Developing and Managing a Successful CV Service Line
An ACC Council on Clinical Practice White Paper

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Executive Summary

The transition from traditional fee-for-service payment models to value-based payment models taking place today has encouraged physicians and hospitals to work collaboratively to provide more efficient and less costly health care. Non-health care industries have used a service line approach to improve quality and performance, making use of methodologies such as Six Sigma or Lean to increase efficiencies while maintaining quality. These approaches can be applied to health care delivery and, more specifically, are a natural approach for cardiovascular (CV) care, which accounts for a large percentage of health care costs. However, implementation of a well-managed service line requires dynamic leadership, a strong but flexible organizational structure, and a commitment to a physician/hospital partnership. This paper describes the various aspects of developing and managing a successful CV Service Line.

Introduction

The concept of service line management is not new to hospitals and hospital systems, but the reasons for implementing a service line strategy have changed. In the past, most service line strategies were primarily marketing initiatives directed outside hospital walls in an attempt to gain market share. Recently, strategies have focused more internally to address clinical performance, outcomes, patient satisfaction and cost. Both physicians and hospitals now receive “grades” that are publicly reported, and insurers are changing gradually to value-based decisions when purchasing health care services. These changes are encouraging physicians and hospital administrators to take another look at collaborative service line management models.

CV services are inherently conducive to collaborative management. Historically they have been highly visible, highly marketed, and account for a large percentage of hospital revenues, but CV services also have been the focus of many Medicare Quality and Outcome Measures. Additionally, development of a service line approach to CV care within a hospital or hospital system engages various members of the health care team and shifts responsibility for quality, cost and data management to those actually delivering the care.

This paper reviews various aspects of managing a CV service line and includes these topics:

- Leadership within the service line along with the concept of dyad leadership—Increasing complexity and cost of care coupled with reimbursement challenges demand this kind of leadership. Organizations that develop strong physician/administrator leadership teams will likely outperform those that do not.
- Governance and organizational structure within the service line—Types of governance or organizational structure affect the behavior of physicians, nurses and administrators and can make the difference between success and failure in reaching organizational goals, whether they are clinical or financial.
- Blending cultures to create a collaborative service line—Hospital administrators and physicians bring unique strengths and perspectives from dramatically different professional backgrounds and cultures. Blending these cultures is one of the biggest challenges; thus, the ability to understand the differences and exploit them in a positive way is important.
- Understanding the financial aspects of the service line—Determining which patient gets put under which diagnosis Related Groups (DRGs) or which patient is considered an inpatient may seem to be straightforward decisions on paper but are not always easily made in practice. The ability of physicians to minimize costs while maintaining quality requires that they understand the finances of the service on a much deeper level than merely knowing the fee for a particular service.
- Understanding and managing data—Hospitals and physicians are already being judged on the basis of quality and are gradually being reimbursed accordingly. The ability of a service line to understand and manage its own data and use that data to drive quality will be another key to success.
- Identifying and training physician leaders—Physicians have had difficulty both identifying leaders within their ranks and preparing them for leadership. Although the role of the chief medical officer (CMO) within hospitals is essential, creating leadership positions for practicing physicians, and training them for leadership, is imperative for the success of the service line.

All of the issues outlined here are applicable whether the management of the CV service line is part of an integrated delivery system or a separate part of a clinical co-management agreement. The challenges are the same and ultimately, the ability of leaders to instill a sense of ownership at every level of care is what will drive success and ensure patients are receiving superior CV care.

Dyad Leadership in the CV Service Line

Many hospitals and physicians are joining forces to develop and market discrete specialty service lines, including programs devoted to cardiac care, orthopedics, gastroenterology, and children’s care. The concept of service lines has evolved from earlier physician-owned or physician-led enterprises, which included office-based imaging and procedure facilities, ambulatory service centers and specialty hospitals.

The trend to integrate services has been motivated by a desire to:

1. Adapt to a climate of decreasing reimbursement and increasing competitiveness
2. Increase volume
3. Improve quality and maximize the efficiency and profitability
4. Engender physician loyalty using professional and financial incentives
5. Create a positive community image of cutting edge “center-of-excellence” centers for care
6. Acquire the latest technology
7. Recruit, train and retain outstanding nursing, technical and support staff for providing and managing advanced specialty services

In a competitive health care environment, the ability of hospitals or hospital systems to develop leadership teams that include both administrative and clinical expertise is critical to the success of programs. Accordingly, the concept of “dyad leadership,” which from a sociology viewpoint refers to two individuals engaged in an ongoing relationship, has evolved as a model for a team approach that joins qualified physicians and non-physician administrators as leadership partners.1, 2
The concept of specialized hospital services is not new. Coronary care units were introduced more than 50 years ago and followed by other specialized units. These were defined by the need for unique operating procedures that required dedicated equipment and specially trained personnel. Hospitals have offered limited outpatient services for many years, but integration of a wide gamut of inpatient and outpatient cardiac services into a single management entity is indeed new and challenging.

As the practice landscape has disfavored in-office physician services and freestanding specialty hospitals, many physicians, including cardiologists, have become hospital employees or have developed close contractual ties to hospitals. The concept of segregating specialties such as CV medicine into service lines embedded into the structure of general hospitals has grown with this closer relationship between cardiologists and hospitals.

