Value-Based Care Process Design
A Hospital/Physician Strategy for Success

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Introduction

The healthcare industry is going through a period of unprecedented change. Those who run hospitals and hospital systems, in particular, will need a clearly defined strategy to manage through the many challenges on the horizon. This paper outlines such an approach, wherein hospitals and their medical staffs, partner in a unique way to achieve the overarching goal of improving value to the consumers of healthcare services.

I. Background

Hospital/Physician Relationships

Up until late in the last century, hospitals were primarily seen as the “physician’s workshop” and, while a great deal of most physicians’ time was spent in these facilities, the hospital administration and its organized medical staff tended to operate in parallel structures.

In the late 1990s, there was a flurry of physician employment activity. However, by the end of that decade most organizations had realized that the development of vertically integrated networks of care, fed by multiple primary care profit centers, was not a successful business model and many organizations divested their physician practice holdings.

Starting with the 1999 release of the seminal report by the Institute of Medicine, To Err is Human, hospitals realized that close functional hospital-physician relationships were essential to drive significant improvements in the quality and patient safety arena. More recently, these relationships have also proven to be an effective way to leverage physician help in identifying and eliminating waste and inefficiency within hospital operations. Taken together, these two goals of improving quality and lowering costs define the value
equation, where value is equal to quality outcomes per dollar of cost. Therefore, any hospital interested in truly improving the value proposition offered to the healthcare consumer has now realized that they must restructure their physician relationships in order to successfully transition from a volume based to a value based business model.

Another way of defining the new paradigm for hospital-physician relations is outlined by the goals of the, so called, “Triple Aim.” In this model first described by Donald Berwick of the Institute of Healthcare Improvement and later the Administrator of the Centers for Medicare and Medicaid Services (CMS), healthcare providers of the future will need to go beyond providing individualized high quality patient care and focus more on the overall health of patient populations, as well as the cost of care delivered. This trio of pursuits also fits well into the value equation and further demonstrates the need for hospitals and physicians to align their efforts toward achieving these objectives.

Hospitals and physicians are therefore now banding together in a variety of ways that can be confusing to define via the acronym-laden lexicon that has grown up around these various organizations, such as ACOs, CINs, IPAs, employed networks, independent contractor relationships, joint governance or co-management agreements, etc.

Functionally, these relationships are primarily concerned with driving clinical, economic, legal, and cultural integration. No one organizational model necessarily serves this purpose across all types of integration and within each hospital’s specific environment. Indeed, it should be specifically noted that hospital-physician employment, in and of itself, does not guarantee any of the types of integration listed above, and employment carries with it the largest amount of financial risk and legal complexity to create and unwind when
necessary. Therefore, no hospital should assume that physician employment is the only viable model available.

Hospital-physician alignment through clinical integration is perhaps becoming the dominant model in the industry. Here, physicians and hospitals are members of a legal entity, such as an Accountable Care Organization (ACO), a clinically integrated network (CIN), or a Quality Collaborative (QC). However, they are not necessarily joined through an employee-employer relationship. In fact, a number of legal case precedents and formal or informal opinion statements from the Federal Trade Commission (FTC) have established that common employment is not a prerequisite for physicians to come together and enter into joint contracts. The key consideration here is whether or not the physicians are involved in a true clinical integration program where improvements in quality and efficiency, rather than financial gains through economic integration, are the goals.

**Drivers of Volume to Value**

Hospitals are now finding themselves driven inexorably towards a more value-based business model where the products delivered through their many services and service lines are changing in significant ways. These organizations, which for years have been primarily producing on-demand services for individual patients with acute or chronic illnesses, now must re-tool to also provide proactive, preventive, or wellness services to populations of patients for whom they will be both clinically and financially “at risk.”

Driving this change in business model is the overall stress on the U.S. economy where healthcare services consume 18% of the gross domestic product (GDP) and servicing the federal debt competes with funding for the largest healthcare payment system in the country, CMS. Furthermore, the U.S. healthcare quality movement, begun over a decade
ago, has failed to produce clinical outcomes commensurate with other developed countries. In addition, there is a growing consumer movement where even the insured are burdened with greater and greater out of pocket healthcare expenses, thus creating a demand for lower costs and greater price transparency and parity. Finally, those who provide care on the frontlines of American medicine, such as physicians, nurses and other healthcare professionals, are increasingly frustrated with a system that relentlessly demands production and profit but provides little in the way of patient or provider satisfaction.

