

Estimating the Magnitude of Unmeasured Risk in VA Patients

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BACKGROUND / RATIONALE:

Numerous studies over the past two decades have compared patient outcomes in Veterans Affairs (VA) and private sector hospitals. A critical limitation of these studies is uncertainty about the adequacy of methods used to adjust for differences in illness severity. While it is generally recognized that many unique socioeconomic, clinical, and psychosocial factors influence the use of VA hospitals, it is unclear whether current methods appropriately adjust for these differences. The failure to account for such differences makes it difficult to discern whether observed differences in risk-adjusted outcomes between VA and private sector hospitals are due to unmeasured illness or to differences in the quality of care. The high rate of utilization of private sector hospitals by veterans who also use VA services offers an innovative approach for addressing this problem.

By identifying VA users who are hospitalized in private sector hospitals, we can compare outcomes of patients who are VA users with outcomes of patients who are not VA users. Because both groups are receiving care in similar hospitals, any differences in outcomes between the two groups is a direct measure of the unmeasured severity of illness that may confound studies comparing outcomes in VA and private sector hospitals.

OBJECTIVE (S):

The primary goal of this study is identify whether VA utilization is an independent risk factor for poor outcomes. Specifically, we will:

- 1: Compare outcomes of VA users and other patients who receive care in private sector hospitals for 10 high-volume medical and surgical diagnoses, adjusting for severity of illness.
- 2: Identify characteristics of VA users that are associated with poor outcomes and estimate the prognostic impact of these characteristics.

METHODS:

The two-year study will employ a retrospective cohort design to identify VA users and non-users age 67 years and older who received treatment for 10 medical and surgical conditions in private sector hospitals during the period 1996-2001. The study will use Medicare administrative data (Medicare Provider Analysis and Review Part A and Denominator files), VA Administrative data (Patient

Treatment File, Outpatient Care File, and the Compensation and Pension Minifile), and other existing data sources, including the US Census Summary Data File and the American Hospital Association Annual Survey. Using the VA and Medicare administrative data, patients who used VA services during the two years preceding the index private hospital admission will be identified. Endpoints will be compared in patients who did and did not use VA services prior to the index admission, adjusting for observed patient risk factors using hierarchical models.

FINDINGS / RESULTS:

Patient cohorts have been identified for the following diagnosis categories: abdominal aortic aneurysm (n=118,180), coronary artery bypass graft (n=595,480), colectomy (n=593,453), lower extremity bypass (n=136,564), valve replacement surgery (n=109,947), acute myocardial infarction (n=750,228), chronic heart failure (n=956,078), COPD (n=499,610), pneumonia (n=1,334,244), and stroke (n=645,184). Overall 5.2% of private sector patients used VA services during the 2 years prior to the admission. Reported sample sizes include male patients only.

STATUS:

Data Analyses are ongoing at this time.

IMPACT:

The proposed study will provide new insights into the magnitude of risk in VA populations that has been unmeasured in prior studies, and, in so doing will add to our understanding of the relative quality of care in VA hospitals. In addition, the proposed study will identify specific veteran characteristics that may explain differences in outcomes between VA users and other patients- characteristics such as disability levels and other factors that typify the veteran population. This information will assist in the development of improved risk-adjustment methods for use in future comparisons of VA and private sector facilities. Study data will also help identify groups of veterans who may be particularly vulnerable to adverse outcomes in private sector delivery systems.

PUBLICATIONS: None at this time.