

Preventing Avoidable Hospitalizations of Nursing Home Residents: A Multipronged Approach to a Perennial Problem

Avoiding unnecessary hospitalization of nursing home (NH) residents, a long-standing challenge,¹ is increasingly recognized as a major opportunity to improve the continuity, efficiency, and quality of long-term care because of its potential to minimize the negative health and social consequences²⁻⁵ and high cost of such hospitalizations.⁶ Addressing this challenge through research and quality improvement (QI) initiatives is imperative in the present era of intense focus on healthcare reform and the approaching “tsunami” of aging Americans who may require residence in long-term care facilities.

In this issue of the *Journal*, Ouslander and colleagues⁷ contribute a preliminary report from a QI project on the frequency and reasons for potentially avoidable hospitalizations in Georgia NHs selected for study because of high or low hospitalization rates. The investigative process involved a structured implicit review of patient records by an expert panel composed of physicians, advanced practice nurses (APNs), and a physician assistant experienced in NH care to judge whether a given hospitalization could have been avoided. In addition, the panel was asked to identify resources that might have been productively applied to prevent the hospitalization. Of special concern in these times, the frequency of avoidable hospitalizations identified in their project (68%) was considerably higher than reported in a 2000 study in California NH residents (45%).⁸ Although this difference might be attributed to variations in study methodology, which included sampling of short- and long-stay residents, as well as regional care differences, it may also reflect real secular trends in the kinds of residents who populate those NHs a decade later. Several other study limitations that the authors noted, including the small and geographically limited sample, could be productively addressed in important future research and QI initiatives.

Nevertheless, the present study lends crucial insights into how care delivery in NHs can be improved to become more patient-centered, lower the risk of unnecessary hospital transfer, and potentially lower costs. Recommended strategies include greater availability of registered nurses (RNs) and primary care clinicians, including physicians, nurse practitioners, and physician assistants, who can expertly assess acute changes in frail residents; better access to diagnostic and treatment services on site; increased use of practice guidelines and tools to assist NH staff in managing residents' health conditions; improved

advanced care planning to minimize futile and potentially counterproductive care; and reversing the present perverse financial incentives that favor hospitalization of NH residents. As the authors indicate, implementation of these measures will require added investment in NHs. Hence, they argue persuasively that realizing the substantial potential for cost savings by reduction of avoidable hospitalizations will provide the resources to buttress NH infrastructure and result in the desired outcome of more-humane, safer, and more-efficient continuous care to residents.

An important reason that many QIs have failed is the lack of systems that support nursing staff in the earlier and more-expert detection, monitoring, and management of clinical problems. For example, a nurse practitioner with gerontological expertise would provide timely and expert primary care to residents and assist facility directors of nursing, often associate degree-prepared nurses with limited geriatric nursing knowledge, in developing such systems. In some states, Medicaid will allow APN consultation as part of billing on their cost report as a direct care expense. One example of establishing a successful system that reduced potentially avoidable hospitalizations 36% from baseline was demonstrated in a recent pilot QI project.⁹ This project used a toolkit called Interventions to Reduce Acute Care Transfers, which included evidence-based guidelines and tools, along with on-site and telephone support by an APN.

Another strategy that warrants serious consideration is having more RNs providing care in NHs, an approach consistent with results from several studies that found higher RN staffing to be associated with fewer hospitalizations of long-stay residents,¹⁰⁻¹² although this approach would require a major change in typical current RN staffing regulations, which require a minimum of only one RN on duty 8 hours per day (although a few states have implemented more-rigorous standards). Thus, licensed practical nurses with limited nursing education make most care decisions in NHs. Nursing home administrators (and lobbyists for the industry) will resist implementation of expanded RN staffing standards for reasons of narrow profit margins, affordability, and availability of experienced nurses, especially in rural areas. Despite federal legislation having been proposed to increase RN staffing beyond Omnibus Budget and Reconciliation Act of 1987 requirements, multiple attempts to change staffing standards have been unsuccessful.^{13,14} This is an issue that needs to be revisited and could be added to the agenda of the Elder

DOI: 10.1111/j.1532-5415.2010.02775.x

Workforce Alliance, a public policy advocacy group, which the American Geriatrics Society, along with 28 other professional, direct care worker, and consumer organizations, is spearheading.

