

Submission from the New Zealand Association of Occupational Therapists

New Zealand Clinical Guidelines for Stroke Management 2010

Date of Submission: 29/06/10

Preamble

This submission is sent on behalf of the New Zealand Association of Occupational Therapists (NZAOT) - the representative professional body for occupational therapists in New Zealand.

Occupational therapy is “the art and science of enabling engagement in everyday living, through occupation; of enabling people to perform the occupations that foster health and well-being; and enabling a just and inclusive society so that all people may participate to their potential in the daily occupations of life” (Townsend & Polatakjko, 2007, p. 372).

Occupational therapists enable people to lead meaningful and satisfying lives through participation in occupation. The term 'occupation' is used in the widest sense - it is “...everything that people do to occupy themselves, including looking after themselves (self care), enjoying life (leisure), and contributing to the social and economic fabric of their communities (productivity); the domain of concern and the therapeutic medium of occupation therapy” (Townsend & Polatakjko, 2007, p. 369).

Occupational therapists help people to identify the occupations that are difficult for them. This could be due to problems with physical abilities, for example, strength or co-ordination, or mental abilities, for example, memory or organization skills. Occupational therapists work with people with stroke and their families/carers to optimise participation and independence for all daily activities (including self-care, leisure and productivity). This is achieved by either working directly to address recovery of function (including motor, cognitive or perceptual function), or by adapting the task or the environment.

Introduction

NZAOT congratulates the New Zealand Stroke Foundation and the New Zealand Guidelines Group on the development of a comprehensive new set of guidelines for acute and post acute stroke care in conjunction with the national Stroke Foundation of Australia.

Question One - General comments

The NZ stroke guideline is an important and very relevant document for occupational therapists in Aotearoa New Zealand. Many occupational therapists work with people who have had strokes within a range of service domains and settings, providing assessment and rehabilitation and recovery

throughout the continuum of care. NZAOT would support the general directions of the guidelines.

Question Two - Question 2: Recommendations

Please comment on the specific recommendations that are relevant to you, or your organisation, in terms of: -

Clinical relevance

NZAOT members would welcome the following amendments toward increasing clinical relevance to the Aotearoa New Zealand context

Page 156

"Patients with difficulties in performance of activities of daily living should be assessed by a trained clinician"

This statement does not capture or reflect the distinct role of occupational therapists in the assessment of activities of daily living (ADL's). The reference in this section was in relation to occupational therapy intervention. Occupational therapists have significant skills in occupation and activity analysis and therefore we feel it pertinent that an *occupational therapist* should be reflected as the preferred and specialist 'trained clinician' most qualified to conduct ADL assessment.

Pages 163,164, 166, 167, and 170 re: Cognition, Apraxia and neglect

The recommendations within these sections refer to further assessment and give mention to occupational therapy in Statement in 6.6.1: *"If cognitive or perceptual deficits are suspected a more detailed assessment, including functional assessment, conducted by a trained team member (eg Neuropsychologist, OT, SLT) can clarify the type of impairments and guide the team in providing the most appropriate interventions"*.

The reference to *occupational therapist* could be further carried throughout the document specifically in relation to cognition, apraxia and neglect.

Page 180 from table:

"For people with severe weakness who are at risk of developing shoulder pain or who have already developed shoulder pain, the following interventions are not recommended:

- *continuous passive motion exercises*
- *ultrasound"*

The evidence supporting the recommendations in this table does not appear to have been discussed in the preceding discussion. This makes it difficult to consider the recommendations.

Page 182 *"Health professionals should recognise people with excess levels of fatigue and provide information and practical strategies such as negotiating*

therapy times and times for rest on a case by case basis. Enforced rest periods however should not be used.

What is meant by “enforced rest periods” and what evidence is supporting this statement as it was unreferenced.

Page 200 “*Access to simulated driver training is very limited in Australia.*”

This statement is not relevant in the NZ context. The paragraph mentions Australia but doesn't relate it to NZ. It would appear the statement and possibly the section has been taken directly from the Australian guidelines. Considerations for the New Zealand context are as below:

Pages 199-200 “*...however a three-step process is generally followed (Unsworth 2007; Lovell and Russell 2005).*

1. “*Medical assessment of fitness to drive (NZTA 2009).*”
2. “*A comprehensive off-road driving test of motor, sensory, visual and cognitive skills that may incorporate tests such as the Dynavision Performance Assessment Battery or the Cognitive Behavioural Driver's Inventory (Klavora 2000; Unsworth, Lovell, Terrington and Thomas 2005); or the OT-DORA (Occupational Therapy Driver Off-Road Assessment) Battery (Unsworth, Pallant, Russell, Germano and Odell 2010).*”

The two assessment tools specifically developed for assessing cognitive function with regard to driving used by occupational therapists in New Zealand have been omitted. They are the Driver Advisement System(DAS) and Canterbury Driving Assessment tool (CanDAT).

