# Towards "Total Consumer Health Care:" The State Of Healthcare In the United States

A white paper.

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## Summary

Population health management, precision medicine, the transformation of employer and insurer markets, healthcare's movement from wholesale to a retail transactions, the formation of mega-systems and the environment of flat to declining utilization of "sick care" services are driving healthcare in a new direction—towards Total Consumer Health Care. We (Treehouse Technology and its partners) believe that these trends are fundamental and robust, and that they will drive the agendas of employers, governments, healthcare providers and consumers for years to come.

## Introduction to Total Consumer Health Care

Demographic changes and events of the past several years have given the healthcare industry in the United States a strong incentive to reconfigure itself, as cost-cutting pressures and structural disruptions are intruding from every direction.

While healthcare providers have attempted to experiment with value-based care delivery models in the past (for example, with integrated healthcare models that were widely tested in the 1990s), the tools, the data and the technology were not sufficiently advanced at the time so as to make such experiments successful. Now, things are different — *vastly* different. The concepts and systems are in place today to begin to view the management of Total Consumer Health Care ("TCH") as the next step in healthcare evolution. TCH is the "holy grail" in health care and financial risk management. It is a view of the person and the family as a unit to be managed as a unit—The right care at the right place and the right time at the right cost with the right outcome.

TCH merges all sources of risk: clinical, financial, administrative, social, behavioral and occupational across all lines of insurance.[1] It asks a simply question—for the person and/or the family, what do we need to define and manage today and what in the future? It works across all lines of insurance: personal and group health, disability, occupational, environmental and property and casualty insurance. It views the person at risk as a "consumer" of services, not as a person "patiently" waiting for a scheduled intervention. Millennials instinctively understand TCH, they are abandoning primary care as an expensive and slow way to manage non-chronic conditions. This is the opposite of the Baby Boomers, they are managed through Medicare incentives to be managed by primary care because they generally have some chronic condition.

Although TCH can be viewed as a population health initiative by an insurer, government, employer or managed care entity, it really is about rapidly responding to any source of personal or familial risk, from any source. For example, cancer care is a family issue, not just a patient-centered care issue. Pain management is a complex of issues and clinical conditions that may affect personal or occupational health and also a family. Millennials have pre-existing genetic markers which will tend to express in their futures as chronic or acute conditions, for example, melanoma in the family.

[1] Personal, group, worker's compensation, disability and occupational health

## Total Consumer Health Care Requires Information and Change

Our health-related data in the second decade of the twenty-first century is growing exponentially, and we have developed an increasingly sophisticated range of tools and techniques (computerized and behavioral) for capturing this data and transforming it into information in context, thus allowing us to identify the most effective health-related treatment protocols available for a given situation, organized as a consumer service, for example, urgent care—for better or worse—functioning as primary care for Millennials without chronic conditions.

Moreover, the cost of transaction processing has been driven down exponentially by the "wiring" of the world through the pervasive presence of the Internet and Internet-connected devices: desktop, laptop, tablet and smartphones that reach into every aspect of human life at speeds 1,000,000 times those of the 1970s at the dawn of the telecommunications age in computing.

As important, perhaps, as the evolution of our technology and processes, an important shift in thinking about healthcare delivery as a continuum of care over a time-frame rather than as an episode is helping to catalyze the appearance of new healthcare and insurance business models that will make, with new systems, Total Consumer Health Care a reality.

Today, across the spectrum of healthcare participants, a startling move towards *convergence* is producing real-world structural and business model implications.

For example, some hospitals are striving to become health insurance providers, and some insurers, for example, Wellpoint and Optum are buying provider organizations. Similarly, the definitional lines between the acute and chronic health delivery service settings are blurring, thus setting the stage for Total Consumer Health Care solutions to emerge.

In short, a complex ecosystem is reconfiguring, reflecting the critical need to coordinate all of these participants to provide an efficient and orchestrated series of interventions across a continuum of care from the place of work to medical facilities and on to the community and into the home. This enables the "patient" to become the "consumer" and the focus shifts in health care from billing to the provision of consumer services to select populations.

