

## The Future of Health Care: Managed Care to Population Health A Volume-to-Value Model

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### ARTICLE HISTORY

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Federal and state regulations have driven change in health care from the volume of care delivered to the value of care provided. Yet, regulations are only part of the story. Major technology, commercial, and social drivers are making changes in health care that place the patient at the center and reorganize the communication and information avenues to change the dynamic of care itself and how it is delivered. As a result, the original intent of managed care to place the patient at the center of a market-based delivery system is being realized.

When managed care was conceived, health care was delivered by silos that practiced in general vacuums leading to coordination of care inconsistencies and producing problems with handoffs between sites of care. The patient experience was variable and provided the majority of provider complaints. Outcomes of care were, and are, a priority but difficult to achieve without coordinated communication. Medicare and the Affordable Care Act (ACA) required a change but could not direct patient-centered outcomes without independent forces driving patient-centered care, communication between patients and all providers, and data repositories feeding analytics to identify actionable approaches to improving care.

Managed care evolved with a focus on shifting care to the ambulatory sector. As a result, medication therapy became the primary cost-effective choice for care. Cost was a major consideration within the pharmacy benefit, because benefit models did not reduce physician and acute

care hospital reimbursement to pay for ambulatory treatment. However, with the introduction of biotechnology methods to produce new and improved diagnostics, as well as treatments for previously untreatable or poorly treated illness, the boundary between site of care and expert providers blurred. The cost of production of these biotechnology “specialty” medications now requires that the entire expense of care is considered, and the division of benefits into medical and pharmacy is not an acceptable method for judging payment.

This paper will attempt to discuss the future of health care, from general principles to how the changes will impact all providers. This is not forecasting using crystal ball gazing but rather predictions that are based on forces that already exist in the marketplace today.

### What are the drivers of change?

The ACA stresses the value of care to ensure that a minimum standard of care is delivered, as well as driving cost out through improvements in quality. Quality variance has been well established since World War II (WWII) as a barrier to improvements in outcomes and to introducing unnecessary cost. Hence, the paradigm shift from volume-to-value requires transparency in all activities and cost accounting of each element of care. Physicians and hospitals have traditionally contracted with insurers to establish fixed reimbursement schedules. However, general practice supplies and equipment used in offices, clinics, and hospitals for examinations, procedures, and surgeries are dependent on manufacturer

and supplier cost demands. Similarly, pharmacies have also contracted with insurers and pharmacy benefit managers (PBMs) to be reimbursed in fixed-fee schedules, but the pharmaceuticals were left out due to manufacturer control of the product pricing. The result is that the delivery of care has cost controls, while the equipment and pharmaceuticals utilized are separately contracted. Value models change this contracting paradigm to aggregate reimbursement paid and expensed per capita reimbursement per member per month. Thus, the cost of innovation, while high, is shifted to reimbursement based on the quality of the outcome reimbursed by marketplace competitive pricing when alternative products and technologies are available.

The drive to value is complemented by the Medicare/Medicaid and ACA focus on the total care provided. Gatekeepers were introduced as an element of managed care to coordinate the various stakeholders. In practice, gatekeepers were supposed to limit the care referred to medical subspecialists. A subsequent model was to place patients in actual or virtual patient-centered medical homes (PCMHs) that included all caregivers and were responsible for all care. The ACA introduced accountable care organizations (ACOs) as a kind of super-PCMH to ensure that all care was coordinated, evaluated, measured, and cost-controlled. This led to a consolidation wave in the insurance industry. Provider groups have also consolidated into group and hospital ownership of physician practices. The next step is to include or coordinate pharmacy,

laboratory, and other elements of the patient experience into one delivery care organization as owned or managed by the ACO.

