Promoting Access to Care and Health Equity Using Telehealth to Mitigate Urban Pediatric Healthcare Disparities

Evelyn Terrell, MHSA, OTR/L • Saima Aftab, MD, MBA, FACHE, FAAP
Elizabeth Sotolongo, MHSA • Laura Cerpa • Fahd Lahrech, MS

Overview

• Virtual care aligns with strategic imperatives and Lean Dimensions of Customer Value, which aim to:
  • Improve health outcomes and quality of care
  • Improve access to care
  • Reduce costs for the healthcare organization, the patient and family, and
  • Improve satisfaction and optimize the patient experience.

• Rapid deployment of multidisciplinary telehealth services during the COVID-19 pandemic presented challenges to create sustainable hybrid models of virtual care.

• As telehealth adoption and utilization increased, Lean process improvement methodologies and tools were embedded at every step of the way.

Planning / Research Methods

A quality improvement (QI) project was conducted to enhance, expand, and optimize virtual care utilization, service, and experience. To create more value for the customer, Lean process improvement methodologies were utilized to define, measure, analyze, improve upon, and sustain workflows and processes for an optimal user experience (AHRQ, 2017). Lean principles and tools were also utilized to measure key performance indicators and the effectiveness of process improvement actions implemented (Shortell et al., 2021).

Implementation Methods

Methods focused on the following:
1. Journey mapping through the customer experience and virtual care workflow
2. Developing a dashboard and visualization tools to create a centralized view of all data
3. Use of Lean tools, which included: swim lane diagram used to map out existing workflows in greater detail, the creation of fishbone diagrams to identify potential root causes of problem areas, and Pareto analysis which enabled us to identify a course of action by quantifying the benefits of addressing our top problem areas (Shortell et al., 2021).

Lean Process Improvement

The A3 problem solving approach to developing a sustainable telehealth model.

A community needs assessment indicated that patients in the primary urbanized service area demonstrated healthcare disparities including: linguistic isolation (20%), living below the federal poverty level (53%), and 59% had difficulties accessing healthcare (versus 28% nationally). 52% were reported to need a specialist (compared to 34% nationally). Telehealth provides opportunities to create efficiencies and optimize staffing resources, enhance access to care and reduce travel related costs for patients and families.

Background

From 24 specialty programs and services, the distribution by specialty is:

- Pediatrics: 24, 60,825 visits, 190+ unique visits, 86%
- Mental Health: 1.34% total patients
- Rehabilitation Services: 2.39% total patients
- Nutrition: 7.37% total patients

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Results and Outcomes

Telehealth was an effective strategic imperative to enhance access to care and improve other key performance indicators:

- Improved access to care for new patients: 24% increase in access
- Improved patient cost savings: $397,472 savings
- Improved time for care providers: 47,755 hours saved
- Improved appointment and worry decision making: 88%

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Conclusion and Looking Ahead

- Technology advancements can increase healthcare accessibility, affordability and facilitate expansion of innovative virtual care services.

- Telehealth proved to be a viable tool in managing high-risk, socioeconomically isolated and underserved children, to transform healthcare delivery.

- It is clear that telehealth plays a pivotal role in healthcare delivery and innovation to meet the needs of children and families during pandemics and beyond.

- Areas of further study: While patients report higher satisfaction, further study is warranted to compare clinical outcomes among telehealth and in-person patients. Expand data collection on patients who received virtual care and conduct quality improvement projects to address specific known health disparities using data such as race, ethnicity, sexual orientation and/or gender identity, income, education level, socio-economic status, primary language for healthcare, insurance status, food and/or housing security. Examine the effect of social determinants of health (SDOH) and patient demographics (including age, diagnosis and insurance type) on telehealth utilization.