

# Effect of Hospitalist Care on Length of Stay in Patients Requiring Close Monitoring and Complex Discharge Planning

Southern WN, Berger MA, Bellan EY, et al. Hospitalist care and length of stay in patients requiring complex discharge planning and close clinical monitoring. *Arch Intern Med* 2007;167:1869–74.

## Study Overview

**Objective.** To determine whether patients with specific diagnoses or discharge needs account for reduced length of stay (LOS) associated with hospitalist care.

**Design.** Retrospective cohort study.

**Setting and participants.** Patients were included if they were admitted to the medical teaching service at Weiler Hospital (affiliated with Albert Einstein College of Medicine, Bronx, NY) between 1 July 2002 and 30 June 2004. Patients were assigned to a hospitalist or nonhospitalist team. Teams were identical except for the type of attending conducting the rounds. A hospitalist was defined as a full-time faculty member without outpatient responsibilities, and a nonhospitalist was defined as a full-time or voluntary faculty contributing 1 or 2 months of teaching service per year.

**Main outcome measures.** LOS, readmission, in-hospital mortality, and 30-day mortality. Pertinent patient-level covariates included demographic characteristics, insurance status, diagnosis-related group weight, primary discharge diagnosis, and discharge disposition (home, nursing home, or home with services). Data were extracted from the Montefiore Medical Center's clinical information system and Social Security Death Registry.

**Main results.** There were 2913 discharges for hospitalist teams and 6124 discharges for nonhospitalist teams. Mean LOS was lower for teaching hospitalists than for nonhospitalists (5.01 vs. 5.87 days;  $P < 0.02$ ). Patients requiring close clinical monitoring (congestive heart failure, stroke, asthma, or pneumonia) and those requiring complex discharge planning had the greatest reduction in LOS. There were no significant differences between the groups in readmission, in-hospital mortality, or 30-day mortality.

**Conclusion.** Hospitalist care was associated with reduced LOS in patients requiring close clinical monitoring and

complex discharge planning, without adversely affecting readmission or mortality rates.

## Commentary

Hospitalist care is associated with shorter LOS and lower costs [1], and this has led many academic medical centers to hire hospitalists to help contain cost and comply with resident work-hour restrictions. The study by Southern et al builds on previous findings by showing that hospitalist care is most beneficial in patients requiring complex discharge planning and in conditions that require close clinical monitoring. The authors hypothesize that the greater reduction in LOS associated with discharge planning reflects hospitalist skills in working with ancillary staff, such as social workers or discharge planners. Additionally, the authors suggest that the reduced LOS associated with discharges requiring close clinical monitoring may be due to the fact that hospitalists are more likely to detect clinical improvement in real time and make adjustments in treatment regimens. The study also found that the strongest association between hospitalist care and LOS was in patients with the highest acuity measured by diagnosis-related group weight.

Although this study adjusted for pertinent patient-level variables and studied various admission diagnoses, there are a number of limitations. The size of the attending physician groups was small (5 and 54). The study had limited power to detect small differences in readmission and mortality rates. In addition, the study was conducted at a single center, which limits its generalizability. For example, the 5 hospitalists at this center might be better trained than the other attending physicians. Also, it is unclear which hospitalist skills contributed to LOS—are hospitalists simply more familiar with the hospital system and the available resources to facilitate discharge planning?

## Applications for Clinical Practice

This study lends more evidence to the advantages of having hospitalist services at academic medical centers, namely reduced LOS and cost containment. However, the effect on

resident education, patient satisfaction, and outside physician satisfaction needs to be explored further to ensure that hospitalist services are delivering high-quality care to every patient.

—Review by Robert L. Huang, MD, MPH

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### Reference

1. Meltzer D, Manning WG, Morrison J, et al. Effects of physician experience on costs and outcomes on an academic general medicine service: results of a trial of hospitalists. *Ann Intern Med* 2002;137:866–74.