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Improving the Quality of Long-term Care

Vincent Mor*

Introduction

Most industrialized and industrializing countries are facing a crisis in the provision of health and social care for their rapidly aging populations. Over the last half century formal care systems have emerged to meet the care needs of frail older persons who no longer have the ability to manage independently and whose families are unable to provide the support necessary to enable them to live in their customary home. Different countries have adopted very different strategies in developing services for the frail elderly, with some investing far more in residential care while others also have encouraged the establishment of home care services (Carpenter et al. 2004; Ribbe et al. 1997). While some countries have invested more in the provision of home and community based services, according to the OECD and most older persons receiving long-term care services received care at home, only 30 percent of all public expenditures were devoted to home care; the bulk going to institutional services.[1] Amongst OECD countries the number of long-term care beds per 1000 elders 65+ ranges from 88 in Sweden and 71 in Switzerland to under 20 in Italy, with the US, Australia and Japan around the OECD average of 41. Given the historical emphasis on institutions, when policy makers seek to improve the quality of long-term care services, they tend to focus on institutional care, which is widely believed not to live up to people's expectations. Documented quality problems range from inadequate staffing to high rates of pressure ulcers, restraints and psychotropic drug use (Carpenter et al. 1999; Feng et al. 2009). Ultimately, there is a limit to how much long-term care can be shifted to home based support and services, since the rapidly aging populations of industrialized and industrializing countries have been accompanied by smaller family sizes, greater geographic mobility and increased female labor force participation, all of which undermine the ability of families to care for older members at home (Manton 1989).

Efforts to improve the quality of long-term care services generally focus on improved regulatory and enforcement systems, internal quality improvement efforts and public reporting of provider performance in a manner designed to stimulate market forces. These three approaches can be applied to all types of service providers, but have been most often applied to institutional long-term care. The purpose of this paper is to summarize the US experience with these three approaches to improving the quality of long-term care services, particularly nursing home care. Since all approaches require that quality be measured, I begin with a brief discussion of the conceptual and technical considerations in measuring quality and the clinical assessment system which is at the core of many of the measures of quality being used in the US.

Measuring quality in long-term care

In the US, federal subsidy of long-term care began once Medicare reimbursed for post-hospital nursing home and home care, and Medicaid began paying for nursing homes in 1966. Scandals about nursing home quality arose frequently, instigating investigations and commissions. In 1984, the Institute of Medicine recommended various changes, most of which were incorporated into a law passed in 1987, including a mandate to comprehensively assess all nursing home residents (Hawes et al. 1997). Systematic assessment serves to structure the clinical information necessary for care planning and provides the basis for a common lexicon (Mor 2004). A resident assessment was nationally implemented in 1991, updated in 1997 and universally computerized in 1998. Following considerable testing, the Minimum Data Set (MDS) for nursing home resident assessment (RAI) was found to be reliable and generally valid in population

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[1] http://www.oecd.org/dataoecd/53/4/34585571.pdf

based research (Morris et al. 1990; Hawes et al. 1995; Mor et al. 2003; Gambassi et al. 1998a; Bernabei et al. 1998; Gambassi et al. 1998b; Bernabei et al. 1999) and the resulting data were found to be correlated with research quality instruments for cognition, depression and physical function (Morris et al. 1994; Hartmaier et al. 1995; Morris et al. 1999).

The RAI was soon used for policy applications such as case-mix reimbursement which pays facilities differentially for serving more impaired and sicker patients (Fries and Cooney 1985). Creating quality indicators to monitor provider performance both to guide quality improvement efforts in a single nursing home (Zimmermann 2003; Popejoy et al. 2000) and to generate and publicly report nursing home quality indicators with the universal availability of the MDS (Reilly et al. 2007). In 2002 the Centers for Medicare and Medicaid Services (CMS) began posting quality measures onto their "Nursing Home Compare" web site (Castle et al. 2007; Castle and Lowe 2005; Mukamel et al. 2007).[2] In spite of known technical limitations of the measures, publicly reported data are now promulgated widely (Castle et al. 2005; Mor 2005). A pay for performance demonstration project that rewards facilities based upon their quality performance on the indicators as well as reductions in acute hospitalizations is now underway (Rahmann 2006). Thus, the assessment instrument underpins multiple policy applications designed to improve quality, including facilitating more consistent and focused facility inspections by regulators, providing targets for quality improvement efforts within facilities or groups of facilities and serving as publicly reported indicators of quality performance, which consumers and their advocates can use to select a nursing home.

Improving regulatory efforts

Nursing homes in the US are licensed by state governments but since most serve residents insured by Medicare or Medicaid for the services received, facilities must comply with national certification standards if they are to be reimbursed for services rendered. Inspection standards are governed by an elaborate set of guidelines specifying how the inspection is to be done, which features of the home are to be inspected and what aspects of residents' medical charts are to be assessed.[3] Sometime after the introduction of a computerized MDS, regulators redesigned the inspection protocols to take advantage of the availability of quality indicators that provided a basis for determining which potentially problematic clinical areas deserved greater scrutiny. In addition to focusing on specific clinical domains such as pain or restraints based upon the quality scores, regulators use the detailed information about each resident to sample patients to review medical records and to determine how well care is provided during observations of residents at meal times or morning dressing. While the availability of these data certainly makes more uniform the content inspections, it doesn't necessarily overcome the problem of variability in inspectors ratings during observations. Indeed, a recent study comparing inspectors' determinations of how help was provided to residents found that only 2 out of 20 facility inspections revealed facilities to be deficient although in all 20 facilities studied research observers found that staff were not compliant with regulations at least occasionally (Schnelle et al. 2009). Furthermore, in spite of the fact that the inspection protocols have become increasingly standardized over the last decade, there are still very large interstate differences in the number and severity of quality deficiencies identified during inspections (Stevenson and Mor 2009; Harrington et al. 2008).