This fundamental change in the organization of medical practice emphasizes the need to include cardiologists in the leadership of this combined enterprise and to define their precise responsibilities relative to other hospital employees and professional managers. The traditional concept of physicians as individual, independent practitioners and small business people is changing, just as the duties and responsibilities of hospital administrators are being adapted to the needs of a combined physician/health care system enterprise.

Effective management of a CV service line requires a multitude of skills and overlapping lines of authority with input from both CV and professional managers. Most cardiac service lines are operated as distinct entities. While the health system or hospital board has ultimate fiduciary responsibility for the service line, operating authority is assigned to a management team, including physicians, nurses, technical and support staff, and administrators. Dyad leadership pairs a physician leader with an administrative leader at each level of management. Thus, the chief administrative officer (CAO) of the health care system is paired with a CMO. The vice president for operation of the CV service line is paired with the vice president and medical director of CV services. The same pairing occurs with administrative directors and physician leaders of the other service areas, such as the cardiac cath lab, cardiac surgery, electrophysiology, CV imaging, inpatient nursing, and outpatient services.

Zismer et al. summarized the individual and shared responsibilities of the physician and non-physician leaders in a “Special Report: Hospital/Physician Integration,” listing physician responsibilities as including:

- Assuring quality
- Minimizing practice variation
- Maximizing the individual productivity of physicians or CV care associates
- Encouraging teamwork
- Promoting continuing education and innovation
- Managing physician-driven resource utilization
- Managing physician hiring and deployment

Non-physician responsibilities include:

- Financial management
- Supply chain management
- Labor relations
- Market share analysis
- Capital deployment
- Building management

Shared responsibilities would include developing a shared mission and vision, a strategic plan, and a performance scorecard.

Separation of the functions of a CV service line from those of the remainder of the health care system comes with responsibility for the service line. Focusing on one specialized aspect in the spectrum of services delivered by the larger health care system empowers the physician/management team. It allows them to react more quickly to environmental challenges, including payment reform, and to collaborate on expanding, contracting, or modifying certain services as real time financial and quality feedback is received.

By fostering better communications between physicians and managers, this partnership promotes more effective use of resources and more cost effective purchasing and hiring. The promise of dyad leadership is to turn organizations, which happen to employ physicians but continue separate operations, into organizations that integrate physicians into every level of the operational chart. This provides efficiencies in human resources, finance, marketing, legal, IT, facilities management, procurement, and other administrative areas. In an atmosphere of mutual trust and respect, managers and physicians can work together at all levels of the organization to define the best roles, processes and technology needed to deliver patient care and administrative services and determine the appropriate allocation of costs for those services.

Dyad leadership of a CV service line is conceptually more straightforward in situations in which CV care physicians are all employed by the organization that owns the health care facilities. However, many successful institutions incorporate cardiologists and other physicians who remain in independent, competing groups. Transitional situations in which some CV physicians are employed or contracted while others remain independent can be particularly challenging. Hospital managers are concerned primarily with the total volume of hospital procedures, regardless of the employment status of the CV physician. For that reason, they may not always steer patients controlled by hospital-employed primary care physicians, emergency room physicians, or hospitalists to hospital-employed CV physicians.

An additional challenge for cardiology integration is collaboration with hospital systems to provide outpatient services, a domain in which traditional hospital administrators often have little experience or success. While shared leadership of a CV service line is one approach to managing outpatient services, some institutions are more inclined to integrate outpatient cardiology into primary care, offering basic cardiology services in primary care offices, rather than referring patients to separate cardiology outpatient facilities. Basic inpatient cardiac services may be offered in small community hospitals, thus avoiding costly referrals and combining costs for management with other service lines, rather than creating a duplicative structure.

A hospital system may be able to control cardiology referrals by owning and controlling primary care practices and, in theory, achieve improved service by providing cardiology services on-site at the primary care facility. In some markets, health care systems are joining forces with insurance companies and employers to limit patient choice and control costs. As health care reform unfolds, this may be a major threat to CV service line management. It will be critical for CV practitioners to emphasize quality and provide appropriate, evidence-based care. Good communication and collaborative, mutually respectful, dyad leadership will be required of both physicians and health system managers in any future system of care.
Governance and Organizational Structure

The consolidation and integration of CV practitioners and hospitals into one organizational entity has the potential for quality and efficiency improvements. However, the involvement of various stakeholders, whether they be solitary practitioners, previously competing private practices, or employed physicians within the hospital or health system, presents organizational and operational challenges. Aligning of incentives certainly serves as a driver, as does shared expectations, yet accountability and enforcement are both difficult and often fail. Individuals and hospitals can be avid proponents of accountability until they are being held accountable themselves. Thus, it is important to develop expectations and a formal governance structure as the first step in the collaborative process. Appendix A provides examples of various governance structures and various organizational charts, but although necessary, an organizational structure itself is less important than how the structure is used. What happens if the structure fails? What if the structure hasn’t anticipated a particular problem? How is that adjudicated? In other words, a structure requires flexibility and transparency.