Yet, how is care driven to quality when there are many providers, ACOs, and PCMHs? One option is to drive all stakeholders toward centers of excellence and best-in-class providers. This is not a new phenomenon. Restricted provider panels of medical groups, subspecialists, and acute care hospitals are common. The primary rationale has ultimately been those providers who could deliver measurable outcomes at a cost that was competitive with their peers. In the ACO world, restricted panels will be an efficiency tool to identify the best practices at affordable costs. Pharmacists have traditionally been excluded from panels based on site-of-care cost concerns (e.g., retail vs. mail service) but will also face restricted panels in the future based on their ability to act as physician extenders to manage common chronic conditions such as hypertension, diabetes mellitus type 2, and hyperlipidemia. Pharmacists are providers in a few states, but the national movement to cast all pharmacists as providers will open up the pool of professionals to monitor and treat patients. In this role, they will be in competition with midlevel providers (nurse practitioners and physician assistants); however, retail medical clinics are not cost effective for all pharmacies, leaving independents and small chain pharmacies to incorporate variations of the medical clinic concept into their operations. Expanded access to cost-effective care for treatments requiring clinical therapeutic expertise is an obvious benefit.

How does the model of care drive quality? Clearly, there is more to the delivery of value than the model. Each stakeholder has a different perspective, but now the individual in the dual role of patient and cost-sensitive consumer is the driver. Quality of care is a bell-shaped curve of excellent to standard to substandard care. The patient situation and comorbid disease state provides different curves that the health care model must address. Hence, the drive to ACOs and PCMHs is as much a patient satisfaction problem as it is a clinical one. The model must be as elastic as the demands, which brings us back to cost.

In the past, cost in health care has been largely inelastic; namely, increasing cost did not decrease demand. However, the price-sensitive consumer is not an inelastic

individual. The patient has infinite demands, but as a consumer there is a ceiling. The pricing of hospital care, surgeries, and the biotechnology “specialty” medications satisfies the patient but attacks the consumer as unattainable. Hence, the cost of care for Hepatitis C, HIV/AIDS, cancers, etc., are often unaffordable even when the consumer only pays copays or coinsurance. The cost of devices and equipment is evident to the consumer through higher costs of procedures and surgeries. But the cost of medications, especially specialty medications, is directly viewed by the consumer. The value of these expensive specialty medications is then a competition between provider interests and patient values. Providers focus on commercial advertising, cost offsets in rebates and discounts, benefit versus cost, perceived benefits of options to care, and the needs of the population being treated. The patient’s focus is on quality of life and the value of incremental increases provided by care. Hence, the model of care is not one model but a series of models. That is the challenge of the volume-to-value model.

### **Technology makes it all happen**

Change in health care delivery and satisfaction happened independent of the ACA and Medicare regulations. Mobile technology placed the patient at the center of care. Provider silos are now producing information to integrate into a practical profile that can move with the patient. Social networks allow patients to communicate their experiences and feelings about caregivers, therapies, and perceptions. They also register their votes on excellence and cost. The outcome is a constant report card for providers. This is not a new experience for surgeons and acute care hospitals in some states, but the ease of communication now makes all providers current and potential targets for professional rating and patient experience evaluation.

All providers now have information, diagnostics, tools, and medications developed over the last few years that were unavailable when most were in training. This technology allows for changes in the competitive environment for delivery of care. It is not necessary for the provider to “touch” the patient physically, when the problem can be viewed and diagnosed and the treatment prescribed at a distance through the cloud. The competition for

providers is the international availability of expertise, and the increased options for delivery of this expertise leads to downward pressure on their fees. Shortages in primary care physicians, nurses, and pharmacists motivate options that deconstruct traditional models based on site of care. The challenge is to train professionals for experimental models that may change over time, requiring retraining to work within new processes. Technology will certainly provide more efficient opportunities (e.g., robotics in logistics and drug dispensing), but the disruption in care while professionals are learning new methods will reverse gains until new objectives can be established.

The digital information highway has democratized all sources of information. There is now an international “super market” of cost, care, and educational information. Cost information is readily available for different bases of cost; namely, average sales price (ASP), average acquisition cost (AAC), national average drug acquisition cost (NADAC), average manufacturer price (AMP), and statewide maximum allowable cost (MAC) pricing. There is also growing availability of manufacturer pricing by average wholesale price (AWP), wholesale acquisition cost (WAC), direct price (DP), etc. (See Health Insurance Answer Book, John C. Garner Editor, Chapter 20, Pharmacy Benefit Management, Questions 20-11 to 20-15, for a complete discussion of drug costs.) The result is a transformation in the businesses that trade on the lack of transparency of actual cost. For example, middlemen vendors often trade on their asymmetric information of drug and supply costs to support their business models. These models are based on manufacturer agreements that allow them to keep a portion of the “cost” as their “earned fees.” Many of these middlemen (e.g., pharmacy benefit managers [PBMs] and group purchasing organizations [GPOs]) deliver crucial technology and contracting efficiencies, but their manufacturer arrangements will be constrained in the future, as well as their ability to base contract discounts and expanded services on fee differentials that will no longer be unknown to payers. This will drive new business models for these middlemen based on transparent cost of care that is fundamentally cost-plus. This will also drive consolidation of some middlemen into coordinated care models

