

# Do Patients With Advanced Cognitive Impairment Admitted to Hospitals With Higher Rates of Feeding Tube Insertion Have Improved Survival?

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Abstract: Context. Research is conflicting on whether receiving medical care at a hospital with more aggressive treatment patterns improves survival.  
Objectives. The aim of this study was to examine whether nursing home residents admitted to hospitals with more aggressive patterns of feeding tube insertion had improved survival.  
Methods. Using the 1999-2007 Minimum Data Set matched to Medicare claims, we identified hospitalized nursing home residents with advanced cognitive impairment who did not have a feeding tube inserted prior to their hospital admissions. The sample included 56,824 nursing home residents and 1773 acute care hospitals nationwide. Hospitals were categorized into nine groups based on feeding tube insertion rates and whether the rates were increasing, staying the same, or decreasing between the periods of 2000-2003 and 2004-2007. Multivariate logit models were used to examine the association between the hospital patterns of feeding tube insertion and survival among hospitalized nursing home residents with advanced cognitive impairment.  
Results. Nearly one in five hospitals (N = 366) had persistently high rates of feeding tube insertion. Being admitted to these hospitals with persistently high rates of feeding tube insertion was not associated with improved survival when compared with being admitted to hospitals with persistently low rates of feeding tube insertion. The adjusted odds ratios were 0.93 (95% confidence interval [CI]: 0.87, 1.01) and 1.02 (95% CI: 0.95, 1.09) for one-month and six-month post-hospitalization survival, respectively.  
Conclusion. Hospitals with more aggressive patterns of feeding tube insertion did not have improved survival for hospitalized nursing home residents with advanced cognitive impairment. **J Pain Symptom Manage 2013;45:524-533.**

Strengths: Clinically relevant study attempting to shed light into a meaningful topic, with large number of patients and hospitals use of a large database. The authors tried to minimize confounding factors and maximize patient enrollment, and used validated tools to assess functional status and cognitive impairment.

## Weaknesses:

As identified by the authors: included limitations due to the limited information captured on MDS, reliance on ICD-9 coding, inability to distinguish intra-hospital care vs. care after discharge. Also, the retrospective nature of the study and use of first admission information only can be included as limitations.

Relevance to palliative care: The common belief that aggressive care leads to better outcomes is challenged in this article, and papers like this can have a significant impact in discussions between health care providers and families, informing the decision making process regarding tube feeding in patients with advanced cognitive impairment. Also it can help policymakers, particularly in the USA where financial constraints have a significant impact in the delivery of quality health care, educating professionals and ultimately improving patient's quality of life.