This convergence is really composed of three distinct but completely interdependent concepts:

- Structural changes across the health and life sciences ecosystem that are reforming what a health organization actually looks like (e.g., business models, revenue sources, and changing definitions of the "customer" or "consumer" of a service).
- Alignment of incentives and goals across the ecosystem that create the opportunity for getting out of our proverbial "stovepipes" (e.g., agreeing to mutual success criteria such as common treatment protocols, bundled payment models, shared definitions of health value) of group health, worker's compensation, occupational health and disability.

- Shared data and insights that open the doors of health transformation by optimizing both the strategic development of structural changes and the tactical implementation and management of aligned incentives and goals (e.g. using analytics to discern what combination of services optimize health outcomes and costs).

The nature of these changes and their implications are now more revolutionary than evolutionary, threatening and transforming "business as usual" for all industry participants. Leading the revolution is the assertion by Millennials that they are not "patients" but "consumers" who expect Amazon-like efficiency in the future from the healthcare system in the U.S. that is remarkably expensive and shows no prospect of improving U.S. life expectancy at the rates experienced elsewhere in the world.

Luckily, consensus is emerging within the health and life sciences markets about what a modernized health enterprise will look like—and it looks highly information driven: collaborative and consumer-oriented, cost-aware, and outcomes-oriented.

- *Collaborative and Consumer-oriented*. Whereas the historical view of health communication involved one-on-one exchanges between two or three practitioners, healthcare delivery will become truly collaborative and consumer-oriented. Multiple practitioners across institutions will work together to develop and monitor treatment programs for their patients turned consumers. Providers, researchers and payers will learn how to maximize health outcomes at the individual consumer-level. And patients themselves will be active collaborators and contributors to their own therapies and wellness efforts, particularly since they are paying an increasing portion of their own healthcare costs and using the Internet to monitor their own health status.
- *Cost-aware*. Without question, the single largest driver of health transformation is cost in the U.S. In a climate dominated by unsustainable expenditures and expensive inefficiencies, no one has benefited: patients are unable to pay skyrocketing premiums and prices, payers are unable to financially manage risk, and providers are unable to profitably maintain the practice of medicine. All constituents in the modernized health system must become more fully cost-conscious in terms of efficiencies, incentives, discretionary spending, risk management and quality.
- *Outcomes-oriented*. The top care providers have always sought the best health outcomes for their patients, especially in the E.U. as opposed to the U.S. But a modern view of health outcomes is multidimensional. Efficacy, sustainability, prevention, quality, safety, and cost all represent important facets of health outcomes. So while the betterment of patient lives is always a primary concern, a more comprehensive view of health outcomes will be required to support the care delivery model. For example, Millennials will expect the prevention of side-effects of treatments to be treated in their lives as equally important with cost of service.

In short, creating a collaborative, consumer-oriented, cost-aware, outcomes-oriented healthcare system requires embracing the priority of information-based decisions and conservation of the consumer's time and effort.

## Total Consumer Health Care Requires New Business Models

Recognizing what is occurring and the trends that are driving healthcare transformation are critical, and this starts and ends with understanding healthcare's business model. In the pre-reform environment, hospitals viewed doctors as their primary customers, with patients being the customers of doctors. Although hospitals were the site of a significant amount of care delivery, doctors were largely in control of what happened in hospitals and the way fee-for-service revenue moved through the health system.

This model is rapidly losing its traction in the market. Accelerated by demographics and passage of the Affordable Care Act ("ACA"), the hospital industry is rapidly moving away from a point of care, fee-for-service payment model towards outpatient care and a more value-based approach to payment. The trends behind this change and the new competencies that will be required in the post-reform environment are being:

- Driven by escalating federal and state fiscal problems and unsupportable healthcare costs;
- Accelerated by provider innovations and successful experiments with new and different value-based business model; and
- Advanced through concepts and principles rooted in the ACA, including mandates to reduce costs and eliminate waste.
- Demographics: Millennials and Baby Boomers.

Large regional hospital systems have been key post-reform movers in these early years of the ACA. They have been developing the size and scale required to provide healthcare value and to manage a population's health across the care continuum. These hospital systems have been aligning with physicians and smaller provider organizations through employment, acquisitions, and partnership arrangements. Their goals are to improve the quality of care, increase access, and lower costs. As regional hospital systems extend value-based services across larger geographic areas, a post-reform business model is replacing the pre-reform model in many communities.

