

Benchmarking for Improved Fiscal Performance in Cardiac Services

By Susan Heck, Vice President

Today, cardiovascular (CV) disease remains a major health concern, responsible for 41% of all deaths in the United States. Acute care hospitals must be prepared to offer advanced cardiac care to this growing segment. In fact, the number of cardiovascular procedures performed at hospitals continues to escalate due to technology advances, expanded patient eligibility for treatment and devices, and the movement of the baby boom generation into the at-risk over-45 age group. This growing cardiac population can account for a significant portion of hospital admissions, and this trend is likely to continue. Overall, CV-related patient care often represents up to 40% of a hospital's revenue.

Reimbursement for patients assigned to cardiac diagnostic-related groups (DRGs), particularly open heart surgery (OHS) and percutaneous coronary intervention (PCI) cases, typically provides hospitals a greater margin than their general mix of all other cases. In some markets this can create intense competition for the more lucrative cardiac patient.

To outdistance competition, cardiovascular programs must be able to compete for market share on the basis of clinical quality, patient satisfaction, and financial outcomes. In order to succeed, it is essential that programs understand best practice and be able to assess performance against leading CV programs that have demonstrated excellence.

The care of the cardiac patient can be very complex and challenging to the resources and operations of every acute care provider. Virtually every department in a hospital or advanced medical center has some role or impact on the services provided to the cardiac patient, which emphasizes the importance of the CV service line in achieving sound clinical and financial performance for the organization as a whole. Benchmarking can be a valuable tool for optimizing outcomes of this critical service line.

While quality is "king" and of great importance to the survival of any acute care facility, profitability is not far behind, for there is indeed a strong relationship between operational and financial performance in CV services. This means that operational and financial performance must be benchmarked along with quality outcomes to achieve true excellence.

Traditionally, cardiac programs have greater access to clinical parameters such as morbidity, mortality, and severity adjusted complication rates to measure their performance. CV programs should benchmark their clinical performance by using comparative data to examine and measure the care processes and outcomes within an organization.

Operational benchmarks are a bit more elusive than their clinical counterparts, but hospitals cannot ignore the need for positive outcomes, both clinically **and** operationally. Indeed, efficient operations often lead to sound financial performance. Organizations must continually evaluate clinical settings to assure that patient care is being delivered in the lowest cost setting. For example, leading hospitals have transitioned pacemaker placement from the higher cost OR setting to the less resource-intensive cath lab. A clearly defined process derived from industry benchmarks can provide support for making such a change. Thus, CV leaders, both physician and administrative, need to better understand the importance of benchmarking in the delivery of quality care **and** the business of medicine.

Another method to assess financial performance is to evaluate the distribution of cases across the often-paired cardiac DRGs [i.e. DRG 124—Cardiac Catheterization with Complications and Comorbidities (CCs) and DRG 125 Cardiac Catheterization without CCs]. Typically, the DRG with the lower number represents the more complex case, and the case that is reimbursed at a higher rate. Tertiary programs often have a 60:40 ratio of cases in the DRG 124:DRG 125 pairing. This ratio should be evaluated in order to understand the movement of less complex cases to the outpatient setting, assure that clinical documentation accurately reflects the complexity of the patient condition, and to monitor any changes in the market that may be shifting these more intense cases to the organization.

Hospitals across the country continue to feel pressures of tightening reimbursement rates and rising costs. Given recent advances in the CV industry, these pressures are more critical for organizations seeking to

provide cutting-edge CV care. Increasing costs for new technology such as drug eluting stents and implantable cardiac defibrillators (ICDs), and increasing operation costs associated with cardiac specialty nurses and radiologist technologists present management challenges for most cardiac programs.

Additionally, the cost of cardiac drugs continues to escalate as new platelet inhibiting agents are approved. Leading hospitals are currently tracking pharmaceutical utilization by case. Efforts to share this information with physicians can be a powerful mechanism to evaluate practice and initiate efforts to lower costs. Pharmacy and Therapeutics Committees and Product Standardization Forums (that are cardiovascular-specific) exist at some hospitals to provide a focused review of high-cost cardiovascular drugs and supplies with recommended guidelines for use. Sharing blinded individual physician utilization information and then benchmarking peer and national usage comparisons can be critical first steps in realizing significant practice changes and cost savings.

With these and other external forces of decreased reimbursement and increasing costs, it is imperative for cardiovascular programs to search for innovative approaches to streamline processes, improve operational efficiencies, and decrease supply utilization and costs. This feat must be accomplished while maintaining or improving quality of care...but this is not easy. Whether a new community program or an established tertiary center, it is necessary to dissect and study the processes used to deliver care to the cardiovascular patient, and then make deliberate operational changes that can be sustained over time.

