Coordinated by Peri Rosenfeld, PhD, and Charlene Harrington, PhD, RN, FAAN

Nursing Counts, highlighting data that illustrate the value of nursing, appears in the *AJN* as a periodic column and is provided by the John A. Hartford Foundation Institute for Geriatric Nursing, the Division of Nursing, New York University, New York City, www.hartfordign.org.

Hospital Care for Elderly

This month's *Nursing Counts* addresses the risk of poor hospital outcomes among patients ages 65 and older, especially those with comorbidities and dementia, and the importance of nurse staffing levels, management, and competency in the care of older patients. People in that age group represent a hospital's "core business," and understaffing will therefore affect them disproportionally and result in a higher incidence of adverse outcomes. The chart (page 116) illustrates the degree to which older patients who have both dementia and coexisting medical conditions are at especially high risk for having poor outcomes.

Unfortunately, most studies of patient outcomes and nurse staffing fail to include patient age as a variable (Minnick's research is an exception). Aiken and colleagues shed much-needed light on the relationship between nurse staffing and adverse events, but they leave unanswered questions about the particular risk to older patients when patient-to-nurse ratios increase. We hope this month's *Nursing Counts* motivates hospitals to reconsider adverse events (such as falls and pressure ulcers) in the context of the age and frailty of the patients who experience them. *—Mathy Mezey, EdD, RN, FAAN*

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Research Brief

Understaffing Increases Risk of Death Among Patients

In a study of how nurse staffing levels in hospitals affect patient outcomes and nurse retention, Aiken and colleagues found that with each patient added to the average nurse's workload, a patient's risk of dying within 30 days of hospital admission increased 7%. (Patient-to-nurse ratios in the hospitals studied ranged from 4:1 to 8:1.) In addition, with each additional patient per nurse, nurses were 23% more likely to experience job burnout and 15% more likely to be dissatisfied with their jobs, factors that contribute to high turnover.

The study used cross-sectional analyses of data from surveyed nurses (n = 10,184), patient discharge data (n = 232,342), and administrative data from Pennsylvania hospitals (n = 168). Patient age was not reported; but given that 48% of hospital patients are ages 65 or older, it's very likely that they are disproportionately at greater risk because of greater nurse workloads. The authors make no specific nurse staffing level recommendations. But they do suggest that recent California legislation mandating minimum licensed nurse-to-patient ratios for its hospitals—ratios the governor has set at 1:6 by July, 2003, and 1:5 when the directive is fully implemented—is feasible.*—Malvina Kluger*

Sources: Aiken LH, et al. Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *JAMA* 2002;288(16):1987-93; Kozak LJ, et al. National hospital discharge survey 2000. Annual summary with detailed diagnosis and procedure data. *Vital Health Stat* 2002;13(153):1-194. http://www.cdc.gov/nchs/data/series/sr_13/sr13_153.pdf.

FAST FACTS

- As of March 2002, hospitals' nurse staffing levels were a factor in 24% of 1,609 "sentinel events" (defined by Joint Commission on Accreditation of Healthcare Organizations as "unanticipated events that result in death, injury, or permanent loss of function").
- Between 1970 and 2000 the rate of hospitalization of people ages 65 and older increased by 23%, while the rate of hospitalization among all other age groups declined.
- In 2000 the average length of hospital stay among patients ages 65 and older was six days; among those ages 45 to 64, five days; and among those ages 15 to 44, 3.7 days.
- In 1999 hospital costs for Medicare recipients ages 65 and older averaged $2,546 among all beneficiaries and $7,222 among those with Alzheimer disease or other dementias.

Sources: Joint Commission on Accreditation of Healthcare Organizations. *Health care at the crossroads: strategies for addressing the evolving nursing crisis.* Washington, DC; 2002; National Center for Health Statistics, Centers for Disease Control and Prevention. *Advance Data from Vital and Health Statistics: 2000 National Hospital Discharge Survey.* Hyattsville, MD; 2002. http://www.cdc.gov/nchs/products/pubs/pubd/ad/321-330/ad329.htm; The Alzheimer's Association. *Use of Medicare services and Medicare costs for people with Alzheimer's disease and other dementias.* [Unpublished data from "Medicare claims for a 5% national random sample of Medicare beneficiaries," CMS FY 1999 data set.] Chicago; 2002.