Goals and metrics for success need to be defined as the culture of accountability is developed. It is important to define clearly the bilateral expectations in writing. In the traditional model of hospital-physician relationships, it is the behavior of the physicians that receives the most attention. Medical staff is counseled regarding the definition of a “disruptive” physician, and the consequences of “bad” behavior are clearly spelled out. Today, this counseling might be called protection against the “Dr. House situation,” in reference to a character in a popular television show. In any case, integrating systems must also spell out the definition of poor performance as part of the health system. This idea is a new and foreign concept for many hospital administrators, whose non-performance in the past resulted in apologies to physicians or no action at all.

The tool used to define expectations is called a “compact,” a contract between all of the stakeholders (physician to physician and physician to hospital) that defines responsibilities. The compact should be written to align expectations with the vision of the new organization and to serve as a mechanism for accountability and a means for alignment of incentives and penalties. Transparent communication between stakeholders is perhaps the most important ingredient of a successful enterprise, and a compact allows for more rational and less emotionally driven transparent communication.

For example, in the Austin Heart Physician Compact, physicians have agreed to meet patients’ needs, achieve optimal patient access, and treat all patients with respect (See Figure 1; Items 1, 2, 10). In this instance, the compact facilitated communication and

**Physician Responsibilities**

**Service**
1. Understand and meet patients’ needs
2. Achieve and maintain optimal patient access
3. Take ownership of each patient encounter to maximize patient continuity

**Quality**
4. Achieve/maintain certification in cardiology and subspecialty areas
5. Practice evidence-based medicine
6. Provide timely and accurate documentation
7. Develop, accept and adopt changes that add value to the consumer and improve the performance of the organization

**People**
8. Build positive relationships and teamwork that enhance the total patient care experience
9. Acknowledge and appreciate each physician’s and staff member’s contribution
10. Treat all with respect
11. Address interpersonal issues real time and face to face in a collegial manner
12. Provide appropriate input into decisions and then delegate authority to elected and appointed leaders
13. Support organization and health system initiatives

**Finance**
14. Accept accountability for timely and effective execution of assigned responsibilities that support the vision and success of the whole organization
15. Participate in outreach, referral relations and marketing activities

**Organization Responsibilities**

**Service**
1. Maintain quality physicians and staff sufficient to provide excellent patient care

**Quality**
2. Provide physicians with data to show how they perform clinically against established standards
3. Support research activities
4. Equip the practice with the technology to promote leading edge therapies

**People**
5. Encourage and recognize teamwork, collegiality and mutual respect
6. Make decisions consistent with our Mission, Vision and Strategic Plan
7. Empower and hold management accountable to execute practice objectives
8. Share information regarding strategic intent, organizational priorities and business decisions
9. Provide physicians with opportunities to have input and influence into practice decisions through dialog and access to leadership
10. Provide constructive performance feedback

**Finance**
11. Align compensation of physicians to individual and group performance
12. Create a collectively efficient place to practice
13. Provide reasonable compensation while maintaining long term financial stability
14. Provide infrastructure to support and promote practice expansion
solved an issue involving a subspecialist who was an hour late for clinic in the office of another cardiologist in a small rural outreach setting. The tardy physician promptly asked the staff to reschedule his first new patient, someone who had waited two to three weeks for his appointment after being referred by the local cardiologist for a consultation. The patient was also a friend and fellow church member of the office staff. Given these circumstances, one could assume that a less formal, but emotionally charged conversation, could have taken place to address the physician’s behavior. Instead, the conversation focused on the physician’s breach of promised responsibilities, specifically, his behavior as it related to the compact’s requirements of meeting patient needs and access, and respect of fellow physicians and staff. The subsequent communication then remains objective and concentrates on behavior. Holding someone accountable for not abiding with a signed agreement is much more effective than launching what could be perceived as a personal attack.

Physicians struggle with interpersonal conflict and often will express their concerns to everyone except the individual in question. Responsibility number 11 in the Austin Heart Physician Compact is that physicians agree to deal with interpersonal conflict in real time and face to face in a collegial manner. Training physician leaders in effective conflict resolution and communication strategies is well worth the time and expense. If possible, physician and administrative leaders at a minimum and, ideally, all stakeholders, should receive formal training in conflict resolution. Also, Crucial Conversations, by Kerry Patterson, provides valuable guidance.3

Hospital administrators tend to be fearful of addressing all but the most egregious physician behaviors for fear of losing admissions to their facility. All stakeholders should heed Quint Studer’s warning that “what you permit you promote.”4 Failing to consistently address outlier behaviors in real time demoralizes the top performers and undermines the organization as a whole. The compact, especially when supported by stakeholder education on effective conflict resolution techniques, is a powerful tool in building a “culture of accountability.”

Note also that the compact is “bidirectional.” Hospitals are held accountable for non-performance, too. For example, loss of access to electronic health records (EHRs) over a weekend due to loss of domain name resulted in on-call physicians having to spend extra time working with the help desk to circumvent the problem. The computer problem was caused by a mistake made by the IT department. The compact requires the organization to provide an efficient place to work. The health system agreed to the IT department’s role in this case and made each of the on-call physicians financially whole for their lost time. The monetary payment was inconsequential in comparison to the positive regard and good faith earned for the newly integrated structure. The message was that everyone is and will be held accountable.