However, the implications of the present article emphasize the importance of geriatric training for all healthcare providers in order to deliver quality care to an increasingly older patient population, especially in long-term care.¹⁵ Indeed, all NH personnel would benefit from this education and training in assessment and care of residents, perhaps most critically the certified nursing assistants who provide the greatest amount of hands-on care and are often the first to witness important changes in the health status of these vulnerable persons.¹⁵

The concern over avoidable hospitalizations will continue to be a perennial one in the broad scheme of providing optimal continuity of care across different sites of care for frail older persons. Older adults in today's NHs are more complex medically, with their acuity level and needs changing more quickly and requiring more-frequent monitoring by well-trained NH staff and primary care providers than in earlier days of a more-custodial level of typical long-term care. The level and complexity of care that can be provided in a particular site continues to shift upward, and providing more-acute care in the NH while minimizing hospital transfers requires a parallel shift in the supporting infrastructure of NHs. Thus, accommodating short-term illnesses such as pneumonia, urinary tract infections, undiagnosed fevers, and dehydration might be managed appropriately in a special "subacute" care unit with 24-hour RN support within the NH, perhaps with remote health monitoring by advanced practice clinicians.

Reducing avoidable hospitalizations of NH residents is a challenging but necessary goal of system reform to improve care quality and decrease healthcare costs. This will require a multipronged approach at upgrading the knowledge and skills of health professionals and direct care workers, improving practice, changing staffing standards, influencing health policy, and realigning fiscal incentives. This is a problem that requires ever-more-urgent attention given the needs of this highly vulnerable group of patients, care quality initiatives demonstrated to be effective in rigorous studies, and rising healthcare costs. It will require better communication among all health professional and consumer groups, who need to join forces in mutual respect to advocate together for what is best for the NH resident. If we advocate together in a united voice, we shall exert greater influence in addressing this complex issue and increased optimism that the needs of our increasingly elderly and frail patients will be met in this century of the aging tsunami in America.

ACKNOWLEDGMENTS

Conflict of Interest: The editor in chief has reviewed the conflict of interest checklist provided by the authors and has

determined that the authors have no financial or any other kind of personal conflicts with this paper.

Author Contributions: Both authors contributed to planning and writing the text and to the preparation of the editorial.

Sponsor's Role: No sponsors were involved in any aspect of this study.

Jean F. Wyman, PhD
Center for Gerontological Nursing
University of Minnesota
Minneapolis, MN

William R. Hazzard, MD
Geriatrics and Extended Care
Seattle Veterans Affairs Medical Center
Seattle, WA
Division of Gerontology and Geriatric Medicine
University of Washington
Seattle, WA

REFERENCES

- Kaiser-Jones JS, Wiener CL, Barbaccia JC. Factors contributing to the hospitalization of nursing home residents. *Gerontologist* 1989;29:502-510.
- Creditor MC. Hazards of hospitalization of the elderly. *Ann Intern Med* 1993;118:219-223.
- Fried TR, Gillick MR, Lipsitz LA. Whether to transfer? Factors associated with hospitalization and outcome of elderly long-term care patients with pneumonia? *J Gen Intern Med* 1995;10:246-250.
- Fried TR, Gillick MR, Lipsitz LA. Short-term functional outcomes of long-term care residents with pneumonia treated with and without hospital transfer. *J Am Geriatr Soc* 1997;45:302-306.
- Thompson RS, Hall NK, Szpiech M. Hospitalization and mortality rates for nursing home-acquired pneumonia. *J Fam Prac* 1999;48:291-293.
- Grabowski DC, O'Malley AJ, Barhydt NR. The costs and potential savings associated with nursing home hospitalizations. *Health Aff* 2007;26:1753-1761.
- Ouslander JG, Lamb G, Perloe M et al. Potentially avoidable hospitalizations of nursing home residents: Frequency, causes, and costs. *J Am Geriatr Soc* 2010;48:627-635.
- Saliba D, Kington R, Buchanan J. Appropriateness of the decision to transfer nursing home facility residents to the hospital. *J Am Geriatr Soc* 2000;48:154-163.
- Ouslander JG, Perloe M, Givens JH et al. Reducing potentially avoidable hospitalizations of nursing home residents: Results of a pilot quality improvement project. *J Am Dir Assoc* 2009;10:644-652.
- Decker FH. The relationship of nursing staff to the hospitalization of nursing home residents. *Res Nurs Health* 2008;31:238-251.
- Horn SF, Buerhaus P, Bergstrom N et al. RN staffing time and outcomes of long-stay nursing home residents. *Am J Nurs* 2005;105:58-70.
- Kramer AM, Fish R. The relationship between nurse staffing levels and the quality of nursing home care. In Phase II of final report to Congress: Appropriateness of minimum nurse staffing ratios in nursing homes (Chapter 2). Baltimore, MD: Centers for Medicare and Medicaid Services.
- Collier E, Harrington C. Staffing characteristics, turnover rates, and quality of resident care in nursing facilities. *Res Gerontol Nurs* 2008;1:157-170.
- Maas ML, Specht JP, Buckwalter KC et al. Nursing home staffing and training recommendations for promoting older adults' quality of care and life. Part 2: Increasing nurse staffing and training. *Res Gerontol Nurs* 2008;1:134-152.
- Retooling for an Aging America: Building the Health Care Workforce. Institute of Medicine, National Academy of Sciences, Washington, DC: 2008.