3. “*An on-road test (Akinwuntan 2003; Di Stefano and Macdonald 2003).*”

The on-road assessment, called such to differentiate it from a non-medical driver licensing test, is conducted in accordance with the New Zealand Transport Agency driver licensing requirements taking into account patterns of condition-related concern.

Pg 200 Return to Driving.

MOH funding criteria for driver assessments is limited to clients who are returning to employment or full time study. This inequitable access to formal occupational therapist driving assessment often makes return to driving challenging through being unable to afford the assessments, and may result in resuming driving without an assessment.

Page 201 Suggested re-wording:

Targeted occupational therapy intervention programmes may be used to increase participation in leisure activities.

Page 147 - Suggest that this section is titled Visual Impairments, rather than visual field loss.

Page 154 onward - Add in sexual activities under the category of activities of daily living: For example, it is important to note that the American Occupational Therapy Association (AOTA, 1986) has categorized sexual expression – defined as “engaging in desired sexual and intimate activities” – as an activity of daily living (ADL). This places it in the same realm as dressing, eating and toileting in terms of activities to focus on during rehabilitation (Friedman, 1997).

Page 202 onwards – Sexuality:

May want to elaborate this section such as...The ability of persons post stroke to engage in sexual activity can be significantly compromised by motor (i.e. movement of the limbs), sensory (i.e. touch and temperature sensations), and autonomic (i.e. blood pressure regulation) dysfunctions. In order to support these physical compromises, there are many available devices on the market to encourage creativity in order to optimize sexual expression once bodily changes have occurred. In addition, sometimes the time of day and other activities planned can facilitate or hinder sexual expression.

Page 261 Glossary – Add under Activities of Daily Living – “engaging in desired sexual and intimate activities” – as an activity of daily living (ADL). This places it in the same realm as dressing, eating and toileting in terms of activities to focus on during rehabilitation (Friedman, 1997).

Clarity and ease of use

- Agree we do need a demarcation between processes but for ease of application might it be better in two sections medical management and rehabilitation pathway acute to community as there seems quite a lot of repetition in sections?
- Much of the preamble would be shortened if it were bullet pointed
- The clarity of the intended application of chapter six is confusing. Is it the intended application in relation to the acute, sub-acute / inpatient rehab or community setting? Or all three?
- The wording of many rehabilitation recommendations appears contradictory to the spirit of the recommendations in relation to Goal Setting ie: "*Every person with stroke and their family/carer involved in the recovery process should have **their wishes and expectations established and acknowledged***" versus "*Patients with confirmed difficulties in personal or extended ADL **should** have specific therapy to address these issues*". Recommendation is that the latter is reworded with the addition ...as prioritized in patient goal setting.

Page 137 “Amount and intensity of Rehabilitation”

This section was difficult to interpret. In particular it speaks of “16 hours” and “additional therapy” but does not clarify if that is 16 hours a week i.e. 5 days or 16 hours in addition to 1-2 hours daily.

“For patients undergoing active rehabilitation, physical therapy should be provided as much as possible but should be a minimum of one hour active practice per day (at least five days a week).”

Is this recommendation of active rehabilitation referring to the acute phase of input or first 6 months? Could this be clarified. It is often not appropriate or practical in a community setting for 1:1 time to be 1 hr a day 5 days a week. Often the client doesn't want to see someone every day. Occupational therapists will often try to achieve increased intensity of rehabilitation with self directed or family directed practice or use of therapy assistants

Page 201 8.4 Return to work – This section might benefit from a slight expansion of background detail with supporting evidence to illustrate the complexities and breadth of intervention to assist return to work including:

- task analysis
- graded return to work options
- work hardening – increasing the intensity to enable clients to be able to have the endurance to be able to return to work.
- to liaising with employers
- facilitating access to supported employment agencies
- access to neuro – psychological assessments (unfortunately the assessment are normally delayed until 6 months post stroke, this can then restrict the clients ability to re-engage in work).