The compact helps to guide the culture molding by specific actions and incentives for the various responsibilities. In addition to addressing non-performance, the compact also serves as a tool to incentivize achieving desired goals. For example, one of the physician responsibilities is to achieve board certification in cardiology and appropriate subspecialties. The organization encourages this goal’s completion by providing financial support for review courses, test fees and a bonus for passing the exam.

Transparent communication, defined as the “organization will share information regarding strategic intent and decisions,” plays an important role in an organization’s success. Mechanisms to achieve this goal can include virtual meetings to disseminate crucial information, as well as the dissemination of meeting minutes of any committee to all stakeholders within 48 hours of the meeting. Transparent communication is particularly important in defining the organization’s goals for the stakeholders and establishing accountability.

One key to accountability is to define in advance metrics of success for the goals of the organization. A goal that does not have metrics is unlikely to be recognized or achieved. In fact, failure to define the metric in advance will lead to conflict and rationalization of poor performance, as the required parties have no defined endpoints. One goal, for example, and part of the compact, is for the physician to understand patient needs. The metric is the patient satisfaction survey, and the goal is for the physician to score in the 90th percentile. The organization supports this measured goal by providing financial incentives for success in achieving in the 90th percentile and anything less than that is not rewarded.

The development of a compact is a very important process that necessitates buy-in of all stakeholders. Each organization needs to define its compact in a precise manner. Simply handing out a compact during an after-hours meeting without full participation and categorical agreement to each responsibility will be a failing and demoralizing exercise. Each stakeholder must be given a chance to thoughtfully review, edit and, subsequently, agree to the terms of the compact. In some cases, a facilitator of individual and group discussions may be required.

The merging of disparate groups of individuals who hold a wide variety of beliefs and expectations about the definition of a successful enterprise is a challenging undertaking. A written compact of bidirectional expectations is essential to align the stakeholders with the vision, shared goals and defined metrics of success. Failure to develop a culture of accountability will ultimately herald a wave of hospital and physician “disintegrations,” as the enterprise fails to meet everyone’s ever-changing expectations.

**Blending Practice and Hospital Cultures**

In the confines of any organization or group, culture can perhaps most simply be defined as a set of shared attitudes, values, goals, and practices. The successful blending of such elements is critical to the success of any collaboration between two distinct entities, such as a hospital and physician practice.

Organizations that have strongly conflicting cultural ideas will most likely fail in any collaboration, but as Hirschedfield and Moss write, “When merging cultures agree, the impact on productivity and the success of the partnership can be significant.”5

Numerous articles in the last five years have discussed the clash of cultures between hospitals and physician practice groups. As noted earlier, this clash stems from the inherent differences found in the two main representatives of the financial and clinical interests of the industry — the health care executive who views him or herself as part of a larger organization and the practicing physician who values independence.
Managers have diverse educational backgrounds and no set job accreditation or licensing process, whereas physicians come from highly structured educational backgrounds with licensure and accreditation requirements. Skills taught in the corporate world stress team building as managers learn to make group decisions and delegate responsibility. Meanwhile, a physician’s training emphasizes personal responsibility, individual goal setting and autonomous decision making. Likewise, in their separate roles in health care, executives and physicians find themselves focused on opposite ends — operational or organizational versus clinical. Executives are concerned with budgets, patient populations and the survival of the organization. Physicians are concerned with survival of the individual patient.

The traditional voluntary medical staff model had hospital executives in authority positions over staff physicians, albeit often in theory only, as physicians largely made clinical decisions independent of the overall organization. Hospital-physician practice models changed as physicians, seeking greater financial and decision-making opportunities, transitioned out of the hospital and into their own practices. This was especially prevalent with specialties, but eventually occurred in primary care, too, which had been the backbone of a hospital. Such models pitted hospital against physicians for revenue as each side competed in areas, such as ancillary services and surgical procedures. Competition escalated when physicians formed stand-alone specialty hospitals.

This competition created an atmosphere of distrust between hospitals and physicians that exists today, and the distrust is the greatest obstacle to overcoming the culture clash. However, the changes occurring in health care are pushing the two sides back into one organization, and they are finding that they must work together because their futures depend on it.

Efforts to reduce national health care spending are changing care delivery and payment models as the delivery system shifts from independent islands of care to interdependent coordination of care. The focus on improving quality and cutting costs has resulted in value-based purchasing, rendering providers, particularly physicians, more vulnerable to lower reimbursements and, in turn, reduced income. Rather than fee for service, providers will soon be paid based on their performance or the outcomes of the care they provide patients. Government and private payers are scrutinizing metrics, such as hospital-acquired infections and readmission rates for individual hospitals.

Consequently, both hospitals and physicians must be equipped with the tools to gather quality data and report it to appropriate government agencies and private payers. Because larger institutions such as hospitals generally have greater sources of revenue, they also have the resources to purchase expensive information systems, such as EHRs, that are used to gather and send outcomes data. Individual physicians, small and large group practices alike, often find it challenging to invest in such systems. Providers that fail to implement EHRs will be unable to meet federal requirements that offer financial incentives for meaningful use. They will also face penalties for not meeting those requirements in coming years.

