Do Practice Guidelines Improve Economic Efficiency Within the VA System

John E. Schneider, PhD

VA Medical Center; Iowa City, IA

BACKGROUND / RATIONALE:

The primary goal of this project is to determine the extent to which the adoption and implementation of clinical practice guidelines leads to changes in the costs of providing care within a healthcare system.

OBJECTIVE (S):

Our project has three aims: (1) Classify VA facilities according to the strategies and intensity of DM and MDD guideline implementation; (2) Determine the extent to which the strategies and intensity of DM and MDD guideline implementation at VA facilities is associated with differences in resource utilization; and (3) Determine the extent to which the strategies and intensity of guideline implementation at VA facilities is associated with differences in treatment costs.

METHODS:

The empirical testing of each of these aims will make use of a unique research tool-a comprehensive VA database created for the purposes of this study that will link together a large national cohort of well-characterized patients in the 1999 Large Health Survey of Veteran Enrollees (LVHS), national guideline, quality improvement and organizational data collected by our study group, and cost data developed by the VA Health Economics Resource Center (HERC). The 1999 LVHS will serve as the study cohort. We will focus on patients with the primary diagnosis of DM or MDD, confirmed by rigorous algorithms that consider clinical and administrative data on utilization, testing and treatment. LVHS respondents will be allocated to VAMCs in which they receive most of

their care within a given year, and will be tracked over the six-year period. We will use the database to estimate a set of multivariable statistical models wherein various measures of utilization and treatment cost serve as dependent variables (i.e., we will estimate what economists refer to as "production functions" and "cost functions").

FINDINGS / RESULTS:

Determining the impact of practice guideline implementation on costs within a healthcare system will contribute importantly to a growing body of health services literature on creating a "business case for quality." The project will also provide insight into organizational structure and process factors that influence institutional efforts to translate evidence into best practice and bridge the quality chasm.

STATUS:

The following 7 database construction tasks have been completed as of February 8, 2005:1. Obtain all necessary data use agreements, 2. Obtain 1999 Large Veterans Health Survey, 3. For LVHS cohort answering whole survey instrument (n = 900,000), merge with all inpatient (PTF) and outpatient (OPC) records for all study years (1999-2004), 4. Obtain all EPRP data for all VAMCs and all study years (1999-2004), 5. Obtain all HERC cost estimates for records identified in #3, 6. Obtain all DSS cost values for records identified in #3, 7. Obtain facility level data for VAMCs (AHA data, VAST, MDRC organizational surveys). We have begun merging these datasets and creating analytic datafiles. We are applying item response theory to develop accurate measures of guideline compliance from the EPRP data. We have been working toward obtaining various data sets containing VAMC organizational characteristics (e.g., VA AES & NCIS).

IMPACT:

The results will in turn enable clinicians, managers, and policy makers to gain a better understanding of the resource implications associated with changes in clinical and organizational structures and processes.

PUBLICATIONS: None at this time.