Quality improvement efforts

Periodic scandals about poor nursing home quality coupled with the increasing acuity and clinical complexity of the population served have pushed nursing home providers to institute quality improvement efforts as has occurred throughout the acute and ambulatory care sector in the US (Rosen et al. 2005; Buhr and White 2006). All quality improvement efforts require either the identification of a target of change and outcome, such as the reduction of facility acquired pressure ulcers or persistent pain, or a process of care measure like medication administration errors or the application of physical restraints (Scott-Cawiezell et al. 2009). In either case, the target needs to be measured and improvement goals set. While individual facilities can undertake quality improvement efforts focused on specialized clinical issues for which no common measurement exists, in order for groups of facilities to collaborate as part of

[2] (http://www.medicare.gov/NHCompare/home.asp). Accessed 4-8-2010.

[3] http://www.cms.gov/manuals/downloads/som107c07.pdf. Accessed 4-8-2010.

a consortia, a style increasingly adopted in the US quality improvement sector, having common measurements is crucial. Under contract from the US Medicare/Medicaid programs, Quality Improvement Organizations throughout the country have been charged with recruiting nursing homes to participate in consortia of facilities focused on improving one or more aspects of their quality performance (Schulke et al. 2007). One recent study found that facilities which set more ambitious quality improvement goals were more likely to achieve them, all standardized relative to the homes' baseline performance level, further demonstrating the value of explicitly measuring quality performance in this setting (Baier et al. 2009). Since organizational capacity is a pre-requisite for implementing quality improvement interventions, but the need for improvement is greatest in the poorest performing facilities, which often have the least capacity to implement an intervention, there is ongoing debate as to the most appropriate targeting strategy (Stevenson and Mor 2009).

Public reporting

Over the last decade or more as the US, the UK and other countries have tried to inject the dynamism of competition on the basis of quality into the health care sector, the use of public reporting of quality has grown dramatically. Since the publication of quality information is designed to stimulate providers to invest in quality improvement efforts these two strategies can be viewed as complementary efforts although they often don't really work in tandem (Mor 2005; Werner et al. 2009a). In the US, the government has been publicly reporting quality indicators, staffing levels and performance on inspections since 2002 in an effort to provide information to consumers and their advocates to facilitate their choosing the "best" nursing home for them.[4] Early research on the use of this information suggests that providers were all aware of it but that relatively few consumers used the data to make a decision about which facility to choose (Mukamel et al. 2008). This is likely because most individuals enter nursing homes directly from the hospital and so it is likely that they and their family rely upon the advice and information of hospital discharge planners. While administrators were well aware of the data and many planned to use it as the basis for instituting quality improvement programs, most were not concerned that consumers would use the site (Castle 2005; Mukamel and Spector 2003).

More recent evaluations of the introduction of public reporting on nursing home quality measures suggest that there may have been an effect on both measured and unmeasured quality and that the unmeasured quality examined by the researchers appeared to have improved following public reporting largely among those facilities with the largest degree of improvement in the measured domains of quality (Werner et al. 2009b). As importantly, facility performance on quality measures focused on the outcomes experienced by post-acute patients entering directly from hospital for rehabilitation and recuperation seems to have resulted in significantly improved outcomes after introduction of the public reporting system (Werner et al. 2009a). The real test of whether these reporting systems are working as originally anticipated will be when we observe that facilities with superior quality performance attract a higher share of new admissions in the market as compared to facilities with lower performance rankings. Most recently states have begun to introduce "pay for performance" schemes that reward high performing and/or improving facilities using payment incentives. Most of these plans are just getting underway and/or are in place as demonstration projects so we have no results of their effectiveness at this juncture. However, clearly reinforcing quality improvement efforts and public reporting with financial rewards should serve to increase competent facilities' efforts to improve their quality of care.

Summary

In the face of persistent quality scandals in US nursing homes, the introduction of a uniform clinical assessment system designed to facilitate more coherent and informed clinical care planning designed to meet residents' needs has made possible all manner of regulatory, quality improvement and competitive stimulation actions on the part of local authorities and providers. The existence of a uniform data system covering all residents of all nursing homes is what makes this possible since measures of quality can be used to characterize the experience of all the residents. While the US has done this under governmental mandate by the "power of the purse" (reimbursement), requiring that Medicare/Medicaid influence providers' behavior, other countries and regions in the EU have been experimenting with these

[4] http://www.medicare.gov/NHCompare. Accessed 4-8-2010.

kinds of quality measurements and efforts at organizational improvement (Carpenter et al. 1999; Bernabei et al. 2008). A recent WHO report summarizes quality reporting systems that feed back performance data to facilities, comparing their performance to those of peers in their area, without identifying them (Mor et al. 2009). Although not universal nor mandatory, such systems exist in Finland, various Swiss cantons and in several Canadian provinces. How these voluntary systems will evolve in comparison with the regulatory imposed system in the US will be very interesting to observe over the next several decades.

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