Across the country healthcare providers are seeking new ways to improve the quality and patient experience of their services, while at the same time reducing cost. Sounds simple, but is actually excruciatingly difficult to achieve. The task gets more complicated as our systems are now being asked to consider the health of populations, not just individual patients which has been the focus for generations. Combined, the Institute for Healthcare Improvement calls these three elements – health, service and cost (value) – the Triple Aim (Figure 1).

Stimulated in large part by the advent of the Affordable Care Act (ACA) payment is now being tied to outcomes and service, not just volume. Commercial insurers are following suit implementing their own models tying payment to performance. These aren’t small dollars at stake either. Hospitals can pay back millions of dollars to Medicare for readmission rates considered too high by peer comparisons. For some, this penalty can wipe out an entire profit margin. With risks this high, you can bet a lot of attention is being paid to redesigning the delivery model.

In his article “Health Care: The Disquieting Truth”, Arnold S. Relman, former editor-in-chief of the New England Journal of Medicine, notes that in the US physician expenses account for approximately 20 percent of health care expenditures (only half of which is compensation). Yet this same group in treating patients influence and often control 100 percent of expenditures. Given this it is paramount for health systems to integrate physicians into the governance and management of services in a real and meaningful way. The service line model provides a structure to do just this and to transform the way care is delivered.

The Service Line Model

Historically hospitals have been organized around departments or services. Think echo lab, or catheterization lab. By contrast the Service Line is organized around programs or patient types, regardless of patient disposition (inpatient, outpatient, ambulatory care) or location. In short, the Cardiovascular Service Line (CVSL) is a collection of cardiovascular programs occurring in both the ambulatory and hospital settings at all locations under one governance and management system. It may be lost here, so let’s call it out: this means that the physician practice falls under the same leadership as services offered in the hospital. This is a significant aspect of the transformative power of this model to truly integrate care.

At the top of the CVSL chain of command is a shared physician and administrative leadership team. This body will be charged with directing the overarching vision, strategy, programmatic offerings, quality, service and financial performance – including budget – for all cardiovascular services. An ingredient to success for this leadership unit is to bring in multiple perspectives, with representatives from perhaps executive level positions, both from the practice(s) and hospital, to operations and nursing. To sum it up, this leadership team will consider the CVSL its own business unit within the hospital or health system, with top-line to bottom-line authority and accountability. This is a critical aspect of the service line model, bringing robust financial data into the equation with clinical decisions around quality and service. To be effective leaders, physicians need to understand the financial ramifications of decisions which have largely been absent in historical medical directorships and other prior leadership models. Figure 2 shows a larger program CVSL governance structure.
Dyad Leadership

At the top of the CVSL and at each of the committee levels – including the Clinical Councils which will be discussed below – sits both a physician and administrative chair. This pairing of physician and administrative talent at each level – known as the dyad leadership model – is another critical success component of the service line model. In a recent survey by MedAxiom, nearly 60 percent of respondents described their governance structure as one that incorporates the dyad model.

Drawing on the strengths of each dyad member, physicians will lead the determination of clinical vision and standards, whereas administrators will lead execution of this course. It only makes sense to have physicians set standards around accreditation, performance, quality, peer review and patient experience. Further, physicians should take the lead in program development, including determining what clinical services are offered, where they are offered and by whom. This is becoming a major decision point around the country as resources tighten and centers of excellence continue to emerge, threatening low-volume programs.

By contrast administrators can navigate the organizational infrastructure to execute on these vision and standards. This too has been a missing ingredient from past structures, such as medical directorships, where physicians went back to busy clinical schedules and no one was left to implement decisions. Administrators as part of their experience can manage the necessary staffing, HR, information technology and regulatory issues that might otherwise halt progress.

Clinical Councils: The CVSL Foundation

The bedrock on which the CVSL is built is the Clinical Council. It is at these councils where the rubber meets the road in terms of clinical operations. Unlike traditional departmental breakdowns in hospitals and health systems, clinical councils are organized around subspecialties and/or disease types. Some examples might be arrhythmia, coronary artery disease or interventional, CV surgery, heart failure, structural heart or vascular diseases. Each of these councils is populated by physician participants who are either specially trained, have a keen interest, or heavily influence the subject area. It is wise to seek broad participation at the council level such that a significant portion, if not all, of your CVSL medical staff is involved at some level. Further, these councils will often be multidisciplinary in their membership, where a cardiologist may sit on the surgical council or an electrophysiologist on the arrhythmia council. Figure 3 shows a smaller program’s clinical council structure.

At the top of each council sits a physician/administrator dyad team. The physician member is sometimes elected by his or her peers or sometimes appointed, depending on the organizational culture. The administrative member is someone steeped in the content area and with at least some reasonable influence over the organizational elements. For instance, a cath lab manager may co-lead the interventional council or the Heart Failure Clinic director the heart failure council.

As mentioned above, the clinical councils are where the heavy lifting takes place in terms of clinical and operational management. Each council will have a very clearly defined scope of authority and accountability to avoid duplication with other councils. Within their specialty content area, each will have jurisdiction over clinical program development, quality and performance improvement, emerging technology and therapies, full spectrum operations including budget, capital needs, physician succession and recruitment, and physician
credentialing and skill development. All decision of the clinical councils will filter through the overarching leadership body (Joint Operating Committee in Figure 3 above) to ensure that system level priorities and needs are being met.

Table 1 provides a more detailed example of a clinical council.

