic recommendation for splinting. 	<p>text was added to highlight evidence gaps with regards to people later after stroke with contracture. Working party members and experts in the field were consulted during this process. Following careful review of the evidence sources, additional papers as suggested and consultation with the expert WP, no changes to the recommendations were made.</p>
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38	Organisation	Yes	Allied health	Managing complications	Early nutrition	The recommendation " For stroke patients who do not recover a functional swallow nasogastric feeding is the preferred method of feeding" needs to specify that this is only in the initial stages. As outlined in the rationale, if enteral feeding is required ongoing, PEG is the most appropriate feeding route. I think this also applies to the recommendation "For stroke patients, continuous pump feeding is preferred over intermittent feeding". ie Where enteral feeds are required in the long term, intermittent, or bolus, regimes are more likely to be the most practical and preferred option. The word "pump" could also be removed. ie continuous vs intermittent/bolus. There is a typo in the last line, 2nd paragraph of the background text of this section "17% Stroke patients".	Typos corrected.
39	Organisation	No	Medical	Pre-hospital		Pre-hospital care guidelines could be clearer by describing 'hours-since-event' rather than 're-perfusion time limits'. This would make the information for decision making easier to understand.	The use of "eligibility for reperfusion" rather than a rigid time (eg 4.5hr or 6hr after symptom onset) was deliberate, as the time window for therapy is likely to evolve.
40	Organisation	Yes	Medical	Early assessment and diagnosis		Strong Recommendation: All patients with suspected transient ischaemic attack (TIA i.e. focal neurological symptoms due to focal ischaemia that have fully resolved) should be assessed urgently. It is common for patients to present to GPs several hours or days after onset of suspected TIA. It would be helpful to have information that qualifies the level of urgency of investigations in this setting. For instance, it would be helpful for GPs to have the guideline describe 'urgent' intervention in terms of the actions that are required to be taken and in what timeframe. For example, the 'Key info' describe 'rapid	The use of language related to timing of interventions (e.g. "immediate", "urgent", "early") has been standardised in the guideline, and the definition has been specified in in the Methodology section. The initial clinical assessment of TIA is "urgent" i.e. within minutes to hours. The wording is now "All patients with suspected transient ischaemic attack (TIA i.e. focal neurological symptoms due to focal ischaemia that have fully

						access TIA management' and the 'Rationale' describe 'investigation completed within 1-2 business days'. This information does not specifically state what needs to be done and in what timeframe.	resolved) should have urgent clinical assessment (see Practical Info)". Practical Info on clinical differentiation of TIA versus mimics has been added.
41	Organisation	Yes	Allied health	Managing Complications	Falls	Preventing and managing malnutrition should be highlighted as an intervention to manage falls risk.	No evidence in searches for malnutrition interventions specifically. The one small study investigating Vitamin D supplements has been included in the narrative summary
42	Organisation	Yes	Medical	Early assessment and diagnosis		Strong Recommendation: All TIA patients with anterior circulation symptoms should undergo urgent carotid imaging with CT angiography (aortic arch to cerebral vertex), carotid Doppler ultrasound or MR angiography. Carotid imaging should preferably be done during the initial assessment but should not be delayed more than 2 working days. Performing 'urgent' carotid studies within 2 business days is interpreted to mean 'as soon as possible'. However, what would be a measured response if a patient presentation is delayed? Does the term 'urgent' entail arranging immediate transport by ambulance? Does 'urgent' MRI or CT scan (on hospital arrival) suggest a time range of 'within 60 minutes'? This additional information would be helpful for GPs.	The use of language related to timing of interventions (e.g. "immediate", "urgent", "early") has been standardised in the guideline, and the definition has been specified in the Methodology section.
43	Organisation	No	Medical	All	General	Whilst the draft guidelines present the evidence, there is little guidance to support patient-centred decision making. For example, explanations about the risks and benefits of anticoagulation therapy support would be of great benefit to general practitioners who manage a patients' long-term care.	Decision support tool is currently out of scope for this guideline. Risk and benefit can be accessed through evidence profile. The Stroke Foundation sought expressions of interest from all disciplines to be members

						A further observation was made that general practice appears to be under-represented on the guideline working groups.	of the content working party and the only response we received was from Dr Mark Nelson. Dr Nelson actively contributed to the guideline content.
44	Individual	Yes	Nursing	Managing Complications	Incontinence	Examples of well validated and recommended continence bowel and bladder assessment forms would be really helpful and one of the reasons this is poorly managed area. guidelines as to when SCUDs should be placed on patient in the 24 hours post thrombolysis eg 6 hours.	The working group decided not to include tools, forms etc as this is not part of the current scope of the guidelines. The Stroke Foundation InformMe website for health professionals has a section that provides various tools and templates shared by various organisations. We will try and source continence bowel and bladder assessment forms for the website.
45	Individual	Yes	Allied health	Rehabilitation	Early supported discharge	<p>Strong Recommendation: Where comprehensive stroke services are available as an alternative to stroke unit care and include inpatient and community rehabilitation, early supported discharge service should be offered to stroke patients with mild to moderate disability. (Fearon et al 2012 [9])</p> <p>Comment: This recommendation is not clear and needs to be reworded so there is less ambiguity.</p> <p>Firstly, there is an assumption that clinicians understand what a typical ESD program provides in terms of staffing and amount of therapist contact or hours of therapy.</p> <p>Secondly, the terms 'mild' and 'moderate' disability need to be further defined.</p> <p>Moderate disability according to what scale? Barthel Index?</p> <p>Finally, we are sending conflicting messages</p>	The recommendation has been re-worded to: Where appropriate services are available, early supported discharge service should be offered to stroke survivors with mild to moderate disability (see practical info section). In the practical information section additional information was added "...moderate disability, with Barthel Index scores between 10 to 18 points.", and (in response to another comment) "The evidence comes from the United Kingdom and there may be differences in care in Australia.

						here – in ‘amount of rehabilitation’ we are recommending a ‘minimum of 3 hours a day’ of therapy (and this estimate will include stroke survivors with ‘moderate disability’) but then recommending these patients be discharged to ESD. Are we sure ESD services can provide the intensity of 3 hours per day?	
46	Individual	Yes	Allied health	Managing Complications	Mood	Not sure where this fits in but I was unable to see anything about screening and managing post-stroke depression and anxiety.	Currently there is no evidence for screening all stroke patients for depression. We have included the following assessment practice points: 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 (GPP)
47	Individual	Yes	Allied health	Rehabilitation	Upper limb activity	Strong Recommendation: For people with mild to severe arm or hand weakness, electrical stimulation in conjunction with motor training should be used to improve upper limb function after stroke. (Howlett et al 2015 [128]) Perhaps the title needs to differentiate between FES and ES? I’m not sure this recommendation should be ‘strong’ based on this systematic review for the following reasons: * The 8 studies included in the subgroup analysis have methodological flaws (i.e. 3 did not have blinded assessors and the other 5 did not report concealed allocation or intention-to-treat analyses) which may have	The evidence profile has been reviewed and the recommendation remains appropriate. The terminology has been changed to ‘electrical stimulation (ES)’ not ‘FES’ throughout guidelines. The WP agreed that given the low quality trials in the SR that the recommendation be downgraded to weak.

					<p>inflated treatment effects.</p> <p>There is also a risk of publication bias</p> <p>* The upper limb subgroup analysis combined studies where the control included nil/placebo and motor/activity training therefore does not quite fit this PICO - This might be less of an issue</p> <p>* The treatment effect and CI was expressed as a SMD and even the authors say that the "benefit of FES in real terms cannot be expressed" so difficult to make a 'strong' recommendation when clinical significance may be minimal. The SMD really should be back converted to determine if the treatment effect is clinically relevant.</p> <p>* The authors 'Howlett et al' did not say there were 'substantial' benefits using this treatment in addition to usual care, which is how this has been graded.</p> <p>I agree with this: "Therefore, it is unclear whether electrical stimulation is more or less effective in people with different degrees of arm weakness."</p> <p>But this is unclear: "There is currently a lack of evidence as to the effect of electrical stimulation for improving motor function on disability or quality of life."</p> <p>Given all these issues, this recommendation should follow a similar line of grading to the 'ES and weakness' recommendation and be given 'Weak recommendation' instead.</p>	
48	Individual	No	Allied health	Managing complications	<p>Contracture</p> <p>"For people with stroke at risk of developing contracture, routine use of splints or prolonged positioning of upper or lower limbs muscles in a lengthened position (stretch) is not recommended"</p> <p>Comment: I understand this is a very specific evidenced based statement to discourage the use of routine splints. However I think it would be preferable to</p>	<p>Our guidelines are intended to guide clinical practice in Australia.</p> <p>The recommendations are based on systematic review of the all current evidence using a specific methodology (GRADE). It is therefore not appropriate that we link to</p>

					<p>have a statement that better reflects the use of splints in current clinical practise. A statement that encourages clinicians to use their clinical reasoning when managing complications.</p> <p>If I may refer you to the reference material which can be found at the link: Splinting for the prevention and correction of contractures in adults with neurological dysfunction. Practical Guideline for occupational therapists and physiotherapists. (2015) College of Occupational Therapists and Association of Chartered Physiotherapists in Neurology.</p> <p>http://www.acpin.net/Splinting_Guidelines/Splinting_Guidelines.pdf</p> <p>These guidelines state:</p> <p>Hand and Wrist: contracture correction “It is suggested that splints should not be used routinely for the correction of range of movement by may be beneficial in selected cases (in people with stroke and ABI)”</p> <p>Hand and Wrist: contracture prevention “It is suggested that splints should not be used routinely to prevent loss in range of movement at the wrist and hand (people with stroke and ABI) but may be beneficial in some cases”</p> <p>“It is suggested that splints in conjunction with botulinum toxin A (in people with stroke and ABI) may reduce spasticity as a component in preventing loss of range of movement in selected cases”</p> <p>“It is suggested that a splint in a neutral wrist position maybe beneficial (for people with stroke) for prevention of hand pain associated with joint malalignment.”</p> <p>Comment: These statements better reflect the guidance we should be giving to stroke practitioners in terms of managing</p>	<p>other clinical guidelines that we have not been involved with.</p>
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						complications with contracture. These guidelines contain a full list of references including the weighting this evidence for your review.	
49	Individual	Yes	Allied health	Managing Complications	Mood	Please include recommendations for the screening of stroke patients for disorders of mood and adjustment to loss. Rehabilitation settings should provide this as well as therapy options to support post-stroke patients and facilitate their adjustments. Stroke patients are at high risk of developing depressive symptoms (+/-40%). The guidelines should reflect this and recommend monitoring and treatment accordingly.	Recommendations for screening have now been included.
50	Organisation	No	Allied health	All	General	<ul style="list-style-type: none"> • Thank-you so much for the opportunity to review these draft guidelines. They will be an invaluable resource for Occupational Therapists across Queensland Health Hospital and Health Services. • Clarity around evidence base per recommendation is excellent and will help clinician critically consider and understand treatment choices to help inform practice changes. • Practice point and consensus based recommendations are helpful for areas with weak or low evidence. • Thank you for referencing and providing links to the articles. This is very useful. 	Noted - thank you.
51	Organisation	No	Allied health	Managing Complications	Mood	Nutrition can play an important role in managing many complications post stroke including malnutrition, dysphagia as well as anxiety and depression. There is evidence to suggest that diet and nutrition may be modifiable risk factors for depression and anxiety ^{3, 4} . There are also numerous studies assessing the therapeutic effect of improved diet on mental health. Mood disorders such as anxiety and depression	We did not find evidence for nutrition and depression.

						often co-exist with a number of chronic diseases ^{5, 6} . DAA have published a role statement outlining the role of APDs working in mental health ⁷ . It is recommended that nutrition be acknowledged as an important aspect of mental health management in Section 13.	
52	Organisation	No	Allied health	All	General	<ul style="list-style-type: none"> • It would be helpful to see recommendations regarding patient to clinician ratios in this National Guideline for both acute and rehabilitation. 	Organisation of services type information is contained within the National Acute and Rehabilitation Stroke Services Frameworks however patient / clinician ratios are not currently available and may be the subject of a separate piece of work in the long-term.
53	Organisation	No	Allied health	All	General	<ul style="list-style-type: none"> • In a number of sections the term “suitably trained person” (or similar term) is used. We strongly recommend that the specific professions relevant, especially those where there is research evidence, are named as these guidelines are very likely to be used when planning models of care and staffing. Stroke survivors have the right to access highly trained professionals such as Occupational Therapists and there is concern that using a generic term may results in inappropriate policy and resourcing decisions in some organisations. The term Occupational Therapist is inclusive of appropriate delegation to an Allied Health Assistant with an Occupational Therapist supervising their practice. This should also be included in the guideline. 	It is the position of the Stroke Foundation not to name disciplines unless there is a specific requirement as there are often multiple highly trained health professionals of different disciplines that are able to carry out these interventions.

54	Individual	No	Allied health	Managing complications	Mood disturbance	<ul style="list-style-type: none"> · The section on “Managing complications” highlights the need to manage emotional distress and depression, but there is no reference to specific psychological therapies that are effective with this patient population. Cognitive Behavioral Therapy has been demonstrated to be effective in treating depression in a wide range of patient cohorts. · It would be useful to provide more specific guidelines around recommended tools and timeframes in relation to the recommended “routine screening and assessment for mood disturbance following stroke and specifically depression”. · Recommendations for managing challenging behaviors should be included. · The section on treatment of anxiety could include anxiety issues specific to stroke (eg. trauma of stroke event, phobias of treatment, health anxiety, etc.) 	We added the following statement to the rationale - "There is no evidence for one form of psychological therapy being better than another. Each of the three published trials used a different therapy and the estimate of effectiveness was based on the pooled results across these trials".
55	Organisation	No	Allied health	All	General	<ul style="list-style-type: none"> • The 'Decision Aid' tool seems a valuable idea to prompt discussion with patients about how beneficial different interventions may be for certain outcomes. However these pages are difficult to interpret, and may not be user-friendly in a therapist-patient consultation. There is use of jargon and values that don't seem to be labelled. Could the wording, formatting and labelling possibly be reconsidered, or else could an interactive guide / tutorial be developed to teach users how to make the most of the resource? 	Implementation tools will be developed. The 'decision aid' tool is not currently in scope, however we are aware that the MAGIC project team are working on methods to enable the clinician to tailor the 'Decision aid' tool .

56	Organisation	Yes	Nursing	Managing Complications	Mood disturbance	<p>The managing complications section focusses on prevention and reduction only. Depression and anxiety is highly prevalent following stroke and should be considered a core impairment addressed in rehabilitation, including assessment and intervention. Could moving the mood section from managing complications to the rehabilitation section be considered?</p> <p>Have recommendations for mood assessment been removed? Considering the recent audit data, I think it is imperative that routine screening using a validated tool (e.g. PHQ-9, GAD, HADS) is recommended, followed by comprehensive assessment if mood impairment is identified. Also the SADQ is a validated mood measure for stroke patients with aphasia (Lincoln et al., 2000).</p>	Screening practice point included.
57	Organisation	No	Allied health	All	General	<p>• The guidelines are a wonderful resource of collated evidence, but clinicians remain frustrated by the lack of sample protocols for implementing recommendations. Could the 'Resources and other considerations' section include links to existing guides / protocols / resources such as the mirror therapy guidelines by Rothgangel & Braun, the GRASP guidelines by Harris & Eng which are supported by the evidence quoted in the guidelines?</p> <p>Perhaps similar resources exist for mental practice, CIMT etc? This would go a long way to bridging the evidence to practice gaps clinicians struggle with.</p>	This is out of scope for these guidelines. We agree with its importance and it may become available in the future iteration of living guideline if resources permit.
58	Individual	Yes	Allied health	Managing Complications	Nutrition	<p>I do not agree with the inclusion of the recommendation that continuous pump feeding is preferred over intermittent feeding in the guidelines as there is no evidence behind this recommendation and it was made based on staff preference. Intermittent</p>	The recommendation has been changed to reflect the little difference between pump feeding and intermittent feeding, and the decision

						feeding allows breaks for rehabilitation and medications, there is also some evidence to show it promotes normal gastrointestinal motility and assist with diurnal cycles. It is also noted in the guidelines that the referenced study (Lee et al. 2010) did not show any differences in rates of pneumonia or mortality in continuous vs intermitted feeding of stroke patients.	should be based on patient preferences and resources.
59	Organisation	No	Allied health	Community participation and long-term care	Leisure	<ul style="list-style-type: none"> There is a recommendation regarding leisure in the Community Participation and Long Term Care section which is welcomed as leisure is a very important aspect of recovery given it incorporates engagement in meaningful activity. We would recommend that leisure post stroke is reviewed and included in all sections as this is relevant through-out all phases of recovery. 	Many of the topics within the guidelines overlap the stroke care continuum and we have tried to avoid replication. The working party believes leisure is best placed in the Community participation chapter.
60	Organisation	No	Allied health	Managing Complications	Oral hygiene	DAA support that good oral hygiene be promoted particularly given the links between oral hygiene, nutrition and disease2.	Noted
61	Organisation	No	Allied health	All	General	<ul style="list-style-type: none"> The use of technology for remote assessment and treatment is not comprehensively covered in the document. Given that many stroke survivors come from rural and remote areas and emerging research and practice using technology such as apps, videoconferencing and other remote strategies, it would be very useful to include some information even if it is limited to a consensus statement/GPP. 	How services are delivered is covered in the Acute and Rehab frameworks and no longer part of these guidelines. Links to these docs to be provided in letter.
62	Organisation	No	Nursing	Managing Complications	Oral hygiene	<p>All patients with stroke particularly those with swallowing difficulties should have assistance and/ or education to maintain good oral and dental (including dentures) hygiene.</p> <p>Strongly support this statement but to strengthen the intervention would suggest</p>	The working party considers the evidence for individualised mouth care plans is insufficient to warrant an explicit recommendation.

						the addition of an individualised mouth care plan. ie. All patients with stroke particularly those with swallowing difficulties should have an individualised mouth care plan, assistance and/ or education to maintain good oral and dental (including dentures) hygiene.	
63	Individual	No	Nursing	Managing Complications	Oral hygiene	Staff and carers of stroke patients should be trained in assessment and management of oral hygiene (Brady et al 2006) Strongly support this statement with the addition of referral of oral health problems to dental practitioners for dental care and advice. Ie. Staff and carers of stroke patients should be trained in assessment and management of oral hygiene and referral of oral health problems to dental practitioners for additional care and advice (Brady et al 2006)	The working party considers that the evidence for referral to dental practitioners is insufficient to warrant an explicit recommendation.
64	Organisation	Yes	Allied health	Secondary prevention	Obesity	• Obesity p. 5– link to clinical practice guidelines not working ie Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults, Adolescents and Children in Australia (NHMRC 2013 [15])	Fixed
65	Organisation	Yes	Allied health	All	Abbreviations	• There is some inconsistency with the use of abbreviations in the document eg * DOAC is utilised on pg 7 and not written in full prior, and then only written in full in the abbreviations list at the end of the document * LDL & HDL pg 21 not listed in abbreviations list at end of document * p 78 NASCET criteria listed only in abbreviations list at end of document * ESCT pg 79 not listed at the abbreviations	Corrected Added NASCET criteria in practical info

66	Individual	Yes	Nursing	Managing Complications	Oral hygiene	For patients with stroke, Chlorhexidine in combination with oral hygiene instruction and/or assisted brushing may be used to decrease dental plaque and gingiva bleeding Support this statement with caution as mouthwash should not be gurgled by people with dysphagia.	Changed to: Chlorhexidine in combination with oral hygiene instruction and/or assisted brushing may be used to decrease dental plaque and gingiva bleeding. Caution should be taken, however, for patients with dysphagia.
67	Organisation	No	Allied health	All	PDF's	• For the PDF version of the documents please use “header rows repeat” to enhance readability of tales across pages.	The PDF's are templates created by the MAGICapp application. We have provided your feedback to the MAGIC project team. It will be possible to export the guidelines to Word and reformat according to your own preferences. We highly recommend the Guidelines be read online in the MAGICapp platform. They are accessible on tablets and smart phone devices as well in an offline capacity.
68	Individual	No	Allied health	Managing complications	Shoulder pain	It is confusing when to use strapping and is strapping for prevention of pain or once pain has developed.	The recommendation clearly states 'in people with shoulder pain, strapping may be used to reduce pain'.
69	Organisation	No	Allied health	All	Appendix 6	The Appendices with “Gaps in Evidence” is a very useful as guide to prioritise further research.	Noted
70	Organisation	Yes	Allied health	Managing complications	Shoulder subluxation	There seems to be conflicting information when to use FES for shoulder subluxation as it is mentioned once there is shoulder subluxation present there is limited evidence to reduce it. However the guideline recommended it states to use FES to prevent and reduce shoulder subluxation. Also the 2010 guidelines stated to utilise	Background, summary of evidence and rationale updated to clarify.

						shoulder strapping to prevent the onset of pain. However the current guidelines make no mention of this and state strapping is recommended to reduce pain.	
71	Organisation	No	Allied health	All	Living guidelines	<ul style="list-style-type: none"> The plan to move to a "Living Guidelines" format rather than the usual five-year major update is strongly supported by Queensland Health Occupational Therapists. Queensland Health Occupational Therapists are eager to contribute to this process and to be consulted regarding the process that will be implemented. 	Noted
72	Individual	Yes	Allied health	Managing complications	Shoulder subluxation	<p>When discussing firm supportive devices there is no reference as to the type of supportive device. This would be beneficial. There is no reference to slings can you please confirm why not. Does the clinician then refer to the stroke guidelines 2010 guidelines which recommends level C for evidence for sling to use to prevent shoulder subluxation. In reference to positioning of the hemiplegic upper limb the 2010 guidelines recommend "correct positioning of the hemiplegic upper limb be implemented as soon as possible. In the new guidelines there is no reference to upper limb positioned and or how the upper limb should be positioned.</p>	<p>We have included following wording changes: "...firm supportive devices (eg devices such as lap trays or similar) may be used. A sling may be used when standing and walking. As in previous guideline updates, the 2017 guidelines supersede the 2010 guidelines.</p>
73	Organisation	No	Allied health	Early assessment and diagnosis	General	<p>There is no information in this section regarding the role of allied health/Occupational Therapy in the assessment/screening of patients with TIA to assist with diagnosis. It would be useful to know if this is recommended for optimal clinical care or if there is insufficient evidence to support this. If there is insufficient evidence, a GPP or Consensus Based Statement would be useful. A specific reference to the national public</p>	<p>We have not identified any evidence or models of care where allied health are involved in diagnosis of TIA</p>

						health campaign that uses the FAST acronym is recommended.	
74	Organisation	Yes	Allied health	Managing complications	Shoulder subluxation	It is confusing if ES is to be used once to actually the reduce the subluxation in the shoulder once present.	Background, summary of evidence and rationale updated to clarify.
75	Organisation	Yes	Allied health	Acute medical and surgical management	General	Pg 18 / 202 General comment "Furthermore, rehabilitation should commence in the acute phase". More specific direction could be included in the recommendations about what rehabilitation interventions are deemed appropriate or not in the acute setting.	Wording in introduction has been reworded to provide additional guidance.
76	Organisation	No	Allied health	Acute medical and surgical management	Stroke unit care	The Strong Recommendation used the term "interdisciplinary team". Multidisciplinary team is a more appropriate term so that the unique value add of team members is emphasised. Reference is made to the possibility of better outcomes (reduced death and dependency and shorter LOS) of integrating acute and rehab stroke services as a "Comprehensive Stroke Unit" but notes "the indirect nature of the evidence means that there is substantial uncertainty about these benefits". Chan et al (2013) [7] Is the meta analysis completed of sufficient quality that any weak recommendations /statements or GPP could be made about comprehensive unit may be preferred and that research needed to confirm or refute the significance of the benefit. ? This may assist services to contribute to pursuit of the research base to validate (or refute) the significance of the possible benefits identified in the meta analysis. It may influence the development of new stroke units, rehab units and possibly influence policy makers to combine existing units to improve outcomes.	There is already a statement that "Services that can provide combined or highly integrated acute and rehabilitation care appear to deliver the best outcomes." The Acute Framework details the components of Stroke Unit Care. Whether combining acute treatment and subacute rehabilitation in a single unit rather than two units working in collaboration is not clear from the meta-analysis

77	Organisation	No	Allied health	Acute medical and surgical management	Assessment for rehabilitation	Given there is no high level evidence for the use of the Assessment for Rehabilitation Tool, this should read it is “recommended” for use rather than “should” be used.	The use of the word recommendations is considered redundant. Should is used as the WP believes it is necessary to change practice.
78	Organisation	Yes	Allied health	Rehabilitation	General	<ul style="list-style-type: none"> • Self management strategies are not discussed in the rehabilitation section. It would very helpful for the literature to be reviewed and information included. • Environmental enrichment is not addressed in the rehabilitation section. It would be useful to incorporate the literature and evidence for or against or a GPP. • It is good to read on page 23 of the rehabilitation section that “tailored interventions that focus on impairment...should be considered”. We work with individuals and as such there should never be a “recipe” approach to managing a client. • There is concern that as reported on page 22 of the rehabilitation section, “divergent opinions with respect to practice statements” were not included. This makes the guideline less transparent especially if certain expert opinions were not considered. We would prefer to hear the range of opinions as it may reflect real life practice more accurately. The splinting and upper limb activity sections are examples of this. • Use of technology such as apps and remote monitoring/therapy would be very useful to include in this section eg regarding intensity of practice, for rural and remote patients, etc. • It would be beneficial to highlight the importance of education to the patient/family member/carer regarding intensity of practice and the impact on recovery as early as 	<p>Self-management is discussed in the Community participation chapter and is now cross-referenced in the Rehabilitation chapter.</p> <p>Cross reference to rehab framework and mention in Rehab intro</p> <p>Review</p> <p>CP: the two points above may have been missed?</p> <p>Apps and remote technology not appropriate in amount of therapy section. No evidence / papers to support putting it in elsewhere either. Agree is important topic to keep an eye of for future updates. Maybe in 'evidence gaps' section somewhere? Re resources and set up for practice out of therapy sessions - beyond scope these recs, possible for future layers of magicapp.</p>

						possible in the patient's rehabilitation journey. Goal is to increase motivation/participation not only in therapy, but also to continue active practice / engagement in tasks outside of the set therapy schedule. Possibly could also include GPP around providing patients with resources/set up to enable active practice outside set therapy times, use of log books etc.	
79	Individual	No	Nursing	Managing Complications	Structure	Difficulties with bladder and bowel management post stroke is common and can have a big impact on a client's and carer's quality of life I would have thought your guideline would have included a chapter on this very important issue In 2009, The Stroke Foundation, in collaboration with the Continence Foundation of Australia, produced a simple fact sheet "Stroke and bladder and bowel control"	Topics already included in Managing complications chapter.
80	Organisation	No	Allied health	Rehabilitation	Goal setting	<ul style="list-style-type: none"> • The imperative to document (not just communicate) goals for recovery should be explicitly stated. • A reference to SMART goals and client centred goals, rather than discipline specific goals is recommended. 	Already included in practical info section of Goal setting topic in Rehabilitation chapter.
81	Organisation	No	Allied health	Rehabilitation	Weakness	<p>Wording regarding use of electrical stimulation should be changed to reflect strength of evidence that we believe to be higher than a weak recommendation.</p> <p>Wording should be changed to be consistent with UL recommendations under 9.7 "strong recommendations" (p.9).</p> <p>The reference appears to be incorrect in the details section on the Magic App version.</p>	There is a degree of uncertainty in the evidence due to a large number of trials with considerable risk of bias in the systematic reviews, we feel the strength of the recommendation is appropriate as 'weak'
82	Individual	Yes	Nursing	Managing Complications	Treatment for depression	From a service model perspective, there is emerging evidence that a stepped care approach may be effective within stroke rehabilitation to provide appropriate intervention based on severity of	There is no evidence that psychological strategies decrease depression in stroke.