in order to squeeze out all delivery and cost inefficiencies. The future models will be expected to anchor costs, services, and methodologies into truly transparent, pass-through models that will be validated by benchmarks readily available on the cloud. Certainly, providers will compete on quality and cost, but widely available, vetted, published guidelines will make care more standard. As a result, the competition between providers will be expected to be less on cost shifting or cannibalizing one service versus another to those that can drive out variance and waste. Witness the international competition in the automobile and electronics industries after WWII for examples of how competition in health care can be accomplished in the future.

### **Patient desire for lack of borders and frictionless care**

Technology has placed the patient in the enviable position of being able to access a huge amount of information, most of which requires professionals to determine whether it applies to the patient's individual condition. At the same time, the patient can send health risk assessment (HRA)-type survey information to his or her primary care providers and health plans to integrate with the providers' electronic medical records (EMRs), medical encounter claims, pharmacy claims, laboratory results, etc. This storehouse of personal data also allows for sanitized aggregation of data to view the population for screening of gaps in care, trending for results of various diagnostic and care options, population health problems, and data mining for cost-effective opportunities.

Contiguous with opening the digital communication highway is the biotechnology development of new drugs, some of which will replace older, small molecules. This technology is driving diagnostics to make more precise diagnoses, expanding patient profiles to include patient- and population-specific genomic patterns, and new medications. This development is a significant achievement for a subset of patients. These patients, and the treating provider teams, want to know that they are receiving therapy that has been vetted to provide significant improvements or cures. However, their price-sensitive consumer side is concerned that these developments are leading to costly solutions resulting in more cost shifting from insurers to them. The ACA, Medicare/Medicaid, Centers for

Medicare and Medicaid Services (CMS), and health plans are addressing this issue with total cost capitation arrangements, as well as risk sharing between government, health plans, and patients. What have not been fully developed are financing and reinsurance options, such as payment for patients' portion of the price based on their fixed assets or some other financing options.

Worldwide manufacturers are addressing this issue by developing biosimilar products to compete with the pioneer specialty medications. Yet, the costs are still significant. Both manufacturers and insurers are rushing toward so-called "value-based" purchasing arrangements that attack the outcome issue. At their most fundamental is the assumption of identification of the patients with the most probable chance of a positive outcome and the expertise of the providers and ACOs to provide an efficient result. This also assumes that there is data analytics supported by process data and cost accounting to ensure that both payers and consumers are receiving the cost-effective outcome.

The individual as patient and consumer needs to be able to cut through the complications of health care delivery and medication nuances to identify the best options for him or her. Commercial arguments by providers, device and medication manufacturers, insurers, and vendors will be held up to the light of competing information and national/international benchmarks of quality and cost. High-cost providers, expensive tests and drugs, middlemen fees, and others will have to not only provide measurable quality outcomes but also defend their fees. As a result, any barriers to knowledge (read that as lack of transparency) or claims of savings will have to be supported with data that can be compared with similar options. The borderless, frictionless world that the consumers desire to reach maximal outcomes that are affordable is supported by the broad base of comparative information on the cloud. The patient may be hopeful, but the consumer is not stupid. [See Figure 1]

### **Providers need transparency to provide value**

The drive to value through transparency will change the provider business model. Value-based and capitation payments require medical providers to build data

warehouses containing populations of patient information, financial systems to deal with the expense accounting required to control cost, risk assessments to protect the group from high-severity patient care, and data analytics to drive efficiencies. This type of infrastructure requires groups, not individuals—hence, the movement of solo medical practices to group, hospital owned, or other types of corporations. Also necessary is vertical integration of primary care, medical subspecialties, mid-level practitioners (e.g., nurse practitioners, physician assistants), pharmacists, laboratory, etc. This integration is necessary to manage the entire care continuum of a patient.

