

# Measuring the quality of long-term institutional care in Finland

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*Summary: Benchmarking care outcomes may revolutionise both the efficiency and quality of long-term institutional care. Experience over nine years in Finland demonstrates a remarkable decrease in the use of different types of psychotropic medications and various improvements in nursing care patterns. The prerequisite information requirements to these findings are the collection of comparable standardised data, combined with regular performance feed-back mechanisms and skilful leadership.*

*Key words: Quality indicators, older people, long-term care, nursing homes, Finland*

Long-term care for older people in Finland is delivered either at home, in sheltered housing, residential care homes (nursing homes), or within health centre inpatient wards (chronic care hospitals). The latter two forms of care and housing have traditionally been seen as institutional care, mainly due to the payment source rather than due to the needs of the older individual or type of housing. In 2008, more than 10% of those aged 75 years and older received 24-hour care in locations other than in their original homes, while 6% lived in institutions.

According to legislation, local authorities are responsible for organising institutional care. They meet the costs of care whenever the care recipient has insufficient economic resources. The National Supervisory Authority for Welfare and Health (Valvira) is responsible for producing guidance and providing supervision so as to ensure that sufficient care services are available.

However, care professionals are free to choose their own quality assurance methods. According to an ongoing European Union 7th Research Framework funded project, *Interlinks*,<sup>1</sup> few organisations had by the beginning of 2010 systematically adopted any approach to quality assurance, apart from the Resident Assessment Instrument (RAI) benchmarking system, described in this article.

Practices in long-term institutional care facilities for older people have repeatedly been criticised in the media since the 1990s. Among issues that have been discussed are: relevant staffing ratios; the use of physical and chemical restraints; lack of rehabilitation nursing care; use of incontinence pads and nappies instead of taking the person to toilet; and malnutrition. The lack of any knowledge regarding these topics was obvious at the end of the century and led to the creation of the *RAI benchmarking project for long-term institutional care* in 2000 in order to determine what really was going on in long-term care institutions.

## National benchmarking project for quality of long-term institutional care

In 2000, three towns – Helsinki, Kokkola and Porvoo – agreed to adopt the RAI instrument to improve quality of care in their long-term care institutions. The RAI instrument originates from the United States, where it has been nationally mandated for quality, research, and payment purposes since 1990. It includes a 400 item

plus observational questionnaire that is filled out by care staff, a user manual and guidelines for individual care plans. Several well validated scales, sets of performance measures and algorithms for payment systems can be derived from the questionnaire.<sup>2</sup>

To ensure the quality of the documentation, and consequently the scales derived from these data, an ongoing education programme for nurses was created. A commercial software programme to enhance the use of the scales and indicators embedded in the RAI system was also developed. In this context, the National Research and Development Centre for Welfare and Health (STAKES), an institute also responsible for national health and welfare registers, and functioning directly under the Ministry of Social Welfare and Health, conducted a benchmarking project (2000–2005) to compare outcomes of care.

Since 2000, the number of residents assessed twice a year in the institutions has more than quadrupled, being approximately 10,000 in 2009. The number of benchmarking facilities has increased from 29 (16 residential homes, 13 health centres) to 95 (62 residential homes 35 health centres), despite a reduction in the number of institutional beds. In 2010, the RAI-benchmarking exercise covers most of the major cities, including public and private sector organisations. This amounts to approximately one third of all the long-term institutional care in the country.

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The benchmarking activities have evolved from a single project to ongoing multiple activities. In 2003, a project to help in the transfer of knowledge using MDS 2.0 for home care was launched. Moreover, projects for mental health (2007), acute care (2009) and intellectual disabilities (2010) have been conducted by the new National Institute for Health and Welfare – THL (formerly STAKES).

The basic RAI benchmarking activity consists of the following steps:

1. Staff members in participating institutions receive RAI education at the start of the benchmarking process; this also is provided as a result of staff turnover.
  2. Staff members in benchmarking institutions perform RAI assessments for each resident at admission, every subsequent six months and whenever there is a significant change in their status.
  3. Copies of the RAI assessments are sent electronically every six months to the National Institute for Health and Welfare.
  4. A unit-level feedback report in Excel form is delivered to each of the participating units within six weeks of data collection. The figures in the feedback report comprise information (percentages, averages) about functional capacity including cognition, social activities, clinical issues such as mood, behavioural problems, pain, diagnoses, medications, procedures like skin care, and nursing rehabilitation.
- In addition, performance measures to monitor quality of care are presented. These indicators to evaluate performance were created by Zimmermann et al.<sup>3</sup> They comprise 26 performance indicators, of which five are risk adjusted, nineteen are concerned with prevalence and five with incidence covering the following domains: accidents and injuries, mood and behaviour, clinical care, cognition, continence, infection control, nutrition, functional capacity, psychotropic medications, quality of life and skin care.
5. Staff members compare each of the measures of their own unit to similar peers and the national average. Wherever performance is poorer than that of their peers, care plans should be rechecked and programmes to improve care initiated.
  6. Twice-yearly seminars are held to