					<p>symptoms/need, from watchful waiting to risk assessment – Kneebone, I. (2015) Stepped psychological care after stroke. Disability and Rehabilitation, 38, 1836-1843. Van Straten et al. (2015). Stepped care treatment delivery for depression: a systematic review and meta-analysis. There is no mention of cognitive behavioural therapy for treatment of depression. I am aware of two RCT studies (Lincoln & Flannaghan 2003; Kootker et al. 2012) which showed no significant effect of CBT; however, there were methodological issues with both these studies. More recently, a program focussing on the behavioural activation of CBT has been shown to be effective – Thomas et al. (2012) Communication and low mood (CALM): a randomised controlled trial of behavioural therapy for stroke patients with aphasia. Clinical Rehabilitation, 27, 398-408. Also, a newly developed CBT approach that accommodates cognitive difficulties has been shown to be effective in acquired brain injury – Ponsford et al. (2015). Efficacy of motivational interviewing and cognitive behavioural therapy for anxiety and depression symptoms following traumatic brain injury. Also a new framework for CBT for post stroke depression has been developed – Kneebone (2016). A framework to support cognitive behavioural therapy for emotional disorders after stroke. Cognitive and Behavioral Practice, 23, 99-109. Based on this emerging evidence could a weak recommendation be considered?</p>	<p>We included the following statement in the rationale: There is no evidence currently for the use of stepped care in stroke only in the general population so we have not included it this time.</p>
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83	Organisation	No	Allied health	Rehabilitation	Vision	Vision may be better placed closer to 12.5 (visual perception). The statement advises that vision should be assessed. It is recommended that a consensus point is included regarding education being provided for patients and carers, as well as comment on adaptive approaches commonly used in rehab.	No change
84	Individual	Yes	Medical	Managing complications	Treatment for emotional distress	13.1 "... (SSRI) and tricyclic antidepressants may be useful...". Suggest replacing the word 'and' to 'or'	Changed
85	Organisation	No	Allied health	Rehabilitation	Amount of rehabilitation	<p>Only Occupational Therapy and Physiotherapy mentioned. Is there research that is inclusive of Speech Pathology?</p> <p>Practice Statement:</p> <p>It is suggested that the recommendation is re-worded to "provide as much opportunity for practice of therapy activities (physio, OT and SP)". The current wording implies booked therapy times, that the therapist must attend / facilitate the therapy, and the patient is passive.</p> <p>Therapists can be innovative in approaches, using circuit classes as recommended, but also use self directed therapy, independent practice, practice on wards with nursing staff, and semi-supervised practice are CORE techniques to achieve the benchmark of minimum 3 hrs per day. This is reflected in the Practice statement, but the "Strong Recommendation" could be reworded to support a multifaceted approach to achieving the desired intensity.</p> <p>Including a dot point regarding access to a variety of therapy activities that address physical, cognitive and psychosocial goals as well as engagement in meaningful activities.</p>	<p>This recommendation pertains to motor training (OT and PT) only. This is highlighted in the background text with links to the recommendations on aphasia therapy provided. We have added this information and links into the rationale section also. With regard the comment on circuit class therapy versus self practice, the recommendation for using circuit class therapy comes from a large RCT. There is no direct evidence of the effect of self-directed practice / family led practice on either outcomes or increasing therapy time.</p>

86	Individual	No	Allied health	Managing Complications		Great to see "against" advice re stretch/ PROM in management of contracture/spasticity. Though it is still a surprise that the evidence of r best practice in these complications is still at a weak body of evidence given limited studies in tis regard.	Noted
87	Organisation	Yes	Allied health	Rehabilitation	Cardiorespi ratory fitness	Great that cardio-respiratory fitness has been included would be useful to also include in the Community Participation and Long-Term Care section.	An introduction to the Community participation and long-term care chapter has been created and links to secondary prevention and rehabilitation including cardiorespiratory fitness has been included.
88	Individual	No	Allied health	Managing Complications		It would be nice to see a bigger section on pain management including central pain syndromes	We reduced the scope of the guideline this time due to resource limitations and did not include central post-stroke pain. We will endeavour ro include this topic in our next update. The 2010 guidelines are superseded by the 2017 guidelines and we do not endorse the use of the 2010 guidelines in clinical practice once the 2017 guidelines are published.
89	Organisation	Yes	Allied health	Rehabilitation	Upper limb activity	Recommendation needs to include comment that "this treatment option is only suitable for patients with minimal sensory and cognitive deficits". There is no detailed information regarding task specific upper limb retraining which is much more widely used than robotics. A statement regarding this is recommended.	Recent Cochrane review has allowed us to add a recommendation on this now.
90	Organisation	No	Stroke survivor	Pre-hospital		Kept complaining about extreme tiredness and lethargy to my doctor ignored	Author contacted thanking her for her feedback and provide

							information about enablement and other support services.
91	Organisation	No	Allied health	Rehabilitation	Upper limb activity	Strong robotics recommendation: - Our understanding is that robotic arms are not widely used in Australia due to significant cost and limited evidence. - "Plain Language Summary" (Mehrholtz et al 2015, p.2 of Cochrane review) reports that "it is not clear when and how often robotics should be used" and that the evidence was "low to very low". Why is this a "strong" recommendation?	The quality of evidence using the GRADE methodology was considered moderate to low. Resource considerations are considered independently of the evidence review and have been alluded to in the resources section
92	Organisation	No	Allied health	Pre-hospital		Despite any direct reference to my profession I found this guideline very informative and educative in term of understanding the significance of time is brain.	Noted
93	Organisation	Yes	Allied health	Rehabilitation	Upper limb activity	Strong electrical stimulation recommendation: - This recommendation appears to conflict with the one made under 8.1 Weakness (p. 6) which states that use of electrical stimulation is a "weak" recommendation.	The strength has been changed to weak.

94	Organisation	No	Allied health	Rehabilitation	Upper limb activity	<p>Strong recommendation AGAINST hand splints:</p> <ul style="list-style-type: none"> - This conclusion is based on a few studies that found that there is insufficient evidence to support or refute use of splints on the hand and wrist for clients in the acute or subacute stages <p>The four studies on which this conclusion is based are addressing clients in the acute and subacute stages. They are using splints to manage varying outcomes (one looking at managing contracture in thumb web space, one looking at pain and two looking at increasing wrist PROM). The 2 studies looking at hand & wrist are using splints as a treatment approach (increase PROM) which is not usual practice for clients with good extensibility (as in those studies) and minimal spasticity (ie risk of losing ROM is low). In fact, studies looking at use of splints are often unclear whether they are using an orthotic for treatment or prevention. The very few studies on which these recommendations depend are not reflective of all relevant aspects of practice in stroke care. It is important to responsibly “guide” therapists to consider the external validity of the studies rather than ruling out a potentially significant intervention. The harm is NOT in providing a splint (not sure whether there are studies stating they are harmful?) but in neglecting to consider it as an option for certain clients.</p> <p>There is insufficient evidence to “strongly” say “AGAINST” and “should not be used” and with no indication of the stage of stroke recovery to which it is applicable. A national guideline such as the NSF Guidelines has a duty of care to the clinicians and their clients to ensure that therapists are guided to</p>	<p>Both the Tyson review of splinting, and the Katalinic review of all stretch interventions (including splinting) showed evidence of no effect of splinting on joint mobility or any other outcomes. Although confidence intervals were wide in the Tyson review, due to the low sample sizes involved, the plausible range of effects was clinically insignificant. The widest confidence interval was -5 degrees to +5 degrees. Even if a 5 degree difference in range of motion is considered clinically important (and most experts believe that a 10 degree difference is the smallest worthwhile effect), the confidence interval does not include a worthwhile effect (noting also that the difference between groups was 0.4 to 1 degree, with 95% confidence intervals straddling 0). Based on the Katalinic review of all stretch interventions, if a 5 degree difference is considered clinically meaningful, there is some uncertainty in the immediate effects of stretch on joint mobility as the upper limit of the 95% confidence interval crosses this value (mean difference 3 degrees, 95% CI 0 to 7 degrees), but there is</p>
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					<p>critically appraise evidence and their own practice, in view of their client's individual presentation and needs/goals.</p> <p>The wording since the 2010 NSF guidelines has changed and become even more misleading to therapist not equipped to look at the evidence in order to determine whether it is applicable to their client population. This can be harmful for clients who may benefit from this intervention especially if used by funders to dictate what therapists do at the clinical level.</p> <p>The wording in 2010 stated that "the routine use of splints...is not recommended" This is reasonable and balanced as therapist need to evaluate whether a splint is required rather than use it routinely without critical consideration. However the new guidelines state "hand and wrist orthoses should not be used as part of the routine practice as they have no effect on function, pain or ROM" This is not a balanced statement as orthoses may be required as part of routine practice for some clients especially post the acute and subacute time frames.</p> <p>An additional article that does not appear to have been considered:</p> <p>Individualised resting splints for adults with acquired brain injury: a randomized, single blinded, single case design by Copley, J., Kuipers, K., Fleming, J., & Rassafiani, M. (2013). Individualised resting hand splints for adults with acquired brain injury: A randomized, single blinded, single case design. NeuroRehabilitation, 32(4), 885-898.</p> <p>The 'Practice points' and Consensus-based recommendations' listed throughout section 11 (communication) provide therapists with some guidance for clinical practice. It is</p>	<p>no uncertainty in the effect over the short to long term (mean difference 1 degree, 95% CI 0 to 3 degrees).</p> <p>Therefore there is robust evidence that the use of wrist and hand orthoses is not effective for improving joint mobility or indeed any other outcome measured including spasticity and arm function. While there is no evidence of harm from splinting, the 'harm' comes from inappropriate use of resources.</p>
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						<p>important that the same is provided for therapist wanting to clinically reason through their decision making in intervention areas such as splint use.</p> <p>Please refer to the more balanced statements outlined in the Canadian Stroke Best Practice Recommendations, Rehabilitation, Section 5.1, p.12.</p>	
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95	Organisation	No	Allied health	Rehabilitation	Activities of daily living	Strong recommendation: - Is there a reason that it says “community-dwelling stroke survivors with confirmed difficulties in personal or extended ADL should have specific therapy from a trained clinician...” instead of from an Occupational Therapist. Occupational Therapy should be specified clearly.	Our position is not to name specific professions when the intervention may be conducted by trained professionals from different disciplines.
96	Organisation	No	Allied health	Rehabilitation	Activities of daily living	Strong recommendation AGAINST acupuncture: The rehabilitation section states that “there were no benefits of acupuncture for ADL performance but also no known harm”. Is the recommendation “should not be used...” as outlined in the current guidelines too black and white in view of the “no known harm”?	The Guideline working party has a responsibility to recommend against treatments with either lack of evidence of effectiveness or evidence of no effect so that scarce health care resources are directed appropriately.
97	Organisation	No	Nursing	Pre-hospital		Excellent very comprehensive	Noted - thank you.
98	Organisation	Yes	Allied health	Rehabilitation	Assessment of cognition	The information in the introductory paragraph page 203 would be better highlighted under practice points. “Trained person” should be more specific and include occupational therapist and psychologist. Practice Point: It is agreed that neuropsychological investigation may be warranted where patients have cognitive deficits, however, comprehensive function assessment should also be completed by an Occupational Therapist as this demonstrates the true impact on the person.	Reworded in background text to include mention of assessment of both cognitive impairments and the impact of these on function
99	Organisation	No	Allied health	Rehabilitation	Cognition	“Trained person” should be more specific and include occupational therapist and psychologist. The practice points for all sections in cognition should include a statement regarding education about deficits and possible strategies to the patient and family if experts agree they considered an agreed	Our position is not to name specific professions when the intervention may be conducted by trained professionals from different disciplines. Statement about education

						part of routine care, not just in the discussion sections.	and strategies has been added to the background text
100	Organisation	Yes	Allied health	Rehabilitation	Memory	Consensus-Based Recommendation re Memory – a statement regarding the limited evidence for memory re-training is warranted.	Additional information has been provided.
101	Organisation	No	Allied health	Rehabilitation	Perception	The consensus-based recommendations are great to see. They may need to include something about establishing clear goals so retraining can occur within a particular occupational role. “Trained person” should be more specific and include occupational therapist and psychologist.	There is an entire topic in the Rehabilitation section about Goal setting and the application of these principles applies across all domains.
102	Organisation	Yes	Allied health	Rehabilitation	Apraxia	Suggested rewording: “....adequate limb movement and sensation should be screened for apraxia”	Reworded as suggested
103	Organisation	No	Allied health	Rehabilitation	Neglect	A clear definition of neglect should be included as in practice therapists may include both sensory and visual inattention as “neglect”. A clear definition will assist in developing a common language. Should specify occupational therapist and/or physiotherapist. Can any further direction about preferred tools be offered by expert group? It is recommended that more specific recommendations be provided regarding eye patching (hemifield patching in preference to monocular) and the specifics of applications (minimum wear time) to guide practice an research further.	Existing definition of neglect in background section text is considered sufficient.

104	Organisation	No	Allied health	Managing complications	General	<ul style="list-style-type: none"> • A complication is a secondary disease or condition aggravating an already existing one. <p>There are concerns regarding categorizing expected stroke sequelae as a 'complication' (e.g. spasticity, swelling and falls). These are serious consequences of stroke similar to weakness, neglect and sensory loss and as such, the importance of managing these expected presentations needs to be highlighted throughout the acute and rehab sections. Prevention practices to manage these expected challenges should be incorporated by clinicians throughout the patient's journey in order to minimise the impact of the stroke on the individuals' function. A 'complications' section may encourage a 'reactive' approach to management (when things get worse) rather than a planned & preventative approach. The guideline needs to reflect the need to minimising harm and be holistic in managing the symptoms impacting on our patient's outcomes.</p> <p>For example: "Recent reviews have reported that spasticity affects between 4 and 27% of adults in the early post stroke period, 19 to 26.7% in the post-acute stage and 17 to 42.6% in the chronic stage" (1. Copley, J., & Kuipers, K. (2014). Neurorehabilitation of the upper limb across the lifespan: Managing hypertonicity for optimal function. West Sussex, UK: John Wiley & Sons.</p> <p>2. Sommerfield, D.K., Gripenstedt, U. and Welmer A-K. (2012). Spasticity after stroke: An overview of prevalence, test instruments, and treatments. American Journal of Physical Medicine and Rehabilitation, 91(9), 814-820.</p>	Follows ICF classification - no changes were made.
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						<p>3. Wissel, J., Maanack, A. and Branin, M. (2013). Toward an epidemiology of post stroke spasticity. <i>Neurology</i>, 80(3 Suppl 2), S13-19).</p> <p>This is not a complication but an impairment (like weakness) resulting from damage to and reorganisation of the central nervous system.</p>	
105	Individual	Yes	Allied health	Rehabilitation	Activities of daily living	<p>Strong recommendation against OT to improve ADL function in nursing home patients - only based on one study in UK who have a different aged care system - ? applicability to all Australian nursing home patients esp. if with independent ADL function prior to stroke</p>	<p>Changed to weak recommendation. WP disagrees that UK environment is not applicable to Australian context from their on experience of working in the UK.</p>
106	Organisation	Yes	Allied health	Managing complications	Spasticity	<p>Overall, it is unclear to what extent expert opinion was sought for this area of practice. Although there is "Practical Info." there are no "Practice statements" or "Consensus based recommendations" to help guide therapists through the complex process of providing optimal care for their clients with spasticity or other types of overactivity. Spasticity is one feature of the upper motor neurone syndrome but other overactive features such as dystonia may have a greater impact on function.</p>	<p>Minor edits have been made to section text. This is also appropriately covered in practical info.</p>

107	Organisation	Yes	Allied health	Managing complications	Spasticity	<p>'Weak' recommendation p.37:</p> <ul style="list-style-type: none"> - The recommendation regarding use of Botulinum Toxin A to reduce UL spasticity is confusing because it does not break down the evidence into moderate to strong evidence for use of Botulinum Toxin A for spasticity symptom reduction, reduction of carer burden and improvement of passive function and inconsistent evidence for its impact on activity and motor function. The suggestion is to have 2 boxes for these two separate issues (this is the same for the recommendation on p.41 regarding LL spasticity and Botulinum). - There also needs to be a statement regarding model of care advised. For instance, multidisciplinary (including Physiotherapy and Occupational Therapy as a minimum), client centred, realistic goals to be established with those activity and motor goals be addressed through rehabilitation once the Botulinum is utilised to address the overactivity that may be interfering with progress/goal achievement. Without this recommendation, planning and models of care for Botulinum Toxin A clinics may inappropriate. <p>1- There is moderate-strong evidence for the use of Botulinum to reduce UL spasticity Multiple consensus statements and RCTs demonstrate that Botulinum is a safe and efficacious treatment for management of spasticity. In fact, the rationale at the bottom of p.37 outlines some the evidence regarding positive features of the upper motor neurone syndrome and passive function. Botulinum Toxin literature never claims to impact on negative features so not sure the reason that this is mentioned in the rationale?</p>	<p>The current recommendation <i>does</i> reflect the difference in evidence between the effects on spasticity and on function by stating that it may be useful for reducing spasticity, but will have little effect on function. The rationale provides a balanced view of the effects of toxin on both positive and negative features of stroke. We have added a statement about providing a window of opportunity as suggested. We have also added a statement in the practical information section about multidisciplinary clinic and goal setting as suggested. Happy to consider having links to consensus statements, but would want a WP team member to review which one/s are the most appropriate. All literature suggested are consensus statements rather than evidence.</p>
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					<p>2- There is inconsistent evidence to demonstrate that it has a direct impact on improving activity or motor function. Therapists need guidance statements that outline the benefits of Botulinum Toxin to addressing the neural aspect of focal overactivity. Rather than a negative statement about what Botulinum doesn't address. It is helpful to have a statement that it provides "a window of opportunity" for therapists to intervene and address the negative features of the upper motor neurone syndrome. The NSF guideline needs to highlight the importance of the rehabilitation interventions that can be used in conjunction with Botulinum for helping clients to achieve their activity goals. It is not a useful when a guideline only outlines what an intervention can't do especially for those clients with moderate to severe impairment. There needs to be a practice-statement / consensus based recommendations put out by "experts" in managing moderate-severe overactivity post stroke.</p> <p>Not all relevant literature included in the guideline eg.</p> <p>Sheean, G., Lannin, N. A., Turner-Stokes, L., Rawicki, B., & Snow, B. J. (2010). Botulinum toxin assessment, intervention and after-care for upper limb hypertonicity in adults: international consensus statement. <i>European Journal of Neurology</i>, 17(s2), 74-93.</p> <p>Wissel, J., Ward, A. B., Erztgaard, P., Bensmail, D., Hecht, M. J., Lejeune, T. M., & Schnider, P. (2009). European consensus table on the use of botulinum toxin type A in adult spasticity. <i>Journal of rehabilitation Medicine</i>, 41(1), 13-25.</p>	
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108	Organisation	No	Allied health	Managing complications	Spasticity	<p>'Weak' recommendation p.49: Not clear why therapists would use adjunct therapies to deal with a neural issue that the Botulinum has addressed? 'Adjunct' therapies can be trialled prior to Botulinum</p>	<p>This recommendation is based on a review of evidence that included trials investigating the effectiveness of adjunct therapies to Botox.</p>

					<p>with certain populations (mild spasticity) but once Botulinum is injected the client needs to have therapy to address the negative features. The adjunct therapies to address the negative features are needed to help improve spasticity related outcomes and function.</p> <p>'Weak' recommendation p.53: This recommendation does not provide sufficient guidance to manage the multitude of different clients seen along their journey. Stretch is an all encompassing word which can include anything from a few minutes of ranging/positioning to days of casting. This recommendation because needs to clarify the type of stretch, the purpose of stretch, the stages of recovery where "stretch" may / may not be helpful. It does not acknowledge the significant limitations in the research regarding this topic. The "Practical Info" below this recommendation is not practical because it does not specify what type of stretch "should not be used routinely" and for which stage of recovery and for which client presentations.</p> <p>In managing clients with moderate to severe spasticity, "stretch" is not a treatment of choice to address the neural component of the presentation. It is used by some therapists as a maintenance intervention.</p> <p>In managing clients with mild spasticity, "stretch" is a preventative approach used by some Queensland Health Occupational Therapists. There are issues on basing recommendations for managing spasticity in stroke patients on the Katalinic review. Experts need to be consulted regarding specific practice-statements that are helpful to daily practice.</p>	<p>We have updated the guidelines to include more information about the definition of stretch and the range of types and dosage of stretch covered by the evidence. There is no evidence that any type of stretch is better than another (they are all equally ineffective), or any dosage of stretch (interventions lasting longer than 7 months have not been investigated, and this is noted in the guidelines). There is no evidence that stretching prevents spasticity or contracture. We therefore recommend it is not used in routine clinical practice and resources are instead directed to interventions that are evidence based (as per rehabilitation chapter).</p>
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109	Individual	Yes	Allied health	Rehabilitation	Amount of therapy	After reading the Lohse paper I am unclear as to how the minimum 3 hour of structured physical rehabilitation figure has been calculated, in particular where the 5days a week for 4 weeks delivery in the calculation comes from, given that the average duration of rehabilitation in the study is listed as 48+/- 68days, with a range of 14-365). I am concerned that stating a minimum of 3hours structured physical activity, without accounting for stage of recovery, fatigue etc, is not only unrealistic but may also be detrimental to patients early post stroke. The average time after stroke stated in the study was also 1 year, again raising concern that it is not relevant in acute or sub-acute settings.	We have been explicit in how we calculated the 3 hours of therapy time. We have added text to clarify the relevance of the evidence to time post-stroke.
110	Organisation	No	Allied health	Managing complications	Contracture	<p>The introductory paragraph states that “National audits report rates of contracture as low as 1% during inpatient rehabilitation”. This is an area that should be listed as requiring further research.:</p> <ul style="list-style-type: none"> - Is it low because therapists are still stretching and implementing preventative measures in routine daily care and rehabilitation? - Inpatient rehabilitation length of stay is becoming shorter and is certainly not a representation of long term impact. - What is happening in the community when clients are not receiving the same amount of input from therapists and “stretch’ is the only intervention in place? <p>The introductory paragraph also states, “Although it is considered that soft tissue must be lengthened to prevent contracture, the most appropriate intervention to prevent or manage contracture is currently unclear with expert opinion divided”. If expert opinion is divided, the discussion needs to be transparent and consensus-based</p>	<p>There is currently no evidence that stretching interventions of any kind prevent or improve contracture. Therefore, there is no evidence to suggest the routine use of stretch in the community is preventing contractures.</p> <p>All suggested additional references were sourced and reviewed. Some additional text was added to highlight evidence gaps with regards to people later after stroke with contracture. Working party members and experts in the field were consulted during this process. Following careful review of the evidence sources, additional papers as suggested and consultation with the expert WP, no</p>

						recommendations are needed to guide clinicians through a balanced approach to considering the best intervention for their individual clients. Some articles to be considered: - Copley, J., Kuipers, K., Fleming, J., & Rassafiani, M. (2013). Individualised resting hand splints for adults with acquired brain injury: A randomized, single blinded, single case design. <i>Neurorehabilitation</i> , 32(4), 885-898. - Pizzi, A.,Carlucci, G., Falsini, C et al. (2005). Application of a volar static splint in post stroke spasticity of the upper limb. <i>Archives of Physical Medicine and Rehabilitation</i> , 86(9), 1855-1859. - Burge, E., Kupper, D., Finckh, A et al. (2008) Neutral functional realignment orthosis prevents hand pain in patients with subacute stroke: A randomised trial. <i>Archives of Physical Medicine and Rehabilitation</i> , 89(10), 1857-1862. - Weppler, C. (2012) Effectiveness of stretch for the treatment and prevention of contractures in people with neurological conditions: A systematic review. <i>Physical Therapy</i> , 92(4), 627-629.	changes to the recommendations were made.
111	Organisation	Yes	Allied health	Rehabilitation	Amount of therapy	I am unsure of where the recommendation for 3 hours daily of active practice comes from as the Lohse study does not indicate 3 hours and this study was conducted with patients who have a minimum time post stroke of 1 year, therefore how valid is this recommendation for acute and sub-acute stroke patients? I also question the feasibility of conducting 3 hours of active practice for acute stroke patients - taking into account their activity tolerance, medical stability etc.	We have been explicit in how we calculated the 3 hours of therapy time. We have added text to clarify the relevance of the evidence to time post-stroke. Also there is evidence from a large RCT that 3 hours of physiotherapy per day (provided in group circuit class therapy) is safe and feasible. This is included in the rationale and evidence summary.