The above infrastructure is predicated on the expertise of the individual professionals and their ability to produce a maximum therapeutic effectiveness at a minimum acceptable risk and an affordable cost. All of these elements must be managed contemporaneously. Because the whole professional team will be reimbursed on a capitation/value-based methodology, the weakest link will drive inefficiencies. Physicians, nurses, and pharmacists must not only be experts in the conditions that they are treating but also the best methods to achieve optimal results.

Vendors who support the ACO, PCMH, and provider teams must be able to supplement the efficiencies that the team requires. Purchasing drives to cost-plus to achieve the most affordable options. Rebates and other discounts will have to be incorporated into point-of-sale based on prior experience and reconciled or repriced in subsequent pricing agreements. Services will be placed under the lens of efficiency and contribution to outcome. As a result, PBM models will have to be reevaluated as pass-through, fully transparent pharmacy benefit administrator (PBA) or third-party administrator (TPA) models. Group purchasing organizations (GPOs) that provide services will be held to a similar standard.

Pharmacists as providers have a unique opportunity for contribution to the ACO and medical group teams. Consumer access to pharmacies provides a real-time opportunity for education in prevention of disease. They can directly provide treatment for low-severity problems or triage to low mid-levels in retail medical clinics. For higher-severity problems, the clinical pharmacist's medication therapy

expertise is critical to the coordinated team to achieve clinical goals. Direct patient involvement will allow for new business models that may not provide desired fees for all instances, but consideration will have to be given to high-volume, high-throughput models that allow one professional to efficiently care for a large number of patients concurrently. This will require technology for communication and data analytics. [See Figure 2]

**Conclusion**

The past was based on patient care. The future will be based on prevention and treatment to targets. The population will be subset by patient concerns and severity.

While the information available to evaluate and treat patients is rapidly expanding, the movement to prevention is the crucial first step. Then professional teams can subset populations by illness and severity of illness to distribute and triage care to the most efficient and affordable options. This is complicated to design and very hard to implement. The future is now, but it is an experiment that will take a decade or more to accomplish.