Implementability (*how realistic given your practice environment*)

Page 65 “.. intervention of therapeutic weekend care, bedside teaching and structured information for relatives during rehabilitation reported long term benefits (reduced institutionalisation and mortality) but numbers were small (Grasel 2006). Ideally training should occur in both hospital and home environments.”

The current structure and nature of rehabilitation could definitely be challenged from a service provision perspective to best meet the needs of the client. There are challenging resourcing issues if we were to provide a 7 day a week service– current allied health rehabilitation services are mostly 5 days Mon – Fri.

Page 68 “*People with stroke and their carers/families should be provided with the contact information for the specialist stroke service and a contact person (in the hospital or community) for any post-discharge queries for at least the first year following discharge.*”

Providing contact details of a person (specialist for stroke) for the first year post discharge is a challenge. Lack of ongoing funding within services prohibits ongoing points of contacts out to 12 months. The most obvious ongoing contact person usually becomes the GP – not any specialist secondary service.

From page 137: “... *UK guidelines recommend patients in the early stages of recovery should undergo as much therapy as the patient is willing and able to tolerate but stipulate a minimum of 45 minutes daily for each therapy that is required (RCPL 2008).*”

We are pleased to see this recommendation as it is a target to aspire to – however often the reality is challenging with current staffing levels and skill mix.

Page 154 Recommendations regarding Upper Limb Activity.

Limitations in skill mix and access to resources may impact on the ability to implement these recommendations. Upper limb function assessment and intervention requires post graduate training and mentoring. The training available in New Zealand is limited.

Page 201 “*A systematic review which included eight RCTs found community OT improved leisure activities if targeted interventions were used, although there was no improvement in personal or extended ADL (Walker 2004).*”

Service restrictions and timeframes often result in targeted rehabilitation to independence and mobility without allowing pursuit of leisure occupations. It is also often not until after the acute rehab phase that people are in a position to consider alternative activities or leisure options and this is often when services withdraw. Current community occupational therapy practice does not allow for targeted leisure options but maybe this is an area we need to explore further.

Pg 202 and 203 Sexuality “Such interventions should be provided by health professionals with appropriate experience/expertise in sexuality counselling.”

Access to appropriate health professionals with expertise in sexuality or support and counseling for people following a stroke is generally limited. This is an area of need that is commonly overlooked.

Pg 205 “*Stroke related personality and behavioural difficulties are known to have significant and longer term impact on individuals with stroke and their family/carers and assessment and individualised interventions should be provided (Murray et al, 2008).*”

This is difficult to implement as access to a psychologist or behavioural specialists within the older population is often limited in the public system to mental health services. These practitioners are often not specialists in stroke and are unable to support mild – moderate behavioural changes or psychological adjustment. This can have a significant impact on the person’s

ability to participate in rehabilitation and day to day occupations in general. It makes working with these clients very difficult without the appropriate specialist supports.

Inequalities

There is, and will continue to be disparities between different DHBs regarding service provision for stroke rehabilitation and hence this will affect the implementation of the proposed Stroke Guidelines. Equity in relation to access and intensity of intervention, and whether the intervention is provided in a Specialist Stroke Service or not is impacted on by geography, demographics and is DHB specific. The same can be said of meeting Māori and Pacific cultural recommendations

Return to work options and vocational rehabilitation is limited in service provision due to funding constraints, geography, transport difficulties. These things are again DHB specific and also vary across DHB's.

page 14 Access Suggests that geographical access issues are more apparent as a result of rurality – our experience suggests that it is also a problem for urban clients. Given an automatic stand-down from driving, some clients may not well enough/able enough to come via public transport. Some areas no longer provide an ambulance service (as transport funding went to PHO's and/or is for beneficiaries only). Sometimes clients can only come for outpatient services if a relative takes time off work – which is not conducive for intensive rehab.

Pages 15 Māori and Stroke:

Initiatives such as the Occupational Therapy Key Strategic Stakeholders, (OTKSS) Occupational Therapy Strategic Plan, 2010-2015 and the Te Umanga Whakaora – Accelerated Māori Occupational Therapy Workforce Development are working towards developing and growing the Māori occupational therapy workforce, this is a long term process and will affect the implementation of the proposed Stroke Guidelines. (see: <http://www.nzaot.com/about/affiliated-groups/occupational-therapy-key-strategic-stakeholders.php> and <http://www.nzaot.com/about/affiliated-groups/te-umanga-whakaora.php>)

Page 39 Return to work in younger clients Unmet needs include inequitable access to and capped funding for (re)training depending on cause of disability (stroke versus accident – as well as a reduction in Paths funding for example). Once sick and annual leave runs out families face increasing hardships meeting ongoing household expenses, let alone medication and transport to treatment or training costs.

