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Three Must-Haves for a Successful Healthcare Data Strategy

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Forward-thinking health systems are talking about both improvement strategies and the use of data to fundamentally transform healthcare while the industry confronts shared challenges. Obstacles include rising costs; aging and growing populations; the need for better access and outcomes at lower cost; changing demographics (including health status, economics, etc.); and an increasing focus on population health, alternative payment models, and other new models as the industry shifts from volume to value-based payment. To succeed in an increasingly digitized and data-driven industry, organizations must ensure that their data strategy is central to their overall improvement strategy, as opposed to two independent strategies.

Guiding Principles for a Data-First Healthcare Improvement Strategy

Meeting current healthcare challenges requires an overall vision with a data strategy to support and sustain organizational goals—namely, a robust and comprehensive approach that leverages data at the center of the improvement and delivery strategy.

To leverage data as a strategic asset, organizations must make data a primary, not tangential, strategy. Three systems comprise the foundation of a data-first transformation strategy (Figure 1) that supports the fourth element, improvement:

1. Best practices – What should we be doing? Identify root causes of process challenges, validate ideal processes (evidence-based guidelines, expert consensus, and standard work).
2. Analytics – How can data and tools accelerate improvement? Capture correct data about the process; integrate all relevant data; grant broad access to data; generate insights from data; and promote more informed decisions and actions with better tools. Look for gaps between best practices and analytic results.
3. Adoption – How do we transform? People learn the required skills, knowledge, attitudes; execute a change management plan (increased technology utilization, data literacy training, improvement framework training, and data-driven culture transformation).
4. Improvement – What value can we realize, and what effort will be required? Measurable health impact (lives saved, lives improved); financial impact (revenue enhanced, productivity gain, cost avoidance, hard cost reduction, and shared savings); and experience impact (patients and their families, clinicians, and administrative/support staff).
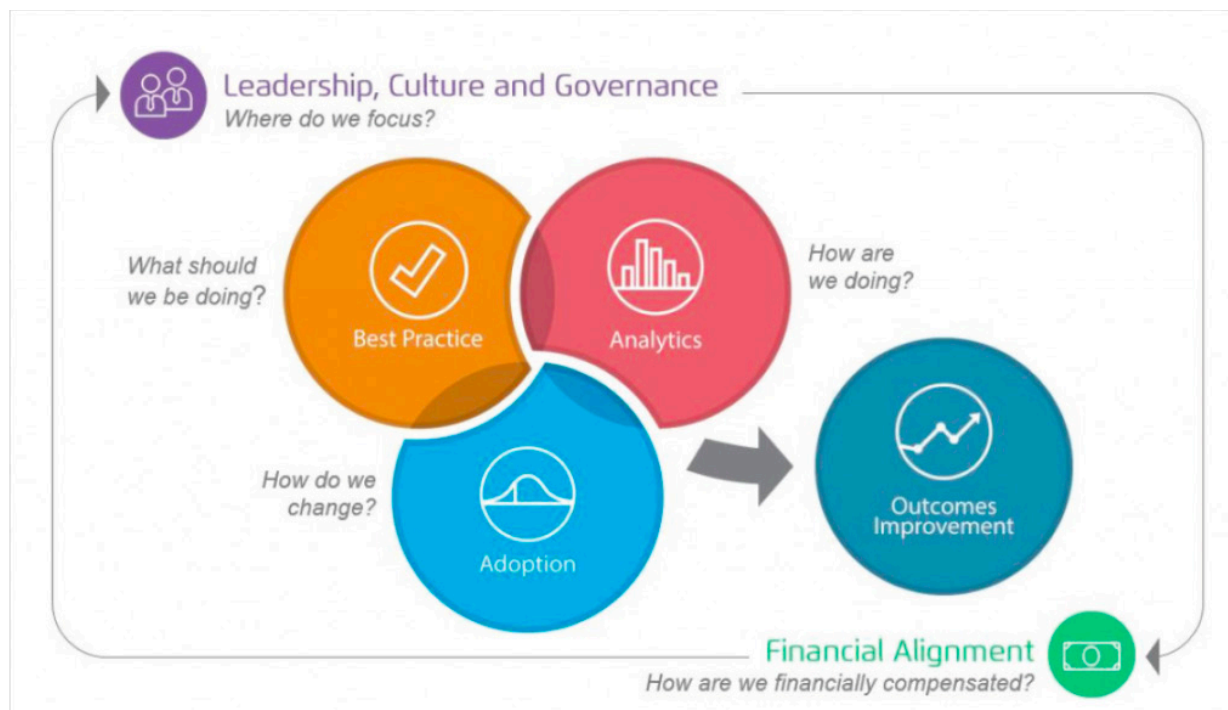

Figure 1: The organizational foundation for data as a strategic asset.