112	Organisation	No	Allied health	Managing complications	Contracture	<p>'Strong' recommendation p.57: Unfortunately, the Katalinic et al 2010 Cochrane review results may not add value to current individual clinical decision making. It combines too many variables. It does not focus on one population of interest (eg. UMN vs LMN) or limit joints to those that have similar characteristics (eg. lower limb and UL). Moreover, it combines prevention of, and treatment of existing contractures using a broad definition of stretch. In fact, the authors acknowledge that the "distinction between stretch for the treatment and prevention of contracture was often ambiguous with studies recruiting a mix of participants" (p.25). The review covers multiple conditions including: Neurological (stroke, MS, SCI, TBI, Guillian Barré syndrome, Parkinson's disease, CP, Charcot-Marie-tooth-Disease), orthopaedic and other conditions (ankylosing spondylitis, sclerosis, post radiation treatment, elderly, knee contractures, Duchenne muscular dystrophy, TKR, #ankle, ACL reconstruction).</p> <p>It is important to question whether combining the mean differences in such a broad selection of studies (different diagnoses, joints and participants, and a range of stretch interventions), in order to achieve a summary estimate of stretch effectiveness, has a clinically applicable outcome. It is also important to acknowledge that there may be limitations in each subgroup in relation to number of participants, number of relevant studies and the level of heterogeneity between the studies. This can reduce the power of the overall conclusion of the review in relation to clinical practice.</p> <p>These and other multiple issues with each</p>	<p>Yes the Katalinic review pooled studies from a range of neurological populations including stroke. However, there is robust findings of no effect across the groups. The only uncertainty is in the interpretation of a clinically meaningful effect of joint range of movement. Experts differ as to whether a 5 or 10 degree improvement in joint range is considered clinically meaningful. If a 5 degree difference is considered clinically meaningful, there is some uncertainty in the immediate effects of stretch on joint mobility as the upper limit of the 95% confidence interval crosses this value (mean difference 3 degrees, 95% CI 0 to 7 degrees), but there is no uncertainty in the effect over the short to long term (mean difference 1 degree, 95% CI 0 to 3 degrees). When only the studies including stroke are pooled (the Tyson review) there is still evidence of no effect on joint mobility. Although confidence intervals were wide due to the low sample sizes involved, the plausible range of effects are clinically insignificant. The widest confidence interval was -5 degrees to +5 degrees. Even if a 5 degree difference</p>
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					<p>sub-group analysis within the Katalinic review don't make for a "strong" recommendation. In fact, some clients may be harmed if the right "stretch" intervention is not administered at the right time. The outcomes of the subgroup analyses do not conclusively demonstrate whether to use/not use stretch as an intervention. The questions that need to be asked is whether this systematic review is the best suited to answer our questions about:</p> <ol style="list-style-type: none"> 1- Management of contracture 2- Prevention of contracture 3- Management / prevention of contracture in the presence of spasticity 4- Effectiveness of splinting in the presence of spasticity 5- Specifically which clients will/will not benefit from splinting / positioning / stretching...it seems that none will?! This is not a reasonable conclusion in view of RCTs utilised. <p>In summary, whilst there is evidence to suggest it may not have clinically important effects on joint mobility in some people, there is insufficient evidence to justify or refute the use of stretch post-CVA based on the findings of this review.</p> <p>As a result, therapists need to be encouraged to consider the "characteristics of the practice context in which they practice, determine client values and circumstances" and apply their judgment and clinical reasoning to determine the best care for each client (Hoffman et al. 2010, p.3).</p> <p>Intervention decision making processes are complex and as such this guideline needs to facilitate a process of analytical decision</p>	<p>in range of motion is considered clinically important (and most experts believe that a 10 degree difference is the smallest worthwhile effect), the confidence interval does not include a worthwhile effect (noting also that the difference between groups was 0.4 to 1 degree, with 95% confidence intervals straddling 0).</p>
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						making that will benefit our clients and ensure minimal harm.	
113	Individual	No	Allied health	Rehabilitation	Aphasia	· The guidelines recommend that for patients with chronic and persisting aphasia their mood be monitored, however no tools or guidelines are proposed (such as use of a visual analogue scales).	Assessment tools are not in scope for this guideline
114	Organisation	Yes	Allied health	Managing complications	Subluxation	<p>The practice statement/consensus based recommendation includes “firm support devices” – only a lap tray is mentioned, other slings and devices should be noted as supported or not supported as in practice many devices are used and it would be very useful to have some evidence based or expert opinion guidance regarding their use.</p> <p>It would be very useful to include recommendations regarding timing, duration and length of application and how long to persist in the absence of voluntary active return.</p>	Recommendation changed to include - firm supportive devices (eg devices such as lap trays or similar) may be used. A sling may be used when standing and walking.
115	Individual	Yes	Nursing	Rehabilitation	Aphasia	3 rd recommendation – spelling correction of ‘language’ needed	Fixed
116	Organisation	Yes	Allied health	Managing complications	Mood	A statement regarding screening for depression using a formal tool, or not, should be included ie is it recommended or not.	There is no evidence to-date showing benefits of generic screening for depression in stroke patients, therefore no recommendation has been made.
117	Organisation	Yes	Nursing	Rehabilitation	Aphasia	2nd Practice Point box – consider inclusion of a dot point regarding supporting the patient’s ability to consent to medical interventions for example “for stroke survivors with aphasia, consideration should be made regarding whether expressive and receptive language abilities are sufficient for the person to make medical/complex decisions independently and provide informed consent”.	Weak recommendation against the use of acupuncture except within a research framework has been created. This is consistent with our approach across the guideline.

						This could also be included in section 11.4 Cognitive communication disorder in (R) hemisphere stroke.	
118	Organisation	Yes	Allied health	Managing complications	Falls	It is recommended that occupational therapy environmental assessment is included as a GPP.	Included as practice point.
119	Individual	Yes	Allied health	Rehabilitation	Aphasia	<p>Timing of aphasia intervention receives little mention except with regards to intensity of treatment. There is a lack of specificity regarding individual aphasia treatments e.g., group therapy, constraint induced aphasia therapy, communication partner training - despite there being evidence for these treatments. There are no dose controlled randomised trials of aphasia therapy in chronic patients. There is no mention of alternative service delivery models e.g., telerehabilitation, volunteer-delivered services, computer-based treatment. Consensus-based guidelines for aphasia (e.g., Australian Aphasia Rehabilitation Best Practice Statements published in BMJ) are not referenced, whereas consensus-based guidelines appear to be referenced in other treatment areas. In the research gaps section, brain stimulation is identified as a gap, yet in the rehabilitation section it is identified as having 'weak evidence against'. It would be useful to have other areas identified as research gaps. Monitoring of mood is recommended for people with chronic aphasia, however mood should be monitored in all patients with aphasia regardless of chronicity. A practice point should be for clinicians to consult of the AARP Best Practice Statements (see http://www.aphasiapathway.com.au/flux-content/aarp/pdf/2014-COMPREHENSIVE-FINAL-01-10-2014-1.pdf).</p>	Practice point that aphasia therapy should be commenced as early as tolerated has been included. Individual types of SLT now referred to in rationale. AARP is now referenced in practical info section.

120	Organisation	No	Allied health	Discharge planning and transfer of care	Discharge care plans	Suggested change to recommendation: A documented post-discharge care plan is developed in collaboration with the stroke patient and family and a copy provided to them and ongoing services providers, along with a comprehensive multidisciplinary discharge summary.	The WP believes the consensus statements cover the necessary detail.
121	Organisation	No	Allied health	Discharge planning and transfer of care	Home assessment	It would be useful to clarify that it is recommended that when a home visit occurs, that the patient and relevant carers are present.	No change. It is usual practice that home visits occur when the stroke survivor and carers are present.
122	Organisation	No	Allied health	Community participation and long-term care	Return to work	This is a core occupational therapy area of expertise and it is recommended that a consensus based recommendation or GPP is included regarding the role of occupational therapy and vocational rehabilitation in relation to good return to work outcomes. There is a recent systematic review regarding return to work post stroke Wei, X., Liu, X and Fong, K. Outcomes of return-to-work after stroke rehabilitation: A systematic review. The British Journal of Occupational Therapy May 1, 2016 79: 299-308	There is only one RCT and this does not provide sufficient information to guide who should provide return to work. It does not compare the efficacy of OT vs another vocational rehab program for example.
123	Individual	No	Allied health	Pre-hospital		Page 4 – Strong recommendation – All stroke Survivors should be managed as a time critical emergency. The dispatch of ambulances to suspected stroke SURVIVORS who ay be eligible for perfusion therapist requires the highest level of priority. (DELETE “Furthermore”) The highest level of priority should (also) be provided TO (when) transport suspected stroke survivors to hospitals capable of offering reperfusion therapists within appropriate timeframes (DELETE the words ‘also’ and ‘when’)	It is a convention in the current guideline to use "stroke patients" when they are in acute care and "stroke survivors" thereafter. This is based on feedback from the consumers on our working party and the Stroke Foundation Consumer Council.

124	Organisation	No	Medical Technology Industry	All	General	<p>1. We support the Stroke Foundation's decision to launch and manage Guidelines digitally as it accommodates timely updates – important in this age of medicine with innovation and advancement.</p> <p>2. Searchability – we tested the search function using key words on the MAGICapp and had limited search results. Consider providing tips on this search function.</p> <p>3. We encourage open-access for all stakeholders – to encourage regular use of the dynamic version – as opposed to printed versions that may be used within the system when out-of-date.</p>	Noted. We have provided your feedback to the MAGIC project team.
125	Organisation	No	Medical Technology Industry	All	General	<p>PRIMARY PREVENTION</p> <p>§ We note the draft guidelines do not contain any explicit reference to primary prevention of stroke (i.e. risk factor management). This is a critical area to address if the 'true' burden of stroke within the community is to be addressed. Greater primary prevention of stroke would represent both social and economic savings to the community. Further, technologies used to prevent stroke have enabled clinical practice to evolve – in some cases avoiding instances of stroke and associated co-morbidities (e.g. catheter and surgical ablation for AF). Recommendation: The clinical guidelines should be expanded to include primary prevention ie: 'Clinical guidelines for primary prevention and stroke management 2017. Links to relevant guidelines⁶ describing approaches to risk factor management could be provided when the new Stroke Guidelines are launched on the Stroke Foundation and other relevant websites. This could be aligned with strategies targeted at general practice mentioned in the draft Dissemination and</p>	Primary prevention was not in the scope for the systematic review. Instead, a link to Guidelines for the Management of Absolute Cardiovascular Disease Risk and Heart Foundation Hypertension Guidelines are provided as guidance, which is applicable to stroke.

						Implementation Plan. Alternately, a consensus statement amongst appropriate bodies relevant to primary prevention of stroke should be formed as a means to increasing understanding and management of this critical component in improving Australian health outcomes.	
126	Organisation	No	Medical Technology Industry	All	General	<p>USE OF GUIDELINES TO ADDRESS GAPS IN CLINICAL PRACTICE</p> <p>§ The need for updated Stroke Guidelines reflects advances in clinical practice for stroke care. These advances and more effective use of currently available clinical practice that is not optimally used represent an opportunity to address current gaps identified through national audits of stroke care⁷. If Guidelines support a particular practice – it is critical that healthcare providers are appropriately equipped to implement the guidance. As an example, Endovascular therapy is reported to be available to stroke patients 24/7 in only 11 centres in Australia, despite ‘strong recommendations’ within the Draft Guidelines.⁷ Although gaps and needs across the stroke care continuum may vary across Australia, we note that there is no explicit link between recommendations/practice points in the draft guidelines and known or common gaps. Definitive links are especially important where clinical practice (not described in the previous guidelines) has evolved and is better placed to address gaps. Recommendation: recommendations and practice points in the guidelines would benefit from identifying where there have been changes in practice that can help address known gaps in stroke care. This</p>	Clinical indicators from the national rehabilitation and acute audits are based on best-practice recommendations in the guideline. The practice gaps between recommendations and current practice are identified in the clinical audit conducted annually by the Stroke Foundation.

						explicit link would complement plans to prioritise gaps described in the draft Dissemination and Implementation Plan (section 3, point 4, page 3). The link between the new guidelines and how they can help address gaps could be highlighted when guidelines are launched and presented in e.g. overall summaries of recommendations/practice points.	
127	Individual	No	Allied health	Rehabilitation	Assessment of cognition	It is stated that: "All patients should be screened for cognitive and perceptual deficits by a trained person using validated and reliable screening tools...patients identified during screening as having cognitive deficits should be referred for comprehensive clinical neuropsychological investigation." We would suggest that guidelines around the timing of cognitive assessments are required to optimise benefit to the patient and their managing team.	No evidence is available re timing.
128	Organisation	No	Medical Technology Industry	All	General	<p>SUPPORTING IMPLEMENTATION OF GUIDANCE</p> <p>§ It is clear that an enormous effort has gone into updating the Stroke Guidelines. To help ensure these Guidelines are best placed to improve outcomes for stroke patients it is important that guidance is implemented and adopted consistently across Australia. Hence, implementation support is critical. We note that the draft Dissemination and Implementation Plan refers to a previously developed implementation framework⁸ that will continue to be promoted and used. We note this framework raised a key question for those involved in stroke care: How practically can you implement the recommendations to improve patient care? Practical consideration of how to implement</p>	Noted. The Stroke Foundation is already involved in supporting the implementation of the guidelines and plans to continue.

					<p>recommendations is essential to ensure that 'real world' clinical practice can have the best chance of achieving the same outcomes as clinical studies underpinning evidence based recommendations. This is especially important when whole systems of care are required to achieve optimal outcomes (e.g. minimising treatment delays for stroke patients who could benefit from thrombolysis or neurointervention).</p> <p>Recommendation: It is not enough to publish a Guideline – healthcare professionals and institutions require support in their implementation to enhance compliance and successful uptake. It is recommended budget and resources are allocated to assisting understanding and practical implementation of the Guidelines within Australia – this may take the form of a pilot to determine best practices.</p> <p>Recommendations, practice points and implementation guidance would benefit from increased emphasis on 'how to' implement guidance – e.g. increased emphasis on the need for protocols and care pathways that provide details of how best to achieve optimal patient outcomes. This can of course be linked to planned use of audit data to assess the effectiveness of guideline implementation, in particular identifying where guideline adoption has improved outcomes of stroke care. This would enable best-practice sharing – e.g. to better understand why stroke care may have improved more in some areas than others.</p>	
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129	Organisation	No	Nursing	Rehabilitation	Assessment of cognition	<p>While I agree that no gold standard cognitive screening tool has been identified yet, I think it is worth noting that the MoCA has demonstrated better results than others - Stolwyk, R.J., O'Neill, M.H., McKay, A.J.D., Wong, D.K. (2014). Are Cognitive Screening Tools Sensitive and Specific Enough for Use After Stroke? A Systematic Literature Review. <i>Stroke</i>, 45, 3129-3134.</p> <p>I think it is great that there is a clear guideline for comprehensive clinical neuropsychological if screening reveals cognitive difficulties. In many clinical setting cognitive assessment is limited to screening which does not facilitate best practice cognitive rehabilitation - McClure, J. A., Salter, K., Foley, N., Mahon, H., & Teasell, R. (2012). Adherence to Canadian Best Practice Recommendations for Stroke Care: Vascular Cognitive Impairment Screening and Assessment Practices in an Ontario Inpatient Stroke Rehabilitation Facility. <i>Topics in Stroke Rehabilitation</i>, 19(2), 141-148.</p>	Recommendations for tools are not in scope for these guidelines.
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130	Organisation	No	Medical Technology Industry	Pre-hospital	<p>ISSUE/CONCERN The recommendations within this section presume Ambulance Services have access to up-to-date data on Hospitals offering reperfusion therapies.</p> <p>IMPLICATIONS Without a central resource providing this information to all Ambulance Services paramedics across Australia success of the recommendations are limited.</p> <p>OUR RECOMMENDATION Consider the creation (if it doesn't already exist) of a database or map featuring Hospitals and types of stroke care available, reference this as a reliable resource of choice for all Ambulance Services personnel – and possibly the general public.</p> <p>COMMENTS This resource may also be helpful in the management of Stroke patients for all stakeholders along the care continuum – most importantly - the patient.</p>	State-based metrics already exist
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131	Organisation	No	Medical Technology Industry	Acute medical and surgical management	Neurointervention	<p>RECOMMENDATION/PRACTICE POINT</p> <p>Section 7.2 Neurointervention</p> <p>Practice statement (page 72 of 202)</p> <p>ISSUE/CONCERN</p> <p>The draft guidelines note: The critical time dependence of clinical outcomes following thrombectomy means that systems of care to deliver suitable patients to the appropriate centre for treatment are crucial. (page 61 of 202).</p> <p>In addition to this, systems of care within treatment centres must be optimised to minimise treatment delays.</p> <p>However, unlike these practice points for Thrombolysis (with drug therapy):</p> <ul style="list-style-type: none"> · a streamlined acute stroke assessment workflow (including ambulance prenotification, code stroke team response and direct transport from triage to CT scan) to minimise treatment delays, and protocols available to guide medical, nursing and allied health acute phase management · immediate access to imaging facilities and staff trained to internet images <p>(page 60 of 202)</p> <p>The Practice Statement (page 76 of 202) for Neurointervention contains no explicit reference to improving workflow at centres capable of this service.</p> <p>IMPLICATIONS</p> <p>Omission of this practice point misses an opportunity to ensure consistent, 'best-practice' workflow to minimise treatment delays and optimise outcomes for patients.</p> <p>OUR RECOMMENDATION</p> <p>Revise practice statement to align with the above practice points for Thrombolysis and include any special considerations relevant to device-based Neurointervention. The Victorian protocol⁹ for Endovascular Clot</p>	<p>The recommendations for thrombolysis are expected to carry-over as there are no endovascular centres that do not also offer thrombolysis.</p> <p>Adding extra recommendations would involve unnecessary repetition but the next version of the Acute Services Framework will emphasize endovascular workflow considerations.</p>
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						<p>Retrieval (ECR – i.e. mechanical thrombectomy) is recommended as a 'best practice' model for optimizing time from diagnosis to treatment for stroke patients.</p>	
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132	Organisation	No	Medical Technology Industry	Acute medical and surgical management	Neurointervention	<p>We note the following on page 66 of 202: Resources and other considerations</p> <p>Economic evaluations of mechanical thrombectomy have not yet been conducted for an Australian setting. However, there is evidence from North American and European evaluations that mechanical thrombectomy combined with alteplase was more effective and cost saving (Aronsson et al 2015 [63]; Lobotesis et al 2016 [65]) or cost-effective (Ganesalingam et al 2016 [64]) when compared to alteplase alone. These findings were consistent despite regional differences in costs and how mechanical thrombectomy was performed. This statement is not entirely accurate – although unpublished, the EXTEND-IA Investigators conducted an analysis¹ of stroke treatment and care costs in parallel to studying the clinical effectiveness of mechanical thrombectomy (MT) (also known as endovascular clot retrieval). This analysis found MT to be cost-saving in comparison to patients treated with Alteplase alone. This was observed at 3 months post treatment – resulting from reduced length of stay and reduced in-patient care costs. Furthermore, mechanical thrombectomy is undergoing evaluation by the Medical Services Advisory Committee (MSAC)², who provide evidence-based advice to the Health Minister on the inclusion of new services on the Medicare Benefits Schedule (MBS). The MSAC evaluation of MT comprises a full health technology assessment (HTA), including economic modelling. Medtronic is the Applicant for this evaluation and, following the Submission based Assessment (SBA) process, we developed and submitted a comprehensive evidence dossier</p>	No unpublished work can be included now. If the result is available before the publication of guideline, it can be included.
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					<p>(including systematic review, meta-analysis and economic modelling) for MSACs appraisal. We consider that the submission demonstrates that in comparison to standard care, MT is safe, clinically effective and highly cost effective. However, we acknowledge that our findings are pending MSAC's appraisal.</p> <p>MSAC considered mechanical thrombectomy (Application 1428) at their meeting on 24th and 25th November. The Public Summary Document (PSD) describing their consideration of mechanical thrombectomy should be available on the MSAC website by January/February 2017. Should MSAC find that mechanical thrombectomy is cost effective in Australian clinical practice, this should be recognised in the 'resources and other considerations' section of the Neurointervention guidance.</p>	
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133	Organisation	No	Medical Technology Industry	Acute medical and surgical management	Stroke unit care	<p>Practice point - Where transfer is not feasible, smaller isolated hospitals should manage stroke services etc etc</p> <p>ISSUE/CONCERN</p> <p>Australia's rural and remote populations have poorer health than their metropolitan counterparts with respect to several health outcomes There is an opportunity to enhance stroke services by connecting smaller isolated hospitals with other hospitals with specialist stroke services via telehealth.</p> <p>IMPLICATIONS</p> <p>Australia's rural and remote populations have higher mortality rates and consequently lower life expectancy. They also experience higher hospitalisation rates for some causes of ill health.</p> <p>OUR RECOMMENDATION</p> <p>Consider a 'practice point' indicating that, where possible, "smaller isolated hospitals" should develop or leverage their connection with a Stroke Service at another Hospital, and/or the Stroke Foundation, to help better tailor stroke care for patients.</p> <p>COMMENTS</p> <p>There is an opportunity for smaller isolated hospitals to be connected to a Hospital with Stroke Care Services via telehealth services, therefore having a Stroke specialist involved in patient care for all Australians – where possible and feasible.</p>	Telehealth is out of scope for this guideline but it is included in the Acute Services Framework.
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134	Organisation	No	Medical Technology Industry	Managing Complications	DVT & PE	<p>For acute stroke patients who are immobile, the use of intermittent pneumatic compression may be used, either as an alternative to low molecular weight heparin or in those with a contraindication to pharmacological DVT prophylaxis (including patients with intracerebral haemorrhage). (Dennis et al 2013 [163]) – “Weak Evidence”</p> <p>COMMENTS</p> <p>In Dennis et al 2013, there were 2% of patients on warfarin and 6% on heparin prior to randomisation as well as 17% prescribed prophylactic LMWH and 13% prescribed treatment LMWH post randomisation (in the IPC group-similar numbers in no IPC group). This equals 38% of the study population being on some type of anticoagulant, therefore the results of IPC use can be extrapolated for patients who are receiving anticoagulants or not (not just for those who are contraindicated or as an alternative).</p> <p>IMPLICATIONS</p> <p>The results of Dennis et al 2013 indicate that some patients may have better outcomes when IPC is used with pharmacological prophylaxis.</p> <p>OUR RECOMMENDATION</p> <p>Consider a ‘practice point’ where IPC is used in addition to pharmacological prophylaxis. Consultation with clinicians is recommended to determine whether particular subgroups of patients (e.g. at elevated risk of DVT) would benefit from this combined prophylactic approach.</p>	<p>There is no recommendation against combined use although there would be a significant associated cost. This option is not excluded by the guidelines. In practical terms an ultra high VTE risk group would be difficult to define.</p>
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135	Organisation	No	Medical Technology Industry	Managing Complications	DVT & PE	<p>Antithrombotic stockings are not recommended for the prevention of DVT or PE post stroke. (Naccarato et al 2010 [165])-</p> <p>“Strong Evidence”</p> <p>COMMENTS</p> <p>The Naccarato et al 2010 paper states that “...the great majority of data in this review comes from trials of GCS, and CLOTS 2009 yielded 93% of the weight in the estimate of effect on the outcome 'death or DVT'.”</p> <p>CLOTS 2009 had contradictory results to CLOTS2 (Dennis et al 2010), which is not included in the Naccarato review as it was released the same year. CLOTS2 found favourable results for the use of thigh length stockings vs knee length stockings in stroke patients stating that “Proximal DVT occurs more often in patients with stroke who wear below knee stockings than in those who wear thigh-length stockings.”</p> <p>IMPLICATIONS</p> <p>Failure to differentiate between the use of thigh and knee length stockings may overlook evidence that indicates thigh length stocking compression may have benefits for some patients.</p> <p>OUR RECOMMENDATION</p> <p>A review of evidence on the use of antithrombotic stockings is required to determine whether differential outcomes for thigh length stocking supports the development of a practice point and/or revision of the recommendation to appropriately reflect current evidence.</p>	The CLOTS2 trial only showed that below knee was worse than thigh. That does not impact the CLOTS 1 result that thigh-high was no better than no stocking.
136	Organisation	Yes	Allied health	Rehabilitation	Cognition and perception	<p>While recommendations around domains of cognitive impairment are relatively specific (particularly re Memory), there is no guide as to what the optimal time for assessment / intervention is, and what factors need to be considered when determining this (e.g.</p>	Added "ideally prior to discharge from hospital." to the practice statement.

