

# Analytics Accelerates Clinical Transformation, Saving \$10M



**\$10M** direct variable cost reduction.

## PRODUCTS

- Health Catalyst® data platform

## EXECUTIVE SUMMARY

Despite potential savings of up to \$30M per \$1B in revenue, for many healthcare organizations, unwarranted clinical variation continues to increase costs. WakeMed Health & Hospitals (WakeMed) recognized opportunities for clinical transformation, but it lacked high-value data and analytics leading to data validity issues and eroding data trust. WakeMed established clinical transformation teams, and implemented the Health Catalyst® data platform, gaining access to the high-value data and analytics the organization can trust to decrease unnecessary care variation and costs, and to improve quality and the patient experience.

## CLINICAL TRANSFORMATION DRIVES COST SAVINGS AND IMPROVED PATIENT OUTCOMES

Unwarranted clinical variation continues to drive excess costs in healthcare, giving the typical healthcare organization as much as \$30M per \$1B in revenue in savings opportunities.<sup>1</sup> WakeMed recognized that it had the opportunity to decrease unnecessary clinical variation and improve patient outcomes, but without a clear planning structure, staff distrust in the data meant that it could not drive rapid cycle improvement.

The organization knew it had opportunities for improvement but could not accurately measure the results. Leaders focusing on improvement had to spend too much time attempting to obtain the data necessary to understand opportunities that could drive change.

While the organization had some data and analytics, it lacked high-value data and analytics, data governance, and standard processes for data validation or prioritization processes. The organization needed a solution that would support its efforts to transform care, ensuring care is evidence-based and minimizing unnecessary care variation.

## DRIVING CLINICAL TRANSFORMATION

To decrease unnecessary care variation and costs, and to help improve quality and the patient experience, WakeMed established clinical transformation teams, implemented the Health Catalyst® data platform and a robust suite of analytics applications, gaining access to the high-value data and analytics the organization could trust. This resulted in redesigned processes to accelerate performance improvement.

### Aligning for clinical transformation

WakeMed established clinical transformation as a strategic priority, aligning compensation structures for physicians and leaders to incentivize and reward improved performance. The organization's clinical leaders, operational leaders, and financial leaders developed and defined the organizational methodology for measuring improvement. The organization now uses its data to intentionally measure and improve patient outcomes and quantify the impact on patients' lives and financial performance.

### Leveraging data for clinical transformation

WakeMed implemented data governance, prioritization processes, and a data quality and performance program, including standard processes for data validation. Leveraging the analytics platform, the organization integrates data from numerous sources, transforming it into standard, high-value, reusable data that are easily consumed by various applications. The analytics team engages with clinical and operational subject matter experts and end users to validate data, ensuring available data are accurate and can be used to support rapid cycle improvement.

WakeMed's clinical transformation teams use the data and analytics to identify, understand, and quantify opportunities for improvement. Teams use rapid cycle process improvement to collaborate and standardize care, using the available evidence and expert consensus to streamline workflows, reduce cognitive load, and improve the consistency of care provided to all patient populations, improving health equity and care quality.



The analytics team, operational leaders, and clinical leaders have established effective partnerships. These partnerships and confidence in the data have allowed us to develop the right infrastructure and processes to accelerate improvement.

**Sunny Lu, MBA, Director, Enterprise Data & Analytics, WakeMed Health & Hospitals**



### ABOUT WAKEMED HEALTH & HOSPITALS

WakeMed Health & Hospitals is the leading provider of health services in Wake County, North Carolina. WakeMed is committed to improving the health and well-being of its community with outstanding and compassionate care to all.

## Insights for clinical transformation

Clinical transformation teams implement “clinical excellence bundles” to improve care by utilizing evidence-based practices. The teams then use data from the analytics platform to drive the adoption of the standards and clinical pathways.

The organization makes use of Healthcare.AI to accelerate the delivery of analytic insights. WakeMed can quickly and easily identify patterns, make comparisons for systemwide enhancement, and optimize performance to plan the most efficient improvement path.

## RESULTS

WakeMed’s analytics-informed clinical transformation efforts are yielding the desired results. The organization has improved care processes for 23 distinct patient populations. In just one year, the organization achieved the following:

- **\$10M** direct variable cost reduction.
- **37 patients avoided readmission** to the hospital.
- **17 surgical patients’ lives saved.**
- Without this work, WakeMed would have needed inpatient beds for 10 more patients every day of the year.



## WHAT’S NEXT

WakeMed will continue to advance the use of analytics across the organization and is integrating more health equity data into its applications, enabling it to identify and intervene where outcomes differ based on personal characteristics. 🗨️



The Health Catalyst analytics platform gives us the actionable data we need to support clinical transformation throughout our system. Not only have we saved money, we have been able to positively impact thousands of patient lives.

**Neal Chawla, MD, FACEP, Chief Medical Information Officer, WakeMed Health & Hospitals**

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## REFERENCES

1. Advisory Board. (2017). *Unwarranted variations in care*. Retrieved from <https://www.advisory.com/topics/clinical-innovation/2017/06/unwarranted-variations-in-care>

## 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.

Learn more at [www.healthcatalyst.com](http://www.healthcatalyst.com), and follow us on **Twitter**, **LinkedIn**, and **Facebook**.