**Co-Management: The First Step of the Journey**

Developing a full cardiovascular service line can often take 12 – 18 months, depending on the organization. This is not surprising given that a vision and strategy needs to be identified, governance and leadership structures created, old structures assimilated or dismantled, and sometimes bylaws changed. Given this and that organizations are feeling an imperative to get results quickly, deploying a co-management program is often a first step on the service line journey.

Co-Management defined is a formal (legal) relationship where physicians share in the management of all or parts of the cardiovascular service line. This relationship must have a very clearly defined scope and authority, with predefined success metrics for accountability. Compensation for co-management activities comes from two distinct buckets: 1) time for meeting attendance and other administrative functions; and 2) incentives for achieving results. The structure co-management takes is often aligned around the clinical councils described above. This is yet another way that such a program becomes a gateway to the full CVSL model.

These two components are critical to align economic incentives and make co-management successful. All too often already very busy physicians are asked to volunteer time for administrative tasks. As can be predicted, the inclination is to give sparingly to these activities in order to concentrate on clinical activities that drive compensation. This tension exists with private physicians as well as hospital employed physicians, particularly when the latter group’s compensation model is largely or entirely based on production measures like work RVUs.

The most common co-management model is a simple agreement between a hospital (or health system) and either individual physicians, physician groups, or both. Scope and authority is clearly defined but does not typically include management of the overall service line (like the model below). Likewise incentive metrics are also clearly defined with specific trigger points for payments. The incentive compensation will usually carry a greater weight than time when looking at the overall pool.

A recent survey by MedAxiom found facilities creating metrics around the indicators in Table 2 below. Each facility will need to tailor its incentives around specific opportunities unique to the organization. More and more programs are seeking metrics that provide real financial return opportunities, which also provides the business case for entering into such an arrangement (important for legal and fair market considerations).

Additionally, only that which can be accurately measured can be used as a metric, given that proving performance improvement is a must. This is often a monumental challenge as our current systems are simply not designed around answering the questions we’re now asking of the. It can often take considerable time to retool our information systems to provide the data – accurate data needed as part of a co-management program. Last, all incentives will need to pass legal approval which is very different from facility to facility.

**Table 1: Clinical Council Detail**

<table>
<thead>
<tr>
<th>Scope</th>
<th>Coordination of all non-invasive imaging services, including echocardiography, nuclear cardiology, CT, MR; ensure appropriate accreditation of each; oversee credentialing and peer review for all non-invasive services</th>
</tr>
</thead>
</table>
| Members | • All Non-Invasive Physicians (across all modalities)  
• One Interventional Cardiologist  
• One Radiologist  
• Director of Radiology |
| Role | • Oversee Appropriate Use Criteria (AUC) adherence  
• Monitor and manage report turnaround time  
• Determines EMR consistent patient annotation  
• Evaluates and determines expansion of clinical scope  
• Develops patient recruitment strategies  
• Develops care coordination strategies with primary care and hospitalists  
• Determine appropriate physician recruitment & succession planning |

**Table 2: Incentive Metrics**

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Coding &amp; Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readmission rates</td>
<td>Patient Satisfaction</td>
</tr>
<tr>
<td>Patient Safety</td>
<td>Referring Physician Satisfaction</td>
</tr>
<tr>
<td>National Quality Standards (registries)</td>
<td>Program Development</td>
</tr>
<tr>
<td>Efficiency / Process Improvements</td>
<td>Outreach Development</td>
</tr>
<tr>
<td>Standardization</td>
<td>Appropriate Use Criteria</td>
</tr>
<tr>
<td>Length of Stay</td>
<td>Quality Assurance Programs</td>
</tr>
<tr>
<td>Cost per Case</td>
<td>Supply Costs</td>
</tr>
</tbody>
</table>
A more complicated arrangement when co-management covers the entire service line is the joint venture model (see Figure 4). In this model physicians and the hospital jointly own a management services company which then holds a contract with the hospital for management services. Compensation for the management services would be based on the fair market value of these service and might include both fixed and incentive (for achieving certain management performance goals) payments. Additionally, physicians may have incentives for achieving pre-defined clinical, operational or programmatic goals. These incentives may be incorporated as part of the joint venture, or handled separately, particularly if participation in the joint venture is not inclusive of the entire CVSL medical staff.

Physician participation in co-management – and the CVSL for that matter, is typically limited to aligned physicians. At some locations this may mean employed physicians or physicians contracted through a PSA, or those who are committed to the host hospital. Limiting participation is in part due to the fact that co-management agreements often include a restrictive covenant, which may preclude some from participation.

It should be noted that care should be taken to clearly define and adhere to specific criteria for participation and seek legal counsel and approval on the definitions. Further all compensation between physicians and hospitals or health systems should seek fair market guidance.

Summary

The United States simply cannot afford the current health system, particularly given its current expense trajectory. At many facilities efforts are underway to cut as much as 20 – 30 percent from current cost structures, expecting reimbursement to continue to tighten. Given the dynamic state of our industry and the ever-increasing demands to improve the product while at the same time lowering cost, it will no longer be acceptable to simply tinker at the edges. Something much bigger will need to be employed.

With all the pieces in place the cardiovascular service line model has the transformative power to fundamentally change the way health care is delivered. It accomplishes this by: augmenting existing administrative structures with physician leaders in real and accountable governance roles; re-orienting services around subspecialty or patient types from the traditional vertical departmental organization; empowering action-oriented dyad leadership that can navigate both the clinical and infrastructure requirements; and aligning both clinical and economic incentives around solid organizational improvement goals through co-management.

The journey to the service line model is certainly not quick or easy, but the opportunities – to patients and to health care systems – are worth efforts.