Knowledge of the hidden costs in cardiac care delivery and the impact of new technology, devices, and pharmaceuticals on the cost and quality equation is very important to achieving long-term viability and success in cardiovascular services. Commitment to primary vendor relationships can be a way to decrease inventory costs in the catheterization lab and the cardiovascular OR, two of the highest cost inventory centers in most hospitals.

Understanding the potential to improve inventory supply costs can be gained by reviewing the recently-published results of *The Corazon National Benchmarking Survey* of over 100 cardiovascular programs from across the country. Participants were asked: "**How many vendors are used for interventional supplies in the Cath Lab?**"

It was surprising that **43%** of respondents purchase interventional supplies from four or more vendors as shown in the above graph. Indeed, opportunities to standardize practice and product exist for this group of hospitals. A quarter of respondents indicate that they use one or two vendors for interventional supplies. Corazon's experience shows that programs that can standardize purchasing through a primary and secondary vendor can capitalize on purchasing power, which requires collaboration and consensus among the cardiologists.

Likewise, programs' ability to manage the work-of-the-day with on-time case starts in the CVOR and Cath Lab, and to staff these procedural areas with the most cost effective number and mix of personnel, can have huge implications for cost and customer satisfaction outcomes. Scheduling issues commonly plague these procedural areas and should be a continued focus for process improvement efforts.

Hospitals need systems in place for data collection and analysis for clinical parameters as well as business functions. Cost accounting systems, integrated purchasing/inventory systems, and distinct cardiac service line budgets are tools that leading programs employ to give their CV administrators an edge in evaluating program performance.

It is Corazon's belief that financial information, in the hand of clinicians, can also be very powerful. For instance, a case manager's ability to assess the resources used for the open heart surgery patient population, sorted by aligning the operative day and ranking the frequency of charges posted in the billing or cost accounting system, can yield a wealth of information. By

applying an 80-20 rule, a “picture” of the current care standard can be developed and shared with physicians based on what is ordered 80% of the time on the operative and subsequent post operative days; and the care delivered 20% or less of the time can be evaluated to assess non-standard practice. This information from the financial systems can be a valuable tool in driving medical practice standardization, and can assist in “hard wiring” the care through the development of standing orders and clinical pathways.

While per-case utilization of resources such as supplies, devices, and pharmaceuticals can be evaluated and benchmarked, average length of stay (ALOS), a key driver of resource utilization, cannot be ignored. Dashboard operational indicators such as ALOS, number of open heart cases, key cardiac procedure volumes, and cost-per-case should be regularly review and trended for improvement.

Corazon strongly recommends that CV programs evaluate the tools in their financial and information systems “toolbox”, and then negotiate for finance personnel (a full or partial FTE depending on program size and scope) dedicated to the CV program. The commitment of financial personnel can become both a platform to support and monitor sustainable changes in clinical practice and a resource for the assessment of changing CV technology and reimbursement. The finance members of the CV team can even expedite the analysis of new business opportunities, because CV programs must be positioned to make market-responsive business decisions in the often volatile cardiac marketplace.

Key operational parameters that cross the “horizontal” care continuum of the cardiac patient experience need to be defined with performance targets identified. This information in some organizations is segregated by departments and not shared across the continuum of care, limiting improvements in processes and outcomes. Corazon advises that compliance with identified targets be measured regularly and shared with key physician and administrative stakeholders. These parameters can be used to compare hospitals within a system or can be used to compare results with best practice performers. After analyzing data, a multidisciplinary leadership team should determine areas for improvement, set goals, delegate to responsible parties, and assist them in maximizing the outcomes. It is important to recognize that benchmarking is a process, and without the follow-up to identify means for performance improvement, the effort is meaningless. Benchmarking is continuous, and finding a ‘best practice’ is not the end goal—using the information in an ongoing quest for excellence is.

In Corazon's experience, those organizations that regularly collect and analyze data from multiple trusted data sources, and measure their performance against others, are better able to quickly respond to the ever changing, highly competitive, and challenging market forces in cardiovascular services. Hospitals who are able to assess and improve their internal performance using “best practice” benchmarks as a guide, and who are able to market their superior clinical, financial, and satisfaction outcomes, will have the market advantage.

*Selections from this article have been excerpted from The Corazon National Survey for Benchmarking Cardiac Program Performance. This comprehensive report, loaded with charts, graphs, and value-added commentary and insight from the Corazon team of Heart Experts, is sure to be an important resource for all programs striving for efficiency, quality, and profitability. To learn more about benchmarking, or to purchase a copy of the Survey **Report of Findings**, call Corazon at 412.364.8200.*



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