present differences in performance measures between care providers. Attendance rates are increasing, with up to 1,000 professionals including nurses, physiotherapists and administrators participating every year

7. The impacts of any quality improvement project that the participants may have experienced are discussed. Clinical themes such as nutrition, nursing rehabilitation, or use of psychotropic medications and physical restraints are repeatedly chosen. Leadership and management issues linking these themes are discussed.
8. A benchmarking feedback data set has been built online for participants to use and it is updated twice a year.
9. Research is also conducted by participating organisations or by the National Institute for Health and Welfare. Numerous reports and peer reviewed articles have been published, including eight doctoral theses.

#### Developments and impact of benchmarking 2001–2009

Of the 26 quality indicators, only one has had negative developments of any substantial degree; namely that the use of multiple medications has tended to increase. That said, it is also the case that despite care received levels of incontinence and cognitive impairment have tended to increase. Nutritional performance measures have not improved: the number of fallers or those with fractures remains roughly unchanged, while the prevalence of grade 1–4 pressure ulcers has stabilised at approximately 8%. Reducing physical restraints has shown only modest improvement (from 20% to 16%).<sup>4</sup>

On the other hand, some aspects of quality have improved remarkably among all participating units. The overall level of psychotropic use is substantially lower today compared with the beginning of the new millennium. Several institutions are practically free from regular use of hypnotics without any increase in sleeping disorders. The overall use of hypnotic medications has dropped among benchmarking participants by more than 50% (from 43% to 21%). Moreover, a decrease in antipsychotic medications (from 36% to 26%) and sedatives (from 58% to 39%) has occurred without an increase in behaviour problems (from 34% to 35%). Nursing patterns and care practices have

moved more towards rehabilitative care: the lack of nursing rehabilitation has modestly declined (from 29% to 26%) and the lack of toileting a little more (from 65% to 46%). The organisations that initiated benchmarking activities in 2000 have acted as beacons showing the way to others. Their progress, compared to the baseline is illustrated in Figure 1.