As a result, physicians are forming relationships with hospitals to help meet these challenges. Hospitals, rather than private practices, can, in effect, provide a more financially secure place to practice medicine. As payment incentives force hospitals and physicians to collaborate to produce better patient care, hospitals and physicians must align culturally in order to make this new arrangement work.
To bridge this cultural gap and repair historical mistrust, hospital leaders and physicians must first acknowledge their differences, learn to appreciate each other’s point of view, work together to build trust and consensus, and, finally, be willing to compromise in order to develop a long-term vision together that fosters local victories.

Health care educator Daniel K. Zismer offers several ideas on how to break down the culture clash. He suggests that executive leadership must be genuinely engaged in working directly with physicians on understanding their needs and must abstain from delegating such discussions to lower management. Also, hospital executives must be willing to implement business models that benefit both the hospital and the practice group. Such models may not fully align with the hospital culture initially and may even dilute the bottom line in the short term, but they should have the potential to expand market share in the long term. When designing collaborations with physician practices, hospital executives should always consider the legal considerations, such as Stark self-referral statutes, anti-statutes, tax exemption standards, and reimbursement issues.

To reduce chances of a culture clash, Hirschfield and Moss suggest identifying leaders on both sides who can provide models of behavior that represent the new desired culture. They say that building culture alignment is a multi-step process that involves:

- Developing a compelling and measurable vision for the organization
- Understanding the perspectives of leadership, staff, patients and providers
- Creating transparency by implementing a communications plan that presents the organization’s vision and strategic initiatives
- Understanding engagement and buy-in to the vision through leadership and organizational surveys

The success of such arrangements becomes even more imperative as health care, once largely decentralized, becomes more centralized into large, integrated health systems. The larger the system of hospitals, physician groups, nursing home facilities, and other care settings that are rolled into one enterprise, the more crucial it is for hospitals and physicians to align successfully in order to ensure the success of the entire organization. Health care leaders can’t leave to chance the operations of such a multi-faceted organization. In essence, such organizations are too big to fail, so hospital and physician leaders must plan how they will work together by blending their distinct attitudes, values, goals, and practices into one cohesive network.

Financial Acumen and Financial Dashboards

Managing the CV service line carries a totally different meaning today than it did in the 1990s when product lines were in vogue. Hospitals are moving away from the traditional silo approach to managing the clinical and business side of the enterprise using dyad leadership. Solid dyad leadership can be dynamic, generating a common vision that can become a powerful, strategic force, driving high quality care and exceptional patient outcomes.

Gradually, insurers are dictating that providers be rewarded for operational efficiencies and improved patient outcomes, and physicians and hospitals are realizing that they can only achieve these goals by working together. This team-based approach may bring to the table experts from different backgrounds, but each is focused on the same goal. In developing a collaborative relationship, it is essential to develop a common language, especially in defining and valuing the services that the enterprise is offering.

The team must design tools to share accurate, credible data related to cost, quality, use of resources and efficiencies, taking into account the organization’s market position, patient base, culture and scope of service.

Part of the cultural gap mentioned above involves vocabulary. Physicians have their clinical jargon, and hospital administrators have their financial lingo. Collaboration involves bi-directional education, and often this involves talking plainly. Medicare payments to hospitals are driven by two core “fee schedules” — DRGs and APCs. DRGs have been in existence since 1980. Originally, all hospital cases were classified as one of 467 types of cases and assigned a DRG. Each classification represented a unique group of patients having common demographic, diagnostic and therapeutic attributes that determined their resource needs. The DRGs formed a manageable, clinically coherent set of patient classifications that related a hospital’s case mix to the resource demands and associated costs experienced by the hospital. They are paid via the Inpatient Prospective Payment System (IPPS). The number of DRGs now totals 999. In addition, the classification has been extended and refined to accommodate complications and co-morbidities.

The Ambulatory Payment Classification (APC) is the method of paying for hospital services provided in an outpatient setting. The Federal Balanced Budget Act of 1997 created this new Medicare “Outpatient Prospective Payment System” (OPPS) for hospital outpatient services, analogous to the Medicare IPPS for hospital inpatient DRGs. APCs, implemented in August 2000, are applicable only to hospitals. These codes are separate and distinct from the Current Procedural Terminology (CPT) codes used to bill for services provided within a non-hospital-based physician’s office.

Beyond the disease specific classifications, there is the issue of how the hospital classifies a patient — as observation, outpatient, or inpatient. Hospitals that have excess bed capacity may have different incentives from hospitals that run a 110 percent census. How a service line reconciles these issues with the demands of quality initiatives, Medicare core measures, coding requirements, and now, value-based purchasing, will determine success or failure going forward. The role of documentation in determining final DRG classification is an area that CV service line leaders need to understand. The goal of documentation should be accuracy and often this involves ensuring that secondary diagnoses are identified. The co-morbidities that these secondary diagnoses represent are important factors that help increase the transparency of the delivery of cardiovascular care and proper assignment of Medicare resources.