						recency of stroke, compliance, the environment, level of distress, whether the assessment will be used to inform inpatient management or community follow-up etc.).	
137	Organisation	Yes	Medical Technology Industry	Managing Complications	DVT & PE	<p>RECOMMENDATION/PRACTICE POINT</p> <p>§ For stroke patients, pharmacological prophylaxis should not be used in the first 24 hours after thrombolysis until brain imaging has excluded significant haemorrhagic transformation</p> <p>§ For patients with intracerebral haemorrhage, pharmacological prophylaxis may be considered after 48-72 hours and once haematoma growth has stabilised, although evidence is limited.</p> <p>COMMENTS</p> <p>Non-pharmacological approaches to prophylaxis are effective alternatives: "The CLOTS 3 trial has shown that IPC (delivering sequential circumferential compression via thigh-length sleeves at a frequency determined by the venous refill time) applied to immobile stroke patients, is safe, and reduces the risk of proximal DVT (our primary outcome), symptomatic DVTs (proximal or calf) and all DVTs (symptomatic or asymptomatic, proximal or calf)."</p> <p>IMPLICATIONS</p> <p>Given patients are contraindicated for anticoagulants for 24-72hrs, IPC should be used to protect patients during this "gap" period of time as IPC is proven to have no increased risk of bleeding as anticoagulants do.</p> <p>OUR RECOMMENDATION</p> <p>Consider inclusion of a 'practice point' where IPC is used as a bridging therapy prior to initiation of pharmacological prophylaxis.</p> <p>Cochrane Library Kakkos SK, Caprini 2016 Combined intermittent pneumatic leg</p>	added "or within 24 hours of thrombolysis" in "For acute stroke patients who are immobile, the use of intermittent pneumatic compression may be used, either as an alternative to low molecular weight heparin or in those with a contraindication to pharmacological DVT prophylaxis (including patients with intracerebral haemorrhage or within 24 hours of thrombolysis)."

						<p>compression and pharmacological prophylaxis for prevention of venous thromboembolism (Review)</p> <p>“It is likely that mechanical methods increase the efficacy of thromboprophylaxis and reduce death and morbidity rates without increasing bleed risk”.</p> <p>International Angiology – Venous Thromboembolism Consensus Statement 2013</p> <p>“In contrast with pharmacological agents, mechanical methods are not associated with bleeding complications”</p> <p>Ho, Kwok. Stratified Meta-Analysis of Intermittent Pneumatic Compression of the Lower Limbs to Prevent Venous Thromboembolism in Hospitalized Patients, Circulation 2013</p> <p>“IPC was more effective than no IPC prophylaxis in reducing deep vein thrombosis (7.3% versus 16.7%; absolute risk reduction, 9.4%; 95% confidence interval [CI], 7.9–10.9; relative risk, 0.43; 95% CI, 0.36–0.52; P<0.01; I2=34%)”</p> <p>“IPC was effective in reducing venous thromboembolism, and combining pharmacological thromboprophylaxis with IPC was more effective than using IPC alone.”</p> <p>General comments</p> <p>Based on the above evidence, Medtronic’s position is that there is strong evidence for the use of IPC in immobile stroke patients (whether or not LMWH is used) and moderate evidence for the use of thigh length TED stockings in stroke patients.</p>	
138	Individual	No	Allied health	Rehabilitation	Cognitive Communication in right	With regard to "cognitive communication disorder in right hemisphere stroke" the recommendation is to have comprehensive	It is our policy not to name disciplines unless there is a clinical requirement as the

					hemisphere stroke	assessment with no further detail as to who would be conducting this (e.g. speech pathology).	assessment may be carried out by different disciplines.
139	Organisation	No	Medical Technology Industry	Managing Complications	Spasticity	<p>ISSUE/CONCERN</p> <p>No mention of Intrathecal Baclofen (targeted drug delivery) for the management of spasticity. There is no Practice Statement - although 'weak recommendations' are included; for and against Botox, acupuncture, electrical stimulation, casting, taping and stretching. Given the clinical evidence, it would be inappropriate to limit clinician choice.</p> <p>IMPLICATIONS</p> <p>Intrathecal baclofen therapy (ITB) is a viable option considered for treatment/management of post-stroke spasticity in many centres around Australia. Lack of inclusion of this treatment option in the guidelines may mean that stroke patients who could potentially benefit are not offered this option.</p> <p>OUR RECOMMENDATION</p> <p>Recommendation/practice points for intrathecal baclofen to be included in the Guidelines as a treatment option for management of post-stroke spasticity in patients who are unresponsive/cannot tolerate oral baclofen.</p> <p>REFER to letter from Medtronic for supporting evidence.</p>	The Rehab medical WP reviewed the references provided and found only case reports and one 12 month prospective trial of a convenience sample written by a physician who disclosed that Medtronic pay him as a consultant. There is low level evidence that it may help in refractory cases but for many it abolishes the spasticity that allows then to stand and walk and muscle as are very weak below that. I have spoken to Baguley, Pollack and Khor and no one in Australia to our knowledge routinely inserters them for stroke.
140	Individual	Yes	Allied health	Rehabilitation	Cognitive Communication in right hemisphere stroke	Typo in Background text, last dot point "disordisorganisedgenital"	Fixed
141	Organisation	Yes	Allied health	All	General	This document currently uses a variety of terms including: clinician, speech pathologist, speech language pathologist. Speech Pathology Australia recommends	Reviewed for consistency and changes made.

						the consistent use of the term 'speech pathologist' when referring to a clinician with qualifications in speech pathology.	
142	Individual	Yes	Nursing	Rehabilitation	Cognitive Communication in right hemisphere stroke	Consider inclusion of a dot point regarding supporting the patient's ability to consent to medical interventions for example "for stroke survivors with aphasia, consideration should be made regarding whether expressive and receptive language abilities are sufficient for the person to make medical/complex decisions independently and provide informed consent". This could also be included in section 11.4 Cognitive communication disorder in (R) hemisphere stroke.	Additional information regarding informed consent, patient-centred care and aphasia friendly processes has been included in the Chapter section text.
143	Organisation	No	Allied health	All	Structure	The guidelines were viewed both online and in printed form. The structure of the guidelines into chapters aided navigation through the recommendations, however, the heading for the chapter being viewed (both online and in hard copy) was small and not prominent. It would assist the reader to be oriented to which chapter was being viewed by increasing the prominence of the heading (e.g. size, bold). Similarly, orientation to the recommendation being viewed and the ability to search for a particular recommendation could be assisted by consideration of how the recommendations are numbered. For a reader not familiar with the content of each chapter, it was at times difficult to find a recommendation without familiarity of the relevant chapter. Consideration could be given to reorganising the numbering to be possibly continuous, or identifiable as content from a particular chapter e.g. recommendations in chapter 1 could be labelled 1.2, 1.2, 1.3 etc., to identify they are not the same recommendations as in chapter 6 (Managing complications) which	Feedback provided to the MAGIC project team.

						would be labelled 6.1, 6.2, 6.3 etc., and so on appropriate for each chapter. To assist unfamiliar readers to find recommendations regarding a particular area of clinical need, consideration should be given to provision of a search function to find content within the document.	
144	Organisation	No	Allied health	Rehabilitation	Communication	Practice point to include specific reference to a speech pathologist performing the assessment. For example: 'Stroke survivors with suspected communication difficulties should receive a comprehensive assessment by a speech pathologist to determine the nature and type of the communication impairment.'	Our general policy is not to nominate specific disciplines to carry out interventions especially where multiple disciplines can legitimately undertake the intervention.
145	Organisation	No	Allied health	Rehabilitation	Aphasia	There are currently no recognised specialties in speech pathology in Australia. In the first practice point reference to 'specialist clinician' should be replaced with specific reference to a speech pathologist with appropriate experience and expertise performing the assessment. For example: 'Those stroke patients with suspected communication difficulties should receive formal, comprehensive assessment by a specialist clinician speech pathologist with appropriate experience and expertise.'	Our general policy is not to nominate specific disciplines to carry out interventions especially where multiple disciplines can legitimately undertake the intervention.
146	Organisation	Yes	Allied health	Rehabilitation	Executive function	Practice point to include specific reference to assessment by qualified allied health professional For example: 'Patients considered to have problems associated with executive functioning deficits should be formally assessed by a trained person qualified allied health professional using reliable tools that include measures of behavioural symptoms.'	added 'suitably qualified (and trained)..."

147	Individual	No	Allied health	All	Structure	I found the presentation of information clear, directive and easy to follow. This new document provides more clarity about "must do's" in addition to informed therapy provision that aligns with patient preference but may not have high level's of outcomes from a research perspective. It also is very clear on those intervention that have high levels of evidence to discontinue in clinical practise.	Noted - thank you.
148	Individual	Yes	Nursing	Rehabilitation	Early mobilisation	Rehabilitation Section: (Recommendation 7) STRONG RECOMMENDATION: All stroke patients should commence mobilisation (out of bed activity) within 48 hours of stroke unless receiving palliative care. This recommendation is based on Julie's AVERT trial – examining very early mobilisation post stroke. Previously I have asked for this to be amended to 'unless otherwise contraindicated' or similar. As I am sure many stroke patients 'receiving palliative care' may benefit from mobilisation. Is there any rationale for maintaining the wording of 'palliative care'? (To me, palliative care is not solely related to end of life care, and is often provided to individuals at early stages of their illness trajectory and therefore this recommendation is misleading and may lead to patients who would benefit from mobilisation missing out).	Suggested wording changes made.
149	Individual	No	Allied health	Early assessment and diagnosis	Rapid assessment in the emergency department	Page 5 – Minor revision – All suspected stroke SURVIVORS who have been pre-notified to the stroke or ED team, and who may be candidates for reperfusion therapy, should be met AND ASSESSED ON ARRIVAL by the stroke team	It is a convention in the current guideline to use "stroke patients" when they are in acute care and "stroke survivors" thereafter. This is based on feedback from the consumers on our working party and the Stroke Foundation Consumer Council.

150	Individual	Yes	Allied health	Acute Medical and Surgical Management	Dysphagia	<p>Page 12 “Weak recommendation”</p> <p>“For stroke survivors with dysphagia, surface neuromuscular electrical stimulation should be applied according to published parameters”</p> <p>[REMOVE only be delivered by clinicians experienced in this intervention – because this applies to ALL interventions in the guidelines]</p> <p>[REMOVE – in a research framework – this intervention is not harmful and not that hard to use - so I see no reason why it cannot and should not be offered to stroke survivors clinically]</p>	We removed the "only be delivered by clinicians experienced in this intervention." as we have made the assumption throughout that health professionals are appropriately trained for any intervention they deliver. We kept 'within a research framework' as this was a deliberate decision by WP members for all interventions with insufficient evidence to guide clinical practice.
151	Individual	Yes	Allied health	Acute Medical and Surgical Management	Dysphagia	<p>Page 12 “Practice Statement” – final 2 bullet points:</p> <p>“All staff and carers involved in [DELETE feeding patients] HELPING STROKE SURVIVORS TO EAT OR DRINK should receive [DELETE appropriate] training in feeding and swallowing techniques”</p> <p>All staff should be (DELETE appropriately) trained in the maintenance of oral hygiene et etc</p>	Agree with suggested change.
152	Organisation	No	Allied health	Rehabilitation	Early supported discharge	An APD should be included in the list of health professionals especially if a patient has nutrition impact symptoms, is receiving nutrition support, has dysphagia, is at risk of malnutrition or has impaired Activities of Daily Living which impact on food preparation.	Dietitians are included.
153	Individual	Yes	Allied health	Secondary prevention	Lifestyle modification	Page 4 – Info box – Practice point –DELETE the word ‘certainly’ (ie “This should occur as soon as possible and certainly prior to discharge from hospital”)	Removed.
154	Individual	No	Allied health	Secondary prevention	Lifestyle modification	Practice Point – Remove the word ‘appropriate’ (ie People with stroke or TIA should be advised to undertake appropriate regular physical activity.....)	No change.

155	Individual	Yes	Allied health	Rehabilitation	Amount of rehabilitation	<p>Page 7 – Strong recommendation - Revise to read “For stroke survivors, rehabilitation should be structured to provide as much (DELETE scheduled) therapy (occupational therapy, physiotherapy AND SPEECH PATHOLOGY) as possible, with a minimum of three hours of task practice per day (DELETE ensuring, DELETE maximized during this time)</p> <p>NOTE: Can the recently published sys review about intensity by Schneider E et al (2016) Increasing the amount of usual rehabilitation improves activity after stroke: A sys review. J of Physiotherapy, 62, 182-187 be mentioned in the guidelines (in the notes)?</p>	The Schneider review was included in the evidence summary. The wording of recommendation has been adjusted to include recommendation for min active practice time (2 hours, Schneider) as well as scheduled therapy time (3 hours, Lohse).
156	Individual	No	Allied health	Rehabilitation	Standing balance	<p>Page 8 – Strong recommendation – For stroke survivors who have difficulty standing practice of standing balance should be provided. Strategies could include:</p> <ul style="list-style-type: none"> • Practising functional tasks while standing (ref, ref , ref) • Challenges to standing balance eg overground walking, obstacle course) (ref) <p>DELETE “Walking training that includes...”</p>	No change is recommended.
157	Individual	No	Allied health	Rehabilitation	Upper limb activity	<p>Page 10 – Weak recommendation AGAINST “Brain stimulation (TMS or RTMS) should not be used in routine practice for improving arm function”</p> <p>(DELETE and only used as part of a research framework – because research on all interventions is ongoing and the intervention is either recommended for use in practice or its not...no need to say ‘within a research framework)</p>	No change - it is recommended that this intervention is only used in research.
158	Individual	No	Allied health	Rehabilitation	Activities of daily living	<p>Page 11 – Weak recommendation – AGAINST – (DELETE and only used as part of a research framework – because research on all interventions is ongoing and the intervention is either recommended for use</p>	No change - it is recommended that this intervention is only used in research.

						in practice or its not...no need to say 'within a research framework)	
159	Individual	No	Allied health	Rehabilitation	Aphasia	Page 12 – Weak recommendations AGAINST – DELETE “and only’ and REPLACE with “maybe’ (ie Brain stimulation.....should not be used in routine practice for improving speech and language function BUT MAYBE used in research OR (DELETE and only used as part of a research framework – because research on all interventions is ongoing and the intervention is either recommended for use in practice or its not...no need to say 'within a research framework)	No change - it is recommended that this intervention is only used in research.
160	Individual	Yes	Allied health	Rehabilitation	Aphasia	Page 12 - Info Box – Practice Points – Where a (ADD stroke survivor and DELETE stroke patient) is found to have aphasia, the clinician should (ADD: ASSESS) and then: <ul style="list-style-type: none"> • Document the impairment (DELETE Document the provisional diagnosis) • Explain and discuss..... • In collaboration with the patient and family/carer, identify goals for therapy and (DELETE develop and initiate) IMPLEMENT a tailored intervention plan 	Agree - changes made.
161	Individual	Yes	Allied health	Rehabilitation	Neglect	Page 17 – Practice statement – consensus based recommendation Stroke survivors with impaired attention to one side should be: <ul style="list-style-type: none"> • Given clear explanation of the impairment • [DELETE Should be] systematically taught 	Agree - changes made.

162	Individual	No	Allied health	Rehabilitation	Spasticity	<p>Page 5 – Weak recommendation [DELETE: For patients with stroke] “Botulinum Toxin A in addition to rehabilitation therapy may be useful for (ADD: managing lower limb spasticity) but is unlikely to improve motor function or walking (ref, ref)”.</p> <p>DELETE” ...improving muscle tone” because it is a meaningless term and there is no standardised measure of ‘muscle tone’</p>	Agree - changes made.
163	Individual	Yes	Allied health	Community participation and long-term care	Driving	<p>Page 4 – Driving – 3rd and 4th bullet points – add the word to in the sentence ‘should be instructed not TO return to driving...’ or ‘should be instructed TO not return to driving....</p>	Agree - changes made.
164	Individual	No	Stroke survivor	Rehabilitation	Loss of sensation	<p>I don't agree with the section 8.2 'Loss of sensation'. As somebody whose stroke cause quite profound loss of touch sensation and proprioception, I cannot speak enthusiastically enough about the improved quality of life I have gained through the sensory retraining program developed by Dr Leeane Carey. I'm confused by the statement 'the benefit outweighs the harm for the majority, but not for everybody.' Having undergone two 6 weeks blocks of sensory therapy, I cannot imagine what possible 'harm' anybody could possibly experience from this therapy. The guidelines state that there are small benefits in sensation and activities of daily living. This therapy was a game changer for me and my quality of life post stroke. In my case, when I touched anything with my affected hand my whole brain fired off searching for the information it was expecting. This is absolutely exhausting. After this therapy my touch sensation found a new home in my brain, right next to the site of my stroke. I have MRI images from the Melbourne Brain</p>	<p>Preferences and values section states that benefits for individuals may be large and no harms. No change. Thank the author for her valuable insight.</p>

						Centre showing the changes in my brain during then following therapy. Prior to this therapy I was unable to dress my children or do many, many things for myself. Whoever wrote this part of the guidelines should spend a year with no meaningful use of one hand, requiring assistance from a nanny to care for preschool aged children. Then tell me how small the benifits from this therapy are. 'Small' is relative to the stroke survivor and their goals. It sure wasn't 'small' for me. It was gigantic!	
165	Individual	Yes	Allied health	Community participation and long-term care	Driving	Page 4 - Weak recommendation at bottom of the page about driving simulation – delete the phrase ‘ to use effectively and appropriately with knowledge’ because we don’t know what is ‘effective’ and appropriate’ in this context. The words are meaningless. Also I suggest amending the phrase ‘receive training and education’ because all interventions require professionals to have some level of education and training. The recommendation will then become “Driving simulation may be used for people who have has a stroke needing driving rehabilitation. Health professionals using driving simulation need to BE TRAINED to mitigate driving simulator sickness”.	Agree - changes made.
166	Individual	Yes	Allied health	Community participation and long-term care	Community mobility and outdoor travel	Page 5 - Weak recommendation - Minor grammatical change: “People who have had a stroke and have difficulty with outdoor mobility in the community should set individualised goals, (add a comma, and remove the word ‘and’), get assistance and adaptive equipment, information AND referral onto other agencies”.	Agree - changes made.

167	Individual	Yes	Allied health	Community participation and long-term care	Carer support	Page 6 – Minor amendment to recommendation: Carers should be provided with tailored information and support during all stages of the recovery process. This INFORMATION AND SUPPORT includes (but is not limited to 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. (Remove the word 'it'). THE PROVISION OF INFORMATION AND SUPPORT should occur prior to discharge from hospital and/or in the home and can be delivered face-to-face, via telephone or computer (ref, ref)	Agree - changes made.
168	Individual	Yes	Allied health	Community participation and long-term care	Carer support	Page 6 – Practice statement 3rd bullet point – “Carers should be provided with info about the availability and potential benefits of local stroke support groups and services AT THE TIME OF, OR BEFORE the person’s return to the community 4th bullet point- This phrase needs to be completely reworded – it currently reads as follows “Assistance should be provided for families/carers to manage stroke survivors who have behavioural problems” The term ‘to manage’ is inappropriate. I suggest something like: “Assistance and training should be provided to families/ carers who will be supporting a stroke survivors who have ongoing behavioural problems” [OR who has ongoing challenging behaviour]	Agree - changes made.
169	Individual	No	Nursing	Rehabilitation	Memory	There is evidence that functional memory training (internal and external memory strategy training) is effective across a range of acquired brain injury populations (happy to provide references here) and there is now	This study was pseudo-randomised trial with only 40 stroke pts to begin with, which dropped down to only 27 who completed training and at

						evidence in stroke specific populations - Miller, L.A, Radford, K. (2014). Testing the effectiveness of group-based memory rehabilitation in chronic stroke patients. Neuropsychological Rehabilitation, 24, 721-737.	least one outcome assessment. We believe this study is insufficient to prove the benefits.
170	Individual	Yes	Allied health	Rehabilitation		Page 23 of 274- Line 2 AMEND: "To achieve this [ADD the word "AIM"], tailored interventions that focus on impairment, activity and participation levels SHOULD BE CONSIDERED (based on the World....)	Agree - changes made.
171	Individual	Yes	Allied health	Rehabilitation	Home-based rehabilitation	Page 43 of 274 in PDF document Summary – Hillier et al (2010) et etc.....in that paragraph it is unclear what 'standard care' was – can this be stated/added please?	Added detail to summary section of evidence profile regarding standard care.
172	Individual	Yes	Allied health	Rehabilitation	Goal setting	Page 46 of 274 of PDF document Goal setting helps direct rehabilitation efforts throughout the various stages of recovery (Rosewilliam et al 2015). AMEND TO: Needs will vary depending on the type of stroke etc etc... DELETE "Goal setting for patients should take into consideration that the needs of each individual..." Second last sentence: "Goals developed in team meetings should ADD "DOCUMENTED AND AGREEED" (Delete: be written down and signed off)	Added detail to summary section of evidence profile regarding standard care
173	Individual	No	Allied health	Rehabilitation	Goal setting	Benefits and harms – A systematic review (ref) reports [ADD TYPE OF OUTCOMES such as 'greater satisfaction' - be more accurate than stating 'favourable effects']	This detail appears in the evidence summary.

