Implementation of a Standardized Discharge Pathway for Hospitalized Children with Renal Disease

PURPOSE
The purpose of this scholarly project was to implement a renal care coordination program with three specific interventions:
1. Introduction of an expected length of stay in care progression rounds.
2. Securing follow-up appointments before discharge.
3. Completing post hospitalization phone calls.
This program was intended to decrease length of stay, decrease readmission rates, and increase patient/family satisfaction related to discharge.

BACKGROUND
The project was implemented in a 26-bed pediatric acute medical renal unit in Houston, Texas that was experiencing extended lengths of stay for the targeted patient population. There were no structured tools or processes to ensure a smooth transition to the home environment.

METHODOLOGY
An interdisciplinarysteam was established to implement the specific interventions aimed at improved care coordination for the targeted patient population using the Plan-Do-Study-Act quality improvement method.

RESULTS
After implementation of the renal care coordination program, length of stay was reduced from 5.44 to 5.10 days, (6.3%) with a baseline standard deviation of 4.03 days and a post intervention standard deviation of 2.48 days (Wilcoxon rank sum test p = 0.821). Readmissions decreased by 26% (23% to 17%) with six out of 35 patients being readmitted within 30 days (p=0.623). Patient satisfaction related preparation for discharge increased by 9% (81.2% to 88.2%). Further analysis found that readmitted patients had significantly higher severity of illness than those who were not readmitted (Wilcoxon rank sum test p = 0.007).

IMPLICATIONS
Providing a framework with targeted evidence-based interventions on high risk hospitalized pediatric patients with renal disease can assist to improve outcomes related to hospital length of stay, readmission rates, and patient experience scores.

Future quality improvement projects should focus on implementing the care coordination interventions with other chronic patient populations. Furthermore, outcomes related to morbidity, mortality, and disease management could be reviewed in relation to the implementation of the identified interventions.