

COMMITMENT TO EXCELLENCE IN THE CARDIOVASCULAR SERVICE LINE



“In the dynamic world of cardiovascular care, excellence isn't an aspiration; it's a culture built on data, innovation, and unwavering commitment.”



For over 10 years, we've been partnering with ambitious cardiovascular centers who want to maximize clinical, financial, and operational performance across their CV service line.

Our mission is to provide health systems with leading solutions that enable robust performance improvement projects and optimize the value of care delivered.

Skye Lawrence

Chief Product Officer
Biome Analytics

In today's increasingly challenging healthcare landscape, numerous cardiovascular (CV) programs are thriving because they have embraced comprehensive strategies that ensure the delivery of high-quality patient care and long-term financial viability. As one part of this approach, these programs have made an unwavering commitment to provide excellent care to every patient. They're following through on this commitment by embracing best practices, proven innovations, and setting high standards for their work processes. They leverage cutting-edge performance improvement (PI) strategies and technologies to drive meaningful change.

Recent developments in analytical tools and strategies have allowed ambitious programs to surpass the expectations of patients, staff, and stakeholders. By providing real-time, actionable insights into inefficiencies and safety failures, the technology enables hospitals to leverage their extensive data collection efforts. This simultaneously reduces costs, creates measurable improvement, and creates the conditions for a broader cultural shift whereby relentless commitment to excellence becomes the prevailing standard.

THE NEED FOR EXCELLENCE

Excellence has never been more in demand. Competition between hospitals and between hospitals and ambulatory surgery centers (ASCs) is increasingly robust,¹ oversight bodies are demanding higher levels of accountability, and patients increasingly have access to information allowing them to choose the best care available.² Meanwhile, top clinicians are harder than ever to recruit and retain,³ and new payment models are putting pressure on hospitals to provide better care more efficiently.⁴ In this demanding landscape, visionary leaders in the CV domain must dedicate themselves to setting their programs apart by demonstrating their ability to provide reliably excellent care at a competitive price.

This may appear to be a lofty benchmark, but research indicates that by establishing ambitious institutional expectations, hospitals can tangibly improve workplace culture and patient safety measures⁵ while also attracting top clinical and administrative talent.⁶ Moreover, excellence-based programs are uniquely positioned to navigate ever-evolving clinical practices and new technologies, using industry partnerships to discern which new tools and clinical strategies merit adoption and which add unnecessary complexity without contributing to real improvement.

Finally, hospitals that focus on becoming leaders in the treatment of particular medical conditions stand to attract more patients in today's competitive market.² This strategic approach enables them to effectively compete with private-equity backed ASCs striving to capture regional markets.⁷ The CV service line presents itself as a particularly promising area for forward-thinking hospitals—a growing patient population and high potential for clinical and financial improvement make cardiovascular disease a top target for new PI tools and strategies.

FROM DATA TO WISDOM

Many excellent CV programs have distinguished themselves from other institutions by finding innovative ways to harness their vast reservoirs of data to drive meaningful clinical and financial improvement. Between multiple registries, financial and payer records, patient surveys, and other clinical sources, hospitals have never collected more data. However, despite the dedicated human effort and financial investments into data collection, analytical reports often fall short—they tend to be too delayed to be useful, can't pinpoint problems accurately enough, and lack financial perspective. As a result, the pace of improvement is slow, the quantification of savings is difficult, and excellence remains out of reach.

The DIKW pyramid is a helpful way of conceptualizing the process of transforming raw data into an essential PI tool. Raw data (D) collected by hospitals on a daily basis forms the base of the pyramid. Information (I) is gleaned from contextualized data. It paints a broad narrative about the current state of care and reveals opportunities for improvement. Knowledge (K) consists of structured information, disseminated throughout an organization and put into action on a daily basis. The tip of the pyramid, wisdom (W), suggests a deep collective belief in the process of creating and maintaining knowledge, and genuine trust in the systems and processes that allow data to be transformed into actionable information.

Most hospitals remain ensnared at the base of the DIKW pyramid. In contrast, thriving CV programs have streamlined the process of turning data into information. Data analysis acts as a force multiplier, allowing them to shift their focus to the important undertaking of fostering knowledge and wisdom, and reaching a new level of excellence.

LEVERAGING EXPERIENCED PARTNERS

Ambitious CV centers have worked their way up the DIKW pyramid using three critical elements that set them apart from their peers: 1) nuanced and accurate data narratives about baseline performance, 2) achievable but ambitious goals for improving care across a variety of measures, 3) evidence-based, cost-efficient strategies for meeting these goals.

To navigate this journey, these programs rely on experienced clinical data experts and new Artificial Intelligence (AI) technology. These resources enable them to quickly convert their excess data into meaningful narratives about the current state of care, which become the basis for goal-forming, PI planning, and the efficient application of proven interventions.

Biome Analytics supports a commitment to excellence by taking data that hospitals are already collecting and—in a matter of days—generating an accurate assessment of the institution's current state of care. Our team of PI experts collaborates with leadership to pinpoint and rank the most profitable interventions and set ambitious goals based on benchmarks set by similar institutions.

Furthermore, Biome equips CV centers with a rich repository of best practices and proven PI strategies used by the nation's leading programs to improve their national rankings. These tools—which are all intuitive and targeted to user roles—yield not only immediate cost savings and performance improvement but also help improve the patient-experience. They take into account critical factors such as social determinants of health (SDOH) and contribute to significant reductions in clinician burnout. These measures work to inspire a shift toward genuine excellence—a hospital-wide commitment to providing the absolute best care at all times.

ABOUT BIOME

For over a decade, clients have relied on Biome's proprietary machine learning, human-enabled technology, and community-driven knowledge network to activate their data assets, engage physicians, and accelerate performance improvement. The UCSF Digital Health awards recently recognized Biome as a "Top 10 Best Patient Cost Savings" solution.

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