174	Individual	Yes	Allied health	Rehabilitation	Weakness	Delete the first paragraph as it is not necessary and wastes space – the paragraph that starts “After stroke....weakness is the most common impairment after stroke Amend first sentence in paragraph 2 to read something like this: “Traditionally strength training and task-orientated training HAVE been used to improve MUSCLE AND LIMB weakness.....” then in the final sentence of parag 2, amend as follows “Research ON THE EFFECTS OF ELECTRICAL STIMULATION HAS ALSO INCREASED. ELECTRICAL STIM HAS THE POTENTIAL TO IMPROVE MUSCLE STRENGTH	Agree - changes made.
175	Individual	No	Allied health	Rehabilitation	Neglect	why is prism adaptation not mentioned in the 2017 draft - is this because of insufficient evidence and is therefore not recommended as a practice statement, or has it been left out?	One small RCT reported in the evidence section but insufficient evidence to warrant practice point or recommendation.
176	Individual	Yes	Allied health	Rehabilitation	Weakness	Average dose of resistance training IN PUBLISHED TRIALS (?) OR A SYS REVIEW (and add REFs) WAS 1 hour a day, 2 to 3 days a week for 4 weeks	Agree - changes made.
177	Individual	Yes	Allied health	Rehabilitation	Perception	With regard to: "Stroke survivors with an identified perceptual difficulty should have a formal perceptual assessment" it is unclear what type of perceptual assessment is being referenced (e.g. neurological, neuropsychological or ophthalmological).	Neurological and neuropsychological included in practice point.
178	Individual	Yes	Allied health	Rehabilitation	Weakness	Bottom of page 60 (of 274) in PDF document “Systematic review (ADD a ref) found moderate improvements in (ADD “upper limb” ?or “lower limb”? - or both?) strength (DELETE with) (ADD: using) a range of interventions to improve strength (DELETE most commonly) INCLUDING progressive	Agree - changes made.

						resistance (DELETE of evidence - since all sys reviews contain evidence)	
179	Individual	No	Allied health	Rehabilitation	Weakness	(page 62 of 274) “For stroke survivors with reduced strength in their ARM (not arms) or LEG (not legs), electrical stimulation may be used ON SPECIFIC MUSCLES” ? Perhaps DELETE the words “particularly for those with less than antigravity strength”	No change recommended.
180	Individual	Yes	Allied health	Rehabilitation	Weakness	Page 63 of 274 There is currently no consensus ON the optimal dosage of electrical stimulation OR PARAMETERS TO USE (ie FREQUENCY OR PULSE WIDTH). Further research is needed to establish which groups of STROKE SURVIVORS benefit MOST (ie THOSE WHO ARE weak vs very weak), THE optimal parameters including frequency and pulse width, timing and duration of intervention.	Agree - changes made.
181	Individual	Yes	Allied health	Rehabilitation	Weakness	Benefits and harms (page 63 of 274) There are small to moderate benefits AND improvements in strength following electrical stimulation and no evidence of harm Quality of evidence (page 63 of 274) There are methodological issues with the trials INCLUDED in the most recent (add year: ? 2010 or 2014) systematic review (ref, ? harris or Nascimento?), therefore..... Preferences and values (page 63 of 274) Electrical stimulation is not always WELL tolerated by everyone. Some STROKE SURVIVORS AS WELL AS CLINICIANS may need training to use THE EQUIPMENT effectively	Agree changes made except remove reference to clinicians as this should be part of standard training and is assumed.
182	Individual	Yes	Allied health	Rehabilitation	Weakness	There are small to moderate benefits AND improvements.....used in the meta-analysis (ADD refs at the end)	Agree - changes made.

183	Individual	No	Allied health	Rehabilitation	Weakness	Electrical stimulation is not always WELL tolerated by everyone and STROKE SURVIVORS AS WELL AS CLINICIANS may need specific training to use THE EQUIPMENT effectively	No change recommended.
184	Individual	Yes	Allied health	Rehabilitation	Loss of sensation	<p>Page 65 of 274</p> <p>Around 40% of stroke SURVIVORS (DELETE are assessed as having) HAVE sensory (ADD: “(or somatosensory)” IMPAIRMENTS. (DELETE deficits on admission) (ref) INCLUDING DECREASED in touch sensation, proprioception and kinaesthesia (DELETE in most cases). THESE IMPAIRMENTS CAN NEGATIVELY AFFECT movement, and predict ARE ASSOCIATED with poor MOTOR and functional recovery (de Diego etc) Doyle et al (ref) interviewed stroke survivor and found that sensory impairments (DELETE significantly impacted stroke survivors) CAN NEGATIVELY AFFET A PERSON’s roles and participation but seem (not SEEMS) to be ignored DURING rehabilitation (DELETE “in the” and “process”)</p> <p>Last sentence of this parag: DELETE: “However it is unclear what the best predictor for sensory rehabilitation is”</p> <p>I note that there is NOTHING written about lower limb sensory intervention. Seems to be a gap that should be addressed/commented on?</p>	Agree - changes made.

185	Individual	No	Allied health	Rehabilitation	Loss of sensation	<p>For stroke survivors with sensory loss of the upper limb, sensory discrimination training (ref Carey et al 2011) ADD: and sensorimotor/tactile stimulation (San Diego et al 2013) may be provided, ADD in addition to mirror therapy, thermal stimulation and pneumatic compression therapy (Doyle et al 2010).</p> <p>Note – having read the summary from Doyle et al 2010 Cochrane review, which indicates that there is preliminary evidence of effectiveness, based on small studies – which is no different from the Carey 2011 RCT – I think we have to avoid showing positive bias to Leanne Carey's research to the exclusion of other earlier RCTs that have evaluated mirror therapy, thermal stimulation and pneumatic compression therapy. The Carey RCT has not yet been replicated in another RCT, just like the other 3 named interventions have not yet been replicated in multiple RCTs.</p>	<p>The WP disagrees with adding in the sensorimotor/tactile stimulation based on de Deigo reference as this trial did not show clear benefits over and above usual care. Re the other three therapies, we have added to the summary section of 8.2.2 PICO that the evidence for these interventions are each based on one small RCT with low RoB. Only difference with Carey 2011 is that it is larger (n=50), albeit still relatively small and single centre trial, with clear power calculations and large effect size. The recommendation has remained the same.</p>
186	Individual	Yes	Allied health	Rehabilitation	Upper limb activity	<p>I prefer the more detailed recommendations from 2010 recommendations, eg emphasising repetitive task specific practice and mental imagery, rather than just stating "motor training".</p>	<p>There are separate recommendations for task specific training, mental practice, mirror therapy etc each with their own body of evidence.</p>
187	Individual	Yes	Allied health	Rehabilitation	Loss of sensation	<p>Benefits and harms</p> <p>Sensory –specific training PROVIDED ALONE OR combined with motor training (DELETE the word function) (DELETE or by itself) showed small benefits in sensation and activities of daily living.</p> <p>Preferences and values (page 66 of 274)</p> <p>Second sentence: "Despite only small benefits (DELETE the word 'Shown') in sensory discrimination training following intervention, STROKE SURVIVORS are likely to want to receive THIS</p>	<p>Agree - changes made.</p>

						INTERVENTION to address SENSORY loss"	
188	Individual	No	Allied health	Rehabilitation	Upper limb activity	I'm concerned about the Strong Recommendation Against Splinting. The statement provided by Tyson et al is very general and broad. I have worked with therapists who take these recommendations literally. As a result, they do not splint under any circumstance - rather than considering treatment options on a case by case basis. Tyson's statement is also based on acute stroke – not chronic stroke. However, this is not clear in the short statement provided. I work with patients who have long term effects following their stroke – tissue shortening, joint contractures, deformity and instability. From my experience, they would have benefited from splinting to protect their hand structures, preserve the shape and appearance of their hand, restrict unwanted motion, maintain hand hygiene etc. It would also reduce the need for people to require interventions such as Botox and orthopaedic surgery.	There is no evidence that stretching prevents spasticity or contracture. We therefore recommend it is not used in routine clinical practice and resources are instead directed to interventions that are evidence based (as per rehabilitation chapter). Both the Tyson review of splinting, and the Katalinic review of all stretch interventions (including splinting) showed evidence of no effect of splinting on joint mobility or any other outcomes.
189	Individual	Yes	Allied health	Rehabilitation	Upper limb activity	Pages 118 to 125 I think that the sys review by Kwakkel et al (2015) CIMT after stroke. Lancet Neurology - should be included as a key reference on page 125– I understand why the Corbetta 2015 Cochrane review is listed as the 'best evidence' but Kwakkel also compared use of restraint alone (forced used) with CIMT.	Kwakkel et al 2015 included.
190	Individual	Yes	Allied health	Community participation and long-term care	Self-management	Page 12 - Practical info (4 bullet points) – these need to be revised into full sentences (eg "Consistent stroke specific tailored ASSESSMENT tools AND OUTCOME MEASURES NEED TO BE SELECTED AND USED TO ASSIST WITH GOAL SETTING AND TO QUANTITY CHANGES IN SELF EFFICACY AND SELF	Agree - changes made.

						MANAGEMENT Remove the phrase 'Further trials recommended'	
191	Individual	Yes	Allied health	Community participation and long-term care	Self-management	<p>Page 12 – Key info - Benefits and harms – final sentence: “These BENEFITS included improvements in disability, confidence in recovery, stroke knowledge, and self efficacy, as well AS improvements in family roles and fine motor tasks (REMOVE ‘discussed above) Page 12 - Quality of evidence – Second sentence – reword “Meta-analysis COULD NOT be performed in one sys review due to A high level of clinical heterogeneity” Page 12 - Preferences and values – last line on page 12 – revise to ‘This info was then used to develop a tailored self mgt action plan USING A BOOKLET, WITH SUPPORT FROM A STROKE NURSING PROFESSIONAL (or RA). Motivational interviewing was used in the goal setting process AND included lifestyle modification.... Page 13 – second parag half way through – The data WERE analysed iteratively using.....</p>	Agree - changes made.
192	Individual	Yes	Allied health	Community participation and long-term care	Community mobility and outdoor travel	<p>Benefits and harms – Logan et al 2014 (ref # 25) should be replaced throughout this section with Barclay et al (2015) ref # 23). Logan study is a multicentre RCT – Barclay is a Cochrane review. Quality of evidence – add reference to Barclay when mentioning ‘based on five trials in a meta-analysis (Barclay et al 2015, Ref # 23) and one large multicentre trial (Logan et al, 2014, Ref # 25)</p>	Agree - changes made.
193	Individual	Yes	Allied health	Community participation and long-term care	Community mobility and outdoor travel	<p>Rationale – again replace Barclay/ Logan refs</p>	Agree - changes made.

194	Individual	Yes	Allied health	Community participation and long-term care	Leisure	Page 26 – Key info – Benefits and harms – add the word ‘That’ as follows: Studies from two sys reviews (Dorstyn et al 2014, Walker et al 2004) suggest THAT leisure therapy.....	Agree - changes made.
195	Individual	Yes	Allied health	Community participation and long-term care	Return to work	Introduction needs a little more editing – suggestion: Approx 20% of stroke survivors in Australia are of working age (ref). Returning to work is an important GOAL for stroke survivors. Return to work is important for a person’s financial, psychosocial and emotional well being (ref). Therefore, return to work SHOULD BE ADDRESSED AS AN IMPORTANT REHAB GOAL FOR SPECIFIC/RELEVANT STROKE SURVIVORS. Second parag – sole sentence – reword – “Workplace rehabilitation interventions and information should be tailored.....	Agree - changes made.
196	Individual	Yes	Allied health	Community participation and long-term care	Return to work	Page 30 – Weak recommendation – “For STROKE SURVIVORS who wish to return to work, assessment SHOULD BE OFFERED to establish abilities relative to work demands, IN ADDITION to assistance to resume or take up work, including worksite visits and workplace interventions, or referral to a supported employment service (DELETE should be offered).	Agree - changes made.
197	Individual	Yes	Allied health	Community participation and long-term care	Return to work	Page 31 – Summary – A randomised trial by Ntsiea (2015).....A workplace intervention programme tailored to the functional abilities of each PERSON was compared to usual care. Participants in the intervention group wre significantly more likely to have returned to work at 6 moths, However, as the trial was conducted IN SOUTH AFRICA, THE INTERVENTION AND RESULTS MAY NOT BE GENERALISABLE TO AUSTRALIAN WORKERS (Remove ‘where over 50% of	Agree - changes made.

						the sample earned less than 5000 rands as month, approx. \$500 AUD' as that isn't relevant here)	
198	Individual	Yes	Allied health	Community participation and long-term care	Sexuality	Page 33 Sexual dysfunction after stroke is a common problem.....National audits report THAT only 18%.....This LOW COMPLIANCE WITH GUIDELINE RECOMMENDATIONS OCCURS despite sexuality being seen as a MODERATE to VERY IMPORTANT ISSUE in their post stroke	Agree - changes made.
199	Individual	Yes	Allied health	Community participation and long-term care	Sexuality	Quality of evidence "One randomised trial only..." (ADD REF HERE – either ?Song or Sansom). Statement at the end 'Await Cochrane review in Sept 2016" – REMOVE as my last contact with Louisa Ng, the lead author in Melbourne indicated that they had not even started the Cochrane review –only registered the protocol. The completed review isn't going to be available anytime soon! Remove this statement throughout this section (eg in "Resources and other considerations.	Agree - changes made.
200	Individual	Yes	Allied health	Community participation and long-term care	Sexuality	BASED ON one randomised controlled trial (ADD REF), an individualized sexual rehab session AND a control intervention (Generic written materials) were equally effective in improving WHAT (?) Outcomes (specify the outcomes). Both groups showed overall improvements, SUGGESTING benefits of sexual education programs generally Another non randomised study (Song et al 2011, n=46), DEVELOPED AND DELIVERED an education program that was subsequently TRANSLATED and MODIFIED for use by Sansom (2015) in a pilot randomised trial in Melbourne, Australia.	Agree - changes made.

201	Individual	Yes	Academic / researcher	Acute medical and surgical management	Dysphagia	In the Practice statement regarding texture modified food and thickened liquids the statement refers to monitoring of intake and tolerance to these consistencies regularly and then specifies weekly in brackets. Weekly monitoring of intake of texture modified food and thickened liquids is appropriate. However, tolerance (ie their ability to safely cope) with texture modified foods and thickened liquids should happen more regularly than once a week (e.g. 2-3x per week). I would suggest separating out these two elements - intake vs. tolerance.	Removed 'weekly' recommendation in practice statement- there is no evidence for timing. Also remove "and tolerance to the modified diet" (therapy is covered in first rec, these practice statements are about nutritional intake.
202	Individual	No	Allied health	Rehabilitation	Visual field loss	The 2010 NSF stroke guidelines include visual retraining strategies such as Fresnel prism glasses, computer based visual restitution training, visual scanning, however these are not included in the 2017 draft - is this because evidence has changed and these modalities are no longer recommended, or have they been missed?	2017 guidelines supersede 2010 guidelines. No specific evidence was identified for these specific modalities.
203	Organisation	No	Academic / researcher	Rehabilitation	General	I am concerned that I cannot find any reference to rehabilitation of swallowing at all in this document. Swallowing impairment affects both safety and efficiency of intake. Aspiration or choking will delay rehabilitation improvement, and could have catastrophic consequences. Problems with efficiency in swallowing contribute to dehydration and malnutrition. These are noted in the acute guidelines and are just as important in the rehabilitation guidelines. Without adequate nutrition there is insufficient energy to take part in physical rehabilitation of limbs, ADLs and exacerbation of cognitive deficits (attention, concentration, new learning ability). Rehabilitation of chewing and swallowing function is just as important as limb, ADL etc. rehabilitation.	Swallowing is located in the Acute chapter under Dysphagia.

204	Organisation	Yes	Academic / researcher	Managing Complications	Early feeding	In the section that discusses a recommendation for continuous pump feed preference over intermittent feeds, the reference (Lee 2010 [18]) does not appear to specifically support this recommendation. Intermittent feeding provides better opportunities for re-establishment of hunger regulation which is an important part of rehabilitation of swallowing by providing motivation and need to eat. Continuous feeding also has implications for adverse effects on sleep cycles. Has reflux of feed also been considered when recommending intermittent vs. continuous feeds?	Working party agreed and changed recommendation to read: 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. (Lee et al 2010 [17])
205	Organisation	Yes	Academic / researcher	Discharge planning and transfer of care	Discharge care plans	One of the key recommendations refers to access to all medications, equipment and support services. I would recommend specifically adding either here or separately information on access to texture modified food and thickened liquids (as needed). The literature shows that ~ 50% of stroke patients have dysphagia, and so it seems reasonable to specifically refer to provision or access to information about texture modified foods and thickened fluids in this document.	Recommendations about texture modified food and fluids are in the topic Dysphagia in the Acute medical and surgical management chapter.
206	Individual	No	Academic / researcher	All	Structure	The structure, presentation and format of the guidelines is excellent. It is very easy to use and uncluttered.	Noted - thank you.
207	Individual	Yes	Allied health	Rehabilitation	Memory	Good overview; it's a small point but perhaps for 12.4 - the last point 'be taught approaches aimed at directly improving their memory e.g. using a notebook, diary, mobile phone/audio alerts, electronic calendars and/or reminders', the techniques won't improve the memory, but rather compensate or assist recall. I could find anything on post-	Agree - changes made to practice point. Geoff contacted regarding where to find Anxiety in the guidelines.

						stroke anxiety - Maybe I missed it?? If it is not in here, was the literature reviewed? Or was it determine there was not enough evidence. I think it would be useful to have a statement on this because clinical anxiety can impact engagement and rehabilitation.	
208	Individual	No	Allied health	All	Structure	Overall I think it looks great. I read through all of the documents I think it is comprehensive whilst being easy to digest. The format is logical. I think that adding in the colour coding to the strengths of the recommendations was an excellent idea. Well done.	Noted - thank you.
209	Individual	No	Allied health	Community participation and long-term care		The driving recommendations do not appear to be completely consistent within the guidelines and/or with the Austroads guidelines.	Reviewed - these guidelines reference Austroads 2016 and are consistent with them.
210	Individual	No	Allied health	All	Structure	<p>These guidelines are difficult to read and to locate the necessary, important and clinically relevant information in a timely manner. The grading system is not as clear as previous guidelines, therefore it becomes difficult to understand how to interpret all of the recommendations.</p> <p>The format appears to be more of a research approach and focus, but it is important to remember that these guidelines are a tool for clinicians. It is important that the guidelines are a user friendly tool that busy clinicians can review to help guide their practice.</p> <p>It would be useful to collate all of the practice recommendations together. Similar to the summary table in each section of the 2010 guidelines</p> <p>The summary of recommendations document is useful, but needs a contents page.</p>	<p>Thank you for your feedback. We understand that this is a new way of accessing and viewing the guidelines and we found from our survey feedback that the majority of clinicians who used MAGICapp were very happy with the new format and the level of detail.</p> <p>We provide a summary of recommendations as we did for the 2010 guidelines which encompasses all the guidelines. A summary for each guideline chapter is also available when you print out each chapter.</p> <p>We will also be providing a suite of implementation tools including a Plain English</p>

							summary, slide set and discipline-specific summaries.
211	Individual	Yes	Academic / researcher	Rehabilitation	Aphasia	<p>The weak recommendation for intensive aphasia therapy is based on studies (from Brady et al., 2016) that in most cases (6 out of 8) tested high intensity high dosage therapy versus low intensity low dosage therapy. This means that any advantage observed in high intensity therapy may reflect high dosage rather than intensity (which is not indicated in the recommendation). Of the 2 studies that controlled for dosage, Martin et al. (2013) (SP-I-RiT) showed no significant difference between high and low intensity treatments, while Pulvermuller (2001) compared 2 different therapies, meaning no conclusions can be drawn regarding the effect of intensity at this stage based on these studies. A 2010 update of Cherney et al. (2008) JSLHR) systematic review on intensity found no benefits of high intensity over low intensity aphasia therapy.</p> <p>For chronic patients with aphasia, there is low quality but dosage-controlled evidence that high intensity aphasia therapy is not more effective than more distributed therapy</p>	<p>Our recommendations are based on the Brady review and their comparisons of high and low intensity of therapy. The review did not include a separate comparison of dosage. The concepts of intensity and dosage are closely related. Timing issue referred to in practical info. We removed the recommendation on Piracetam as not on TGA.</p>

					<p>for functional measures while distributed therapy may be more effective than high intensity therapy for measures of impairment (Dignam et al. (2015) Stroke). The Brady et al. (2016) Cochrane review draws conclusions regarding high dose aphasia therapy being more effective than low dose therapy (at least for functional communication in VERSE), however, dosage of aphasia treatment is not currently mentioned in the draft recommendations.</p> <p>Unlike the previous guidelines, there is no mention (either for or against) of how early aphasia therapy should be commenced. For clinicians this is a key question for aphasia management. The Brady et al. (2016) Cochrane review analyses data on this issue. Given that there is evidence (low quality) that deficits in cognition predict aphasia therapy outcomes (Lambon-Ralph 2010 Neuropsychological Rehabilitation), a potential Practice Point is that cognition should be assessed in stroke patients with aphasia.</p> <p>If the purpose of the guidelines is to guide Australian practice, the relevance of considering the use of Piracetam is not clear, given that this drug is not used therapeutically in Australia (and is currently on the Poisons schedule of the TGA 2016).</p>	
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212	Organisation	Yes	Pharmaceutical Industry	Secondary prevention		<p>Page 58 of 152; Another factor that may play a role in the choice of DOACs is the availability of a specific reversal agent for the anticoagulation effect of the NOACs. This may be particularly useful when rapid reversal of the anticoagulant effects of dabigatran is required for emergency surgery/urgent procedures and in life-threatening or uncontrolled bleeding. Idarucizumab (Praxbind) has been shown to completely reverse the anticoagulant effect of dabigatran within minutes (Pollack et al 2015 NEJM; REVERSE AD interim results). Idarucizumab (Praxbind) is TGA approved and available in Australia.</p> <p>Andexanet alfa (Andexanet) is a recombinant modified human factor Xa decoy protein that has been shown to reverse the inhibition of factor Xa in healthy volunteers (Connolly et al 2016 NEJM; ANNEXA-4 results). It is currently being evaluated and not yet approved for use in Australia.</p>	Information about DOAC reversal agents was added in rationale "... DOACs had variable effects on gastrointestinal bleeding versus warfarin. Although during these trials of DOACs versus warfarin there was no DOAC reversal agent available, outcomes after major bleeding, particularly intracerebral bleeding were similar, despite the capacity to reverse warfarin. More recently, idarucizumab has become available for immediate reversal of dabigatran (add ref) and andexanet alfa may become available for Xa inhibitors (add ref). The availability of these reversal agents for major bleeding or emergency surgery may further strengthen the recommendation for DOACs over warfarin."
213	Organisation	No	Managerial	All	Structure	<p>Overall the Magic App format was easy to use and comprehensive. The PDFs were too large and unmanageable to be of much benefit. Will the guidelines follow this format when they are published?</p> <p>The MagicApp is user friendly and the incorporation of decision aids, key info, rationale and reference lists assists in finding information quickly and allows the user to choose what depth of information they wish to access. This is made even easier with the highlighted labels of weak, strong, against recommendations.</p>	Thank you for your feedback. The guidelines will be published in MAGICapp and you will have the option to view online or export into a PDF or Word.

