

Healthcare Cost Management: Broad Organizational Engagement and Activity-Based Costing Drive \$4.3M in Improvements



\$4.3M cost reduction
in one year.

PRODUCTS

- Health Catalyst Data Operating System (DOS™)
- PowerCosting™ application

EXECUTIVE SUMMARY

Since 2017, hospital margins have continuously declined, indicating the ongoing financial challenges healthcare systems face. Despite implementing several effective cost management initiatives, this health system recognized the need for actionable insights to improve its healthcare cost management processes. Using solutions from Health Catalyst, the organization developed and implemented a comprehensive approach to healthcare cost management across its system, empowering its staff and enhancing the delivery of high-quality care.

NAVIGATING HEALTHCARE COST MANAGEMENT

Over the past seven years, hospital operating margins have seen a steady decline, presenting challenges for health systems in pursuing financial stability. While recent trends point to hospital finances stabilizing, health systems still grapple with unparalleled obstacles to bolster margins.^{1,2}

TRADITIONAL COSTING METHOD CONSTRAINTS

Despite having established processes to manage costs, the health system acknowledged the constraints of traditional costing methods reliant on relative value units. These methods hindered the organization's ability to pinpoint cost drivers, limiting its capacity to reduce costs and enhance margin performance. The organization sought a transformative solution that would provide the organization with actionable insights to manage costs.

INNOVATIVE SOLUTIONS DRIVE TRANSFORMATION IN COST MANAGEMENT PROCESSES

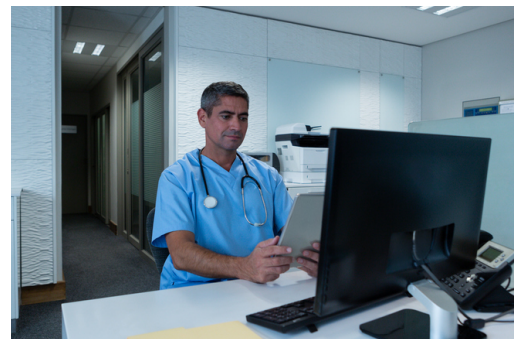
The health system embarked on a journey to transform its healthcare cost management, utilizing the Health Catalyst Data Operating System (DOS™) platform and the PowerCosting™ application to understand its comprehensive cost picture, including patient-level costing. It focuses on improving cost management and financial performance in its current mixed payment model while laying the groundwork to succeed as it transitions to more value-based contracts.

Executive committees establish board-level improvement goals and oversee eight different clinical improvement programs. A dyad leadership model—which pairs a physician and an operational leader together—drives clinical and operational improvement. More than 30 different workgroups focus on improving care quality and cost drivers. The organization uses “inPUTS”—pharmacy costs, utilization, time (such as variation in length of stay), and supplies—to help teams understand cost drivers and inform improvement opportunities.

PowerCosting and clinical condition-specific analytic accelerators provide the organization's teams and executives access to the streamlined, patient-level costing data required for improvement. Teams easily access integrated, aggregated cost views based on granular data from the EHR, claims, payroll, and other systems. Additionally, teams can visualize trend data over time and compare service line costs, which helps the organization identify cost variation drivers and generate new insights. The organization provides broad access to the data, fostering widespread engagement in improvement efforts.

The health system identified more than 80 different opportunities and tactics to improve financial performance. The organization prioritized interventions based on care quality/clinical impact, spending, the ability to create additional capacity, the amount of operational variation, evidence to support change in practices, and improvement feasibility. The organization implemented numerous changes to improve clinical care quality and cost management effectiveness. For example:

- **Pharmaceutical costs.** It changed the breast cancer treatment medication administration method from two high-cost intravenous medications to an equally efficacious, less costly subcutaneous combination medication.
- **Low-dose computerized tomography (LDCT) lung cancer screening.** To increase LDCT screening, the organization updated its processes. It reached out to patients who previously received LDCT lung cancer screening to reassess the need for repeat screening, implemented lung cancer screening and smoking history questionnaires via the EHR as part of the e-check-in process for all primary care appointments, and kicked off a patient outreach/marketing campaign to educate the community about the importance of LDCT. The organization also engaged with patients to remove barriers to care, such as providing transportation support for those traveling long distances.
- **Laboratory stewardship:** It optimized processes to decrease the number of duplicate labs ordered, minimize routine lab order duration, and leverage technology to support clinical decision-making.



PowerCosting allows us to dissect costs at a granular level, uncovering inefficiencies and unveiling opportunities to enhance care quality. We've improved care quality while eliminating millions in unnecessary costs.

Project Manager

The health system uses PowerCosting to quantify and evaluate the ongoing impact of improvement efforts. It communicates program success, quantifying and communicating the impact of improvement efforts on care quality and financial performance.

RESULTS

Using PowerCosting, the organization has transformed cost management. The organization's data-informed improvement strategies effectively decrease costs and improve care quality. Results include:

- **\$4.3M cost reduction** in one year, including:
 - **\$1M** breast cancer medication cost reduction.
 - **25 percent increase** in lung cancer screening, resulting in a **\$24K increase in revenue**.
 - **10 percent decrease** in the average number of lab tests completed per inpatient encounter.
 - **11 percent reduction** in average lab costs per inpatient encounter.



WHAT'S NEXT

The health system will continue using the insights gained from PowerCosting, empowering teams to drive further cost management and care delivery innovations. The organization remains committed to refining its processes, identifying additional areas for improvement, and enhancing financial sustainability and patient outcomes. 🌟



PowerCosting is pivotal in our ongoing quest for financial sustainability and operational excellence. It provides granular insights into cost structures, empowers teams to make informed decisions, drives targeted interventions, and steers our organization toward a future of enduring financial strength and superior patient outcomes.

Director of Finance

PowerCosting provides the data-driven insights we need to support our transformative journey, drive strategic actions, enhance profitability, and provide superior patient care outcomes.

Project Manager

REFERENCES

1. A look at hospital operating margins in the United States. (2022). Definitive Healthcare. Retrieved from <https://www.definitivehc.com/resources/healthcare-insights/hospital-operating-margins-united-states>
2. National Hospital Flash Report: June 2023. (2023). Kaufman Hall. Retrieved from <https://www.kaufmanhall.com/insights/research-report/national-hospital-flash-report-june-2023>

ABOUT HEALTH CATALYST

Health Catalyst is a leading provider of data and analytics technology and services to healthcare organizations, committed to being the catalyst for massive, measurable, data-informed healthcare improvement. Our customers leverage our cloud-based data platform—powered by data from more than 100 million patient records, and encompassing trillions of facts—as well as our analytics software and professional services expertise to make data-informed decisions and realize measurable clinical, financial, and operational improvements. We envision a future in which all healthcare decisions are data informed.

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