#### Discussion

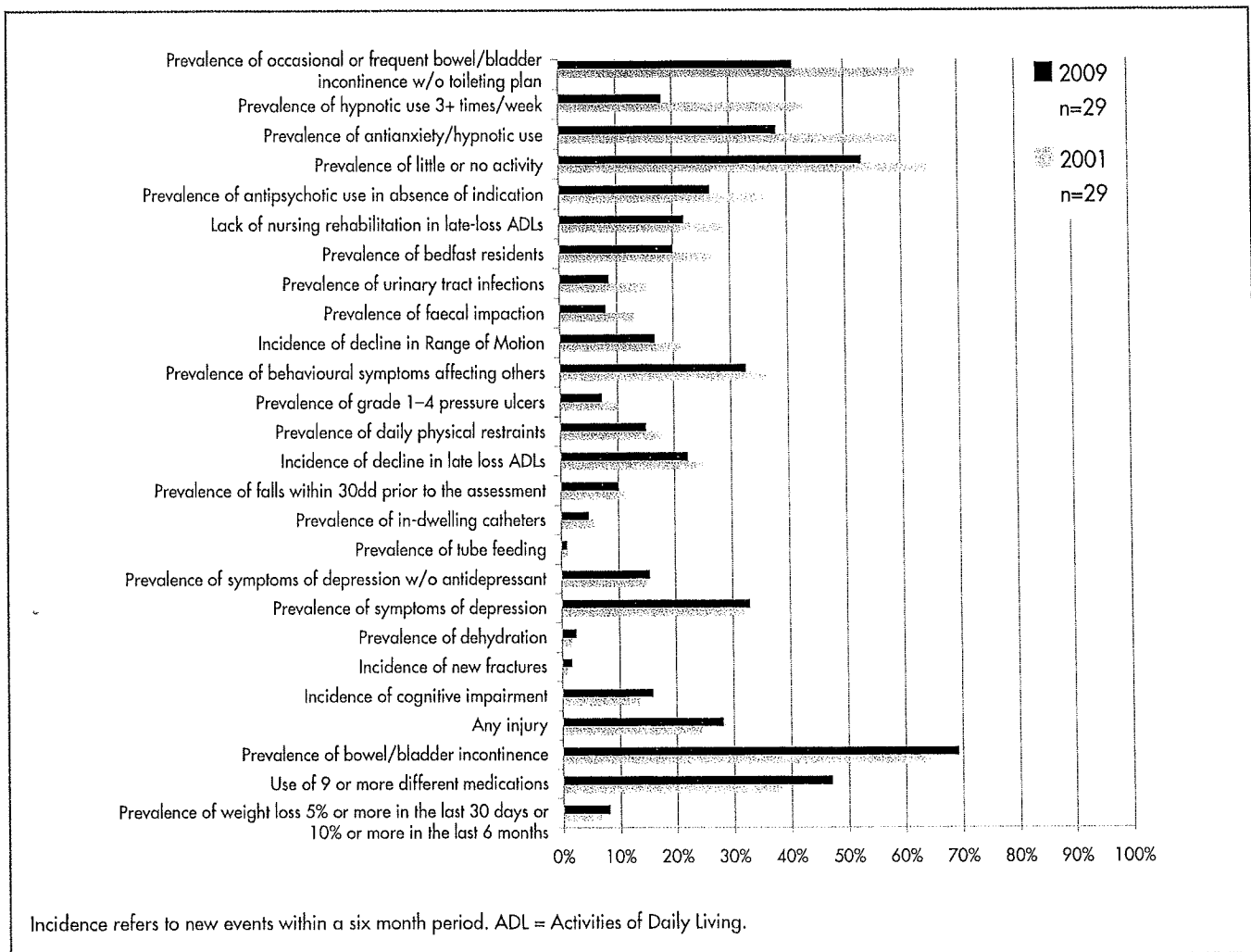
The introduction of a benchmarking approach has had a particularly significant impact on utilisation rates of various psychotropic medications that as recently as 2001–2003 were among highest rates in the world.<sup>3</sup> The change in medication patterns is an example of simultaneous improvements in financial efficiency and care quality. Potentially harmful medications can be removed, money is saved and the risks for patient safety diminished. Changes in nursing patterns can also be seen with a tendency to move out of restorative care towards an active approach with a focus on nursing rehabilitation and social activities, including activities to support the frailest and sickest.

Without standardised documentation benchmarking is not possible. This required repeated meetings and discussions without which the change may not have happened. Without benchmarking, the revolutionary change in the use of medications among participating units may not have been observed. Without international links,<sup>5</sup> both targets to achieve and messages set may not have been as clear. However there remains room for improvement: Finland still has a way to go.

Why was it that not all quality areas improved? One reason might be the observational, rather than leading, role of the National Institute for Health and Welfare. It was up to the long-term care institutions to grasp quality issues and make change happen. Sometimes change may not have been prioritised in the middle of everyday concerns over issues such as sick leave and staff turnover. The project has taught us all the importance of skilful nursing leaders. In the absence of good leadership and a just approach, unwanted nursing patterns, such as too much reliance on psychotropic medications or physical restraints, are easily adopted.<sup>4</sup> Some changes may also be more difficult to push through than others. Moreover, the role and impact of selection on quality and performance is unclear.

Of importance is the long-term care institutions' willingness to commit to benchmarking. In the absence of national rules, small care providers are more or less

Figure 1: Performance measures in 29 long-term care institutions, 2001 and 2009



on their own. The Finnish health and social care system has been named as one of the most decentralised in the world by Valtonen,<sup>6</sup> with relatively high levels of independence for local municipalities. This is not, however, without its downsides: few things are comparable, true improvements are difficult to show. Nonetheless, in the European Union, variations in nursing patterns and governance may be vast. Benchmarking offers an opportunity to learn from others with regard to both quality and efficiency. Results from Finland over a nine year period may encourage others to take this option seriously.

### Conclusions

The use of a standardised data collection protocol, including documentation instruments, such as RAI, is a useful method of gathering comparable information from different care providers in the long term care sector, particularly in cases where municipalities have substantial autonomy.

When data gathering is further used for quality improvement purposes, benchmarking might thoroughly change care delivered to older people.

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### ACKNOWLEDGEMENTS

The authors express their gratitude for interRAI, the not-for-profit research organisation and copyright holder of the RAI instruments for allowing the use of their instruments.