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Improving The Quality Of Care For Nursing Home Patients

There are 19,100 nursing homes in the United States with nearly 1.6 million residents. Nursing home patients are characterized by being old (mean age 80 years or older; almost 90 percent are older than 65 years), female, and physically and cognitively impaired. These statistics can mask the true heterogeneity of the nursing home patient. Forty-five percent of patients discharged from nursing homes had stays of fewer than 90 days. These patients are admitted for short-term rehabilitation, acute illness, or terminal care. Long-stay patients have significant impairments of cognitive or physical functioning.

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Improving the quality of care for persons who will live in a nursing home for many years is a complex task. For these individuals the nursing home serves as a health care facility and a home. The 1985 Institute of Medicine report[1] and the resulting regulations that were part of the 1987 Omnibus Reconciliation Act attempted to address this dual role of the nursing home and encouraged a de-emphasis on the medical model of long-term care. Much remains to be accomplished, however, to improve nursing home medical care.

In a recent review article Ouslander[2] described six strategies to improve medical care in nursing homes. One strategy is a systematic approach to screening, health maintenance, and preventive practices. This concept is controversial. Although there is enthusiasm for targeting preventive measures in older, community-living persons, there is little consensus (and even fewer data) on what specific measures should be recommended. The approach to take with the frail elderly in the nursing home is even less clear.

The goal of prevention changes in late life. In younger persons, the goal is to target disease-specific morbidity and mortality, but for older persons who have many chronic conditions, this focus loses its value. The ability of an intervention directed toward an old person to prevent future disability is handicapped by the "narrow therapeutic window that characterizes the elderly person."[3] More relevant goals include prevention of iatrogenic illness, prolonging the period of effective activity and function, and ensuring an adequate social support system. A key to success is using an approach tailored to the individual. Developing a health promotion plan for the residents of a nursing home is different from devising one for a group of preschool children. The homogeneity of the children allows for recommendations that can be applied to almost all participants. In contrast, applying general preventive recommendations to a group of frail older adults will fail to take into consideration the variability of each individual.

In this issue of the *Journal*, Richardson has provided family physicians with a review of the data available to guide us in health promotion for nursing home patients.[4] The data include a limited number of studies of the value of annual physical examinations and panels of laboratory tests. In summary, the studies' results are discouraging. The remaining data are a compilation of recommendations made by authoritative panels for prevention among community-living elderly. Many studies used to develop these recommendations do not include older people as subjects, and extrapolating these guidelines to older populations could be misleading.

Nonetheless, Richardson provides us with a starting point. His recommendations are divided into practices to complete at the time of admission to the nursing home and ones to follow at regular intervals thereafter. The recommendations are conservative and, combined with prompt assessment and treatment of episodic problems, would ensure all nursing patients a minimum standard of medical care. A few areas deserve further comment.

Evaluating the risk of falling can be expanded into a more comprehensive, institution-wide program to reduce accidental injury and encourage mobility. A recent study evaluated the benefits of a fall prevention assessment in high-risk nursing home patients.[5] The assessment was completed by a nurse practitioner. Several correctable problems were identified, including muscle weakness, postural hypotension, gait and balance disorders, adverse drug effects, occult infections, dehydration, and metabolic disorders. Hospitalizations for patients in the group receiving this evaluation and intervention were reduced compared with that for a similar group of high-risk patients.

Similarly, evaluating the nursing home patient's nutritional status can be expanded into an active program that identifies weight loss and adult failure-to-thrive syndrome. Clinically, failure to thrive is defined by unintentional weight loss, which may be reversible or irreversible, and accompanying metabolic abnormalities.[6] In the nursing home, in addition to weight loss, conditions associated with undernutrition include anemia, hip fractures, pressure ulcers, depression, and dementia. Careful evaluation of high-risk persons and implementation of correctional measures by involving the family, nursing staff, dietician, and other staff can improve nutritional status and prevent disability. Similar preventive programs could address other common clinical problems, such as pressure ulcers and recurrent urinary tract infections.

The prevention of iatrogenic problems is an area of great potential in the nursing home. Careful evaluation of medication use and reducing the risks of hospitalization are two areas with particular promise. The average nursing home resident takes more than eight medications, and in this population the use of high-risk medications, e.g., digoxin, diuretics, and psychoactive drugs, is particularly common. The risk for drug-drug interactions and drug-disease interactions is especially high. In one study, older patients using six to ten drugs during 1 year had a 13 percent rate of adverse reactions.[7] The physician should be decisive about discontinuing unnecessary medications. Richardson's recommendation to review all drugs at least every 6 months is worthwhile.

Nursing home patients are frequently transferred to the emergency department for evaluation or to the hospital for treatment. The risk for iatrogenic problems developing in these environments is high. Communication between the hospital and nursing home can be poor. A different physician could be directing the patient's care after transfer to the hospital. Important information on symptoms, baseline functioning, ongoing or new treatments, and advanced directives do not always come with the patient, and hospital staff infrequently try to gather the missing data. Many of these patients have delirium, which can be aggravated by the transfer and further complicate assessment and treatment in the hospital. Overtreatment, undertreatment, and misdiagnosis are not uncommon. An important preventive strategy in the nursing home is to consider carefully the need to transfer a patient to a hospital. If at all possible, evaluations of acute problems should occur in the nursing home, and if appropriate, treatment should be initiated without a transfer. If hospitalization is required, continuity of care must be ensured. Nursing home clinical records should be provided to the hospital, and the nursing home attending physician should supervise the hospital care or communicate regularly with the hospital attending physician.

To progress toward a rational and effective preventive approach for nursing home patients, family physicians must begin grappling with the complexities of applying anticipatory strategies to this diverse patient group. To help guide us, additional research data are needed. Richardson gives us a good place to start. Family physicians can now expand and improve their application of preventive principles to the nursing home elderly. An emphasis on maintaining function, avoiding iatrogenic illness, and targeting interventions to individuals are essential components of high-quality preventive care in the nursing home.

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