

Public release date: 9-Feb-2010

Contact: Mark Hollmer

mark_hollmer@brown.edu

401-863-1862

JAMA and Archives Journals

Patients with advanced dementia more likely to receive feeding tube at larger, for-profit hospitals

Despite being of questionable benefit for patients with advanced dementia, new research finds that hospitals with certain characteristics, such as those that are larger or for-profit, are more likely to have a higher rate of feeding tube placement, according to a study in the February 10 issue of *JAMA*.

Dementia is a leading cause of death in the United States, and estimates project that 16 million individuals will have dementia by 2050. Characteristics of advanced dementia can include severe functional impairment, eating problems, malnutrition and recurrent infections. "The decision to place a feeding tube in a patient with advanced dementia is one of the sentinel decisions that family members and health care professionals grapple with in the nursing home environment. Two widely cited structured literature reviews conclude that the use of feeding tubes in patients with advanced dementia does not improve survival, prevent aspiration pneumonia, heal or prevent decubitus ulcers [bed sores], or improve other clinical outcomes," the authors write.

Despite this evidence, a previous study reported that more than one-third of nursing home residents with advanced dementia have a feeding tube inserted, and other research has indicated that many of these patients had their feeding tube inserted during an acute care hospitalization, according to background information in the article.

Joan M. Teno, M.D., M.S., of Brown University, Providence, R.I., and colleagues examined the characteristics of acute care hospitals associated with greater rates of feeding tube insertion among nursing home residents ages 66 years or older admitted with advanced cognitive impairment. Rate of feeding tube placement was based on a 20 percent sample of all Medicare Claims files and was assessed in hospitals with at least 30 such admissions between 2000 and 2007, which was 2,797 acute care hospitals for this study.



During the study period, 280,869 admissions occurred among 163,022 nursing home residents (average age, 84.0 years; 67 percent women, and 12.5 percent black residents). Between 2000 and 2007, the hospital rate of feeding tube insertion per 100 eligible admissions decreased, from a high of 7.9 in 2000 to a low of 6.2 in 2007. The rate of feeding tube insertion varied from 0 to 38.9 per 100 hospitalizations.

A higher rate of feeding tube insertions was independently associated with for-profit ownership vs. hospitals owned by state or local government, with an absolute difference of 3.0 feeding tube insertions per 100 admissions. Hospitals with a greater number of beds (more than 310 beds vs. less than 101 beds) also had higher rates of feeding tube insertion, as did those with more intensive care unit use for chronically ill patients in the last 6 months of life.

"Feeding tube insertion in persons with advanced cognitive impairment demonstrates a disconnect with the existing evidence of their effectiveness," the authors write.

"These results are the first to our knowledge to document the national variation in rates of feeding tube insertions among acute care hospitals. Future research is needed to better understand why this variation occurs and to intervene to ensure that feeding tube insertion reflects informed patient preferences based on discussion of the evidence of risks vs. benefits."

###

(JAMA. 2010; 303[6]: 544-550. Available pre-embargo to the media at www.jamamedia.org)

Editor's Note: Please see the article for additional information, including other authors, author contributions and affiliations, financial disclosures, funding and support, etc.