Pages 68 *“Access to rehabilitation later in recovery may be needed to prevent deterioration or to realize potential for improvement, especially for those in residential facilities that made little progress earlier due to co-existing*

illness. One RCT compared a structured re-assessment system for patients and their carers at six months post-stroke with existing care via GP (Forster 2009). No difference was found on any outcome.”

Inequalities exist with access to allied health rehabilitation between private homes and rest home or private hospital. For example: One team has a built in review in 6 months following discharge from community rehabilitation and can offer further periods of rehabilitation. If a person is discharged into a care facility they are dependent upon services available within the care facility. Community rehabilitation teams are usually unable to provide services within care facilities currently. If this were to begin it would have a significant impact on caseload and staffing.

Page 107 *“Any patient with suspected or actual impairment of spatial awareness e.g., hemi-inattention or neglect should have a full assessment using a validated standardized battery of tests (Bowen 2007, Jehkonen 2006).”*

Access to validated and standardized tests may vary between services. Standardised batteries may not be appropriate for reasons of communication, cultural or language reasons. Suggest include where appropriate and/or include a statement about the possible times this will not be appropriate.

Question 4- Implementation

With reference to your practice environment, how could specific recommendations be implemented?

Nil response

Question 4 Implementation

Please make recommendations for the implementation of the guidelines overall.

Implementation is likely to have more traction with multiple prongs including for example:

- Easily accessible guidelines (chunked to different aspects of the journey) in varying formats – hard copy, and online – poster size pathways / recommendations etc.
- Education about the guidelines – articles in professional magazines, online links and clinical presentations at conferences and workshops
- Clinical leadership driving the culture change – all relevant disciplines to demonstrate leadership – this can be promoted via professional associations as well as via organizations
- Promotion of Clinical audit – feedback on performance

Question 6 Further Evidence

Page 148 – 154 :Occupational therapists have a significant role in assessing mobility needs other than *walking* e.g. assessment for and prescription of scooters, wheelchairs for mobility and appropriate seating/positioning supports. Further evidence regarding function and mobility should be included in the document.

Page 137 paragraph 6.1:

While we appreciate the research is scant, albeit there is evidence from neurobiological science, the guidelines would benefit from some robust debate as regards the risks of secondary damage to the pnuembra area in relation to the safety and degree of early intervention – that is in the immediate first week aftermath of stroke..

6.1.1 Concern that fatigue issues do not get a mention in relation to intensity.
– many clients cannot sustain such intensity of treatment.

P 145 Weakness (6.1.2 UL activity 6.2.2).

Recommendations should include mirror therapy as an intervention as well as the brief mention in **6.3.5** - the research data is small sample as yet because they are using expensive MRI etc, but does suggest a good fit with theories on cortical reorganisation. It appears valuable in reducing vulnerability to secondary complications such as neuropathic shoulder pain.

Expert opinion would also suggest that engaging in occupations that are meaningful in addition to progressive resistance exercises etc such as gardening, woodworking, using adaptive aids to use a computer, using the occupation of shopping as therapy has greater buy in for the clients and improves outcomes.

Pg 178 Subluxation Recommendations

Research is not considered in relation to slings post stroke to prevent subluxation or maintain shoulder symmetry:

Brooke, M., de Lateur, B. Diana-Rigby, G. & Qusted, K. (1991).
Shoulder subluxation in hemiplegia : effects of three different supports.
Archives of Physical Medicine and Rehabilitation, 72, 582-586.

This was a comparative study, n=10. Comparison between Harris Hemi-sling, Bobath sling, Arm trough and lap board using xray and comparing to non-affected shoulder. This study found that the Harris hemi-sling provided good consistent correction; Bobath sling less effective and that the arm trough and lap board tended to over correct. The recommendation was made that attention needs to be paid to the "fit" of the equipment to the individual and monitoring in regard to over correction.

Zorowitz, R., Idank, D., Ikai, T., Hughes, M. & Johnston, M. (1995). Shoulder subluxation after stroke: A comparison of four supports. Archives of Physical Medicine and Rehabilitation, 76, 763-771.