214	Organisation	No	Nursing	Rehabilitation		very good to have a recommended time when referrals to rehab are made from acute.	Noted - thank you.
215	Organisation	Yes	Managerial	Rehabilitation	Cognition	Will there be a definition section such as strategy training under the cognition section?	Definition included.
216	Individual	No	Allied health	Rehabilitation		We OTs work with so many neuro deficits that there still is a paucity of evidence based research in . Even though I am in an acute setting there can be a lengthy hold up with moving onto rehab and there is an expectation to provide rehab. Great to have more studies and interest around UL therapy and intensity of practice etc. Still so much else to know re vision/perception/cognition/sensory training - core work for an OT!	Noted - thank you.
217	Organisation	No	Managerial	Acute Medical and Surgical Management	Stroke unit care	The evidence for a dedicated stroke rehabilitation unit with co-located stroke beds within a geographically defined unit has been removed. Will the Organisational survey question be adjusted accordingly?	This evidence is included in the Acute and Rehabilitation Frameworks and further audits will contain these organisational questions.
218	Individual	No	Allied health	Rehabilitation		Very good. I would like bobath therapy to be included in this section as it is an approach that therapists use, but it would be good if the guideline presented the literature regarding it's effectiveness.	Thank you for your feedback. There is no evidence for the effectiveness of Bobath therapy and therefore it has not been included in the guidelines.
219	Organisation	Yes	Managerial	Acute Medical and Surgical Management	Assessment for rehabilitation	The clinical indicator does not match the recommendation contained in the practice point. Assessment by a physio does not equate to assessment for rehabilitation.	Correct clinical indicator included.

220	Organisation	Yes	Managerial	Rehabilitation		<p>Use the full terminology for ICF in line 3 and add reference (International classification of Functioning, Disability and Health)</p> <p>Stroke survivors being treated within a rehabilitation framework should always be constantly monitored and reviewed for signs of deterioration and in this situation referred to their treating neurologist or medical stroke specialist. - Add as sentence" stroke survivors treated within a rehab framework should be monitored and treated by a rehabilitation expert.</p> <p>Are all the neurologists or medical stroke specialists aware of this last sentence – it is a continual frustration for many NSW rehabilitation services, in trying to return a stroke survivor back to the acute unit when there is deterioration especially when services are not co-located.</p>	Agree - changes made.
221	Organisation	Yes	Managerial	Rehabilitation	Early supported discharge	<ul style="list-style-type: none"> • This recommendation is not clear and should be reworded so there is less ambiguity. In terms of definition there is an assumption that clinicians understand what a typical ESD program provides in terms of staffing and amount of therapist contact or hours of therapy. <p>The terms 'mild' and 'moderate' disability also needs to be further defined. Mild to moderate disability as assessed on the Barthel Index, FIM (provide range of scores). Finally, we are sending conflicting messages here – in that the 'amount of rehabilitation' we are recommending a 'minimum of 3 hours a day' of therapy (and this estimate will include stroke survivors with 'moderate disability') but then recommending these patients be discharged to ESD. Are we sure ESD services can provide the intensity of 3 hours per day?</p> <ul style="list-style-type: none"> • There is only one piece of evidence 	Re-worded recommendation to say: "Where appropriate services are available, early supported discharge service should be offered to stroke survivors with mild to moderate disability (see practical info section)." In the practical information section added in brackets at the end "...moderate disability, with Barthel Index scores between 10 to 18 points." Also added (in response another comment) "The evidence comes from the United Kingdom and there may be differences in care in Australia".

						<p>published in Australia, the majority are from Europe which has different models of care/service models where ESD is more likely to be effective, including access to more community services. For example in the UK it is possible to send a person home with 4 x daily carer visits in addition to daily therapist visits. There are just not the community services to support this in Australia.</p> <ul style="list-style-type: none">• ESD definition as per the Fearon review was 'any intervention that aimed to accelerate discharge from hospital with the provision of support (with or without a 'therapeutic' rehabilitation intervention) in a community setting.' In most cases the control group was stroke unit/medical or neurology ward, not a rehabilitation service.• Total amount of data available is limited and the authors note that there is insufficient evidence to draw conclusions on ESD services for patients living in a more dispersed rural setting.	
222	Organisation	No	Pharmaceutical Industry	Secondary prevention	Anticoagulant therapy	<p>Warfarin should be considered as equal first-line with DOACs for initiation in patients with non-valvular atrial fibrillation and adequate renal function. The reasons are: 1) there is uncertainty in physicians' practice of prescribing and dosing of DOACs; 2) real-world safety data for relatively new DOACs is still emerging; 3) differences exist in efficacy and safety among various DOACs; 4) there is no significant difference between DOACs and warfarin for prevention of ischaemic stroke; 5) absolute benefits of DOACs compared to warfarin is small; 6) benefits of DOACs may be less applicable in Australia where TTR (time within therapeutic range) is highRefer letter for more detail (this</p>	<p>The evidence from the RCTS of DOACs versus warfarin reflected real world time in therapeutic range for warfarin. Whilst elements of the evidence for superiority over warfarin may be more apparent for certain DOACs we have elected not to recommend a specific DOAC given the lack of direct head to head comparison.</p>

						is a summary only - more detailed information and references were provided).	
223	Organisation	Yes	Managerial	Rehabilitation	Goal setting	<ul style="list-style-type: none"> • Reword recommendation to make the focus less directive (Goals for recovery should be clearly communicated...) this makes the focus sound like the clinician sets the goals and informs the patient what they are – but goal setting is a collaborative process involving a conversation with patients and their valued others. It is essential to understand what matters to the patient before setting goals. • It would also be useful to clarify that there are 2 types of goals: patient goals and health professional goals. There are goals that health professionals have which may not necessarily be linked to the patient's goal eg. Our duty of care to keep patients safe when they have a cognitive impairment – patients may not agree with our goals in relation to this. • Instead of using the wording ‘well-defined, specific and challenging’ change to ‘SMART’ goals as this is the term used within rehabilitation. Maybe add after SMART ‘and should also be challenging. 	Recommendation reworded slightly to increase focus on patient-centred aspect of goal setting. "SMART" goals are mentioned in practical considerations
224	Organisation	No	Allied health	Secondary prevention	Long-term blood pressure lowering therapy	The title of this section should be changed to “Pharmacotherapy for blood pressure lowering” as this is a better representation of the information contained in this section.	These patients require pharmacotherapy regardless of the success of lifestyle measures. There are separate sections of lifestyle changes
225	Organisation	Yes	Managerial	Rehabilitation	Early mobilisation	Needs to be made clearer what constitutes as very intensive i.e. an extra 3 out of bed sessions as per AVERT trial Also needs to be clearer that mild strokes should not be held back as a result	Additional detail added to the practical Information session. The point about independently mobile people is included in practical considerations.

226	Organisation	No	Allied health	Secondary prevention	Cholesterol lowering therapy	The title of this section should be changed to "Pharmacotherapy for cholesterol lowering" as this better represents the information contained in this section. Furthermore, the opening paragraphs in this section should include a reference back to Lifestyle Modifications (Section 4).	These patients require pharmacotherapy regardless of the success of lifestyle measures. There are separate sections of lifestyle changes
227	Organisation	Yes	Managerial	Rehabilitation	Early mobilisation	Langhorne (36) mentioned in references, but not made reference to	Fixed.
228	Organisation	Yes	Managerial	Rehabilitation	Vision	Add a recommendation re management in the summary recommendations. There is no point assessing without having a management strategy.	Following statement added to the end of the vision section text: "There is currently insufficient evidence for either restitutive or compensatory strategies for visual dysfunction to make any recommendations on interventions."
229	Organisation	No	Allied health	Secondary prevention	Diet	<p>DAA Support that all stroke and TIA survivors should be educated on relevant lifestyle modifications.</p> <ul style="list-style-type: none"> · Section 4.2 Diet. This practice point should be changed to a strong recommendation, given that in the 2010 guidelines this was Grade A evidence and the studies were large meta-analysis and long term cohort studies with the outcome of stroke. From 2010 both "improving diet: a diet low in fat (especially saturated fat), low in sodium, but high in fruit and vegetables" and "Interventions should be individualised and delivered using behavioural techniques such as educational or motivational counselling" were Grade A evidence with references to support this. The latest version of the guidelines should reflect this. · Section 4.2 Diet. A practice point for referral to an APD should be added. APD's are the experts in nutrition and can provide 	<p>Where there were existing national guidelines and recommendations for lifestyle modifications, the working party elected not to stroke specific searches as these guidelines apply to all cardiovascular disease groups.</p> <p>A practice point referring to an APD has been included.</p>

						individualised advice to stroke or TIA survivors.	
230	Organisation	Yes	Managerial	Rehabilitation	Physical activity	<p>9.1 Amount of rehabilitation – should this be Amount of Physical Activity as rehabilitation incorporates all aspects of the person and this only takes physio and OT into consideration. Maybe add 'formal' prior to 'scheduled therapy time' ie. 'formal scheduled therapy time' so as not to undervalue the contribution to the stroke survivors therapy program provided by other disciplines such as nursing – though nursing and other disciplines can also provide formal scheduled therapy. Another suggestion is to change it to 'as much scheduled formal OT and PT as possible???</p> <p>Under consensus-based recommendation add nursing to semi-supervised and assisted practise involving nursing, family/friends, as appropriate</p>	Additional information added to practical information section.
231	Organisation	No	Managerial	Rehabilitation	Walking	Why is cueing of cadence a weak recommendation when it is backed up with a systematic review (reference 126)	This is justified in the rationale section of this recommendation.
232	Organisation	No	Managerial	Rehabilitation	Activities of daily living	Only discussing patients who are dwelling in the community, not patients in a rehabilitation setting, so should the same techniques be applied?	The evidence and recommendations includes subacute and community populations.
233	Individual	Yes	Medical	Secondary prevention	Long-term blood pressure lowering therapy	<p>I am a bit concerned, if the guidelines are just read superficially, that a doctor may feel justified treating from 155 to 145. I appreciate the reasons behind the reticence regarding targets but from a pragmatic perspective a firmer guiding hand is I think warranted.</p> <p>Would it be worthwhile inserting a line after 'All stroke and TIA patients, regardless of baseline blood pressure, should have long-term blood pressure lowering therapy initiated or intensified, unless contraindicated by symptomatic</p>	We have amended the recommendation and added two weak recommendations as per Heart Foundation feedback. We also modified the "Practical Info" to elaborate on targets that may be appropriate.

						hypotension.... i.e. The 'target' blood pressure in stroke is not well established, but aiming for a systolic pressure of less than 130 systolic may provide additional benefit without harm compared with <140/90.' (SPS3 2013 [42]; Arima et al 2006 [46] ; Thomopoulos, Parati and Zanchetti 2016 [47] ; Ettehad et al 2016 [48] ; Lahkan and Sapko 2009 [43]).' [Refer to NHF letter for references]	
234	Organisation	Yes	Managerial	Rehabilitation	Activities of daily living	Suggest a trained clinician instead of an Occupational Therapist specifically, this creates an opportunity to use generic staff	Agree - consistent with decision not to name professions.

235	Organisation	Yes	Health - NGO	Secondary prevention	Long-term blood pressure lowering therapy	<p>There is a recommended treatment target for hypertension (“to around 140 mmHg SBP, but not substantially below”) for acute stroke patients on p.31 of the secondary prevention chapter – but no treatment target specified for the longer term. A target would be very useful for General Practitioners and non-stroke physicians managing these patients long term. The Heart Foundation Guideline for the diagnosis and management of hypertension (HTG) in adults 2016 [2] recommends a treatment target for patients with hypertension and a history of stroke of <140/90 mmHg.</p>	<p>We have amended the strong recommendation and added two weak recommendations. We also modified the "Practical Info" to elaborate on targets that may be appropriate:</p> <ol style="list-style-type: none"> 1. All stroke and TIA patients, with a blood pressure of >140/90 should have long term blood pressure lowering therapy initiated or intensified (Strong) 2. In patients with a blood pressure of 120-140 systolic who are not on treatment, initiation of antihypertensive treatment is reasonable, with best evidence for dual (ACEI/diuretic) therapy. (Weak) reference: PROGRESS/Arima substudy 3. The ideal long term blood pressure target is not well established. A target of <130 systolic may achieve greater benefit than a target of 140 systolic, especially in patients with stroke due to small vessel disease'. (Weak) Ettehad meta-analysis, SPS3 <p>Practical info: There is no agreed blood pressure treatment target and the intensity of blood pressure lowering should reflect the overall vascular risk of the individual (which is high in people with a history of stroke). Sub analysis of the</p>
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						<p>PROGRESS trial did not find heterogeneity in the benefit of blood pressure lowering treatment across the range of baseline BP (noting that few patients had baseline BP<120mmHg). There did appear to be benefit in starting treatment for intracerebral haemorrhage patients if BP was >120mmHg. Treatment to at least 130 mmHg was not harmful in SPS3.</p> <p>Observational studies vary in whether there is an increase in stroke risk in people with low-normal BP (ie a "J-curve") and some have found a higher risk of poor outcome in patients with systolic BP <120mmHg. However this effect was not seen in meta-analyses of primary and secondary prevention trials including the SPRINT trial (which didn't include patients with stroke due to other ongoing research). Patient outcomes were improved by more intense blood pressure lowering to a target of <120mmHg systolic, irrespective of baseline levels (Thomopoulos et al 2016, [47] Ettehad 2016 [insert]). The ongoing SHOT trial (NCT01563731) is testing BP lowering in stroke patients to a target of <125mmHg vs 125-135mmHg vs 135-145mmHg.</p>
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							<p>We would suggest initiation or intensification of blood pressure lowering treatment to achieve systolic BP between 120-140mmHg. The use of ambulatory BP monitoring may be useful if the consistency of BP control is uncertain.</p>
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236	Organisation	Yes	Managerial	Rehabilitation	Upper limb activity	<p>The quality of the evidence for mechanically assisted arm training eg robotics is low yet it remains a strong recommendation. How realistic is the application of this in the clinical setting given the associated cost?? Is there a way to reword this recommendation to make it more applicable for clinicians???</p> <p>Electrical stimulation: could the title differentiate between FES and ES?</p> <p>Disagree that this recommendation should be 'strong' based on this systematic review for the following reasons:</p> <p>The 8 studies included in the subgroup analysis have methodological flaws (i.e. 3 did not have blinded assessors and the other 5 did not report concealed allocation or intention-to-treat analyses) which may have inflated treatment effects.</p> <p>There is also a risk of publication bias</p> <p>The upper limb subgroup analysis combined studies where the control included nil/placebo and motor/activity training therefore does not quite fit this PICO - This might be less of an issue</p> <p>The treatment effect and CI was expressed as a SMD and even the authors say that the "benefit of FES in real terms cannot be expressed" so difficult to make a 'strong' recommendation when clinical significance may be minimal. The SMD really should be back converted to determine if the treatment effect is clinically relevant.</p> <p>The authors 'Howlett et al' did not say there were 'substantial' benefits using this treatment in addition to usual care, which is how this has been graded.</p> <p>Agree with this: "Therefore, it is unclear whether electrical stimulation is more or less effective in people with different degrees of</p>	<p>Evidence profile has been reviewed and recommendation remains appropriate. Terminology changed to 'electrical stimulation (ES)' not 'FES' throughout guidelines. Agree that given the low quality trials in the SR that the rec be downgraded to weak.</p> <p>The quality of evidence using the GRADE methodology was considered moderate to low. Resource considerations are not part of reviewing the evidence and have been alluded to in the resources section.</p>
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						<p>arm weakness.”</p> <p>But this is unclear: “There is currently a lack of evidence as to the effect of electrical stimulation for improving motor function on disability or quality of life.”</p> <p>Given all these issues, this recommendation should follow a similar line of grading to the ‘ES and weakness’ recommendation and be given ‘Weak recommendation’ instead.</p>	
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237	Organisation	No	Health - NGO	Secondary prevention	Long-term blood pressure lowering therapy	<p>The stroke guideline recommends that ‘All stroke and TIA patients, regardless of baseline blood pressure, should have long term blood pressure lowering therapy initiated or intensified, unless contraindicated by symptomatic hypotension’. We suggest that the references used be reviewed. The references provided do not support this statement, or are not appropriate to underpin a guideline recommendation for widespread community use, or underpin quality indicators of care.</p> <p>i. The SPS3 Study [4] was a randomised open label study in lacunar stroke (n = 3020), which targeted a lower (SBP 130 mmHg) vs higher (SBP 130-140 mmHg) blood pressure. The blood pressure levels achieved in the two groups were 127 mmHg vs 138 mmHg respectively. There were no significant differences in the 3 outcome measures of death, recurrent stroke, and recurrent ischaemic stroke, with all hazard ratios crossing 1, and all p values > 0.05.</p> <p>ii. Arima et al [5] was a post hoc analysis of PROGRESS. It is felt that this is appropriate for hypothesis generation, however should not be used as a basis to make a guideline recommendation for widespread community use.</p> <p>iii. Thomopoulos et al [6] was a meta-analysis of randomised controlled trials for blood pressure lowering therapy (the patient population was not specified), comparing more vs less intensive treatment, targeting three different SBPs of 150, 140 and 130 mmHg. It is felt that this is not a suitable reference for secondary prevention in stroke,</p>	We acknowledge that not all references are stroke specific but these are large meta-analyses and consistent with stroke-specific literature
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					<p>and does not support the statement 'All stroke and TIA patients, regardless of baseline blood pressure, should have long term blood pressure lowering therapy initiated or intensified'.</p> <p>iv. Ettehad et al [7] is also a meta-analysis of randomised controlled trials of blood pressure lowering therapy, in a non-specified patient group, therefore it does not provide a suitable basis on which to make recommendations for a post-stroke population.</p> <p>v. Lakham et al [8] looked at blood pressure lowering for preventing stroke recurrence: a systematic review and meta-analysis. Studies included were heterogeneous in relation to baseline blood pressure. One of the included studies (PROGRESS), considered patients with systolic blood pressures up to 160 mmHg as 'normal'. These studies mostly used one or two antihypertensive drugs (compared with placebo), and achieved modest blood pressure reductions. It is not an appropriate reference to support the above recommendation.</p>	
238	Organisation	Yes	Managerial	Rehabilitation	<p>Communication</p> <p>11.1 Practice Point: Stroke patients should receive formal comprehensive assessment by a qualified speech pathologist Add link to aphasia pathway http://www.aphasiapathway.com.au/ 11.4 Stroke survivors with R hemisphere stroke should be screened for communication disorders</p>	<p>Link is provided in the Practical info section. Screening for communication disorders is in the rehabilitation chapter.</p>

239	Organisation	Yes	Medical	Secondary prevention	Long-term blood pressure lowering therapy	<p>In terms of the blood pressure lowering therapy outlined in the Secondary Prevention Chapter, some of our members have concerns about the recommendation that 'All stroke and TIA patients, regardless of baseline blood pressure, should have long term blood pressure lowering therapy initiated or intensified, unless contraindicated by symptomatic hypotension (SPS3 2013 [42]; Arima et al 2006 [46] ; Thomopoulos, Parati and Zanchetti 2016 [47] ; Ettehad et al 2016 [48] ; Lahkan and Sapko 2009 [43])'. Feedback from some Fellows is that the references cited either do not support this recommendation or are not appropriate to underpin a guideline recommendation for widespread community use. Please see the attached document for their specific feedback about the references cited.</p>	<p>We have modified the "Practical Info" to elaborate on BP targets that may be appropriate. The final text reads:</p> <p>There is no agreed blood pressure treatment target and the intensity of blood pressure lowering should reflect the overall vascular risk of the individual (which is high in people with a history of stroke). Sub analysis of the PROGRESS trial did not find heterogeneity in the benefit of blood pressure lowering treatment across the range of baseline BP (noting that few patients had baseline BP<120mmHg) (Arima et al 2006 [47]). There did appear to be benefit in starting treatment for intracerebral haemorrhage patients if BP was >120mmHg. Treatment to at least 130 mmHg was not harmful in SPS3 (SPS3 2013 [43]). Observational studies vary in whether there is an increase in stroke risk in people with low-normal BP (ie a "J-curve") and some have found a higher risk of poor outcome in patients with systolic BP <120mmHg. However this effect was not seen in meta-analyses of primary and secondary prevention trials including the SPRINT trial (which did not</p>
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							include patients with stroke due to other ongoing research). Patient outcomes were improved by more intense blood pressure lowering to a target of <120mmHg systolic, irrespective of baseline levels (Thomopoulos et al 2016 [48], Ettehad 2016 [49]). The ongoing SHOT trial (NCT01563731) is testing BP lowering in stroke patients to a target of <125mmHg vs 125-135mmHg vs 135-145mmHg. We would suggest initiation or intensification of blood pressure lowering treatment to achieve systolic BP between 120-140mmHg. The use of ambulatory BP monitoring may be useful if the consistency of BP control is uncertain.
240	Organisation	No	Managerial	Rehabilitation	Cognition	Very little evidence, just practice points	Yes unfortunately this is the case. We have conducted a systematic literature search but evidence is lacking.
241	Organisation	No	Allied health	Secondary prevention	Obesity	Section 4.4 Obesity. DAA support the recommendation that weight loss be promoted in those who are overweight or obese. However, in older adults (aged over 65 years) healthy range BMI cut offs change and weight loss should be considered on an individual basis.	Noted. Recommendation is to follow national guidelines.
242	Organisation	Yes	Managerial	Rehabilitation	Cognition	The recommendations are vague talking about strategy training – what is meant by this?	Definition included in practical advice.

243	Organisation	Yes	Managerial	Rehabilitation	Neglect	Typo in 3rd sentence under consensus based recommendation: 'visual scanning to reduce "the" impact of neglect	Fixed.
244	Organisation	No	Stroke survivor	Secondary prevention		Medication for lowering blood pressure cholesterol tablets aspirin	Respond to author thanking her for her feedback and provide information about enableme and other support services.
245	Organisation	Yes	Managerial	Rehabilitation	Perception	Typo in the 5th sentence under consensus based recommendations –trips, falls	Fixed
246	Individual	Yes	Nursing	Secondary prevention		Excellent very comprehensive. note Typo under Aspirin and clopidogrel 7/202 weak recommendation 'with after"	Fixed
247	Organisation	No	Pharmaceutical Industry	Secondary prevention	Cholesterol lowering therapy	Suggestion re CHOLESTEROL LOWERING THERAPY: The evidence around the importance of lipid lowering in both primary and secondary prevention is unanimous. As evidence emerges for the use of new classes of lipid lowering therapy, i.e. the PCSK9 Inhibitors, the suggestion would be to add this class as a treatment option (where not contraindicated) in those people who can not reach their LDL target on a statin or those who can not tolerate a statin	If RCTs demonstrate benefit of other agents for lipid lowering the guidelines can be updated in future.
248	Individual	No	Allied health	Secondary prevention		Am really pleased that it is spelt out loud and clear that splinting and stretch do not help with contracture or spasticity !	Noted - thank you.