The focus of most CV service lines initially involves the length of stay (LOS) of both congestive heart failure patients and acute myocardial infarction patients. Both are measurable data elements that are tracked by Medicare and now, increasingly, by private insurers. Typically, reports can be generated that track both average or mean LOS and geometric LOS. Geometric LOS tends to minimize the effects of outliers on analysis.
Identifying the actual cost of a service within the service line is difficult but necessary. It is the key to success because it eventually determines your efficiency and determines what impact management is having on the service line. Indirect costs should be identified and shared fairly across different service lines or departments. Historically, shifting of these indirect costs has been a mechanism by which high revenue-producing service lines have supported low revenue-producing service lines or even revenue-losing service lines. To a large extent, the shift is inevitable, but it must be done transparently so that the true contribution of a specific line is identified and potentially exploited. Furthermore, without transparency, determining the contribution margin of a specific service line is impossible.

Direct costs are more easily identifiable and require close scrutiny to ensure operational efficiencies in all the services under the management of the service line. Obvious examples within the CV service line would be the cost of an interventional call schedule or the cost of stents. Adjusting call schedules or sharing call schedules within a hospital system can often achieve large savings. Lowering the cost of stents by negotiating a better contract with a specific vendor or decreasing the number of stents per case can lower direct costs immediately.

The value of collaboration is an ongoing responsibility for all partners in any new venture. Many hospitals and hospital systems are structuring their service lines across the continuum of care (office and hospital). This change gradually makes the walls of the hospital less distinct, so it is imperative that the financial components be thoroughly understood across this continuum. Many service lines use rolled up financials as a way of accounting for patients and services no matter where they appear within the hospital system. This 360 degree perspective allows all team members to analyze trends, revenue, and expenses appropriately. Multihospital systems can face additional challenges if there are cross-campus variances or if there is competition between hospitals within a hospital system. Financial data, like clinical data, must be accurate if cogent decisions are to be made. As IT solutions have improved, data has become more reliable, but barriers still remain. Large CV groups that have integrated with hospitals or hospital systems often have different IT platforms, and, in many cases, the non-compatible systems make it difficult to analyze quality, finances, or efficiencies across the spectrum of care.

A number of solutions are evolving to address the needs of a service line. One tool is the dashboard concept. Cars have dashboards that, at any given moment, show what the speed is, how much gas is left, etc. Dashboards within a service line are similar; they provide a snapshot of volumes, revenues, or costs. Whatever tool an organization uses, the tool must facilitate monitoring and managing the entire continuum of cardiovascular care.

A team-based collegial approach to the development and ongoing use of this tool is critical. Many organizations use what is called a balanced dashboard, which contains financial, quality, and process indicators. Other organizations use separate financial dashboards. Regardless, the elements included should be relevant, timely, and easy to use.

Suggested components in a financial dashboard include MDC5 data. MDC5 refers to a grouping of cardiac and vascular DRGs, which provide a starting point for core data. Data elements may include: length of stay, mortality, co-morbidities direct cost, and case mix index (CMI). CMI is a key indicator that reflects the diversity, clinical complexity and the needs for resources in the population of patients in a hospital. Other suggested components include volume statistics, productivity and specific DRGs that may be targeted for quality improvement. Relevant dashboards might include resource utilization, quality initiatives, financials and patient satisfaction. Dashboards should be simple, straightforward and intuitive. The data must be easy to obtain and easy to validate.

Also, physician involvement from the beginning is mandatory for a successful program. Collegial communication in the analysis of data and explanation of outliers is best done peer-to-peer. Using data as a team produces optimal patient outcomes, financial stability and growth and high levels of satisfaction.

### Quality Dashboards for Use in CV Service Lines

A clinical quality dashboard is a toolset developed to provide clinicians with the relevant and timely information they need to execute daily decisions that improve quality of patient care. As mentioned in the previous section, dashboards are used in all types of management information systems and are designed to offer users a quick and easy way to access tools and information.

In terms of quality improvement, dashboards have been developed as a way for clinicians to monitor patient care. They offer an excellent way to pull internal reports and analyze the day-to-day quality of care, making them an easy clinical decision aide tool. If properly constructed, dashboards should provide the organization with a clear assessment of how it is performing in key areas against expectations for itself. However, having a dashboard is not equivalent to doing the work of quality improvement. It is simply a picture. In terms of the CV service line, dashboards should include pertinent data from both inpatient and outpatient settings, as well as data on all subsections of the CV service line, such as cardiology, cardiac surgery and vascular surgery.

The clinical quality dashboard should include at least one variable from each of these nine topic areas:

- Outcomes frequently compared with nationally established benchmarks
- Critical national initiatives
- Publicly reported data
- Progress on local initiatives
- Patient satisfaction
- Patient complaints and potential lawsuits
- Significant incidents
- Workforce issues, such as retention
- Peer review summaries

Specifics may vary by hospital and service area, but a comprehensive picture will emerge only when all variables are united.

