



# A Patient-Centric Framework for Managing Variable Costs in Healthcare

7 Use Cases for Linking Clinical Quality to Financial Outcomes



# 7 Use Cases for Linking Clinical Quality to Financial Outcomes

Ask any healthcare provider, and they'll tell you that quality of care is essential, it's their No. 1 focus. Healthcare finance leaders, however, tend to focus on the bottom line – but the two aren't in conflict: overall care quality affects healthcare costs and serves as a foundation for sustainable cost management. Hospital and health system finance teams should pay equal attention to quality and cost – keeping the human element at the forefront of healthcare.

Efforts to improve quality benefit the entire organization, and healthcare leaders must build a culture of cost containment that permeates organization-wide and supports ongoing performance improvement. Maintaining buy-in and input from stakeholders across different clinical, operational, and financial roles is possible with a robust decision support system.

Clinical leaders, department managers, and others across an organization working to implement healthcare cost containment strategies and optimize patient care need access to timely, accurate cost and quality data and analytics. Armed with this intelligence, leaders can:

- Manage the clinical and operational drivers of cost
- Answer multi-dimensional questions about cost variance
- Increase confidence in decision-making and improvement choices

To successfully manage and reduce costs within your organization, a decision support framework should include seven dimensions of analysis:

- 1 Opportunity analysis
- 2 Physician variation
- 3 Patient complexity
- 4 Process inefficiency
- 5 Unexpected outcomes
- 6 Patient experience
- 7 Payment impact

The framework detailed in this e-book offers a patient-centric approach to cost management. For every increment of care, there is a cost, and behind every cost is a real person with fears, pain, and unique conditions. Taking a patient-centric view of cost means finance leaders need a multi-dimensional view of patient-related input. The first step is to clearly identify your opportunity to lower cost. From there, we will explore six factors that contribute to cost and how Syntellis' [Axiom™ Enterprise Decision Support \(EDS\)](#) solution can inform and transform your outcomes and, ultimately, your margins.

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# Opportunity Analysis

Tasked with planning for strategic growth, transforming costs, improving quality, and optimizing reimbursement as payment models shift from volume to value, healthcare organizations are the ultimate multi-tasking enterprise. As such, hospitals and health systems need analytics that measure financial outcomes, identify trends, and highlight potential opportunities.

In Syntellis' [2022 CFO Outlook for Healthcare](#), 69% of finance leaders said cost reduction was among the most critical activities to support their organizations' financial health. However, just 18% of respondents manage performance improvement initiatives with a robust and modern decision support solution.

Decision support tools play a unique and strategic role in how finance leaders can curate and deliver meaningful performance analytics to various stakeholders. Using a robust decision support solution, finance leaders can guide their organization through identifying opportunities to lower costs and implementing cost-saving measures.



## Axiom EDS Capabilities

- Flexible, accurate, advanced costing methodologies
- Data model extensibility to create metrics you didn't know you needed
- Purposeful ad hoc reporting and business-driven analytics and insights to develop stakeholder transparency

**69%**

of finance leaders rate cost reduction among most important activities<sup>1</sup>

**64%**

are NOT confident in the accuracy of their current cost accounting solutions<sup>1</sup>

## 2 Physician Variation

Physicians are central to patient care decisions and, in turn, greatly influence care costs. That also means that physician variation is a very real challenge, often based on where they were trained, where they practice, and personal preferences (for example, the brand of implant used in hip replacement surgeries).

Improving costing accuracy by adopting more advanced costing methods is critical to successfully answering questions surrounding physician variation, such as, "Is there variability in the therapeutic or diagnostic choices by providers?" More granular transaction-level and events-based costing approaches help engage clinical leaders in efforts to highlight the financial implications of care variation and adverse quality outcomes.



### Axiom EDS Capabilities

- Transaction micro costing capability to accurately measure acquisition costs
- Ability to analyze and report cost and utilization by physician
- External market comparisons of utilization and cost

# 37%

of healthcare waste is attributed to care delivery i.e., care coordination, low value treatment, over utilization<sup>2</sup>

## 3 Patient Complexity

Are costs higher because the physician treats more complex patient cases? Every patient brings different clinical complexities to the costing process. Patient severity can cause a 10%-35% variation in treatment costs for various conditions.<sup>3</sup> Therefore, the physician argument of “my patients are sicker” has merit and must be accounted for.