Although they are yet to view themselves as a consumer-oriented solution to the management of employees of employers, they are beginning to see the "handwriting on the wall". Millennials are not going to tolerate the current standards of care and business models, they are turning away from primary care and they will turn away from major medical centers to outpatient facilities that are cost-effective and convenient—with better outcomes and less risk of infection.

We do not consider these trends to be ephemeral; we consider them to be durable, sustainable and long-lasting. We think this because these trends are so closely reflective of the fundamental requirements of a fair system of healthcare delivery in the minds of so many Americans, namely that the system be:

- Safe
- Accessible
- Efficient and
- Effective.

These tenets of delivery fairness have been in the social vernacular for many years, and we think that a shift from these principles is not likely in the foreseeable future. It has been a long time in coming, and the models we are testing today are far from perfect, but we are getting closer to the elusive product/market fit that lies at the heart of healthcare service delivery success: A workable U.S. version of the already successful European healthcare models that may or may not involve socialized medicine, for example, the U.K. compared to Germany or France.

## From Evolution to Revolution

We believe the next stage for healthcare is most likely to be a full transition to a *health and care* business model, what we call "Total Consumer Health Care." This modulation will revolutionize the industry, transforming it from provider-driven *sick* care system to consumer-driven *health* care with a consumer orientation, not a billing orientation.

In this new model, providers and and payers, including employers, Medicare and Medicaid will be viewed as the customers at the top of the system. These customers will select a "Healthcare Company" to manage and provide care for their group of patients under a value-based financial arrangement. The Healthcare Company will guarantee its customers a certain level of performance at a specific cost for health and healthcare services in all settings, eventually migrating to a full capitation system where the Healthcare Company is taking and sharing financial risk. In this business model, those enterprises which are not taking risk will be moved aside in the new delivery system. This is a *risk transfer* model of health care, not a fee-for-service model of care.

As the "content-of-care" administrator, the Healthcare Company will function much like cable companies do today. Such companies own the infrastructure that allows consumers to get a signal for their television or computer. They also produce some content (i.e., programs) and typically obtain a significant portion of content through contracts with other producers.

In the healthcare domain, the Healthcare Company's infrastructure will include:

- Network development and management systems
- Managed care contracting expertise and strength
- Sophisticated information technology (IT) systems for predictive modeling, care management, payment administration, and customer service
- The significant financial and capital capacity required to assume risk
- A consumer-orientation and focus on the customer that over time approaches the business model and behavior of Amazon.

Some Healthcare Companies may already have this infrastructure, but no content (i.e., care provision capabilities) of their own. Their business is working on the customers' behalf to aggregate and manage efficient and effective content providers under subcontracting arrangements, for example, Medicare "Under Arrangements" services provided to a medical center by a subcontractor.

Of course, the model has the potential to put hospitals, doctors, and other care providers at the bottom of the chain, effectively making them a commodity producer. Providers of low-cost commodity services have no control over price or revenue. This is not the role most hospitals and health systems would wish to assume. Additionally, the new Healthcare Company may not be a hospital or health system at all. In fact, many powerful non-hospital competitors are vying to play this role by enrolling patients, capturing the associated revenue stream, and then providing or contracting for the services the patients need.

## The Future of Healthcare and Risk Management

This model is, even today, is changing the nature of the hospital business in particular. Successful organizations will aim to be *the* Healthcare Company in their communities, using their powerful brand names in the community, taking on risk, and then providing services on their own and/or through subcontractors. At present, only a very few health systems (for example, Advocate Health Care, Geisinger Health System, and Kaiser Permanente, among select others), have established themselves as this type of entity.

Hospital and health system leaders are starting to realize that this evolution is being driven by a new set of trends. Leaders are beginning to coalesce their thinking around the implications of these trends and strategies for success going forward.

The six key trends we focus upon are as follows:

- The arrival of population health management
- Employer/insurer market transformation
- Healthcare as a series of retail (read "consumer") transactions
- Flat to declining utilization
- Mega-system formation and
- The emergence of new competitors.

While there are other trends impacting the healthcare industry, these six are broad enough and robust enough to be viewed appropriately as core trends.

## TREND 1: THE ARRIVAL OF POPULATION HEALTH MANAGEMENT

Population health management is the care management function of the new Healthcare Company, and as such, is the business problem and the opportunity of the day. *Population health management* occurs when a healthcare system or network of providers works in a coordinated manner to improve the overall health and well-being of patients across all care settings under a risk-bearing financial arrangement.

