

**Additional Document(s):****StatileHIFigures****Title:**

Optimizing Discharge Efficiency in Medically Complex Pediatric Patients

**Presenters:**

- Angela Statile [*Key Presenter*] (Cincinnati Children's Hospital Medical Center, Assistant Professor, Hospital Medicine) — [angela.statile@cchmc.org](mailto:angela.statile@cchmc.org)
- Amanda Schondelmeyer (Cincinnati Children's Hospital Medical Center, Fellow, Hospital Medicine)
- Denise L White (Cincinnati Children's Hospital Medical Center, Assistant Professor, Process Improvement)
- Joanna Thomson (Cincinnati Children's Hospital Medical Center, Assistant Professor, Hospital Medicine)
- Laura Brower (Cincinnati Children's Hospital Medical Center, Fellow, Hospital Medicine)
- Matthew Carroll (Cincinnati Children's Hospital Medical Center, Chief Resident)
- Julie Hausfeld (Cincinnati Children's Hospital Medical Center, Clinical Manager)
- Karen Tucker (Cincinnati Children's Hospital Medical Center, Clinical Director)
- Christine M. White (Cincinnati Children's Hospital Medical Center, Assistant Professor, Hospital Medicine)

**Background:**

Medically complex children pose significant challenges to providing timely and efficient discharge from the hospital. Delays in hospital discharges negatively impact patient flow.

**Purpose:**

Increase the percentage of medically complex general pediatric patients discharged within 2 hours of meeting medically ready criteria from 50% to 80%.

**Methods:**

We focused on the drivers of discharge goal identification, care coordination, staff engagement in discharge preparedness, and preoccupation with failure (Figure 1). Upon admission, physicians defined discharge criteria in the electronic health record (EHR). Nurses placed an EHR time-stamp to signal when patients met all goals. Key interventions included cohorting medically complex patients onto a single resident team, creating an admission order set for medically complex patients which included discharge goals specific to these patients (e.g. on home ventilator settings), instituting weekly multidisciplinary care coordination rounds, and completing a needs assessment tool to promote proactive discharge planning. A run chart assessed the impact of interventions over time (Figure 2). Length of stay (LOS) and readmission rates before and after implementation were compared using Wilcoxon rank-sum test (Table 1).

**Results:**

The percentage of patients discharged within 2 hours of meeting discharge criteria improved from 50% to 80% within 1 year without negatively impacting 30-day readmission rate (30.65% to 28.24%;  $p=0.71$ ). There was no significant change in median LOS (3.10 to 2.75 days;  $p=0.19$ ).

**Conclusions and Implications:**

Using interventions targeted at discharge goal identification and early discharge planning, we improved discharge efficiency on complex pediatric patients without increasing LOS or readmissions.

**Type of Study:**