II. Solutions

Functional Hospital-Physician Relationships

Physicians directly control, through their ordering habits, the clinical and financial enterprise within American hospitals. Therefore, any viable solution for successfully transitioning from a volume based to a value based business model must start with leveraging the physician’s power of the pen, or perhaps more appropriately for this day and age, the physician’s power of the computerized order entry system (CPOE).

There are multiple ways to structure the hospital-physician relationship so that the desired alignment of physicians around quality and cost can be achieved. Since form, in this case, should definitely follow function, it is best to first focus on the desired functional elements of these relationships before deciding on the optimal structure.

The key functional capabilities of any hospital-physician relationship include:

1. **Joint contracting for value based reimbursements.** As mentioned, this does not require hospital-physician employment and can be accomplished through an ACO, QC, or CIN model. It should be emphasized again, however, that in order to avoid negative scrutiny from the FTC, the primary function of the relationship must be to drive quality and efficiency through clinical and not economic integration. Luckily,
these goals are entirely consistent with and supportive of any hospital that desires to develop a more value based production system.

2. **Sharing of vital information technology (IT) infrastructure.** It has been noted by pioneers in the field that the facilitation of information flow, the availability of reliable near real-time provider performance and patient utilization data, and the ability to proactively manage patient care outside of the four walls of a hospital are all key capabilities of any population health management system. Unfortunately, this IT infrastructure is expensive and, at this point in time, offers more of a promise than a reality. Nevertheless, any successful integrated network, truly intent on taking on the challenges of the Triple Aim must commit to significant IT and clinical technology investments.

3. **Care management support.** Aggressive care management, especially for high-risk patients, is perhaps the essential human resource for a successful population health management enterprise. These individuals, through risk assessments, disease management, health education, and social work support activities, augment the patient centered medical home and extend the primary care platform of any high performing clinically integrated network into the community.

4. **Accountability for meeting common standards and performance measures.** Unfortunately, physicians do not have a good track record of holding each other accountable to quality, patient safety, and behavioral standards. The best performing hospital-physician networks, therefore, are putting mechanisms in place to assure that there is real accountability in any ACO.

5. **Fair and equitable distribution of shared savings and other revenues.** This may be one of the most challenging aspects of any hospital-physician relationship. Historical tensions between the hospital and its medical staff as well as physician inter-specialty conflicts and competitive interests can easily disrupt and sidetrack other key developmental aspects of the organization. Thoroughly working out all these issues is necessary, but resolving all conflicts should not preclude moving forward and implementing an integration program. After all, nothing drives
solidarity and cohesion like mutual success, and achieving the benefits of integration will overcome many of the internecine squabbles that might otherwise derail the program.

6. **Co-branding, marketing, and driving internal referrals.** These elements serve to transform the hospital-physician CIN into a “virtual” multi-specialty group that benefits both providers and patients. Such a structure creates a seamless self-sustaining economy within the network itself and provides a well-coordinated highly efficient patient care experience for those it serves.

7. **Collaboration and teamwork in care process design and implementation.** This item is critically important, and a full section will be devoted to its discussion. Suffice it to say, however, that clinical care process design and execution must be the ultimate product of the core operating system in any highly successful hospital-physician venture.

**Value-Based Care Design and Production**

**Rationale**

As stated, value-based care design and production must be the primary activities of a clinically integrated network that is actively transitioning towards a value-based business model.

This is not to say that the production of clinical care services needs to be reduced. In fact, the proverbial shift from “volume to value” is a somewhat misleading way to describe the production model that must accompany a shift in reimbursements from fee for service to fee for value. Certainly, bundled payments, shared savings agreements, global capitation arrangements, and other value based reimbursement mechanisms may actually demand more attention to volume production and efficiency than does the fee-for-service model. Moreover, the capture of market share will be an important goal for any physician-hospital
entity striving to profit in a value-based reimbursement environment. Last but not least, since healthcare delivery will remain predominantly a fixed cost industry, the higher the utilization of that fixed cost infrastructure, the better.

