BACKGROUND/RATIONALE:
Over the past decade, significant changes have occurred in the organization and delivery of inpatient medical care. One of the most striking changes has been the emergence of hospitalists - physicians who spend the majority of their time in the care of hospitalized patients. As an innovation to inpatient care, hospitalist models have been adopted by 64% of VAMCs, in response to pressures to improve inpatient efficiency and recent mandates to restrict resident work hours. Early studies suggested that hospitalist models decreased length of stay and costs, while maintaining or improving quality. However, a recent multi-center trial found hospitalist models were not associated with improved outcomes. In light of these contradictory findings, a closer look at the impact of hospitalist care models in VHA is warranted, as well as an examination of how the effects of hospitalist models may be modified by other organizational factors such as teaching status, intensive care staffing, and 24-hour in-house physician coverage.

OBJECTIVE(S):
The objective of this study is to systematically study the impact of hospitalists and other organizational factors on the quality and efficiency of inpatient medicine services. This will be accomplished through three specific aims: (1) Describe practice characteristics and organizational features of inpatient medicine services, (2) Determine the associations of these practice characteristics on quality and efficiency, adjusting for potentially confounding patient and hospital characteristics, (3) Determine associations of organizational features identified in Aim 1 with quality and efficiency of care, and degree to which these features moderate the effectiveness of hospitalists.

METHODS:
This study has two phases,(1) a data collection phase that will involve the administration of surveys and (2) data analysis based on a patient cohort identified from inpatient administrative data. The surveys in phase one will collect both administrative and provider level responses. Assessment of organizational factors from administrative level individuals will occur at all 125 VAMCs, with surveys administered to chiefs of medicine(COM), medicine unit nurse managers (NM), and medical ICU directors (MICU). Provider level surveys of all inpatient physicians will be administered at a sampling of 36 VAMCs stratified to best represent the geographic and sociodemographic variation within VA. The phase 2 analyses will utilize survey responses and inpatient administrative data in the development of hierarchical models for the following
outcome measures: LOS, costs, ICU transfer, mortality rates, readmission rates, time of discharge, and Patient Safety Indicators. All models will be risk adjusted for any patient, physician, and facility level characteristics that may confound the relationship between the process measures and outcomes.

FINDINGS/RESULTS:
The project is in its fourth year. Data collection is completed and we are currently writing up the findings of the study.

IMPACT:
By providing descriptive information on the range of inpatient medicine services and how organizational factors within each structure relate to quality and efficiency, this study has the potential to help VA refine inpatient medicine services to best provide high quality care. The identification of practice and organizational factors that support inpatient quality improvement programs will help clinical and administrative leaders maximize the quality and efficiency of their programs. The early data collection has gone extremely well and the preliminary findings support the original project impact statement.

PUBLICATIONS:

Journal Articles

Conference Presentations
- Kaboli PJ, Lund BC, Abramoff MD, Alexander GC, Cowan C, Ross JS. Adverse Events after Intravitreal Injection of Ranibizumab and

- Charlton ME, Mengeling M, Halfdanarson T, Kaboli PJ. Randomized Trial of a Home-Based Intervention to Improve Colon Cancer Screening Rates. Poster session presented at: VA HSR&D / QUERI National Meeting; 2012 Jul 16; National Harbor, MD.

- Kaboli PJ. Bridging the Quality Improvement and Research Divide. Paper presented at: Society of General Internal Medicine Annual Meeting; 2012 May 9; Orlando, FL.


- Richardson KK, Kaboli PJ, Cram PM, Vaughan-Sarrazin MS. Difference in the Receipt of Hip Repair in VA Patients Admitted to VA and Non-VA Contact Care Hospitals for Hip Fracture. Poster session presented at: VA HSR&D Rural Health / VA Office of Rural Health Field-Based Meeting; 2010 May 6; Portland, ME.


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