**About the Author**

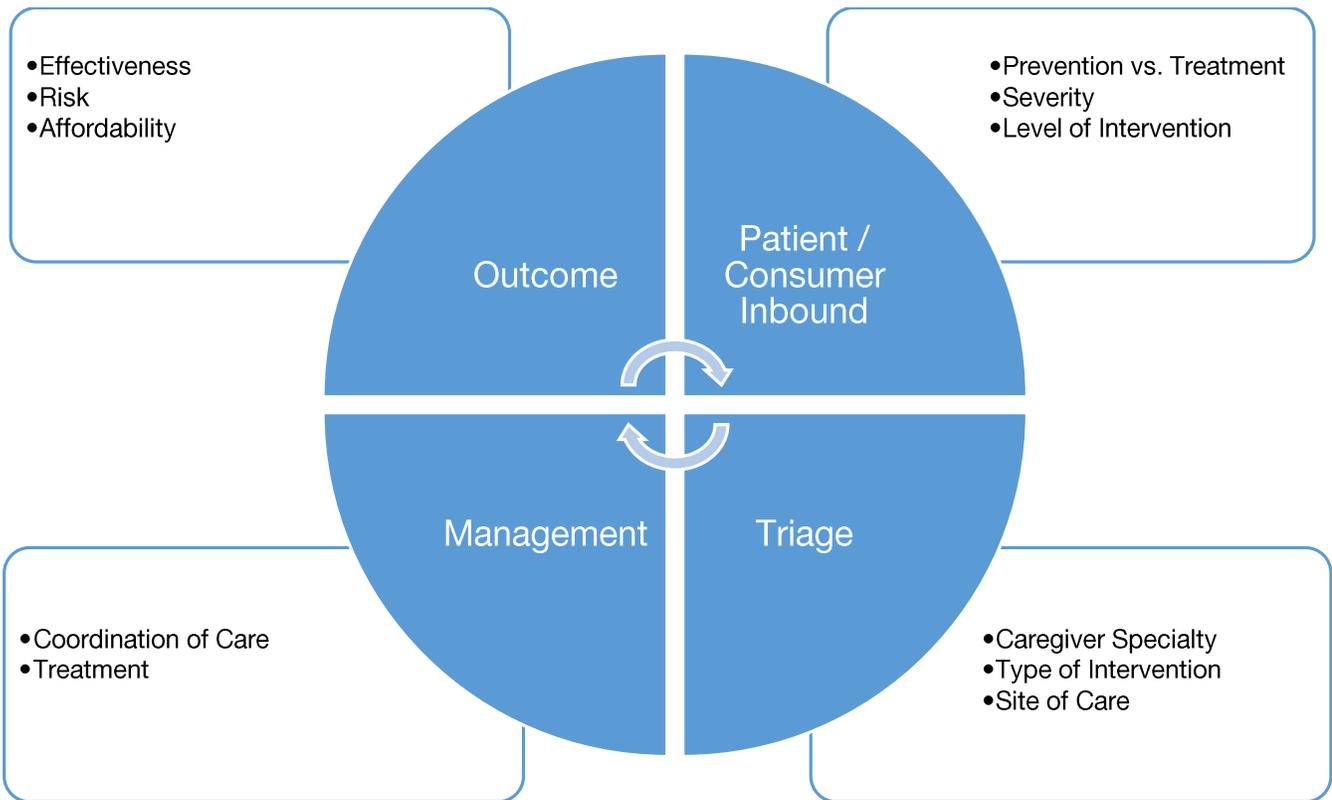
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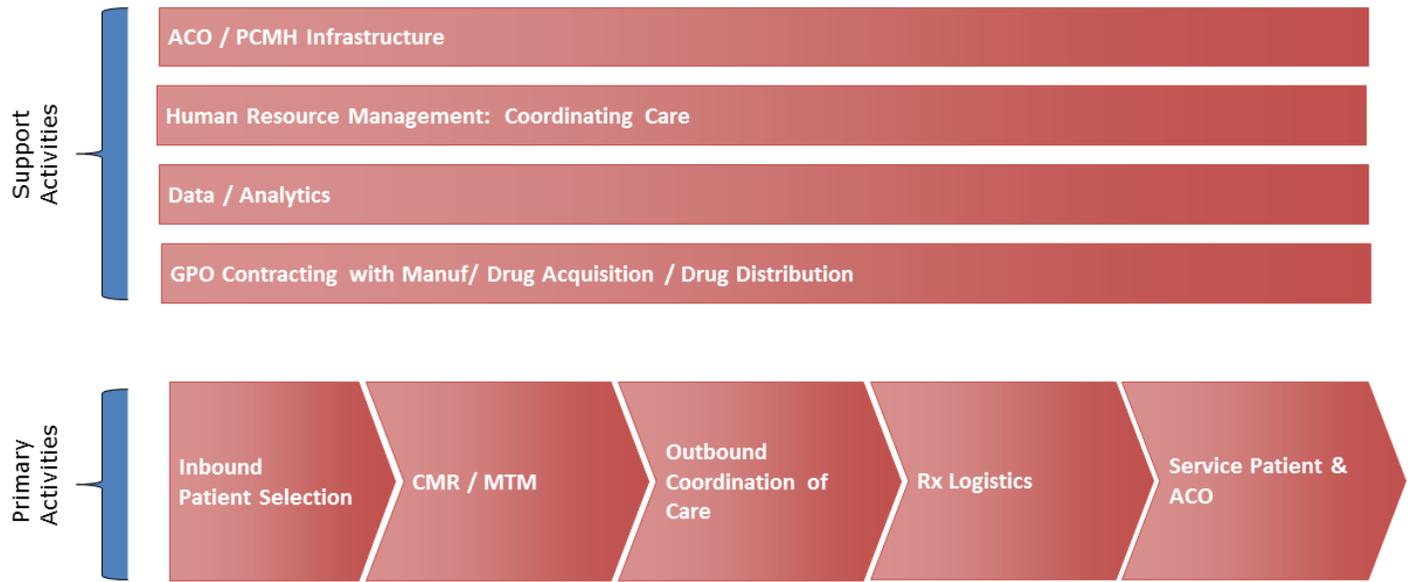
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**Figure 1. Patient / Consumer-Centered Model**



Reference: Pro Pharma Pharmaceutical Consultants Inc., 3/16

Figure 2. Value Chain—Integration of Team Members into Care Coordination



Reference: Pro Pharma Pharmaceutical Consultants Inc., 3/16