A POPULATION INTERVENTION TO IMPROVE OUTCOMES IN CHILDREN WITH MEDICAL COMPLEXITY

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Problem Statement: Children with medical complexity experience frequent interactions with the medical system and often receive care that is costly, duplicative, and inefficient. The growth of value-based contracting with providers creates incentives for systems to improve this situation. This project was designed to improve the health, care, and utilization for a population-based cohort of children with medical complexity.

Project Description: This was a quality improvement initiative in a freestanding children’s hospital and surrounding catchment area, as part of an accountable care organization. Children, aged 0-18 years, with a percutaneous feeding tube, a neurological diagnosis, and Medicaid as their primary payor were targeted for intervention. Initiatives included: standardization of percutaneous feeding tube management, family education and empowerment, care coordination, attention to continuity, and data management.

Results: Between January 2011 and December 2014, we observed an 18% decrease (p<0.001) in admissions and a 32% decrease (p<0.001) in the average length of stay for children included in the cohort. Total inpatient charges were reduced by $11,764,856. There was a 7% increase (p<0.001) in the percent of children with weights between the 5th and 95th percentile. A total of 61% of children entered the care coordination program.

Conclusions: We created a population-wide initiative to improve the care of children with medical complexity. Our approach has shown promising results, including reduced cost while improving weight status and quality of care. We conclude that a concerted institutional initiative, in the context of an accountable care organization, can be part of the solution for improving outcomes for children with medical complexity.