Addressing the health needs of frail elderly people: Ontario’s experience with an integrated health information system

Frail elderly people comprise a subpopulation that poses numerous important challenges for the health care system. In Canada, like most developed nations, per capita health care expenditures rise disproportionately with age [1]. Although there is widespread concern in the popular media that population ageing will have catastrophic financial consequences, it is generally felt that population ageing has played a minor role in rising health expenditures in Canada [2], and it will be possible to cope with the costs of caring for future cohorts of the elderly if we manage the health care system appropriately.

Home care has become the fastest growing segment of the Canadian health care system, and a national commission on the Future of Health Care in Canada [3] described home care as ‘the next essential service’. Nonetheless, hospitals continue to be the leading source of health expenditure in Canada [4], and the rates of acute hospitalisation of Canadians aged 85 years and over are almost six times higher than those under 65 years [5]. The study by Jönsson and colleagues in this issue raises the troubling question of whether current care practices in acute hospitals provide an adequate response to the complex care needs of frail elderly people [6]. Indeed, for most countries, the same question could be posed for the health care system as a whole.

It would be easy to dismiss Jönsson and colleagues findings as much ado about paperwork. They clearly demonstrate that clinical documentation in Nordic acute hospitals is non-systematic, incomplete and inattentive to issues of functional status or co-morbidity. Why is that a problem? Among the most important reasons for alarm is the complexity of the health needs of frail elderly people. The presentation of symptoms is often ambiguous, threats to health are multifactorial, trajectories of change are highly variable and outcomes of care are uncertain. Comprehensive assessment yielding high quality, multidimensional information has come to be regarded as an essential tool required to provide care at the individual level and to manage services at the aggregate level [7]. Jönsson and colleagues propose the use of the MDS-AC instrument to this end; however, it may be argued that there is a need to extend this approach across all sectors providing services to frail elderly people.

The province of Ontario, Canada, has made several steps forward in establishing an integrated health information system based on the interRAI instruments [8]. Following an extensive review of alternative assessment and classification systems [9, 10], complex continuing care hospitals/units were mandated in 1996 to use the Resident Assessment Instrument 2.0 (RAI 2.0; also referred to as the Minimum Data Set 2.0 (MDS 2.0)) [11]. By 2002, the RAI-Home Care (RAI-HC) [12] was mandated for all home care clients expected to be on service for 60 days or more. Case managers in single point entry agencies known as Community Care Access Centres (CCACs) now use the RAI-HC to assess needs and to contract services for home care clients. In 2005, the RAI-Mental Health (RAI-MH) [13] was mandated for use in all adult in-patient beds in psychiatric hospitals/units, including acute, long stay, forensic and geriatric psychiatry. Implementation of the RAI 2.0 is currently underway for all long-term care facilities in the province, including for-profit and not-for-profit homes. The most recent initiative is a joint effort between interRAI and the Ontario Ministry of Health and Long Term Care to develop a contact assessment that will be used as the initial, brief assessment of all CCAC clients. Implementation of the interRAI Contact Assessment (interRAI CA) will begin in May 2006, and it will be used to determine (i) the need for comprehensive assessment with the RAI-HC; (ii) urgency for initiation of services such as nursing or personal support

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and (iii) need for a referral for rehabilitation. The interRAI CA will also be used as the basic assessment for short stay home care clients with relatively uncomplicated care needs. Research projects are currently underway to evaluate the appropriateness of new interRAI instruments for palliative care, emergency department screening, acute care, community mental health and primary care.

The use of interRAI assessment instruments for each of these sectors has brought Ontario closer than many jurisdictions to the possibility of an integrated health information system linking the major providers of health services to frail elderly people. As each of the above mentioned instruments makes the transition from pilot studies to use in normal clinical practice, their multiple applications for multiple audiences [7] are beginning to emerge. For example, the Ontario Hospital Report [14] initiative uses RAI 2.0 data in public report cards on the quality of Ontario complex continuing care hospitals/units. The Canadian Institute for Health Information (http://www.cihi.org) has established three national reporting systems to provide comparative reports on continuing care, home care and mental health (see, e.g. report on facility-based continuing care [15]). A national RAI User’s Forum has been established as a venue through which clinicians using these instruments exchange knowledge on their implementation and use in day-to-day practice.

Many factors have contributed to the progress that Ontario has made to date, including strong leadership at all levels of the health care system; effective collaboration between key stakeholders; a clear commitment to standardisation based on psychometrically sound data and the establishment of an infrastructure to capture, compile and report on the gathered data. This is not to say that these implementation efforts have been free of challenges, setbacks or frustrations. Among the most important lessons from the Ontario experience are

(i) The introduction of any standardised instrument is a major perturbation to the health care system that requires appropriate resources and effective change management processes;
(ii) The availability of computerised information systems is a prerequisite to successful implementation;
(iii) Education of clinicians, managers and policy-makers in the use of these instruments and the data they yield must be provided on an on-going basis;
(iv) Feedback is critical for all stakeholders. The data must be used to inform decision making at all levels of the health care system and
(v) Although the data can be used for many purposes, there must be a clear emphasis on their clinical applications to sustain their use in daily care provision.

Like any change process, the introduction of interRAI instruments has different challenges and opportunities at different stages of implementation. The early stages of implementation are characterised by the need to address issues like resistance to change, unfamiliarity with new assessment procedures and clinical terminology, limited computer literacy, introduction of data submission standards and reorganisation of business processes to eliminate redundant or unnecessary documentation. However, to realise the full potential of an integrated health information system, new challenges emerge after implementation within individual sectors. The promise of such a system comes not only from good assessment practices within individual health care sectors but from the effective exchange and utilisation of information between sectors collaborating in providing care to frail elderly people as their strengths, preferences and needs change over time.

References