Before you engage physicians or clinical leaders about outcome or cost variability, it's important to create a level playing field to address that objection from the start. Stratifying patients into similar groups based on severity of illness provides a basis for evaluating hospital resources used and establishing patient care (and cost) guidelines.



### Axiom EDS Capabilities

- Integration of the 3M™ APR DRG severity grouper
- Business logic to calculate observed versus expected outcomes
- Flexibility to select and report against relevant benchmarks

# 10%-35%

of treatment variability costs are attributed to patient severity

## 4 Process Inefficiency

Inefficient patient flow, delays, and supply availability can significantly contribute to higher healthcare costs. To account for these inefficiencies, it's important to look at processes with a critical eye toward improvement.

For example, the operating room (OR) is one of the most expensive settings in the healthcare system, and OR efficiency can significantly impact cost and quality outcomes. Care delivery time stamps help identify variability in OR utilization and prevent costly idle time, bottlenecks in the intensive care unit (ICU) and emergency department (ED), overtime, and post-op complications.



### Axiom EDS Capabilities

- Time-driven, activity-based costing methodology
- Integration of date and time stamps from internal and external sources
- Data transformation to enable temporal analysis

**\$311,966**

3-month cost of idle OR time due to first case delays<sup>4</sup>

**\$78,623**

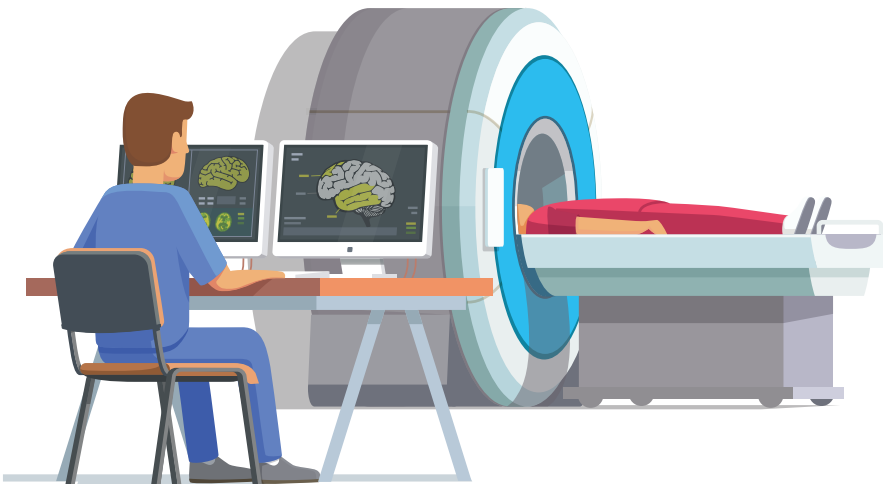
cost of nursing overtime<sup>4</sup>

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# Unexpected Outcomes

Preventable events that should not happen in hospitals inevitably do, and the associated costs go directly to the bottom line. For example, central line bloodstream infections increased more than 50% in the latter part of 2020 compared to the same period in 2019. The average cost of a central line infection is \$48,000, adding more than \$74 million in costs across the U.S.<sup>5</sup>

A decision support solution that embeds metrics to identify patient safety and quality indicators, as well as financial impacts, promotes more effective risk identification and prevention.



## Axiom EDS Capabilities

- Cross-encounter analysis to measure care across the continuum (such as readmissions)
- Integration of patient safety and quality measures with financial data
- Patient encounter viewer to easily conduct individual case reviews

**\$48,000**

average cost per case for one central line infection

**\$74M**

additional costs across the U.S. due to central line infections

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# Patient Experience

Patients bring not only clinical complexities to their condition but also social complexities. Social determinants – where they live, food and housing insecurities, race, gender identity, and more – can be barriers to care access and often are the source of disparities in care. In fact, 80% of health outcomes can be related to social determinants of health.<sup>6</sup> Thus, it's easy to see how the patient experience and social complexity can impact margins.

A robust decision support system should be able to link a Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) score – the patient's perspective of care – to the patient encounter to facilitate analysis of patient perception to patient outcome. Using this approach, data can be “sliced” by any data element in the database, such as physician, nursing unit, time of discharge, patient location, payer, race, language, etc. Not only is this data required for many “pay-for-performance” initiatives, but it is often a factor in physician reappointment and reappraisal decisions.



