Submission Id: 3756

Title Hospital At Home Readmissions

Priority 1 (Research Category)

Healthcare Services, Delivery, and Financing

Presenters

Anthony Daniels, MD, David Walsh, MD, Christy Ledford, PhD, Thad Wilkins, MD, MBA

Abstract

Context: Hospital at Home (HAH) is an alternative care delivery model to traditional inpatient care that allows hospital level care in the home. Little is known about patients that decompensate in HAH programs and require escalation back to the physical hospital. Additionally, little is known regarding readmission from HAH programs that focus on patients with COVID19.

Objective: To evaluate the HAH versus usual hospital care for patients requiring readmission within 30 days for COVID19.

Study Design: Matched case-control retrospective case series of readmissions.

Setting or Dataset: Academic medical center

Population studied: 100 patients admitted with COVID19 and subsequently enrolled into the HAH program were identified randomly from a larger database of all patients admitted to the HAH program. A case control cohort was matched on age, gender, and severity of illness. In total 25 patients were identified (11 HAH and 14 control) as requiring readmission.

Outcome Measures: Inpatient length of stay (iLOS) defined as length of stay in the physical hospital, total Length of stay (tLOS) defined as total length of stay in the physical hospital and the HAH program, rates of 30-day readmissions, time to readmission, CHOSEN score, 4C score, and LACE index.

Results: This retrospective analysis included 25 patients (mean age 52.2, SD 12.9) that required readmission. 50% of the patients were female, 60% were black, 32% were white, and 8% were other races. Compared with usual care patients, HAH patients had no significant difference in 30-day readmissions (11% vs. 14%, p=NS) or average days to readmission (8.8 vs. 12.9, p=NS). The iLOS (4.1 vs. 5.8 days, p=NS) was shorter in the HAH group but the total LOS (11.7 vs. 5.8 days, p=0.01) was longer in the HAH group. The HAH group had lower predicted in-hospital mortality scores (4C) (5.4 vs. 6.9, p=NS), higher discharge readiness scores (CHOSEN) (33.0 vs. 30.7, p=NS), and lower 30-day readmission and mortality scores (LACE) (4.7 vs. 9.0, p=0.03).

Conclusions: Our study found a statistical difference in the LACE scores predicting higher readmission rates in the control group. However, there were no differences in readmissions between study groups. Further studies are needed to identify the best predictors of readmissions from HAH programs in COVID19 patients to better align resources with patients at highest risk for readmission. Additional studies should compare commonly used risk stratification tools for readmission.