Several valuable resources are worth consulting when selecting dashboard variables. They include the CMS Core Measures; the hospital quality measures from the Joint Commission for Accreditation of Hospitals and Organizations; the Institute for Healthcare Improvement’s Alignment with National Health Care Improvement Initiatives and its Six Bundles national quality initiative; and the National Quality Forum’s Safe Practices.
There needs to be explicit clarity about which quality responsibilities belong to individual hospitals and which responsibilities belong to the system. Without that clarity, nothing will be accomplished. Credentialing and peer review should be reported and tracked by each hospital. Beyond that, individual variables depend on how responsibilities are allocated between the system and its hospitals. Some dashboard variables should be similar at all hospitals within the system, but each facility should have some dashboard variables unique to itself. However, the system holds ultimate responsibility for quality.

Annual reviews of a dashboard’s structure in a venue removed from the hospital and done with a “30,000-foot view” help to remind stakeholders to look at everything in context. Also, it is important to remember that not all data are measurable on a dashboard. Some areas for improving safety and quality require discussions that can’t be quantified. This is where physician engagement is necessary. Similarly, first-person patient experiences heard by the board can do a great deal to prevent data hypnosis.

**Goals, Process and Utilization**

The goals of the dashboards should be set by the strategic planning committee of the CV service line. These would include compulsory data required by CMS, such as core measures, and the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS®) survey scores. Other goals include data tracked to differentiate the CV service line from its competitors, such as heart failure readmission rates, mortality data in coronary artery bypass graft surgery, or patient satisfaction data. It is
metrics such as these that help drive and track improvements in efficiency. These data can also be used in holding physicians accountable for their areas of the service line with regard to gain sharing or reimbursement clauses. As health care reform evolves, reimbursement models will likely change to include some form of value-based purchasing of medical services. These models will require service lines to track data concurrently and use the data to make timely process corrections in order to remain competitive.

Implementing quality dashboards requires a team approach that begins with strong leadership from both management and physician leaders and especially requires that physicians buy into the process. A strong physician champion who possesses good leadership and communication skills should be on any quality committee that is established. It would be the committee’s job to provide accurate data to an overall steering committee; therefore, the quality committee’s chair should have good content knowledge about quality. Also, the five to nine members of a quality committee should obviously include one or two physicians.

Once specific dashboards are created, a clear plan for their use should be set. One option is to tie performance improvement to cost savings for the enterprise. These can be in the form of length of stay, readmission rates, expenses associated with intervention and EP procedures and adherence to appropriate use guidelines. These data also can link compensation to performance. This fundamental change in compensation alone could lead to significant performance improvement.

Training the New CV Physician Executive

“Leaders establish the vision for the future and set the strategy for getting there; they cause change. They motivate and inspire others to go in the right direction and they, along with everyone else, sacrifice to get there.”
– John Kotter

As health care reform moves forward and the terms accountable care organization or clinically integrated networks take hold, the role of the physician as an administrative leader will be more in demand. In the past, clinical or academic physician leaders were often selected because of their recognized clinical excellence or academic CV, but today these clinical or research competencies do not necessarily translate into new world leadership competencies. The primary goal of the physician leader is still to create the clinical vision, as the “keeper of the product,” while managing the physician team(s). However, the dyad management model for integrated health systems mentioned earlier defines a relationship between qualified physician and non-physician leadership partners. Physician roles within the dyad are complementary to the non-physician partner, who may, for example, be a hospital administrator or nursing leader. Physicians manage physician-centric goals and activities and partner with non-physician leaders who are more directly accountable for financial, performance, HR and supply chain issues (See Figure 3). While the physician and administrative co-managers each have areas of direct responsibility and accountability, they partner to deliver on mission, vision, values, culture, overall performance, internal organizational relationship and strategy. These two co-managers each bring a unique set of skills and expertise to the table, synergistically creating a final performance greater than the sum of the individual parts.

A key physician leadership role in the new dyad model will be to develop a high functioning team, a role that was not necessarily a strategy taught during medical school nor of great interest to many clinical or academic physicians. However, focus on team interaction and team success is well worth the time and investment, particularly in today’s environment. In the book, Five Dysfunctions of a Team, Pat Lenoci describes the strategy around which teams either fail or succeed. The role of the leader, or in the dyad model, the co-leaders, is reviewed, emphasizing the need to develop trust, clarity, constructive confrontation and focus on decisions and productive outcomes. Teams that function within an open, trusting environment have constructive conversations that lead to good discussions and the best decisions.

Identifying Aptitude

Jim Collins, the author of Good to Great, writes of organizations needing “the right people on the bus, in the right seats.” When it comes to identifying the best qualified clinicians to assume the new administrative physician leader roles, several tools exist. The Children’s Healthcare of Atlanta (CHOA) Center for Leadership Strategies program uses a Leadership Potential Checklist (See Table 1), which includes the demonstration of the passion and promise to lead as an initially critical criterion. Other assessment options include the DISC personality profile tests, which have been used in corporate, business, and personal situations to identify professional and personal insights and tendencies. Being able to

Additional Resources for Building Clinical Quality Dashboards

- The Excellent Board II: New Practical Solutions for Health Care Trustees and CEOs, published by Health Forum, contains 39 new articles and six reprints from the first volume. To purchase, go to www.healthforumonlinestore.com and use order number 196126.
target insights and strategies for interpersonal success using the DiSC tests enables a manager and team to have more effective communication, understanding and tolerance. These tests have been used for personal growth and development, training, coaching and management of individuals, groups, teams and organizations.

