

\$74M in Healthcare Operational Improvements: How Texas Children’s Hospital is Delivering on Its Vision



**Texas Children’s
Hospital**[®]

HEALTHCARE ORGANIZATION

Children’s Hospital

TOP RESULTS

- \$74M in operational improvements
- 14 percent decrease in hospital length of stay
- Established a data-driven, transparent culture

PRODUCTS

- Late-Binding Data Warehouse™
- Essentials Analytics
- Advanced Healthcare Analytics
 - Operations & Workflow
 - Financial
 - Population Health

SERVICES

- Installation Services
- Clinical Improvement Services



Texas Children’s Hospital is internationally renowned for delivering quality care to children. As a leading pediatric institution, the health system is dedicated to pioneering advancements in care that will benefit the worldwide pediatric community. According to CEO Mark Wallace, Texas Children’s feels a tremendous responsibility to “accelerate the translation of research from bench to bedside, and to anticipate the future needs of children’s health regionally, nationally and internationally.”

INVESTING IN THE FUTURE AND IMPROVING FINANCIAL PERFORMANCE

To provide high-level care to a broader population of patients and maintain its position at the leading edge of pediatric care, Texas Children’s launched a \$1.5 billion strategy designed to support the expansion of clinical care, academics and research capabilities.

On the heels of this expansion effort, Texas Children’s faced a significant inflection point. Federal and state funding reductions, along with increased competition, threatened the organization’s profitability. In fact, projections indicated they would fall \$50 million



Health Catalyst provided the hardwiring to support our vision. They gave us the data and reports that enabled us to easily see whether we were delivering on what we had promised. And, when we were struggling to deliver, their solution gave us the ability to monitor our performance as we ran PDSA cycles to improve.

Mark Mullarkey
Senior Vice President

short of what was needed to build capital reserves and to maintain their bond rating.

To improve financial performance and prepare for the future, Texas Children's leadership team launched a system-wide performance improvement project called "Delivering on the Vision" (DOTV). DOTV would involve increasing accessibility for patients as well as driving healthcare operation savings. To achieve this vision, the health system would need to improve the quality of patient care, increase revenues and reduce costs.

DATA-DRIVEN HEALTHCARE PERFORMANCE IMPROVEMENT

Texas Children's strategy for delivering on the vision encompassed, in part, the following efforts:

- ▶ Enhancing strategic decision-making by providing timely access to integrated data and a single source of truth
- ▶ Establishing a data-driven, transparent culture, where executives and clinicians collaborate to define and approve clinical and operational measures
- ▶ Increasing the accountability of leaders, providers and frontline managers for their clinical and operating performance
- ▶ In depth assessments of labor, non-labor, inpatient clinical operations, clinical documentation improvement and physician practice operations.

The common denominator in these efforts was a need for sustained, transparent, easily visualized data and measurement. Therefore, Texas Children's implemented a late-binding enterprise data warehouse (EDW) platform and healthcare analytics applications from Health Catalyst. The EDW integrates data from the electronic health record (EHR), financial, operational and other systems across Texas Children's to create an enterprise-wide, single source of truth that informs clinical and operational decisions.

The EDW delivers quick and secure access to integrated, trusted data. Analytics applications running on the EDW give clinicians and staff access to needed information via easy-to-use dashboards. Access to trusted data has enabled a culture of transparency, driving system-wide engagement and accountability for clinical and operational results.

“Through our Delivering on the Vision initiative, we wanted to improve revenue or reduce expense by a net of \$61.4 million. That was our goal, and we gave ourselves 18 months to achieve it. We have far surpassed that target. Health Catalyst’s solution has played an integral part in our ability to sustain our gains and deliver even further beyond our goal.

Mark Mullarkey
Senior Vice President

RESULTS

The DOTV initiative is achieving real, measurable healthcare performance improvement.

\$74 million in operational improvements

As part of the DOTV initiative, Texas Children’s leaders established a goal of increasing operating margins over the course of 18 months with a target of \$60 million in savings. The organization has far surpassed this goal, realizing \$74 million in cost savings to date. These savings are the result of the systematic identification and execution of revenue generation and cost reduction improvements.

Using the EDW to complement their work, Texas Children’s continued to identify several key performance improvement opportunity areas and executes focused interventions to drive operational savings. Key initiatives and their respective success include:

Improvement Opportunity Area: Physician Services

An initiative to improve [practice management](#) resulted in:

- 29 percent increase in capacity, physician throughput and schedule template utilization
- 36 percent decrease in no-show rates
- 16 percent increase in internal referral rates

A complimentary initiative to improve [provider productivity](#) achieved:

- 15 percent increase in provider productivity
- 39 percent increase in revenue per clinical FTE

Improvement Opportunity Area: Labor

The health system undertook an initiative to use labor resources more effectively to deliver optimal patient care. Results included:

- Improved staff flexing
- An estimated 2 percentage point reduction in salaries and benefits as a % of net patient service revenue

Improvement Opportunity Area: Clinical Operations

Texas Children’s care teams are proactively making the shift from fee-for-service to value-based care using [evidence-based practices](#) and data-driven decision-making. Specifically, these teams are improving quality and cost by reducing variations in care. For example, the health system’s initiative for improving [asthma care](#)



The structured reporting ability that Health Catalyst delivers frees our valuable analysts from the treadmill of grinding out reports, and, instead, lets them direct their efforts to more important topics—like improving patient care.

Robert Mattix
Vice President Revenue Cycle

achieved a 49 percent decrease in unnecessary chest X-ray orders, 80 percent utilization of best-practice order sets and 90 percent usage of asthma action plans by providers.

Improvement Opportunity Area: Non-labor Improvements

Texas Children's tackled clinical documentation improvements, including more accurate and timely coding and better billing and revenue capture. The health system also achieved non-labor improvements by standardizing supplies and services and reducing non-labor supply and purchased services costs.

14 percent decrease in hospital length of stay while census has increased

Texas Children's is achieving one of its most important objectives of the DOTV initiative: improving patient access. The health system has sustained a 14 percent decrease in overall hospital length of stay two years in a row. At the same time, the census has increased, enabling physicians to see more patients. The organization's quality improvement initiatives ensure that patients receive quality care as they transition from the hospital to the level of care they need.

A data-driven, transparent culture

The DOTV initiative—supported by data—enables more strategic decision-making and increases the accountability of leaders, providers and frontline managers for their clinical and operating performance. Physicians now have greater accountability for their performance because they are able to understand and track their performance against shared objectives. Accurate, timely, accessible data has made the conversations among medical staff and the administrative team more productive and action-oriented. And when performance issues crop up, leadership can identify them easily and intervene in a timely manner.

What's Next

Texas Children's will continue to broaden its use of healthcare analytics in support of a growing number of improvement efforts designed to achieve higher-quality care, reduced costs and a better patient experience. 🌟

ABOUT HEALTH CATALYST

Health Catalyst is a mission-driven data warehousing, analytics, and outcomes improvement company that helps healthcare organizations of all sizes perform the clinical, financial, and operational reporting and analysis needed for [population health](#) and [accountable care](#). Our proven enterprise data warehouse (EDW) and analytics platform helps improve quality, add efficiency and lower costs in support of more than 50 million patients for organizations ranging from the largest US health system to forward-thinking physician practices.

For more information, visit www.healthcatalyst.com, and follow us on [Twitter](#), [LinkedIn](#), and [Facebook](#).