## Axiom EDS Capabilities

- Integration of patient satisfaction survey data with financial data
- Ability to stratify reporting by social determinants of health
- Flexible analysis and reporting to identify health disparities

1%

increase in profit margin associated with a five-point increase in hospital rating<sup>7</sup>

80%

impact of health outcomes related to social determinants of health



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# Patient Impact

As more payers adopt alternate payment models, reimbursement is increasingly tied to quality measures. However, reporting at the summary level causes claims to be defined as only one type of service. This makes it difficult to readily understand how changes to contract terms affect specific service lines.

To better understand the impact on your bottom line, reporting should be done at every level of the contract where reimbursement contributes to the final expected amount. This can improve the efficiency of contract negotiations and allow finance leaders to understand the impact of contract terms without having to make individual, targeted adjustments.



## Axiom EDS Capabilities

- Contract modeling capabilities that span the continuum of payment initiatives
- Processes that help bring quality leaders to the table in contract negotiations
- Integration of real-time monitoring of potential financial risk

**50%**

of commercial and government payer programs utilize alternate payment models, such as incentive or penalties based on quality measures<sup>8</sup>

**100%**

of Medicare beneficiaries covered under accountable care model, i.e., shared risk, increased value-based care capabilities for providers by 2030<sup>9</sup>

# Conclusion

Ultimately, patients pay the price for uncontrolled healthcare costs — 81% of healthcare executives said costs from poor planning are passed on to patients.<sup>10</sup>

Your decision support system should help you identify which dimensions for cost containment can be prioritized to boost both your bottom line and quality outcomes. You may not be able to tackle all these areas at once, and that's okay, but mapping out a plan with your data or performance improvement teams to start small can lead to big savings in the end. You also should be able to lean on your decision support system provider to optimize your cost-saving initiatives.

The use cases detailed in this e-book for linking clinical quality to financial outcomes are all supported by the Axiom EDS portfolio of products. Axiom EDS alerts healthcare leaders to unfavorable trends, providing a comprehensive and detailed view across cost, quality, and service line measures. This granular detail helps inform decision-making to improve financial, clinical, and operational performance.



<sup>1</sup> Syntellis Performance Solutions: [2022 CFO Outlook for Healthcare](#)

<sup>2</sup> NIH: Waste in the US Health Care System: Estimated Costs and Potential for Savings, [PubMed.gov](#), October 15, 2019

<sup>3</sup> Ardoin, D.: [Reducing Clinical Variation to Drive Success in Value-Based Care \(Part 1\)](#). Healthcare Financial Management Association, March 26, 2019.

<sup>4</sup> The American Journey of Surgery: [Enumerating the causes and burden of first case operating room delays](#), March 2020

<sup>5</sup> Weiner-Lastinger, L.M., et. al.: [The Impact of Coronavirus Disease 2019 \(COVID-19\) on Healthcare-Associated Infections in 2020: A Summary of Data Reported to the National Healthcare Safety Network](#). Cambridge University Press, Sept. 3, 2021.

<sup>6</sup> Manatt, Phelps & Phillips, LLP: [Medicaid's Role in Addressing Social Determinants of Health](#), Robert Wood Johnson Foundation, Health Policy in Brief, Feb. 1, 2019.

<sup>7</sup> Harvard Business Review: [When Patient Experience and Employee Engagement Both Improve, Hospitals' Ratings and Profits Climb](#), May 8, 2019

<sup>8</sup> CMS Innovation Center: [Health Care Payment Learning and Action Network](#)

<sup>9</sup> CMS Innovation Center: [Innovation Center Strategy Refresh](#)

<sup>10</sup> Syntellis Performance Solutions: [What's In Store for Healthcare Organizations in 2022](#)



## About Syntellis

Syntellis Performance Solutions provides innovative enterprise performance management software, data and intelligence solutions for healthcare organizations. Our solutions include enterprise planning, cost and decision support, and financial and clinical analytics tools to elevate organizational performance and transform vision into reality. With over 2,800 organizations and 450,000 users relying on our Connected Analytics and Axiom software combined with No. 1 rankings from Black Book Research and HFMA Peer Review designation for 6 consecutive years, our proven industry expertise helps healthcare providers acquire insights, accelerate decisions and advance their business plans. For more information, please visit [www.syntellis.com](http://www.syntellis.com).