StrengthsFinder 2.0 is another commercially available reference for identifying personal aptitude, inclination and tendencies. Identifying potential leaders who demonstrate an intrinsic passion for the job opportunity will ensure their dedication to the effort to practice and perfect the leadership roles. Importantly, the physician leader must see administrative managerial responsibilities as a legitimate, real task, not simply a time-filler between patient responsibilities.

**Acquiring Leadership Expertise**

Emerging physician leaders may seek to gain expertise through the formal process of a Masters of Business Administration (MBA) program. Common MBA core curricula includes, but is not limited to, accounting, business strategy, economics, finance, human resource, marketing management, manufacturing and production, operations management, statistics and technology and information systems. In the dyad co-management model for health care administration, it is important that the physician co-manager be conversant in all of these areas, but the administrative co-manager may, in fact, have the primary responsibility and accountability for expertise and productivity in these areas. The American College of Cardiology has formed the Cardiovascular Leadership Institute to assist cardiovascular professionals as they learn skills needed to become effective and visionary leaders. Also, the American College of Physician Executives offers courses that can accelerate physician learning in business and operational areas.

Alternatively, many new physician leaders choose to employ on-the-job training to hone their skills. The 70/20/10 rule of leadership development describes 70 percent of leadership development/organizational learning as on-the-job, 20 percent through coaching and mentoring and through shared experiences with peers, and 10 percent through knowledge acquired with formal learning (for example, classrooms, workshops and e-learning).

**Measuring Leadership Competencies**

Several tools are available for measuring leadership competencies. The CHOA Center for Leadership Strategies employs a Leadership Competency Checklist (See Table 2). Also, the formal 360 degree evaluation process, which uses peer and direct report feedback, may help new leaders identify their strengths and weaknesses. Coach or mentor feedback provides more of a one-on-one assessment.

Marshall Goldsmith describes the use of a feedforward process<sup>5</sup>, which differs from feedback and employs a distinctly different philosophy applicable for either process or behavioral improvement. Another model, described as the “dyad assessment of the dyad,” allows for continuing review and reinforcement of leadership competencies between the co-managers themselves. CHOA, a community of cardiology practice executives, administrative leaders, physician and business office teams, centralizes data from more than 300 practices represent at least 5,400 physicians across the United States. With the data, CHOA can provide benchmark operational practice data, define optimal business strategies, describe positive and negative experiences and offer insights into the future of cardiology.

**Valuing the Leadership Role**

Many physician leaders in the dyad model perceive a new value that derives from being members of a successful team that involves them as participants in both clinical and business decision making for the system. Physician and administrator (or nursing) co-leaders assume accountability and credit for their respective areas of expertise within the whole of the enterprise and collectively succeed.

The organization needs to demonstrate its appreciation of the value of physician leadership and expertise by appropriating time and money for the education and training of physician leaders, as well as compensating them for leadership time. Time away from a busy clinical practice, with the associated decrease in income earning opportunity, needs to be offset using fair market evaluation. This incentivizes the physicians in their new leadership and administrative roles. In the new norm of today’s health care, highly productive, accountable leadership is vitally important, as much so as clinical expertise for cardiac catheterization, transesophageal echocardiography or other CV specialties.

Successful integrated health care systems will be dependent on this new physician leadership role. Ultimately, the best leaders may prove to be those who are internally passionate about this new role and realize the added value to the system provided by their dedication to perfecting leadership roles and competencies. Years went into clinical and/or academic expertise, and a similar dedication and persistence will be required to master these new administrative roles.

**Table I**

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<thead>
<tr>
<th>CHOA Center for Leadership Strategies Leadership Potential Checklist</th>
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<tbody>
<tr>
<td>☐ Passion and Promise to Lead</td>
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<tr>
<td>☐ Brings Out the Best in People</td>
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<td>☐ Authenticity</td>
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<td>☐ Receptivity to Feedback</td>
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<td>☐ Learning Agility</td>
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<td>☐ Culture Fit</td>
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<td>☐ Adaptability</td>
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<td>☐ Conceptual Thinking</td>
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<td>☐ Navigates Ambiguity</td>
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<td>☐ Passion for Results</td>
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**Table II**

<table>
<thead>
<tr>
<th>CHOA Center for Leadership Strategies Leadership Competency Checklist</th>
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<tr>
<td>☐ Delivers Operational Excellence</td>
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<td>☐ Acts Strategically</td>
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<tr>
<td>☐ Focuses on the Customer</td>
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<tr>
<td>☐ Builds Capability</td>
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<tr>
<td>☐ Champions Innovation &amp; Change</td>
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<tr>
<td>☐ Builds Productive Relationships</td>
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<td>☐ Demonstrates Personal Mastery</td>
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<td>☐ Communicates and Influences Effectively</td>
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References

2. Baldwin KW, Dimunation N, Alexander J. Healthcare leadership and the dyad model. PEJ; July/August 2011.
8. Baldwin KW, Dimunation N, Alexander J. Health care leadership and the dyad model. PEJ; July/August 2011.
15. Duberman T. Developing physician leaders today using the 70/20/10 rule. PEJ September/October 2011.