What will need to change most dramatically, however, is the overall cost structure of the production system. This will need to be adjusted carefully by front line clinical experts who can make such adjustments without sacrificing quality, patient safety, and other critical outcomes. Interestingly, this is perhaps the major difference between the accountable-care or value-based care model of the 21st century and the managed-care model of the late 20th century. In value-based care the clinical process design comes first and drives the budget, in the capitated-gatekeeper models of the 1980s and 1990s, the budget was set first and then providers were expected to fit the clinical care into these fiscal limits. Unfortunately, the providers were not prepared for or equipped with the appropriate evidence-based care guidelines or technology 30 years ago, and the only way they could make the system work was to deny or withhold care. This led to significant provider dissatisfaction and patient backlash, which essentially led to the demise of these plans in most areas.

Now, the providers have more evidence-based standards to follow and the technology to make sure that all caregivers are literally reading off the same page and being measured as to their compliance with guidelines and standards. Therefore, the task at hand for hospital and physician provider groups is to re-tool their production of healthcare delivery services so that they can efficiently deliver care according to best practice, evidence-based standards and do so in the most cost efficient manner possible.

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This task will not be easy and will need to be part of an ongoing system that perpetually drives value higher in the healthcare delivery industry. Furthermore, the work of setting up this system and monitoring its performance on an ongoing basis is not something that can be accomplished through legislation or even local management policy. Instead, it will require clinicians, such as practicing physicians, nurses, technicians, and others, along with healthcare managers and staff to roll up their sleeves and systematically design, re-design, and in many instances totally revamp the way that healthcare is delivered at the bedside or in the exam room.

As an example, the primary care physician of the future will likely not spend most of his or her time seeing individual patients in a clinic setting according to pre-scheduled 15, 30, or 45 minute appointments. Instead, the primary care physician will oversee a team of providers in a patient centered medical home setting that may include advanced practice nurses, care managers, social workers, disease managers, health educators, dieticians, pharmacists, and others who provide a gamut of care to their patients. The care will range from preventive and screening care to acute care to post-acute care, including hospice and end-of-life services, within the four walls of the PCMH and out into the home, worksite, or other areas of the community.

Obviously, the above example and other new models of care will require much different procedures, staff, technology, equipment, and supplies to deliver. Regardless, the overarching goals of healthcare reform, i.e., higher quality at lower cost, will demand that these resources be applied with an eye towards optimizing outcomes per unit of cost. Therefore, a value-based care design process will be required.
**Process**

Value-based process design teams will be deployed to address each common care process for the most frequently seen clinical conditions in the system. These teams will consist of the following members:

1. **Ad hoc members**
   a. Physician team leader--a front line clinician who provides care within the chosen care process on a regular basis.
   b. Clinical content experts--other clinicians (nurses, technicians, etc.), who perform care within the process regularly.
   c. Non-clinical content experts--administrative, non-clinical staff, who perform essential functions (registration, billing, scheduling, etc.) related to the process.

2. **Permanent members**
   a. Process improvement experts--process engineers or others who are well versed in techniques, such as process mapping according to Lean methodologies and other modern process improvement principles.
   b. Performance improvement (PI) experts--Quality or PI staff that are well versed in performance improvement models such as the PDSA (Plan-Do-Study-Act) cycle or the IHI (Institute for Healthcare Improvement) Model for Improvement.
   c. Business analysts--financial analysts who are familiar with cost accounting according to the Time Dependent Activity Based Cost Accounting (TDABC) methodology popularized by Robert Kaplan, PhD., and others for use in the healthcare setting.

Once these teams are formed, they will begin work on the chosen care process and be asked to accomplish the following tasks:

1. Establish the goal of the selected care process and choose a true outcome measure (outcome as opposed to process measure) for the procedure or care cycle.
2. Map the process according to a modified Lean process mapping technique as to:
   a. Current state. How is the process performed at this time?
   b. Ideal state. As determined by the physician leader and content experts according to the evidence base, their experience and the input of patients or others, whose perspective is important in the care design process
3. Cost-analyze the process. Using the TDABC methodology to establish a capacity rate ($/minute) for the care cycle.
4. Set up an outcome measurement system. How will outcome be captured on a close to real-time basis?

