Commentary: Nursing Home Staffing— More Is Necessary but Not Necessarily Sufficient

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A growing body of evidence links nursing staffing levels in nursing homes with quality of care. Indeed, the relationship between nurse staffing and patient care is not restricted to nursing homes; it applies in hospitals as well (Aiken et al. 2002). The issue is inevitably more complex than simply a body count. Although some minimum numbers of staff are likely necessary just to get the core tasks done, the quality of those workers (their skills and motivation, their kindness and concern) is bound to play a substantial role. Alas, we are reconciled to measuring only the easy part. Those measurements tell an important, if incomplete, story.

While the specifics vary, the general relationship holds. More is better. Sometimes the results suggest the problem lies in the supply of professional staff; sometimes the deficit is in nursing aids. Most of these studies have relied on extant data sources whose accuracy and sensitivity is questionable. Most of the information on staffing levels comes from OSCAR (Online System for Certification and Administrative Reporting), a periodic report of nursing home staffing provided by each facility at the time of periodic federal surveys. More accurate staffing data can be obtained from Medicare cost reports, but these are not consistently available. Both sources provide only average levels of staffing. Neither reflects staff turnover or the use of temporary staff. The information on quality generally relies on quality indicators usually derived from the mandatory Minimum Data Set (MDS), which generates quarterly data on all nursing home residents.

The analyses of the relationship between staffing and quality has typically assumed a linear relationship between the intensity of staffing, often separated into professional and nonprofessional nursing. The paper by Schnelle and his colleagues reported in this issue carries this investigation to a new level in several respects (Schnelle et al. 2004). Their data on quality are drawn from direct observations and interviews with residents. Their findings

suggest that the relationship between staffing and quality is not linear; at least some threshold must be reached before the benefits of higher staffing levels are seen.

If this finding is true, it may help to resolve the confusion in the literature over the relationship between staffing and quality in nursing homes. While few studies suggest that more staff is harmful, many studies have difficulty establishing a significant concordance between more staff and better care. Many explanations can be posited for this failure. The measures of both staffing and quality vary widely. The information on the two sets of measures may not even be based on data covering the same time period. The quality of the data is questionable. The units of analysis for more precise studies are often small. Nonetheless, a large part of the problem may be traceable to the observation that the relationship, under the best of circumstances, is not likely to be linear. If so, then statistical methods that assume such linearity are bound to underestimate the effects, especially if many of the observations are under the threshold.

Schnelle found a substantial effect of nonprofessional staffing on quality measures that reflect the staff's ability to provide basic services, but this distinction was seen only at the extremes of staffing. The indicators they used address care designed to meet critical, but fundamental, supportive care needs. Quality of nursing home care must obviously meet such basic needs, but it must go much further. Inadequate support for feeding and transferring is deplorable, but even adequate care in these areas leaves a lot of room for meeting the total needs of nursing home residents. Making the lives of nursing home residents meaningful requires attention to areas often addressed under the rubric of quality of life, but that term may disguise the basic essence of such care. It is far from sufficient to suggest that good nursing home care consists only of keeping residents dry and nourished. The Maslovian hierarchy of needs applies to people in institutions as much as to those in the community (Maslow 1954), perhaps even more given their sterile living situations. Some work has been done to create measures that address quality of life for nursing home residents (Kane et al. 2003). These indicators may be even more sensitive to staffing levels, but the nature of the staff involved may be different. The attention to nursing staff needs to be broadened to examine the role of other staff, such as activities staff.

The measures of quality Schnelle's team used are likely more sensitive than the cruder items derived from the MDS. Questions have been raised

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about the accuracy of the latter. Efforts to use them to substantiate the role of staffing have met with mixed success (Abt Associates 2001). The MDS measures have not been able to distinguish effectively between homes that are expected to provide better care from those that did not augment services (Kane et al. in press). As Schnelle has reported elsewhere (Simmons et al. 2002; Levy-Storms, Schnelle, and Simmons 2002; Saliba and Schnelle 2002), there is some reason to question whether the levels of performance charted truly reflect the reality of care.

Levels of staffing, expressed as bodies per resident, may not tell the whole story. Schnelle's findings also indicate that professional staffing levels, which have been shown elsewhere to correspond with measures of quality (Bliesmer 1998), did not distinguish among a variety of measures designed to reflect the roles that professional nurses might be expected to play. In other words, for more complex tasks, a nurse is not a nurse; the quantity of nurses is not the crucial issue. Other factors determine the effectiveness of professional nursing performance. These may include the quality and training or experience of the individuals or they may depend on the way care is organized, for example, the level of informational support systems in use. Here we are left with more questions than answers.

On the one hand, nursing homes have more systematic data available than any other form of health care. The implementation of the MDS has been a major accomplishment. The intensity of this activity is prompted by a concern that quality in this sector is a particular problem. On the other hand, the initial foray was directed at examining those aspects of care that could be reported by staff. The plans for the next generation of the MDS (MDS 3.0) call for expanding the inquiry to address elements that will require direct examination of residents' perceptions about care. Studies like Schnelle's are helpful in identifying the problems but they do not offer a mechanism for ongoing surveillance. The challenge facing the redesign of the MDS is to create a method that will produce credible information that is also actionable.

If more staffing is needed in nursing homes to meet even basic needs, the costs of such care will increase substantially. Perhaps this is the moment to reevaluate the place of the nursing home in the spectrum of long-term care. Just as hospitals became more specialized and increased the proportion of intensive care unit beds as care became more complex, while reducing hospital admissions and lengths of stay, so too may nursing homes come to occupy a different place in long-term care. Such care may be best targeted to those who need intensive support, leaving many former nursing residents to obtain care in the community through improved programs of home care,

some of which may be combined with residential services (Zimmerman et al. 2003; Kane and Wilson 1993; Wilson 1993). Nursing homes have responded to market opportunities. In responding, they have tried to be all things to all people. As the pressure to shorten hospital stays grew, they offered themselves as sources of postacute care. But the same institutions may not be equally appropriate in providing the more intensive rehabilitative services required for postacute care and the supportive life-affecting models of extended care (Kramer et al. 1997; Kane et al. 1996). Some degree of institutional specialization may offer a better blueprint. Discussions about the effect of staffing must first decide what kind of care they are staffing for. Both the numbers of personnel needed and the types of such staff will likely vary with the clinical and social challenges different types of care present.

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