249	Organisation	No	Allied health	Rehabilitation	Upper limb activity	<p>I suggest this requires further thought. The evidence cited to support this recommendation is the meta analysis published by Tyson & Kent. When the four specific studies that report effects of splinting the wrist and hand post stroke are reviewed, your recommendation over generalises the results. Tyson and Kent state, "The available evidence shows that an upper limb orthosis does not [affect] upper limb disability, range of movement (of the wrist or thumb) or pain; although there is some suggestion that a day-time orthosis may prevent the development of pain. These conclusions come from just four trials including two by the same research team and so should be treated with caution until replicated by other trialists" (Tyson & Kent, 2011, p.35).</p> <p>The two studies conducted by the same research team referred to above discovered that the routine use of (1) ONE modified resting splint design (with wrist position changes between the studies), (2) worn at night only, (3) for four of seven night per week, (4) in the early phases of recovery, (5) for four weeks only (6) when combined with routine upper limb therapy during the day, (7) had no effect on contracture and wrist pain (8) in people living with the consequences of (9) stroke or traumatic brain injury in the first study and (10) stroke in the second study. This does not equate with your recommendation. The measure of function included these studies was the Motor Assessment Scale. It may be argued that this is not an accurate indicator of function. It assesses the performance of predetermined tasks under controlled conditions. It does not assess how a person</p>	<p>The guideline recommendations, by definition as based on the current evidence base, not current clinical practice. Both the Tyson review of splinting, and the Katalinic review of all stretch interventions (including splinting) showed evidence of no effect of splinting on joint mobility or any other outcomes. Although confidence intervals were wide in the Tyson review, due to the low sample sizes involved, the plausible range of effects was clinically insignificant, meaning that low statistical power was not the issue. The widest confidence interval was -5 degrees to +5 degrees. Even if a 5 degree difference in range of motion is considered clinically important (and most experts believe that a 10 degree difference is the smallest worthwhile effect), the confidence interval does not include a worthwhile effect (noting also that the difference between groups was 0.4 to 1 degree, with 95% confidence intervals straddling 0). The Katalinic review of all stretch interventions, including splinting also found strong evidence of no effect. Therefore there is robust evidence that the use of wrist</p>
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					<p>uses the wrist and hand in daily life to carry out self-determined goals.</p> <p>The third study included by Tyson and Kent (2011) and used to adopt a position against splinting examined the effects of (1) ONE of TWO thumb splints (2) worn by a mixed sample that included SCI (n=23), CVA (n=14) and TBI (n=7), (3) some of whom were up to three years post SCI, where thumb splints were (4) only worn at night (5) for twelve weeks. The application of these findings to stroke is questionable considering the majority of participants were those with spinal cord injury who have already experienced atrophy and perhaps, loss of web space. The fourth study included actually supports the use of (1) a neutral alignment (2) custom made wrist support (3) that was worn for up to 16 hours per day for up to 13 weeks to (4) reduce pain. It is inappropriate to use this study to justify a position against splinting.</p> <p>Usual occupational therapy practice when prescribing a wrist-hand orthosis for people post stroke is guided by careful analysis of the presenting problems in the wrist and hand. Several splint designs may be selected. Best practice would never be to prescribe the same splint for all patients (esp. for mixed diagnoses like CVA, TBI and SCI). I go so far as to say that the primary assumption of the first article published by Lannin, et al (2004), eg. that therapists routinely prescribe a resting splint (one only), was incorrect. It works well to limit the intervention to one splint only when conducting a randomised controlled trial but is not usual practice. I cannot imagine any situation where a recommendation would be made to wear the splint for four consecutive</p>	<p>and hand orthoses not effective for improving joint mobility or indeed any other outcome measured including spasticity and arm function.</p>
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					<p>nights and remove it for three. The long term risks and benefits (beyond the time frame of these studies) is also considered in usual practice. Instructions for incorporating the splint into routine therapy that involves active hand training or passive hand involvement would be provided. Finally, the purpose for choosing to splint extends beyond management of contracture, pain, tone or clinically controlled dimensions of function.</p> <p>In my opinion, the impact of your similar 2010 recommendation against splinting post stroke has been detrimental to occupational therapy practice. The same limited evidence reported above and cited in your 2010 Guidelines appears to have resulted in the widespread abandonment of splinting as an intervention for people post stroke who are now living with contracted, painful and non-functional wrists and hands. By repeating this recommendation in the new guidelines, I believe you are inflating the findings of the three studies this DRAFT statement is based on. All you can recommend against is the short-term, routine use of a specific wrist hand orthosis worn at night only for 4 of 7 nights per week -- not the carte blanche statement that hand and wrist splints have no effect and should not be used.</p> <p>I am more than willing to discuss this further should you feel it appropriate, and refer you to:</p> <p>Copley, J., Kuipers, K., Fleming, J., & Rassafiani, M. (2013). Individualised resting hand splints for adults with acquired brain injury: a randomized, single blinded, single case design. <i>NeuroRehabilitation</i>, 32(4), 885-898 doi:10.3233/NRE-130913</p>	
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250	Organisation	No	Medical	Secondary prevention		The RACP is happy to support the recommendations relating to glycaemic therapy, diabetes, hormone replacement therapy and oral contraception and has no feedback on these areas.	Noted - thank you.
251	Organisation	Yes	Allied health	Managing Complications		DAA recommends 'Accredited Practising Dietitian (APD)' be used in place of 'dietitian' throughout the document. APDs are university-qualified professionals that undertake ongoing training and education programs to ensure that they are the most up-to-date and credible source of nutrition information, in line with DAA Professional Standards. APDs are trained to assess nutritional needs. They also assist people to manage health conditions and diseases using food as Medical Nutrition Therapy.	APD has been included where necessary as it is recognised that there are many unaccredited people in this field.
252	Organisation	Yes	Allied health	Appendix 4		DAA are pleased to see a number of dietitians involved in the working group. DAA request that our two representatives, Fiona Simpson and Judy Martineau, be listed as DAA representatives.	Changes made.
253	Individual	Yes	Allied health	Acute Medical and Surgical Management	General	General comment "Furthermore, rehabilitation should commence in the acute phase" More specific direction could be included in the recommendations about what rehabilitation interventions are deemed appropriate or not in the acute setting.	Introduction in the Acute chapter has been modified and cross-referenced to other appropriate chapters.
254	Individual	Yes	Nursing	Acute medical and surgical management	Summary of recommendations	please refer to page 4 of 202 summary of recommendations , un the practice point bullet point two needs rewording "present who present "	Changed to presenting.

255	Individual	No	Allied health	Rehabilitation	Upper limb activity	<p>Strong Recommendation AGAINST</p> <p>Hand and wrist orthoses (splints) should not be used as part of routine practice as they have no effect on function, pain or range of movement (Tyson et al 2011 [133])</p> <p>This statement is misleading as it does not specify the use of resting hand splints. The RCTs included in this review have only investigated the use of resting hand splints. In addition, the statement does not specify the use of resting splints in isolation. The RCTs included in the Tyson review investigated splints used alone, rather than as part of a comprehensive intervention program. Sufficient research investigating the use of splints as a component of intervention, used in conjunction with movement retraining and other techniques (as is often the case in clinical practice), has not yet been conducted. Recommending against using splints as part of a treatment program is therefore unfounded.</p> <p>Other aspects of the studies used to arrive at this recommendation are also worth considering, in terms of how closely these studies represent clinical practice. It is important when evaluating systematic reviews such as these that external validity (generalisation to one's own context) is considered. Without this consideration, there is lack of awareness as to whether an intervention may be useful in some, but not all, clinical situations.</p> <p>Three of the RCTs included in Tyson's review indicated no increase in passive range of motion following splint wear. However, in all these studies, passive range of motion was either close to normal to begin with (wrist extension 76-79 degrees at baseline [Lannin et al, 2003]); or at baseline</p>	<p>Both the Tyson review of splinting, and the Katalinic review of all stretch interventions (including splinting) showed evidence of no effect of splinting on joint mobility or any other outcomes. Therefore there is robust evidence that the use of wrist and hand orthoses is not effective for improving joint mobility or indeed any other outcome measured including spasticity and arm function. Yes, contractures, pain and spasticity persist in the chronic phase after stroke, there is evidence that splinting and stretching is <i>not an effective treatment intervention</i>. While there is no evidence of harm from splinting, the 'harm' comes from inappropriate use of resources. All suggested additional references were sourced and reviewed. Following careful review of the evidence sources, additional papers as suggested and consultation with the expert WP, no changes to the recommendations were made.</p>
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					<p>was already beyond the point where the wrist was splinted (mean of 58 degrees at baseline in Lannin et al, 2007, with the splint placed at neutral or around 45 degrees extension; mean of 50 degrees extension in Basaran et al, 2012, with the wrist positioned conservatively in the splint). In all these circumstances, it is debatable whether the splint would be applied clinically with the purpose of increasing passive range of movement, or that it would be expected to increase passive range of movement if the splint was positioned at less than the end range. In the Burge et al (2008) RCT, participants who did not receive a splint lost wrist mobility (indicating that the splint may not have increased range but may have maintained it). A more recent randomised, single blinded, single case design that was not published at the time of the Tyson review (Copley et al, 2013) found that the splinted group maintained passive range of motion while the non-splinted group lost passive range of motion, suggesting that splints helped maintain passive range of movement. Other studies that were not RCTS and therefore not included in the Tyson review (e.g. Pizzi et al, 2005) have found an increase in passive range after splinting.</p> <p>Copley and Kuipers (2014) provides a full narrative review of the use of both resting and functional splints post-stroke. A narrative review was used here as there are many individual client and situational factors which might affect the way in which clinician's apply splints with this population. All these factors have not yet been applied in the splinting studies that have been included in the systematic reviews on</p>	
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					<p>splinting conducted to date. For example, the effect of individualising the design and positioning of the splint, as well as its wearing schedule, has not been adequately addressed. A narrative review of the research suggests that the length of time post injury, the degree of spasticity/hypertonicity, the use of daytime or night-time wear, and the position of the splint to provide submaximal stretch to hypertonic muscle groups for each person, may all be important factors in splinting practice. The Copley et al (2013) resting splint study used an individualised clinical reasoning tool, the Hypertonicity Intervention Planning Model (HIPM) (Copley & Kuipers, 2014) to individualise splint design and position. As mentioned above, this study found that resting splints helped maintain passive range of motion. Given that research has shown it is difficult to gain expertise in upper limb hypertonicity management (Burgess et al, 2008), it is likely that the informed use of splinting relies on individualised clinical reasoning skills. Kuipers et al (2009) found that exposure of novice therapists to the HIPM resulted in more structured, expert reasoning when making clinical decisions. The use of this model therefore may have resulted in a more structured expert application of splinting in the Copley et al (2013) study. The results of this study and other research cited above calls into question the recommendation against splinting in the proposed stroke guidelines. More in-depth information on the review included in Copley & Kuipers (2014) can be provided on request.</p> <p>At the very minimum, I would propose that</p>	
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						<p>the statement on page 9 be amended to: Resting hand and wrist orthoses (splints) should be carefully considered and applied with consideration of individual characteristics as, when used in isolation, they do not affect function, pain or range of movement for all people.</p>	
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256	Organisation	No	Medical Technology Industry	Managing Complications	Contracture	<p>This strong recommendation against the use of splints for the management of contractures does not address the chronic stroke population. Therapists have following the existing Stroke Guidelines (2010) of no splinting and have used it in the chronic stroke population - In clinical practice, what results have they seen? Do patients have better range, less contractures, less joint deformities, less spasticity? How do they manage the upper limb for someone who has not recovered any hand function, and considering the pathophysiology of spastic paresis.</p> <p>Therapists read "routine" as meaning "no". Contractures, deformities, joint instability and pain continue to persist in the UL of chronic stroke patient.</p> <p>"The Splinting for the prevention and correction of contractures in adults with neurological dysfunction Practice guideline for occupational therapists and physiotherapists" by the College of Occupational Therapists and Association of Chartered Physiotherapists in Neurology have created a document that assists the therapist to work through and assess the need for orthotic intervention. The authors emphasise that splinting should only be undertaken as part of the comprehensive multidisciplinary management of the patient, by appropriately skilled postgraduate practitioners, and additionally there is need for clear objectives, patient consent, measurement and review.</p> <p>Summary tables of recommendations from their document suggests the following: It is the view of the Guideline Development Group (GDG) that, taking into account the systematic review findings and the strength</p>	<p>Both the Tyson review of splinting, and the Katalinic review of all stretch interventions (including splinting) showed evidence of no effect of splinting on joint mobility or any other outcomes. Therefore there is robust evidence that the use of wrist and hand orthoses is not effective for improving joint mobility or indeed any other outcome measured including spasticity and arm function. Yes, contractures, pain and spasticity persist in the chronic phase after stroke, there is evidence that splinting and stretching is <i>not an effective treatment intervention</i>. While there is no evidence of harm from splinting, the 'harm' comes from inappropriate use of resources.</p>
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					<p>of the evidence, splinting interventions can have a role in overall prevention and correction of contractures. Nonetheless, therapists must be analytical and critical in their splinting practice, identifying when splinting may be applicable and when not. The GDG agrees with the recommendations made in other guidelines, such as the National clinical guideline for stroke (Intercollegiate Stroke Working Party [ISWP] 2012), that splints for the wrist and hand should not be used routinely after stroke. This does not mean, however, that splinting (splints or casts) has no role, and it is advocated that it should be considered for the wrist and hand in selected cases. Splinting requires clinical reasoning:</p> <ol style="list-style-type: none"> 1. What is the purpose and goal of the splint? Hygiene, function, maintain tissue length 2. What type of splint should be prescribed? The same splint will not work for everyone. 3. Do therapists have the required splinting skills? Do you make the thermoplastic splint or use adjustable soft prefabricated splints? 4. Ease of application - Who will fit the splint? Where does the patient reside? 5. Skin condition - How fragile is the skin? Thermoplastic or prefabricated soft splint 6. Monitor and re-evaluate the splint and the splint wear program - Depending on joint and tissue changes, splints need to be modified and changed accordingly. <p>It is important that the guidelines be not a directive but facilitate and encourage good clinical reasoning.</p> <p>EBP is "the integration of best research evidence with clinical expertise and patient</p>	
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						<p>values" (Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000, p.1). This means that evidence based practice does not rely on appraisal of the literature alone. As well, clinical experience (i.e., the clinician's expertise, clinical reasoning, and past experience) and the patient's preferences and life-goals must also be considered (Hoffman, 2008). This is a great definition of evidence based practice. Rather than just relying on the literature alone, clinical experience and the patient's goals must be considered. If something doesn't work, you re-evaluate and work out a new plan. But if something works consistently in clinical practice, then it is reasonable to keep doing it.</p>	
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257	Organisation	No	Medical Technology Industry	Managing Complications	Contracture	<p>Serial casting is a method of providing a prolonged stretch and positioning to tight muscles and then changed over time to gradually increase the stretch provided to muscles and improve joint ROM. It is therefore "prolonged positioning". Following serial casting, what is the recommendation to maintain joint ROM and tissue length? Active motor training may not be sufficient to maintain ROM and a splint maybe required to maintain joint ROM and tissue length.</p> <p>For patients who have developed a contracture, active motor training will be difficult. Consider the patient in a NH environment or those who are not actively engaged in a rehab program.</p>	<p>The Katalinic review found no evidence that any stretch intervention, including prolonged positioning or casting was effective. The upper limb activity section of the rehabilitation chapter presents recommendations of effective interventions for stroke survivors with and without active voluntary movement.</p>
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258	Organisation	No	Medical Technology Industry	Rehabilitation	Upper limb activity	<p>This broad statement does not assist the clinician in making a clinical decision regarding orthotic intervention for the UE. The UK Practice guideline for occupational therapists and physiotherapists on Splinting for the prevention and correction of contractures in adults with neurological dysfunction is concise document that works through orthotic intervention. The authors emphasise that splinting should only be undertaken as part of the comprehensive multidisciplinary management of the patient, by appropriately skilled postgraduate practitioners, and additionally there is need for clear objectives, patient consent, measurement and review. It is the view of their Guideline Development Group (GDG) that, taking into account the systematic review findings and the strength of the evidence, splinting interventions can have a role in overall prevention and correction of contractures. Nonetheless, therapists must be analytical and critical in their splinting practice, identifying when splinting may be applicable and when not. The GDG agrees with the recommendations made in other guidelines, such as the National clinical guideline for stroke (Intercollegiate Stroke Working Party [ISWP] 2012), that splints for the wrist and hand should not be used routinely after stroke. This does not mean, however, that splinting (splints or casts) has no role, and it is advocated that it should be considered for the wrist and hand in selected cases.</p> <p>When discussing orthotic management in the neuro hand, it needs to be broken into acute and chronic. During the acute inpatient stage, we want to try to facilitate as much movement in the arm as possible. You</p>	<p>Our guidelines are intended to guide clinical practice in Australia.</p> <p>The guideline recommendations, by definition as based on the current evidence base, not current clinical practice. Both the Tyson review of splinting, and the Katalinic review of all stretch interventions (including splinting) showed evidence of no effect of splinting on joint mobility or any other outcomes both of which found robust evidence that the use of wrist and hand orthoses is not effective for improving joint mobility or indeed any other outcome measured including spasticity and arm function. Therefore there is not evidence that any stretch or splinting interventions prevent or reduce contracture.</p> <p>The recommendations are based on systematic review of the all current evidence using a specific methodology (GRADE). It is therefore not appropriate that we link to other clinical guidelines that we have not been involved with.</p>
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					<p>will use a number of treatment methods to do this. A priority will be to provide sensory feedback to the limb for motor recovery. The "routine" use of splints suggests that you are not thinking about what you are doing. There will be times where you may need to support a weak joint to facilitate function, facilitate a better hand/arm position. How you do this may include a splint. The splint used here has a different function and goal and our clinical decision cannot be determined by this stroke guideline. For example: A wrist splint supporting the wrist will allow improve the quality of movement in the fingers</p> <p>There are therapists who have followed the existing Stroke Guidelines (2010) of no splinting. How does this play out in the chronic stroke population? What results have we seen? Do they have better range, less contractures, less joint deformities, less spasticity? How do we manage the upper limb for someone who has not recovered any hand function? Consider the pathophysiology of spastic paresis. We continue to see patients who experience a whole heap of complications which may include tissue shortening, joint contractures, joint instability, joint deformities - swan neck/boutonniere, nerve compression , vascular changes etc. Think about all the other anatomical structures in the upper limb. For example, sustained wrist and finger flexion will cause changes to the dorsal wrist capsule and finger ligaments leading to instability. The have neuropathic arm pain due to compression and stretch on nerves. When their wrists are passively mobilised, the wrist clunks - reflective of ligament changes and instability.</p> <p>The use of splints requires clinical</p>	
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					<p>reasoning. It is not a stand alone treatment - this should be emphasized in the guidelines. Clinicians need to think through:</p> <ol style="list-style-type: none"> 1. What is the purpose and goal of the splint? Hygiene, function, maintain tissue length 2. What type of splint should be prescribed? The same splint will not work for everyone. 3. Do you have the required splinting skills and knowledge on how to splint? Do you make the splint or use prefabs? 4. Ease of application - Who will fit the splint? Where does the patient reside? 5. Skin condition - How fragile is the skin? Thermoplastic or prefabricated soft splint 6. Monitor and re-evaluate the splint and the splint wear program - Depending on joint and tissue changes, splints need to be modified and changed accordingly. <p>The guidelines for Australia should be reflective of what the UK practice guidelines suggest. Duncan et al in her Stroke Rehabilitation Clinical Practice Guidelines summary recommend that spasticity and contractures be treated with antispastic positioning, range of motion exercises, stretching, splinting, serial casting, or surgical correction.</p> <p>When treating stroke patients, there are so many variables. Hence clinical reasoning should be used in conjunction with EBP. EBP is "the integration of best research evidence with clinical expertise and patient values" (Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000, p.1). This means that evidence based practice does not rely on appraisal of the literature alone. As well, clinical experience (i.e., the clinician's expertise, clinical reasoning, and past experience) and the patient's</p>	
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						<p>preferences and life-goals must also be considered (Hoffman, 2008). This is a great definition of evidence based practice. Rather than just relying on the literature alone, clinical experience and the patient's goals must be considered. If something doesn't work, we re-evaluate and work out a new plan. But if something works consistently in clinical practice, then it is reasonable to keep doing it.</p>	
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259	Individual	No	Allied health	Acute medical and surgical management	Stroke unit care	<p>Discussion point - The evidence for the benefits of stroke unit care is clearest for units that can provide several weeks of rehabilitation on a comprehensive stroke unit or stroke rehabilitation unit (SUTC 2013 [5]). Services that can provide combined or highly integrated acute and rehabilitation care appear to deliver the best outcomes. NOT included in the recommendations? Reference is made to the possibility of better outcomes (reduced death and dependency and shorter LOS) of integrating acute and rehab stroke services as a "Comprehensive Stroke Unit" but notes "the indirect nature of the evidence means that there is substantial uncertainty about these benefits". Chan et al (2013) [7]</p> <p>Is the meta analysis completed of sufficient quality that any weak recommendations /statements or GPP could be made about comprehensive unit may be preferred and that research needed to confirm or refute the significance of the benefit. ? This may assist services to contribute to pursuit of the research base to validate (or refute)the significance of the possible benefits identified in the meta analysis. It may influence the development of new stroke unit, rehab units and possibly influence policy makers to combine existing units to improve outcomes. Given that stroke unit care has had strong evidence for several years now, we should be pushing beyond that now to establish which are the best models of "stroke unit care" (& rehab) for overall outcomes particularly as the guidelines recommend rehab should occur in the acute phase.</p>	The evidence (meta-analysis) is not strong enough to specify exactly what type of model is best.
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260	Individual	Yes	Allied health	Acute medical and surgical management	Assessment for rehabilitation	<p>Practice points</p> <ul style="list-style-type: none"> • Every stroke patient should have their rehabilitation needs assessed in the first week of stroke by members of the multidisciplinary team, using the Assessment for Rehabilitation Tool (REF). • 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. <p>Given that the ART is aimed to ensure all patients who could benefit from rehab are identified, and that there is a finite amount of resources for inpatient rehab, perhaps further comments could be made about the possible challenges which may be raised by routine use of ART for all stroke survivors. Comment on the ART's ability to delineate / identify the most suitable model of rehab (ie inpatient rehab, community based rehab, transition care services).</p> <p>Based on the Cochrane review which concludes "there are no firm grounds for restricting access according to a person's age, sex, stroke severity or pathological stroke type" [Stroke Unit Trialists Collaboration 2013 [5], p18], consideration should be given to including a statement to recommend that "services have localised processes for identifying, triaging, directing, waitlisting rehab referrals to the available resources " due to the possibility of demand and supply mismatch.</p>	In the practical info section we added "While there are no grounds for restricting access to rehabilitation to any stroke survivor with identified rehabilitation needs, there may well be a mismatch between demand for rehabilitation and availability of services".
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261	Individual	Yes	Allied health	Rehabilitation	Early supported discharge	<p>Where comprehensive stroke services are available as an alternative to stroke unit care and include inpatient and community rehabilitation, early supported discharge service should be offered to stroke patients with mild to moderate disability. (Fearon et al 2012 [9])</p> <p>The suggestion that perhaps usual care had improved since Fearon 2012's conclusions and the difference is not as large as thought, perhaps the "Strong" recommendation that ESD "should" be offered for those with mild to moderate disability could be revised to more carefully acknowledge the benefits and patient and carer gains received from inpatient rehab, particularly given that "The level of services available following discharge from hospital can be limited, and stroke survivors and their families/carers often report being dissatisfied with the information, support services and therapy available" P24. More guidance should also be provided about what at a minimum would constitute an ESD that is deemed comparable to stroke unit care.</p>	<p>Re-worded recommendation to say: "Where appropriate services are available, early supported discharge service should be offered to stroke survivors with mild to moderate disability (see practical info section)." In the practical information section added in brackets at the end "...moderate disability, with Barthel Index scores between 10 to 18 points." Also added (in response to comment line 228) "The evidence comes from the United Kingdom and there may be differences in care in Australia".</p> <p>Information in the practical information box provides detail and links regarding recommended elements of effective ESD services.</p>
262	Individual	No	Allied health	Rehabilitation	Home-based rehabilitation	<p>Home-based rehabilitation may be considered as a preferred model for delivering rehabilitation in the community. Where home rehabilitation is unavailable, stroke patients requiring rehabilitation should receive centre-based care. (Rasmussen et al 2016 [19]; Ghazipura 2015 [18]; Hillier et al 2010 [21])</p> <p>Although statistically significant, were the very small mean group differences in Bartel Index reported actually a clinically meaningful improvement to support this recommendation?</p>	<p>As outlined in the benefits and harms section this recommendation is based not only on the small benefit in relation to function, but the large benefit noted in terms of quality of life. The 'weak' nature of the recommendation reflects the low number of studies.</p>

263	Individual	Yes	Allied health	Rehabilitation	Weakness	<p>Stroke survivors with reduced strength in their arms or legs should be offered progressive resistance training. (Ada, Dorsch and Canning 2006 [43]; Harris and Eng 2010 [42])</p> <p>AND</p> <p>Weak Recommendation: For stroke survivors with reduced strength in their arms or legs (particularly for those with less than antigravity strength), electrical stimulation may be used. (Nascimento et al 2014 [39])</p> <p>Recommendation needs to stipulate it is for mild to moderate UL weakness as applicable for the population from (Harris JE, Eng JJ)</p> <p>AND</p> <p>Eng excluded ES as a strength training.....</p> <p>However, Ada L, Dorsch S, Canning CG's systematic review DID include electrical stimulation an mental practice as a strengthening modality!! Electrical stim as a modality for strengthening SHOULD be included in the definition of a "strengthening" therapeutic application based on Ada's SR.</p> <p>It is not clear why the electrical stimulation is ONLY a weak recommendation and isn't also referenced by Ada's systematic review.</p> <p>In Upper Limb Activity section, E stim is a STRONG recommendation – conflicting with this section??</p>	<p>The Ada review appears in the evidence summary for any strengthening interventions. It is not possible to extract the effectiveness of ES alone from this review. Practical information section of this recommendation amended slightly to highlight lack of certainty about the optimal strengthening protocols and whether it is more or less effective in weaker or stronger patients. The strength of the recommendation was reviewed and deemed appropriate.</p>
264	Individual	Yes	Allied health	Rehabilitation	Loss of sensation	<p>For stroke survivors with sensory loss of the upper limb, sensory discrimination training may be provided. (de Diego et al 2013 [44]; Carey et al 2011 [46]; Doyle et al 2010 [47])</p> <p>A definition of sensory discrimination training could be included in the glossary.</p>	<p>Additional information added to practical information section.</p>