This again was a comparative study, n=20. Comparison between the Bobath Roll, Rolyan Humeral Cuff, Cavalier Support and a Single Strap hemi-sling (similar to the Harris hemisling). Xrays were taken and compared to the non-affected limb. The Rolyan Humeral cuff was the only support to significantly reduce total asymmetry (vertical and horizontal asymmetry)(p = 0.008); the single strap hemisling corrected vertical displacement significantly. The conclusion is made by the researchers that different supports may be beneficial for different patients: a patient with a flaccid UE may consider a single-strap hemisling to decrease traction forces while awaiting development of tone or volitional movement. A patient with some volitional movement may consider a Rolyan humeral cuff sling to distribute the affected limbs weight to another part of the body. Cognitive ability, the presence of neglect, level of support for application of the sling etc all need to be considered.

In summary, perhaps the statement in the guideline needs to include these slings and also needs to include the following points:

- Cognitive ability, the presence of neglect, level of support for application of the sling etc all need to be considered.
- When using hard supports eg lap trays and arm troughs, attention needs to be paid to the "fit" of the equipment to the individual and monitoring in regard to over correction.
- Different slings may be suitable for different patients in relation to the level tone or volitional movement they have.

Page 147:

Suggest that a timeframe for conducting a visual screen and if necessary an assessment is included in the rationale and recommendations, as our experience suggests that medical practitioners often want to wait 6 months or more before addressing vision, which is inappropriate.

Page 63-64 *“There is no stroke-specific evidence regarding the effectiveness of home visits, and very little evidence in other populations.....”*

Expert opinion suggests that home visits can support discharge planning when completed for reasons of establishing safety within the environment, clarifying client expectations about it being easy once home and developing client confidence prior to returning home. It can be an invaluable opportunity as a community based therapist to meet the client prior to discharge, be involved in the discharge planning process and has improved the hand over from hospital to community supporting the seamless transition as mentioned in the guidelines.

Although not stroke specific there was a recent study completed through the Auckland Medical School that established that an occupational therapy assessment completed in a person's home environment versus a falls risk assessment completed by a nurse reduced falls in an elderly visually impaired population.

http://www.rnzcgp.org.nz/assets/Uploads/NZFP/June2007/Robertson_June_07.pdf

Page 155:

Eye patching for diplopia **should always be guided by the treating optometrist**. Where possible the avoidance of prolonged patching or occlusion should occur as persistent patching can cause impairment of depth perception as it relies on binocular vision. Additionally a prolonged lack of visual stimulation through persistent use of patching can cause negative neuroplastic as described below.

Patching –the traditional black patch should ideally no longer be used to assist clients with diplopia as it deprives the retina of light stimulation and there is the risk associated with long term sensory deprivation that the brain can facilitate a negative neuroplastic change in shutting down the reception of that eye if it continues to receive no stimulation.

Ref: *Indiana Low Vision Centres- www.eyecolleges.com*

Neger R (1998) The evaluation of diplopia in head trauma. Journal of Head Trauma Rehabilitation 4: (2) 27-34

Scheiman M (1997) Understanding and managing vision deficits. A guide for occupational therapists. Slack Incorporated new Jersey U.S.A

Suchoff I, Kapoor N, Waxman R, Ference W (1999) The occurrence of ocular and visual dysfunctions in an acquired brain-injured patient sample. Journal of the American Optometric Association 70: (5) 301-307

Aksionoff E, Falk N (1992) The differential diagnosis of perceptual deficits in traumatic brain injury patients. Journal of the American Optometric Association 63 (8) 554-557

Pg 180

Pain is an issue for people with stroke and more reference to how to assess pain is suggested including timing of intervention, which specific pain assessment tool to use, importance of all staff using the same measuring tool and consideration of pain behaviours in those who are cognitively impaired.

7.9 Fatigue There is some professional debate about the evidence about the definition "*that fatigue is not associated / ameliorated by rest.*" When clients

over- extend themselves they experience a neuro- fatigue that can cause a distressing temporary return of negative symptoms, but a rest / relaxation helps them recover. Coping strategies are always time management, prioritising and graduated exposure to probe natural healing.

References

Townsend, E.A., & Polatakjko, H. J. (2007). Enabling occupation II: Advancing an occupational therapy vision for health, well-being, & justice through occupation. Ottawa, Ontario: CAOT Publications ACE.

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