

## HOW LEADING HEALTH SYSTEMS ARE MODERNIZING INSIGHTS, WORKFLOWS, AND GOVERNANCE TO DRIVE SUSTAINABLE PERFORMANCE



### EXECUTIVE SUMMARY

This is the third installment in Biome's 2026 White Paper Series. Our first paper outlined the major market pressures facing hospitals, and the second explored the mitigation strategies high-performing CV programs are using to respond. This paper builds on that foundation by focusing on how hospitals are transforming performance through integrated, data-driven models of care.

As cardiovascular programs confront rising complexity, leading systems are unifying clinical, financial, and operational data to drive more reliable decisions, stronger governance, and measurable improvements across the CVSL. These emerging practices set the stage for our fourth paper, which will outline Biome's strategic focus for 2026.

Over the past year, our podcasts with partner hospitals have underscored several of these critical insights. Learn more at: [Biome Insights](#)

### THE CASE FOR DATA-DRIVEN TRANSFORMATION

Nationally, CV programs are navigating a complex landscape:

- Increasing cardiovascular acuity and rising comorbidity burden
- Persistent staffing constraints across the workforce
- Heightened pressure to reduce LOS, bed-days, and procedural variation
- Greater scrutiny on margins, contribution per case, and cost stewardship
- Escalating accreditation and regulatory expectations
- Transition from retrospective to concurrent data needs

Historically, hospitals have relied on siloed data sources, registries, EMRs, cost systems, and financial tools, that rarely align in timing, definitions, or analytic logic. This fragmentation leads to inconsistent insights, delayed decisions, and limited ability to measure performance in real time. This white paper explores how leading cardiovascular centers are modernizing traditional healthcare analytics to drive stronger clinical, operational, and financial outcomes.

### AT A GLANCE

Hospitals are unifying clinical and financial data to make faster, more accurate decisions across the CVSL.



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## INTEGRATED CLINICAL + FINANCIAL DATA

FORWARD-THINKING CV CENTERS ARE MOVING BEYOND SILOED ANALYTICS BY CREATING A SYNCHRONIZED DATA ECOSYSTEM.

## UNIFIED, RELIABLE MEASUREMENT FRAMEWORKS

DATA ONLY BECOMES TRANSFORMATIONAL WHEN MEASUREMENT IS RELIABLE, TRUSTED, AND TIMELY.

## OPERATIONAL WORKFLOWS THAT TURN DATA INTO ACTION

SUCCESSFUL CV PROGRAMS ARE EMBEDDING INSIGHTS DIRECTLY INTO THEIR OPERATING MODEL.

## INTEGRATING CLINICAL, OPERATIONAL, AND FINANCIAL DATA

Forward-thinking cardiovascular centers are moving beyond siloed analytics by creating a synchronized data ecosystem. Hospitals are standardizing definitions and timeframes across commonly used data sources. This alignment reduces ambiguity, improves comparability, and streamlines decision-making for clinicians, finance teams, and operational leaders.

### Shift Toward Concurrent Data Review

Rather than waiting 90–120 days, high-performing programs are reviewing cases weekly to monthly to identify:

- Documentation gaps
- Risk capture issues
- Variation in post-procedure care
- Opportunities affecting LOS or readmissions

Integrated dashboards and streamlined reporting ensure physicians, administrators, and quality leaders are using the same data and the same definitions, reducing confusion and improving accountability.

## MODERNIZING MEASUREMENT FOR RELIABILITY & ACTIONABILITY

Data only becomes transformational when measurement is reliable, trusted, and timely. Hospitals are modernizing measurement in several ways:

### Unified Benchmarks Across Teaching, Non-Teaching, and System-Level Cohorts

Organizations are moving toward more nuanced performance comparisons that reflect true differences in case mix, acuity, procedural patterns, and institutional structure.

### Emphasis on Risk-Adjusted Measures

As acuity rises, raw metrics often paint an incomplete picture. Programs are adopting risk-adjusted views of:

- Mortality
- LOS
- Readmissions
- Complications
- Cost and margin per case

Risk-adjusted modeling enables more equitable comparisons and reveals improvement opportunities that would be missed using raw data alone.

## **Cost Accuracy & Contribution Margin Analytics**

With financial pressure intensifying, hospitals are taking a more granular view of:

- Direct cost drivers
- Device utilization patterns
- Hybrid OR vs. cath lab resource use
- Post-acute care pathways

These insights are used to strengthen negotiations, reduce waste, and improve contribution margin without compromising clinical quality.

## **OPERATIONALIZING INSIGHTS THROUGH MODERN GOVERNANCE MODELS**

The most successful CV programs are not only measuring performance, they are embedding insights directly into their operating model.

### **Multidisciplinary Performance Rounds**

Monthly or biweekly meetings now include clinicians, operations, finance, and quality. This structure reduces silos and ensures decisions are grounded in shared data. These sessions:

- Evaluate trends in LOS, O/E outcomes, and throughput
- Review high-risk or outlier cases
- Identify workflow breakdowns or documentation gaps
- Assign accountable owners

### **Real-Time Surveillance and Early Warning Signals**

High-performing programs review key measures continuously to detect small deviations early, before they evolve into systemic issues affecting accreditation, quality, or reimbursement. When data directly informs pathway design, programs see meaningful gains in efficiency and quality.

### **Embedding Insights Into Care Pathways**

Examples include:

- Standardizing post-TAVR recovery pathways
- Reducing ICU via enhanced recovery protocols
- Implementing radial-first strategies for PCI
- Streamlining pre-procedure workflows for elective patients

## **PREPARING FOR 2026: THE IMPERATIVE FOR INSIGHT-ENABLED CARE**

As 2026 approaches, cardiovascular programs must position themselves for increasing expectations around transparency, value, and outcomes. Hospitals that invest in data-driven foundations today will be better prepared to:

- Adapt to evolving CMS quality programs
- Meet rising accreditation requirements
- Improve throughput in constrained bed environments
- Strengthen margins amid growing cost pressures
- Maintain competitive performance rankings
- Respond to shifting patient volumes across inpatient, outpatient, and ASC settings

The acceleration of insight-enabled care is no longer optional. It is becoming the defining capability differentiating leaders from laggards across the cardiovascular marketplace.

## CONCLUSION

The most successful cardiovascular programs in 2026 will be those that treat data not as a reporting exercise, but as an operational engine. By integrating clinical and financial data, modernizing measurement, and building governance models that translate insights into action, hospitals can meaningfully improve quality, efficiency, and financial sustainability.

Data-driven transformation is the critical bridge between understanding 2026 market challenges and executing the strategies needed to overcome them. This evolution positions health systems to achieve high reliability, maintain competitive advantage, and deliver exceptional cardiovascular care in an increasingly demanding environment.

## DISCOVER THE FUTURE OF CARDIOVASCULAR WITH BIOME'S ADVANCED ANALYTICS PLATFORM

Elevate your cardiovascular care with Biome's cutting-edge analytics platform, integrating clinical, operational, and financial data to enhance efficiency and patient outcomes. Join leading health systems utilizing Biome to improve care standards, speed up treatment times, and achieve significant cost savings.

Contact us to revolutionize your CVSL and prepare for the future of healthcare: Biome Analytics