265	Individual	Yes	Allied health	Rehabilitation	Vision	<p>VISION: Practice statements.</p> <p>The practice statement makes no suggestions about possible education and adaptive training approaches for patients with visual impairments to allow them to maximise function despite their visual deficit. The statement advises it should be assessed but should also include a consensus point about education being provided for patients and carers, as well as comment on adaptive approaches commonly used in rehab presently to guide current practice and further research.</p>	<p>Following statement added to the end of the vision section text: "There is currently insufficient evidence for either restitutive or compensatory strategies for visual dysfunction to make any recommendations on interventions."</p>
266	Individual	Yes	Allied health	Rehabilitation	Amount of rehabilitation	<p>For stroke survivors, rehabilitation should be structured to provide as much scheduled therapy (occupational therapy and physiotherapy) as possible, with a minimum of three hours a day ensuring active task practice is maximised during this time. (Lohse et al 2014 [57])</p> <p>For stroke survivors, group circuit class therapy should be used to increase scheduled therapy time. (English et al 2015 [53])</p> <p>Can the wording in the recommendation consider "provide as much opportunity for practice of therapy activities (physio, OT and SP)" in order to acknowledge more explicitly the patient self practise or semi-supervised time as crucial to maximising intensity of rehab. "Scheduled therapy (OT and Physio)" implies booked therapy times, that the therapist must attend / facilitate the therapy, and the patient is passive. However, in reality, therapists can be innovative in approaches, using circuit classes as recommended, but also use self directed therapy, independent practice, practice on wards with nursing staff, and semi-supervised practice are CORE</p>	<p>We have been explicit in how we calculated the 3 hours of therapy time. We have added text to clarify the relevance of the evidence to time post-stroke. Also there is evidence from a large RCT that 3 hours of physiotherapy per day (provided in group circuit class therapy) is safe and feasible. This is included in the rationale and evidence summary.</p>

						techniques to achieve the benchmark of minimum 3 hrs per day. This is reflected in the Practice statement, but the “Strong Recommendation” could be reworded to support a multifaceted approach to achieving the desired intensity.	
267	Individual	Yes	Allied health	Rehabilitation	Cardiorespiratory fitness	The practical info discusses once a patient is medically stable and has passed a screen for inclusion in cardiorespiratory fitness training, tailored interventions can be provided. Are there any further recommendations regarding the screening tools or criteria to be used for the screening process to allow a cardiorespiratory fitness training program to commence?	Additional information added to Practical info section.
268	Individual	Yes	Allied health	Rehabilitation	Activities of daily living	ADL REFERENCE ARTICLE LINK DOESN'T WORK [181] Guidetti S, Ranner M, Tham K, Andersson M, Ytterberg C, von Koch L A "client-centred activities of daily living" intervention for persons with stroke: One-year follow-up of a randomized controlled trial.. Journal of rehabilitation medicine 2015;47(7):605-11- PubMed Journal	Fixed
269	Individual	Yes	Allied health	Rehabilitation	Activities of daily living	ADL REFERENCE ARTICLE LINK DOESN'T WORK [184] Shinohara K., Yamada T., Kobayashi N., Forsyth K. The model of human occupation-based intervention for patients with stroke: A randomised trial. Hong Kong Journal of Occupational Therapy 2012;22(2):60-69- Journal Website	Fixed
270	Individual	Yes	Allied health	Rehabilitation	Cognition	The practice points for all sections in cognition should include a statement about education about deficits and possible strategies to the patient and family if experts agree they considered an agreed part of	Statement about education and strategies added to the background text.

						routine care, not just in the discussion sections.	
271	Individual	Yes	Allied health	Rehabilitation	Attention and concentration	Weak Recommendation: For stroke survivors with attention and concentration deficits, consideration may be given to prescribing exercise training and leisure activities. (Liu-Ambrose et al 2015 [240]) The evidence for this recommendation applies to the chronic CVA population with mild cognitive impairment and these factors should be stipulated in the recommendation.	Clarifying comments added to practical info section. The selection criteria for the parent trial list cognitive impairment as an exclusion. The comment in the Abstract Conclusion about mild cognitive impairment was just a reflection of the cohort's cognitive status on testing, not a selection criterion.
272	Individual	Yes	Allied health	Rehabilitation	Limb apraxia	Should state "adequate movement AND sensation should be screened for apraxia".	Change made.
273	Individual	No	Allied health	Rehabilitation	Neglect	NEGLECT : - Practice point refers to full assessment with validated tools Can any further direction about preferred tools be offered by expert group.	It is outside of the scope of the this guideline to review the quality of all existing tools. We hope to include this in scope in future guidelines depending on resources.
274	Individual	No	Allied health	Rehabilitation	Neglect	Pg 222 Weak Recommendation: Stroke survivors with symptoms of unilateral neglect may be provided with cognitive rehabilitation (e.g. computerised scanning training, pen and paper tasks, visual scanning training, eye patching, mental practice). (Bowen et al 2013 [264]) Can more specific recommendations be provided regarding eye patching (hemifield patching in preference to monocular) and the specifics of applications (minimum wear time) to guide practice an research further.	There is insufficient evidence to guide practice further than what is covered in the guidelines

275	Individual	No	Allied health	Managing complications	Early hydration	<p>Hydration: Pg20 / 140 Strong Recommendation</p> <ul style="list-style-type: none"> • 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. (Visvanathan et al 2015 [9]) <p>A practice point should be made in reference to use of IV fluids – (when required) to preferably NOT be via a parietic limb.</p>	Thanks. This practice point would be too specific.
276	Individual	No	Allied health	Managing complications	Spasticity	<p>For patients with stroke, adjunct therapies to Botulinum toxinum A such as electrical stimulation, casting, taping and stretching may be used to reduce spasticity. (Stein et al 2015 [56]; Krewer et al 2014 [57]; Etoh et al 2015 [58]; Ochi et al 2013 [59]; Wu et al 2014 [60]; Yamaguchi et al 2012 [61]; Mills et al 2016 [62]; Santamato et al 2015 [63]) Perhaps this could be reworded to state “...may be used to reduce the functional impact of spasticity” as these interventions may be aimed at maximising the negative features of CVA of opposing muscle groups whilst the botulinum toxin is in effect, but are not actually targeted at reducing spasticity as an outcome.</p>	<p>The Rehab medical WP reviewed the references provided and found only case reports and one 12 month prospective trial of a convenience sample written by a physician who disclosed that Medtronic pay him as a consultant. There is low level evidence that it may help in refractory cases but for many it abolishes the spasticity that allows then to stand and walk and muscle as are very weak below that. I have spoken to Baguley, Pollack and Khor and no one in Australia to our knowledge routinely inserters them for stroke.</p> <p>No practice point needed.</p>

277	Individual	Yes	Allied health	Managing complications	Spasticity	<p>For patients with stroke, the routine use of stretch to reduce spasticity is not recommended. (Katalinic et al 2010 [64]; Kim et al 2013 [65]; Jung et al 2011 [66])</p> <p>The recommendation against stretch applies in the short term (<7 months) which is not the biggest burden of care in relation to contracture development. Long term hand hygiene issues is perhaps an area that requires further research to justify whether continuing stretch can have a positive impact in the chronic population, (as per Kim's study suggests). However, as the long term implications have NOT been determined, for the population of CVA patients with limited active recovery and residual spasticity, the impact of sustained stretching regimes beyond 7 months on long term outcomes including hygiene, pain, skin complications, and patient and carer burden of care has not yet been determined.</p>	<p>This recommendation is in line with current evidence. There is no evidence from any population group (including people with long term spinal cord injury) for the effectiveness of very prolonged and sustained stretching regimes. Slight wording changes to the practical information.</p>
278	Individual	Yes	Allied health	Managing complications	Subluxation	<p>Shoulder subluxation recommendation does not include any treatment parameters (as per the past) –</p> <p>Perhaps include recommendations regarding timing, duration and length of application.. 6 hrs per day and how long to persist in the absence of voluntary active return</p>	<p>There is a lack of evidence to guide such treatment parameters. Additional information provided in practical info section of electrical stimulation.</p>
279	Individual	Yes	Allied health	Managing complications	Subluxation	<p>Firm Support Devices - Only lap trays are given as an example of a "firm support device.</p> <p>Practice point needs to comment on whether use of shoulder slings /orthotic supports are a supported option to provide clinical direction to services who may need to justify purchase of same.</p>	<p>Included the following wording changes: "...firm supportive devices (eg devices such as lap trays or similar) may be used. A sling may be used when standing and walking.</p>

280	Individual	No	Allied health	Managing complications	Shoulder pain	<p>140 Shoulder Pain</p> <p>Weak Recommendation AGAINST</p> <p>In stroke patients, electrical stimulation is not recommended to manage shoulder pain. (Vafadar et al 2015 [75])</p> <p>The article refers to application of ES for subluxation protocols (ie posterior deltoid and supraspinatus) rather than application of ES to other muscle groups to reduce pain (ie to external rotators and scapula stabilisers) which may be of more relevance. The recommendation above needs to be more specific and state that "Application of ES to posterior deltoid and supraspinatus (for the prevention of shoulder subluxation) has NO effect on shoulder pain prevention of management".</p>	This level of detail is available in the references and not needed in rationale or recommendations.
281	Individual	Yes	Allied health	Managing complications	Mood	A statement recommending screening be completed should be included as a practice point and where possible, provide guidance to staff about timing of mood screenings.	Screening practice point added. No evidence available for timing of mood screens.
282	Individual	Yes	Allied health	Managing complications	Falls	No reference is made in this section to an Occupational therapy home environment Ax. OT home Ax should be specified in the practice point, rather than just a mention of environmental hazards in rationale sections.	Included as a practice point.
283	Individual	Yes	Allied health	Community participation and long-term care	Sexuality	References not contained within the section. ?	Fixed.
284	Organisation	No	Medical	Acute medical and surgical management	Reperfusion therapies	ACEM is concerned that the references used for thrombolysis in the Guidelines only report favourable outcomes for thrombolytic therapy. ACEM's systematic review on stroke thrombolysis raised concerns about the quality of many of the studies. As such, ACEM strongly advocates for continuing research in this area, to address the ongoing issues regarding the efficacy of thrombolysis in stroke.	Grading of quality of evidence as "high" is consistent with every other international guideline (and the 2010 guidelines now endorsed by ACEM also rated evidence as "A"). In terms of negative outcomes the risk of symptomatic haemorrhage is clearly described. Further

						The College notes that the evidence for stroke thrombolysis is given an evidence rating of A. Given the heterogeneity of the studies and the mixed outcomes, the College can only support an evidence rating of B which is in line with other international guidelines.	placebo-controlled trials of thrombolysis would be unethical.
285	Organisation	No	Medical	Acute medical and surgical management	Reperfusion therapies	<p>Use of thrombolysis in the elderly</p> <p>ACEM is also concerned with the sentiment expressed in the 'Practical Info' section on Thrombolysis (p. 47), in particular the following statement:</p> <p>"Although some guidelines have recommended against treatment of severe stroke, individual patient data meta-analysis demonstrated consistent benefit of treatment across the spectrum of stroke severity."</p> <p>ACEM's commissioned review suggested that poorer outcomes following thrombolysis were most clearly associated with greater stroke severity. ACEM does not agree that evidence shows the same benefit of thrombolytic therapy for those who have suffered a severe stroke, and considers the above statement inappropriate.</p>	There is an important difference between prognosis and treatment benefit - patients with more severe stroke or who are older have a lower rate of good outcome. However, the benefit of treatment vs no treatment is just as strong in the severe and the elderly (as per individual patient data meta-analysis Emberson et al Lancet 2014)

286	Organisation	Yes	Medical	Acute medical and surgical management	Reperfusion therapies	<p>Consent</p> <p>ACEM is also concerned with the following practice point in Section 7.1 Thrombolysis: “Where possible the patient and caregivers should be involved in the decision to give thrombolysis. However, as an emergency therapy, formal consent for thrombolysis is not required”.</p> <p>As outlined in its revised position statement, ACEM considers informed consent is vital to any intervention in medicine, especially where there is a risk of significant harm. Stroke thrombolysis falls into this category. Information provided to patients and family/carers must enable a layperson understanding of the key clinical issues and risks associated with the therapy. Discussion with families and carers should be tailored to the particular clinical situation and include the following points:</p> <ul style="list-style-type: none"> • Thrombolysis provides no mortality benefit • Numbers needed to treat (NNT) to achieve functional independence, as measured by modified Rankin Scale outcome of 0-1, is 10 (i.e. 10 patients needed treatment for one additional good functional outcome) • Treatment has a risk of causing a symptomatic intracranial haemorrhage (sICH), with numbers needed to harm (NNTH) being 42 (i.e. 42 patients needed treatment for one to experience sICH), and 122 for risk of death from sICH. It should be acknowledged that there is wide variation in the literature regarding the NNTH with the confidence intervals ranging from 119 to 13 for sICH and 830 to 30 for death. <p>Furthermore, ACEM is concerned that overall, there is no reference to patient consent or patient information in the Guidelines. ACEM acknowledges that there</p>	Additional information regarding consent has been included.
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						<p>may be emergency situations where family or carers are unavailable for this discussion. However, ACEM strongly believes that these guidelines must provide a greater emphasis on obtaining informed consent. This should not simply be 'where possible', but should be strongly encouraged within the guidelines, even in emergency situations. Unless there are reasonable grounds for emergency treatment, a medical practitioner must seek informed consent from a patient before commencing a procedure. Patients and their families and carers must be provided with appropriate information that will enable them to make an informed decision about their care. In line with established processes for emergency consent for major procedures, if families and carers are unavailable for consent, consent should be obtained by the Director of Clinical Services or proxy.</p>	
287	Organisation	Yes	Medical	Acute medical and surgical management	Reperfusion therapies	<p>"Almost all patients would want thrombolysis"</p> <p>ACEM notes the comment that suggests nearly all patients would want thrombolysis. In conducting ACEM's independent review, consumer engagement was undertaken which suggested the above statement was not true. Consent was highlighted as being of particular importance to consumers. Therefore, unless the above statement has been validated in a trial situation, ACEM considers this an inappropriate statement in the Guidelines.</p>	A consensus based statement regarding informed consent has been added.

288	Organisation	No	Medical	Early assessment and diagnosis	Transient ischaemic attack	<p>We note the weak recommendation against the use of the ABCD2 tool on page 4. Many settings (especially rural and remote) do not have rapid access to imaging and/or echocardiography. ACEM considers that the ABCD2 may be a useful screening tool by which to identify patients who require urgent transfer to metropolitan regions for investigations. Similar, many metropolitan centres are experiencing significant resource constraints, and the ABCD2 tool may assist with resource allocation.</p> <p>Given that evidence against ABCD2 use is weak, ACEM recommends that consideration be given to revising this recommendation to incorporate advice for settings where in the absence of particular resources, use of the ABCD2 tool may be beneficial in stratifying patients for the purpose of urgent investigation.</p>	<p>We acknowledge the convenience of ABCD2 but unfortunately if used in isolation it is an inappropriate tool for stratifying the urgency of investigation as it misses high risk mechanisms for recurrent stroke and disadvantages younger patients. The recommendation clearly states that we discourage "use in isolation" given the finding of AF or carotid stenosis in ~25% of patients with "low risk" ABCD2 scores. We encourage improved diagnostic accuracy for TIA through education about common TIA mimics as a means of prioritizing investigations. We have added a "Practical advice" box listing key features of common TIA mimics.</p>
289	Organisation	No	Medical	Acute medical and surgical management	Acute blood pressure therapy	<p>ACEM suggests that some of the recommendations marked as 'AGAINST' are unclear, and have the potential to be misinterpreted. For example, in section 9 – Acute blood pressure lowering therapy: "Aggressive blood pressure lowering in the acute phase of care to a target SBP of <140mmHg is not recommended for any patient with stroke"</p> <p>This has been marked as both a 'Weak Recommendation' and 'AGAINST'. This could be interpreted as either (i) a weak recommendation that supports not undertaking aggressive blood pressure in the acute phase or (ii) it could also be interpreted as a double-negative, whereby</p>	<p>The methodology section of the chapter clearly articulates what each of the GRADE classifications mean and how they should be interpreted. AGAINST clearly means that the intervention should not be carried out.</p>

						the recommendation supports lowering the target SBP to BP<140mmHg. ACEM therefore recommends that either (i) further guidance is provided within the guidelines as to how to interpret the format of the recommendations or (ii) the format of the recommendations is amended to allow for clearer and easier interpretation.	
290	Individual	No	Allied health	Rehabilitation	Loss of sensation	<p>Background:</p> <p>1. In relation to the comment: '...with impairment in touch sensation, proprioception and kinesthesia in most cases (de Diego et al 2013 [44]).'</p> <p>Recommendation: the guidelines may wish to make reference to an article on prevalence of sensory loss rather than an intervention study with only 21 patients.</p> <p>Alternatives that may be considered are: Tyson, S. F., Hanley, M., Chillala, J., Selley, A. B., & Tallis, R. C. (2008). Sensory loss in hospital-admitted people with stroke: characteristics, associated factors, and relationship with function. <i>Neurorehabilitation and Neural Repair</i>, 22(2), 166-172. doi:10.1177/1545968307305523</p> <p>Carey, L. M., & Matyas, T. A. (2011). Frequency of discriminative sensory loss in the hand after stroke. <i>Journal of Rehabilitation Medicine</i>, 43(3), 257-263. doi:http://dx.doi.org/10.2340/16501977-0662</p>	No change
291	Individual	Yes	Allied health	Rehabilitation	Loss of sensation	<p>'A 2015 survey of Australian hospitals indicated that 84 out of 108 (78%) had locally agreed assessment protocols for sensory deficits (Stroke Foundation 2015 [6]). However, it is unclear what the best practice for sensory rehabilitation is.'</p> <p>Recommendation: The guidelines may wish to refer to a subsequent survey of the same Australian hospitals that detail assessments</p>	Survey information included.

						and sensory rehabilitation currently undertaken, as follows: Pumpa, L., Cahill, L. S., & Carey, L. M. (2015). Somatosensory assessment and treatment after stroke: An evidence-practice gap. Australian Occupational Therapy Journal, 62, 93-104. doi:10.1111/1440-1630.1217	
292	Individual	Yes	Allied health	Rehabilitation	Loss of sensation	<p>Re: evaluation of the SENSE trial: It is noted that Certainty in effect estimates (Quality of evidence) is Low Due to serious indirectness and serious imprecision It is unclear what is meant by: serious indirectness, other than the statement below: Indirectness: Serious Comparator received a form of sensory training as well; Comment: The stronger and more rigorous approach to investigation of a therapeutic effect is in relation to an active intervention comparator. In the Carey et al 2011 RCT an active intervention, consistent with usual care, was employed as the comparator intervention. In this situation the positive effect of SENSE therapy can be viewed strongly in relation to usual care. Recommendation: Inclusion of an active control should not be considered an error of 'serious indirectness'.</p>	Agree - have removed the downgrade factor of indirectness based on using an active control. This brings strength of evidence to moderate and wording in evidence table adjusted accordingly.

293	Individual	No	Allied health	Rehabilitation	Loss of sensation	<p>Imprecision: Serious, Only data from one study, Low number of patients; It is acknowledged that the number of patients is relatively low, however this number (n=50) was predefined based on power analyses from previous studies and effect sizes obtained in those studies. Precision of an effect is based on sample size as well as variability in effect to obtain the average effect size. It may be argued that a clinically significant improvement is more important than an average statically significant improvement from an individual treatment planning perspective.</p> <p>Recommendation: The guidelines may wish to add that patients who received SENSE therapy showed a clinically significant improvement, as reported in the manuscript (Carey et al 2011), as follows:</p> <p>Analysis of Individual differences and magnitude of intervention effects suggested a superior improvement for those in the experimental SENSE therapy group compared with the compator usual care/exposure group. Inspection of the magnitude of change for individuals following SENSE therapy indicates that 36% had a reduction in deficit of at least 50%, that 24% were performing in the normal range and only 2 did not show an improvement.</p> <p>Finally the effect size for SENSE therapy from the RCT was $d=0.79$ (Cohen's d). This is considered a medium to large effect size based on benchmarks suggested by Cohen(1988).</p>	Agree with comments, but ultimately, single site, single study with relatively small n means that evidence should be downgraded on 'imprecision'.
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294	Individual	Yes	Allied health	Managing Complications	Mood	No recommendations on mood screening, when to assess and what are the recommendations for screening tools.	Screening practice points included: 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 in
295	Organisation	No	Pharmaceutical Industry	Secondary prevention	Anticoagulant therapy	Page 54 – Summary In this section it appears to be recommending one type of NOAC in comparison to aspirin in adults with AF unsuitable for VKA therapy. However, similar to the NICE guidelines, the recent 2016 ESC Guideline states that: NOACs are recommended in preference to VKAs or aspirin in AF patients with a previous stroke” with no preferential recommendation to one NOAC over another. Reference: 2016 ESC Guidelines	Only apixaban has been specifically trialled in patients deemed unsuitable for VKA and hence is mentioned in the evidence summary. No recommendations about the use of specific DOACs were made.
296	Organisation	No	Pharmaceutical Industry	Secondary prevention	Anticoagulant therapy	Pages 59 and 64 – Summary Please add additional information in the paragraph pertaining to the ROCKET-AF trial to be consistent with the information included regarding the RELY and ARISTOTLE trials and rivaroxaban prospective Real World Evidence study information. In the ROCKET-AF trial rivaroxaban 20mg daily (or 15mg for patients with creatinine clearance 30-49mL/min) was non-inferior to warfarin for stroke prevention and had similar rates of major bleeding although gastrointestinal haemorrhage was higher. In the ROCKET-AF trial rivaroxaban 20mg daily (or 15mg for patients with creatinine clearance 30-49mL/min) was non-inferior to	Only ITT results are discussed. The "as treated" or "per protocol" analyses were not presented for any of the trials.

					<p>warfarin for the prevention of stroke and systemic embolism in the per-protocol population, while the as-treated safety population analysis achieved statistical superiority(hazard ratio, 0.79; 95% CI,0.65 to 0.95; P = 0.01). The rates of major bleeding were similar between the rivaroxaban and warfarin groups. There was an increase in gastrointestinal bleeding events (3.2% vs 2.2% in the rivaroxaban vs. warfarin groups respectively; p<0.001), but a significant reduction in haemorrhagic stroke (HR 0.59; 95% CI 0.37-0.93; p=0.02) and intracranial haemorrhage (HR 0.67; 95% CI 0.47-0.93; p=0.02) with rivaroxaban compared with warfarin. 7,468 patients (52%) had prior stroke/TIA1. In Rocket AF the mean CHADS2 score was 3.5. In a subgroup analysis, the efficacy and safety of rivaroxaban and warfarin for prevention of stroke and non-CNS systemic embolism and avoidance of major and non-major clinically relevant bleeding among patients who had previous stroke or TIA were consistent with findings in the entire ROCKET AF population. The results support the use of rivaroxaban as an alternative to warfarin for prevention of recurrent as well as initial stroke in patients with AF2.</p> <p>The XANTUS study of rivaroxaban is the first large international, prospective, observational study to describe the safety and efficacy of a NOAC in routine clinical use in a broad population of patients with non-vascular atrial fibrillation. 6784 consecutive consented patients were included and followed for 1 year or at least 30 days after permanent discontinuation. All adverse events were recorded and major outcomes such as major bleeding,</p>	
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					<p>symptomatic thrombotic events and all-cause death, were centrally adjudicated. In XANTUS the mean CHADS2 score was 2.0. 19.0% had experienced a prior stroke, SE, or TIA. The rates of stroke and major bleeding were low in patients receiving rivaroxaban in routine clinical practice. Treatment-emergent major bleeding: 2.1 events per 100 patient-years. All-cause death: 1.9 events per 100 patient-years. Stroke: 0.7 events per 100 patient-years, TIA: 0.5 per events per 100 patient years³.</p> <p>Reference:</p> <ol style="list-style-type: none"> 1. Patel, M. et al. (2011) Rivaroxaban versus warfarin in nonvalvular atrial fibrillation (ROCKET-AF). NEJM. 365(10):883-91 2. Hankey et al. Lancet Neurol 2012;11:315–322 3. Camm AJ, Amarenco P, Haas S, Hess S, Kirchhof P, Kuhls S, et al. XANTUS: a real-world, prospective, observational study of patients treated with rivaroxaban for stroke prevention in atrial fibrillation. Eur Heart J. 2016;37(14):1145-53. 	
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