The new care model focuses on the health of the individual in all settings ("Total Care"),

removing the silo-like treatment of services related to wellness, preventive, primary, acute, post-acute, rehabilitative, long-term nursing, and home health and hospice care. The clinical challenges for providers are to integrate consumer-orientation and wellness into their fabric of services, proactively identify individuals and groups at risk of developing disease, pre-emptively manage patients with chronic conditions, and intervene in the early stages of disease to improve health and avoid or reduce costs.

Population health management represents a business opportunity for organizations that develop the right strategies to maximize wellness and minimize illness for specific population segments. Radically different from the way care is provided now, the approach requires broadening the scope, environments, and capabilities in which healthcare organizations operate in order to be successful in the new role of population health manager.

Population health management *is* occurring in numerous places in the U.S. and is expected to gain significant speed in the next decade. The private insurance market is moving faster than government payers into risk-bearing health-management arrangements with providers. Such arrangements reward providers for improved patient health outcomes at lower costs.

As it relates to the reimbursement aspects of health transformation, pay-for-performance ("P4P") is an umbrella concept used to describe the healthcare industry's shift from volume-based, fee-for-service compensation to other models that are more focused on the outcomes (clinical and financial) delivered. Led by many initiatives sponsored by the Centers for Medicare and Medicaid Services (CMS) and others, the industry is exploring multiple models for delivering P4P. Some of the more commonly discussed programs, models and initiatives include:

- Accountable Care Organizations (ACOs), which are emerging rapidly nationwide, are designed to involve the provider in managing the health of a defined population with some level of assumed risk for the care provided. Generally, they consist of a group of providers that agrees to be accountable for the quality, cost, and overall care of a group of Medicare beneficiaries. ACOs are a legal entity focused on achieving healthcare quality goals and outcomes that result in cost savings.
    - Shared Savings Program (SSP)—an ACO program whereby physicians are financially rewarded for lowering expenses while still meeting performance standards and operating under a fee-for-service model.
    - Pioneer ACO Model—a more ambitious ACO program designed for organizations already experienced in providing care coordination. It includes higher levels of savings and risks as compared to SSP, and enables participating organizations to transition away from fee-for-service reimbursement models. It also extends the outcomes-based payment model to payers other than Medicare.
    - Advance Payment ACO Model—a program available to SSP participants who need additional start-up resources to build the necessary infrastructure to support the ACO. The program provides upfront and monthly payments for purposes of investment.

- Patient-Centered Medical Home (PCMH)—an organized community of providers focused on comprehensive, patient-centered coordinated care. PCMHs usually strive for greater accessibility by patients to care services and shared decision making. They generally seek to improve quality, safety, evidence-based practices, and prevention as a means of controlling costs. The concept of a PCMH is central to many ACOs.
- Bundled Payments (BP)—a method of provider reimbursement whereby payments are based on predetermined expected costs for clinically defined groupings of care services. Also known as episode-based payment, episode payment, episode-of-care payment, case rate, evidence-based case rate, global bundled payment, global payment, package pricing, and packaged pricing.
- Value-Based Purchasing (VBP)—a model of reimbursement whereby providers are rewarded for meeting predefined quality and efficiency performance targets. Also known as Value-Based Payments.
- Comprehensive Care Payment (CCP)—a model of reimbursement whereby providers are paid a single price to deliver all of the services needed for a population of patients for a fixed period of time. Also known as condition-adjusted capitation and risk-adjusted global fees.

Many of the emerging reimbursement models share certain attributes that derive directly from the goals described above. These attributes include:

- Payments are value-based, not volume-based, focusing on evidence-driven practices and actual outcomes obtained.
- Payments cover broader or full range of services that produce good quality and outcomes, including reimbursement of services not currently covered but that can improve quality and outcomes (e.g., care coordination, education, prevention, monitoring, email and phone contacts, telemedicine, etc.).
- Cost and outcome assessments that influence reimbursement and benchmarking must be sensitive to patient-specific risks and other factors.
- Variable financial obligations include both upside (i.e., rewarding good outcomes at lower costs) and downside (i.e., penalizing poor outcomes at higher costs). This includes the idea of healthcare warranties, for example, outpatient risk for 90 days after an inpatient episode of care.