Key Characteristics Behind a Successful and Sustainable Improvement Strategy

Organizations that have built successful and sustainable improvement strategies, with data and analytic strategies supporting them, have a few key characteristics.

#1: A Strong Governance Structure

First, they have built a structure to support sustainable improvement, with strong governance, clear priorities, and engaged clinicians with the required resources to support the efforts (Figure 2).
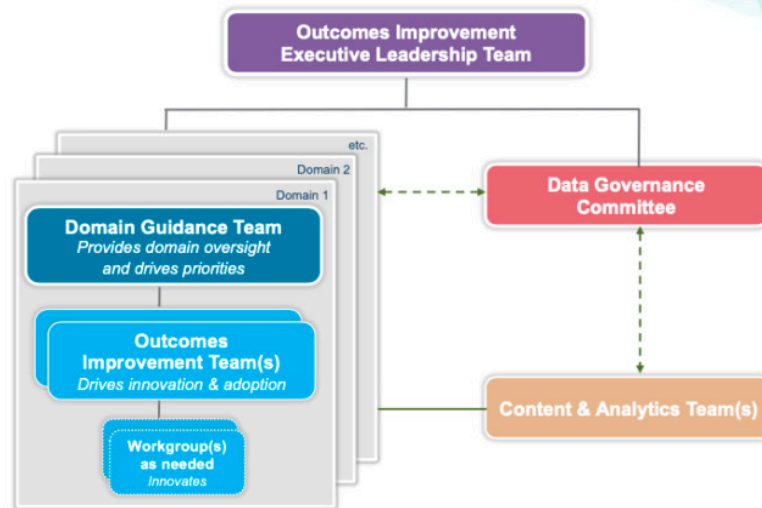

Figure 2: A governance structure that supports data as a strategic asset.

#2: Aligned Incentives

Second, successful health systems have aligned incentives to ensure focus and commitment around their organizational vision and strategies.

#3: Technology and Tools for Expanding Data and Interoperability

And, third, they have provided the technology and tools to manage expanding data and interoperability (e.g., a cloud-based analytics platform. such as the Health Catalyst® Data Operating System [DOS™]).

The right tools and technology, supported by the right structure, can successful improvement, such as the following:

- ◉ Achieving self-service analytics with rapid response analytics: By deploying a data platform and analytics application across its organization, one health system established a single source of data truth, eliminating silos and freeing up analysts to spend most of their time analyzing, rather than preparing, data. As a result, the organization achieved 95 percent relative increase in the number of users accessing the analytics application.

- Widespread [data utilization](#) for continuous data-driven improvement: By leveraging an advanced data platform and a robust suite of analytics accelerators, a health system reduced expenses and increased hospital in/outpatient revenue for more than $33 million in positive margin.
- [Integrated healthcare data](#) for timely, adaptive, purpose driven analytics: Having recognized the value of immediate access to adaptive, integrated, rapidly deployable healthcare data, one health system embraced a next-generation data model. With its new capabilities, the organization deployed dashboards, visualizations, and analytic insights in as little as one week, achieving a 95 percent reduction in work hours required to incorporate system enhancements and 88 days saved in the time required to implement system enhancements.
- Data for improved [stroke care](#) delivery and reduced mortality: With the help of analytics, an organization identified opportunities to improve its stroke care delivery through facility-wide automated alerts, reducing the need to transfer patients to other facilities. The health system achieved a 33.8 percent relative reduction in mortality for patients who had had a stroke and $118,000 in cost savings—the result of a 23.7 percent relative decrease in average variable costs and a 19.4 percent relative reduction in length of stay.

A Healthcare Data Strategy to Meet Evolving Industry Needs

The need for change is clear, as is the opportunity. As healthcare data skills, assets, and capabilities mature, health systems must use data strategically to transform care clinically, financially, and operationally. An evolving industry will require and drive the need for broader and richer patient data, compelling organizations to move forward with a clear data and analytics strategy. Successful health systems will acquire the needed data (e.g., data beyond the clinical care setting), integrate it into operations, supply an interoperable data platform, and create an agile governance structure to manage the data and support a culture around data use. Furthermore, to truly transform healthcare, that data strategy has to be embedded in an overall improvement strategy and vision. ◊

About the Author

David Grauer comes to Health Catalyst after 23 years in executive leadership positions at Intermountain Healthcare, a Utah-based, not-for-profit system of 22 hospitals, 185 clinics, and 1,400 employed physicians that is widely recognized as a leader in clinical quality improvement and in efficient healthcare delivery. For the last nine years, Grauer served as CEO/Administrator of Intermountain Medical Center, a 502-bed hospital in suburban Salt Lake City that is both Utah's largest hospital and the flagship of Intermountain Healthcare. Previously, he was CEO/Administrator of two other Intermountain hospitals: Cottonwood Hospital and TOSH—The Orthopedic Specialty Hospital.