

'Implementation of a Teaching Service and Delivery of Care at a Community-based Hospital'

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MEDICAL EDUCATION RESEARCH

Background: Community hospital sites offer robust educational opportunities for pediatric learners and the incorporation of inpatient teaching services is of interest to educational leaders. The impact of learners on inpatient delivery of care is poorly understood, however.

Objectives: To measure associations between type of inpatient service (teaching vs nonteaching) on patient LOS and discharge times at a pediatric hospital in the community. Secondary outcomes included prevalence of rapid response team (RRT) calls and transfers of care.

Methods/Design: In July 2016, an inpatient teaching service (TS) was implemented at Texas Children's West Campus (TCHWC) in Houston, Texas. The TS consisted of 1 senior pediatric resident, 1 pediatric intern, and 2 medical students staffed by an attending pediatric hospitalist. Patients admitted to the acute care floor were assigned to either the TS or a pediatric hospitalist-only non-teaching service (nTS). We conducted a retrospective cohort study of patients admitted to TCHWC over a one-year period. LOS and discharge time of patients discharged by the TS and those discharged by the nTS were compared with the Wilcoxon rank sum test; RRT calls and transfers were compared using ANOVA.

Results: During the study period, 2104 patient admissions were analyzed, 1066 from the TS and 1038 from the nTS. There were no statistically significant differences in LOS or discharge times between the TS and nTS (TS median patient LOS of 45.5 hours vs 45 hours for the nTS ($p = 0.62$); TS median patient discharge time of 14:16 vs 14:20 for the nTS ($p = 0.67$)). Regarding the secondary outcome, 13 (1.2 %) patients on the TS and 25 (2.4%) of patients on the nTS had RRT calls ($p = 0.04$). All 13 patients on the TS who had an RRT call were transferred to the pediatric intensive care unit (PICU) (100%), while 24/25 patients on the nTS (96%) were transferred to the PICU ($p = 0.06$).

Conclusions: In a community hospital setting, a TS was not associated with longer LOS, delayed discharge times, or increased escalation of care when compared to an attending-only nTS service. Next steps will include incorporation of patient complexity and patient charges into the analyses.