## **COMMENTARY**

## COMMENTARY ON "EVALUATING INPATIENT PUBLIC REHABILITATION IN AUSTRALIA USING A UTILIZATION REVIEW TOOL DEVELOPED IN NORTH AMERICA"

The article by Poulos in this issue (1) is a utilization analysis of 3 Australian public hospital rehabilitation wards using a commercial review tool developed in the USA. The key findings are that only approximately half of the patient days met utilization review criteria for appropriate "rehabilitation" service provision and, for those that did, 60% of the provision was at "skilled nursing facility level" rather than a more intensive level. Therapy time was for an average of only 37 min per weekday. Thus, the paper raises important issues relating to efficiency and appropriateness of inpatient rehabilitation.

In Australia there is a universal health insurance system (Medicare Australia) that ensures that all the population can access public hospital services, including rehabilitation services, without direct payment. In the Australian state in which the study was conducted (New South Wales) case-mix based funding for inpatient rehabilitation services will soon commence (2). This will provide an incentive to increase efficiency and to reduce the length of inpatient stays in rehabilitation wards. Poulos' data suggests that there is substantial scope to increase the efficiency of the rehabilitation wards that he studied.

Australian citizens can supplement the health services they receive by taking out additional private health insurance that provides access with no or limited payment to private hospital services including rehabilitation services. Patients in private rehabilitation wards in Australia tend to have fewer functional limitations at admission and are more likely to have had an elective arthroplasty as the health condition responsible for their admission compared with public hospital rehabilitation facilities (3). Thus, Poulos' findings are likely to be generalizable to all Australian public hospital rehabilitation services, but probably not to the relatively large private inpatient rehabilitation ward sector in Australia.

The utilization review tool that has been applied in the study is InterQual Rehabilitation and Subacute. This is a proprietary instrument with some evidence of validity and reliability (1). Poulos considered that 4 of the 5 levels of service provision in the utilization tool were indicative of a rehabilitation service. In this analysis only 48% of total rehabilitation bed days satisfied these criteria, mostly (61%) at the "lowest" level, which is a skilled nursing facility.

The review showed no difference in appropriateness of rehabilitation service provision in different diagnostic groups. The large percentage (60%) of episodes in the "other rehabilitation" diagnostic group reflects the increasingly older population with multiple health conditions contributing to limited functioning. This points to the importance of availability of general rehabilitation services and not rehabilitation catering only for specific diagnostic groups.

There is evidence that dose of therapy has an influence on outcome in rehabilitation programmes (4) and that patients in rehabilitation wards have surprisingly limited amounts of activity each day. This study confirms this and also shows that tolerating more therapy is not a significant problem. Rather the major reasons for the rehabilitation/subacute level service criteria not being met were insufficient therapy being available (27% of bed days in which rehabilitation/subacute level of care was not met), waiting for transfer to a residential aged care facility (26%), being appropriate for discharge home (17%), and needing acute or subacute medical care (17%).

How can efficiencies be achieved? Most obviously this can occur by provision of more therapy, particularly on weekend days. Poulos quotes Australian rehabilitation staffing standards that are consensus-based (5). His data suggest that there are significant non-patient-related duties that occupy therapy time, particularly for occupational therapists, and the redefining of therapists' duties to include less administrative time is likely to improve efficiency. There are also other activities not captured in the current study that may be increased, for example more incidental functional activity, or nurse-initiated and supervised "therapy". The provision of rehabilitation in other settings, particularly ambulatory settings, should also improve efficiency.

Whether to transfer out rehabilitation patients requiring acute care is a difficult issue due to the opportunity cost with reference to health services overall and the crisis in acute care in Australian hospitals. Australia has fewer acute hospital beds than the Organisation for Economic Co-operation and Development (OECD) average (6) and the better solution might be for case-mix-based funding to fund acute care for selected patients for short periods in rehabilitation wards.

Reducing the time spent waiting for other care (particularly residential aged care facility beds) is another potential target. However, it can be argued that a reasonable amount of time is required to make this major life decision. Also, in Australia there is a compulsory assessment regarding suitability for residential care and this cannot occur until the patient is considered to have reached their rehabilitation potential (7). There is also great variation in the provision and availability of residential aged care across Australia (8).

Efficiency and appropriateness of provision of rehabilitation services is not the only issue to consider. Equity of access to rehabilitation is a relevant competing principle. This is best exemplified in the USA, where 15% of the population have no health insurance and essentially no access to rehabilitation services (9). There is marked geographical variation in availability of rehabilitation wards in Australia (8), which therefore

influences equity of access. In addition, in Australia, if a person has private health insurance it is much easier for them to obtain inpatient rehabilitation (3).

The balance between efficiency and equity in relation to rehabilitation services should be the subject of further discussion in the *Journal of Rehabilitation Medicine*.

## REFERENCES

- Poulos C. Evaluating inpatient public rehabilitation in Australia using a utilization review tool developed in North America. J Rehabil Med 2010; 42.
- New South Wales Health. Episode funding policy 2008/2009 NSW. Sydney, 2008. [accessed 2010 January 4]. Available from: URL: http://www.health.nsw.gov.au/policies/pd/2008/pdf/ PD2008 063.pdf
- Simmonds F, Stevermeur T, Rankin N. The AROC annual report: the state of rehabilitation in Australia in 2008. Centre for Health Service Development, University of Wollongong, 2009 [accessed 2010 January 4]. Available from: URL: http://chsd.uow.edu.au/ Publications/2009\_pubs/son\_2008.pdf
- Kwakkel G, Wagenaar RC, Koelman TW, Lankhorst GJ, Koetsier JC. Effects of intensity of rehabilitation after stroke. A research synthesis. Stroke 1997; 28: 1550–1556.

- Australasian Faculty of Rehabilitation Medicine. Adult rehabilitation medicine standards 2005. Sydney, 2005 [accessed 2010 January 4]. Available from: URL: http://afrm.racp.edu.au/index.cfm?objectid=5F2AF08F-BD60-798C-F7801CEE5462760A
- 6. Organisation for Economic Cooperation and Development. OECD iLibrary. Health at a Glance 2009 [accessed 2010 January 4]. Available from: URL: http://www.oecdilibrary.org/oecd/sites/health\_glance-2009-en/04/04/g4-03-01.html
- Australian Government, Department of Health and Ageing. Introduction to Aged Care Assessment Program, Canberra 2009 [accessed 2010 January 4]. Available from: URL: http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-acatacap-learning-generic.htm~ageing-acat-acap-learning-generic-intro-acap.htm
- 8. Giles LC, Halbert JA, Gray LC, Cameron ID, Crotty M. The distribution of health services for older people in Australia: where does transition care fit? Aust Health Rev 2009; 33: 572–582.
- 9. Redlener I, Grant R. America's safety net and health care reform what lies ahead? N Engl J Med 2009; 36: 2201–2204.

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