Delirium, Depression Often Overlooked

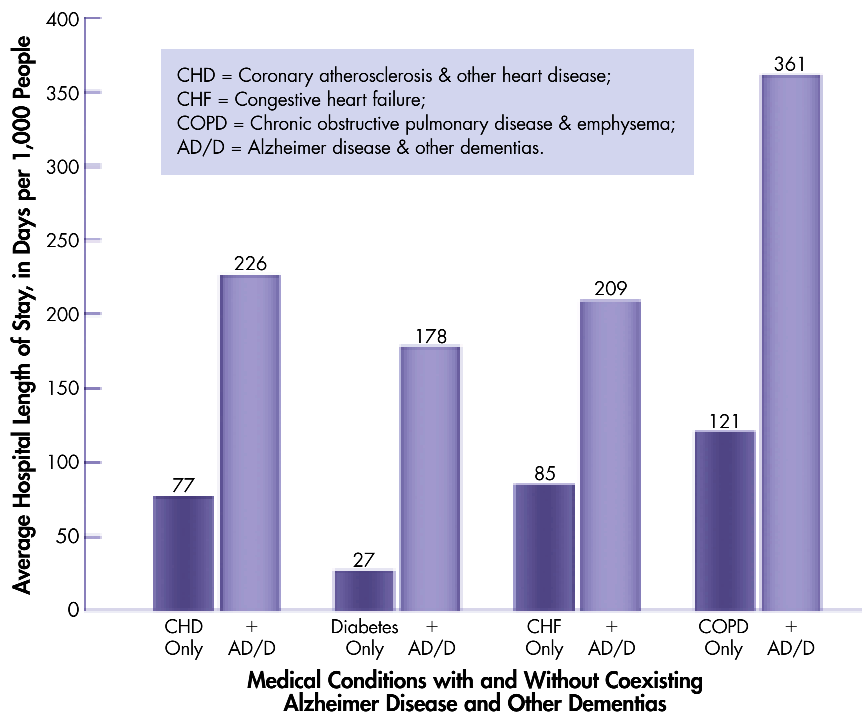
Hospitalized elderly require special care.

Cognitive impairment among older adults hospitalized for common medical or surgical conditions can have devastating human and economic consequences. Delirium (an acute disruption) and dementia (a chronic degenerative disorder) are the two most common cognitive disorders adversely affecting older patients' hospitalization and postdischarge outcomes. Elderly patients with these impairments are more likely to have prolonged hospital stays and higher health care costs, according to an analysis of a 1999 Centers for Medicare and Medicaid Services data set concerning Medicare fee-for-service beneficiaries ages 65 and older.

A growing body of evidence points to a strong relationship between delirium and depression, including the fact that both conditions are poorly recognized and managed. In a recent unpublished pilot study by this author and colleagues, funded by the Alzheimer's Association, 145 hospitalized elderly patients were screened for cognitive impairment. Evidence of it was found in 35% (51), yet 65% (33 of 51) had not been identified as such by either family members or hospital staff. In short, the symptoms and behaviors associated with cognitive impairment often are unrecognized by professional caregivers as well as family members.

The pilot study included in-depth interviews with a subsample at multiple intervals, from time of hospital admission through six weeks postdischarge. The findings from these interviews suggest the importance of managing illness, managing and negotiating patient care, and teaching and supporting psychosocial coping skills in this population.—*Mary Naylor, PhD, RN, FAAN*

Source: The Alzheimer's Association. *Use of Medicare services and Medicare costs for people with Alzheimer's disease and other dementias*. [Unpublished data from "Medicare claims for a 5% national random sample of Medicare beneficiaries," CMS FY 1999 data set]. Chicago; 2002.



Source: The Alzheimer's Association. *Use of Medicare services and Medicare costs for people with Alzheimer's disease and other dementias.* [Unpublished data from "Medicare claims for a 5% national random sample of Medicare beneficiaries," CMS FY 1999 data set]. Chicago; 2002.

Nurse Management and Physical Restraint

Nurse managers can strongly influence how much restraint is used in patients when characteristics aren't a determinant, according to a study of three teaching hospitals. Data were collected from units, such as intensive care, where restraint is used most often. The three hospitals had varying levels of restraint use but similar patient acuity levels and staff attitudes and knowledge about restraints. Age was associated with restraint use: 59% of restrained patients were older than 64, even though they accounted for only 40% of the patient population.

A lower incidence of restraint use was attributed to nurses and physicians agreeing that nurse managers develop and discuss restraint alternatives, as well as nurse managers supporting staff nurses' decisions about when to use restraint. The study's findings underscore the importance of the nurse manager in influencing restraint use and achieving favorable patient outcomes.—*Ann Minnick, PhD, RN, FAAN*

Sources: Minnick A, Leipzig R. The restraint match-up. *Nursing Management* 2001;32(3):37-9; Minnick A. Retirement, the nursing workforce, and the year 2005. *Nursing Outlook* 2000;48(5):211-7. ▼

Announcement

Are you looking for a nursing home in California?
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