Once the teams are done with their work, the care process will then be utilized, and its outcomes and costs will be monitored on an ongoing basis in order to determine the value production (outcomes/costs) of the process. A process “owner” or champion will then be chosen (likely the physician team leader of the care process design team) who will be provided with ongoing data regarding outcomes and costs related to the process. When this data signifies a problem, the process owner will be responsible for analyzing and revamping the care process in order to reestablish high value outputs. This will require process owners and others to learn how to do rapid cycle process improvement and become part of a true “learning organization.” Over time, the learning organization and the dozens, hundreds, or even thousands of individual care processes and their owners, through the use of ongoing data-driven PI, will create an ever evolving and improving patient experience for those served by this system.

III. Benefits

The utilization of a strategy as outlined above will provide hospitals and their physician partners with many advantages going forward into the reformed healthcare environment. Some of these include:
1. **An improved value proposition to offer the consumer.** Along with enhanced clinical outcomes, which are the ultimate objectives of this model, the consumer will benefit from a pricing structure more closely aligned with true costs. This will mitigate the “sticker shock” that currently distresses many patients when presented with a bill, which they are responsible for, through participation in a “high deductible” or “consumer directed” health plan.

2. **An enhanced ability to negotiate rates for services under a value-based reimbursement model such as bundled payments.** The true costs revealed by the cost accounting component of this model will allow pricing to actually be driven by costs, which is not the case in most of healthcare today. Establishing this connection between costs and price will assure that hospitals and physicians preserve profitable margins for their services as overall reimbursements drop and cost control and the capture of market share become imperatives.

3. **Establishment of a more satisfactory work environment for healthcare providers.** More and more physicians and other caregivers are dissatisfied and frustrated by working within a system that values production over quality. The above system will reverse the unfortunate trend in clinical settings for volume production to compromise quality and patient safety. Instead, the emphasis will be on driving volume through value by designing high quality, cost efficient care processes first and then using these to attract larger shares of the market and consumer demand. In the end, most healthcare workers will find this enterprise to be much more rewarding than trying to keep pace with the accelerating production treadmill.

4. **Improving the healthcare knowledge base.** Despite the fact that medicine is considered a science and evidence based practice is certainly the goal for most high quality providers, the truth is that very little of what transpires during any care delivery episode is truly data driven and measured according to its efficacy or efficiency. This model will fill in the knowledge gaps that clinical research simply cannot reach. The millions of small details involved in patient care that will never
be the subject of a double blinded, randomized controlled clinical trial can be analyzed through this system and modified in order to improve patient care. This will transform the current hospital inpatient and outpatient settings into learning labs, where knowledge is immediately translated into practice for the benefit of those served.

5. **Competitive advantage.** The hospital-physician enterprise that adopts a strategy as outlined above will surely thrive in a value-based business model. Quite simply, when value production is the goal, building a system that can deliver this product reliably will be the ultimate success factor in the race to capture the largest share of a market that is demanding more and more quality, including an enhanced patient experience, for the healthcare dollar.

### IV. Conclusion

The demand for value based healthcare services is enormous. Consumers of all types, to include large employers, government and commercial payers, and individual patients, are no longer willing to accept the fact that the U.S. healthcare system lags far behind systems in other developed countries in producing true healthcare value. In order to meet this demand and reverse the negative trends in healthcare quality and cost, a re-tooling of the system will be necessary. This transformation from a volume to value based business and clinical delivery model will require closer ties and more integrated efforts between hospitals, hospital systems, and their physician partners. There are a number of ways to structure the hospital-physician relationship and the structural elements should be determined primarily by the functional capabilities of the organization. The key function to consider is value production itself through the front line care of common clinical conditions.

*A systematic method of turning each care process into an ongoing learning lab where continuous data-driven quality and cost efficiency improvements can occur will reap significant benefits for any providers who follow this path.*
and select populations of patients. A systematic method of turning each care process into an ongoing learning lab where continuous data-driven quality and cost efficiency improvements can occur will reap significant benefits for providers who follow this path.
V. Bibliography


