

Implementing Data-Driven Solutions to Optimize Healthcare Cost Management



RESULTS

- **Meaningful revenue increase** resulting from improved payment for the services provided.

PRODUCTS

- **Health Catalyst® Data Platform**
- **Health Catalyst PowerCosting™**
- **Health Catalyst Pop Analyzer™**

EXECUTIVE SUMMARY

The demand for healthcare systems to optimize service delivery and enhance efficiency continues to rise. Temple University Health System (Temple Health) recognized the need for a new healthcare cost management system to eliminate cost discrepancies in its budget while maintaining a high level of care. Utilizing the Health Catalyst PowerCosting™ and Pop Analyzer™ applications, Temple Health was able to produce a comprehensive analysis of its organization's costs.

INEFFICIENCIES IN HEALTHCARE COST MANAGEMENT

Healthcare systems continue to face pressure to deliver services more effectively and efficiently. Traditional cost accounting systems often use oversimplified costing practices that can result in poor decision-making, as most costing systems are not tailored for healthcare cost management and don't match the operational reality of healthcare.¹

THE NEED TO ALIGN DATA WITH COST

As a safety-net provider serving numerous patients with Medicare and Medicaid, Temple Health must carefully manage costs. The organization recognized that higher-cost care doesn't always equal higher-quality care. Still, traditional costing systems failed to provide Temple Health with the data required to understand and manage cost drivers thoroughly. The organization needed a new solution that could provide meaningful data, eliminating unnecessary costs, improving budget accuracy, and ensuring payment for services aligned with service delivery costs.

THE RIGHT TOOLS FOR THE JOB

The solution for Temple Health was to implement the Health Catalyst PowerCosting and Pop Analyzer applications to reduce analytics development time. PowerCosting uses activities—not just relative value units—to deliver an accurate, extensive view of the organization’s costs based on granular data from its EHR, claims, and payroll data.

How They Work

Temple Health uses PowerCosting and Pop Analyzer to accelerate time to insight and faster reporting. Pop Analyzer allows users to define populations quickly with drag-and-drop filters without using sophisticated or customized SQL coding. Through rapid ad hoc analysis capabilities, Temple Health can quickly ask and answer questions about various populations, with population definitions aligned with the Centers for Medicare & Medicaid Services classification systems.

Temple Health can also assess the costs and revenue differences for services provided. Using PowerCosting, Temple Health identified excess inpatient days for patients covered by a specific payer. Because the payer required preapproval for discharge to a skilled nursing facility (SNF), patients often experience prolonged length of stay (LOS) while awaiting approval for SNF admission. Temple Health used the data to negotiate improved payment for the services provided.

Pop Analyzer also supports detailed data gathering for grant submissions and numerous ad hoc analyses. For example, Temple Health was interested in exploring cost drivers for a specific patient population undergoing surgery. The organization was able to quickly identify and drill into pre-op LOS, post-op LOS, frequency of laboratory tests, operative supply utilization and operative costs, and differences in costs and outcomes for patients transferred to the facility versus direct admissions, improving decision-making effectiveness.

Gaining a Comprehensive View

Temple Health now has a comprehensive view of the total cost of care. It easily calculates margin by service line and can view cost data by department, service line, provider, and category, enabling easy comparison of costs between service lines, specialties, and physicians. The organization



ABOUT TEMPLE UNIVERSITY HEALTH SYSTEM

Temple Health is a major Philadelphia-based academic health system that is driving medical advances through clinical innovation, pioneering research, and world-class education. The health system’s 1,550+ physicians and scientists share a common mission of bringing tomorrow’s treatments to the bedside today, helping them achieve outcomes once thought impossible.



With the Health Catalyst PowerCosting™ application, we can navigate the intersection of cost and quality, using detailed, activity-based data to identify cost drivers and ensure high-quality care is delivered efficiently.

Byron Glasgow, MBA, AVP Business Analysis, Temple University Health System

can quickly answer routine and ad hoc financial questions and address challenges.

Temple Health easily identifies patients' time at each care phase, enabling the organization to distribute labor costs accurately. Instead of developing a budget that distributes costs evenly across service lines, the finance team and service line can budget estimated labor costs and allocate actual costs to the appropriate service line.

The organization engages physicians in using data for improvement. Temple Health can drill into the data and identify the root causes of cost variation, identifying physicians with the highest quality outcomes and lower costs. Physicians and leaders can then eliminate unnecessary variation.

RESULTS

Using PowerCosting, Temple Health understands the true cost of its services and intervenes to manage expenses, ensuring ongoing financial viability and patient care. Results include:

- **Meaningful revenue increase, resulting from improved payment for the services provided.**
- **Improved budget accuracy.**
- **Analytics insights generated in real-time, eliminating weeks to months previously required to validate and refine analytics requests.**



WHAT'S NEXT

Temple Health will continue to use PowerCosting to gain insight and improve the effectiveness of cost management decision-making, improving its financial viability and performance.

REFERENCES

1. Lawson, R. (2017). Costing practices in healthcare organizations: A look at adoption of ABC. *HFMA*. Retrieved from <https://www.hfma.org/accounting-and-financial-reporting/costing-and-managerial-accounting/57198/>

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. Its more than 500 clients leverage the cloud-based data platform or its other software applications—powered by data from over 100 million patient records and encompassing trillions of facts—as well as its analytics software and professional services expertise to make data-informed decisions and realize measurable clinical, financial, and operational improvements. Health Catalyst envisions a future in which all healthcare decisions are data informed.

Learn more at www.healthcatalyst.com, and follow us on X, LinkedIn, and Facebook.