Health and Health Services Use in the HRS/AHEAD
Fredric D. Wolinsky, PhD
VA Medical Center, Iowa City; Iowa City, IA

BACKGROUND / RATIONALE:

   Health care expenditures for older adults are larger than those for younger adults, most of these costs accrue   from hospital episodes that are paid for by public funds, and there is substantial variation among older adults in terms of their health care expenditures, with less than one-eighth accounting for over seven-tenths of their total health care costs. Despite these facts, relatively little is known about the health and health services use of older adults over time.

OBJECTIVE(S):

   The objective of this study is an in-depth examination of the health and health services use of the 7,447 HRS/AHEAD respondents aged 70 years old or older at baseline.

METHODS:

   We will analyze the public use data from the baseline (1993) in-person and the 1995, 1998, 2000, and 2002 telephone follow-up interviews merged with data taken from the restricted Medicare claims files, the National   Death Index files, and data aggregated from the Area Resources File and linked to the HRS/AHEAD using the restricted geocode HRS/AHEAD files.   With this unparalleled data structure we will then accomplish five specific aims: (1) examine the risk of self-reported hospitalization; (2) investigate the selection bias in obtaining consent for Medicare records access (19.4% of HRS/AHEAD respondents have not provided consent); (3) assess the risk for eight specific major morbid events (prostate, breast, and colorectal cancer; hip fracture; acute myocardial infarction; chronic heart failure; stroke; and, diabetes) and their sequelae; (4) evaluate the risk for preventable hospital episodes; and, (5) model hospital episode and resource consumption trajectories over time. Hierarchical, multi-level, multivariable modeling will include five categories of covariates (from most to least distal): sociodemographic characteristics; socioeconomic and other access factors; health beliefs and lifestyle; health status; and, health services use. Estimation techniques will principally rely on event history models, such as binomial and multinomial logistic regression, and proportional hazards models. Linear and non-linear regression and random effects models will also be used where appropriate.

FINDINGS / RESULTS:

First, when modeling all-cause hospitalization, we expect that the market structure and practice pattern factors will be the most salient predictors, followed by the local access measures. Second, we expect that the epidemiologic risk factors for each of the 8 common, morbid conditions will be the most salient factors when modeling those conditions, followed by the market structure and practice pattern measures, and the continuity of interpersonal primary care. Third, when modeling preventable or ambulatory care sensitive hospitalizations, we expect the most salient predictors will be education, continuity of interpersonal primary care, and the supply of primary care health care services in the local access area. Finally, when modeling post-baseline late life course trajectories of hospital utilization patterns, we expect that pre-baseline patterns will be the most salient predictors, followed by market structure and practice patterns, local access factors, and functional and socioeconomic status.

STATUS:

This project started on September 15, 2004 and is ongoing.

IMPACT:

This research has important implications for improving equity in and the quality of health care. Many of the risk factors that we will identify represent potentially mutable barriers to optimizing health outcomes among older adults. We will quantify the relative importance of these barriers, which will provide a solid evidentiary base for developing cost-effective interventions and cost-effective health policies. Specific aim 1 provides rigorous correspondence and selection bias analyses between administrative claims and self-reports of hospital episodes, clarifying the utility of each for evidenced-based policy-making. Specific aim 2 identifies targets of opportunity for the detection and management of the onset of chronic conditions in late life. Specific aim 3 identifies risk factors for preventable hospital episodes and ACSCs, suggesting intervention targets to facilitate the substitution of less expensive and traumatic outpatient chronic care management. Specific aim 4 characterizes individuals for whom appropriate interventions might substantially alter their otherwise deleterious and resource intense late life course hospitalization trajectories.

PUBLICATIONS:

Journal Articles

1. Johnson RJ, Gallagher TJ, Wolinsky FD. The influence of the end of life on the extent of informal help received by older adults. Research On Aging 2004; 26: 259-283.