Related to this trend, many hospitals expect to be jointly contracting as a physician-hospital organization for some degree of population health risk within the next year or two; primarily because some of their most significant payers are asking them to assume risk.[7] Many of the largest U.S. health systems expect more than half of their revenue to be generated by value-based payment arrangements within the next five years. The care delivery and contracting mechanisms may be an ACO, a medical home, or another model. Yet, most hospitals and health systems have a significant amount of work to do to meet the functional requirements for effective population health management.

## TREND 2: EMPLOYER AND INSURER MARKET TRANSFORMATION

The private insurance market is changing dramatically. Volume is down. The percentage of all firms offering health benefits has dropped. Changes within benefits design are even more striking and have significant implications for healthcare utilization and costs.

### From Defined Benefit to Defined Contribution Employee Directed Plans

Up to this point, commercial health insurance has been dominated by employer-sponsored "defined-benefit" health plans. Under such plans, employers identify the healthcare benefits to be offered to their employees (for example, hospitalization, physician, dental, etc.) and the expected costs employees would cover through copayments, deductibles, and coinsurance. Rates are negotiated between employers and insurers, with employers bearing the risk for unknown levels of utilization and cost.

This is changing and is among the key new developments in the employer and insurer markets. Increasingly unwilling to shoulder risk for rising costs, many employers are starting to shift their employees into "defined-contribution" health plans. Under such plans, an employer contributes a fixed amount toward each employee's health insurance. Each employee determines how and where to spend that money on healthcare coverage. An employee who opts for a more expensive plan will have to pay for the incremental cost. This trend leads the way in creating a consumer-oriented market for healthcare in that, if the employee pays, the employee is the customer, not the employer.

### High Deductible Health Plans Paired with Health Savings Accounts.

High Deductible Health Plans (HDHPs) with a savings option are a related product innovation in the insurance market. The plans are offered under both traditional plan and defined-contribution structures. Employees contribute to a health savings account (HSA) on a pre-tax basis, from which they draw funds to pay out-of-pocket expenses below the deduction threshold. Employers also may contribute funds to the employee's HSA. At the end of the benefit year, funds remaining in the account typically are rolled over to the next benefit year.

The critical element of this insurance innovation is the behavior change that insured consumers exhibit with new and different incentives. Under traditional insurance products, consumers have little to no incentive to control costs since they have no economic responsibility for payments to providers beyond the copays and deductibles. In contrast, individuals with HDHPs assume economic responsibility for payments to providers, and therefore have incentives to control unnecessary utilization and cost. Consumers may forgo or delay necessary and appropriate services with such plans, but those risks are counterbalanced by patients' increased involvement in making cost-conscious decisions and efforts to maintain good health. HDHPs can be structured in ways that reward healthy behaviors and the use of appropriate preventative services.

## Public Exchanges

The ACA's mandate related to public exchanges is accelerating the movement to defined-contribution health insurance. Exchanges are marketplaces where individuals or businesses can comparison-shop and purchase healthcare coverage. Their basic idea and structure closely resemble defined-contribution health plans, and they often use HDHPs paired with HSAs.

Small employers are expected to move their employees into public exchanges or "dump" them by ending the company-sponsored coverage. The penalties for doing this will be much less than the cost of continued insurance coverage.

The uninsured who move into the exchanges represent potential new consumers for hospitals; the shift of individuals previously covered under commercial insurance into the exchanges represent potential market share loss, if the organization does not participate in plans offered through the exchange.

In numerous states, more exchange enrollment is projected to originate from previously commercially insured individuals than from the uninsured.
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## Private Exchanges

Additionally, numerous large employers—such as Amazon and Walmart—are pioneering the use of "private exchanges" as a way to offer active employees a broader choice of plan and coverage options, and cap the employer's benefit subsidies through defined contribution plans. More than 100 private exchanges are now operating across the country. Surveys suggest increasing interest among employers for this kind of exchange participation with 56 percent of employers responding in 2012 that they would consider private exchanges for active or retired employees.

## Direct Contracting

Direct contracting by self-insured employers with healthcare providers is another employer-driven innovation that is changing competitive dynamics in numerous markets. Frustrated by an inability to control healthcare costs, some major employers are taking matters into their own hands and creating narrow networks of contracted providers for high-end services. Other employers are extending direct contracting efforts to encompass population health management with a narrow set of providers in a defined geographic market, fro example, the Cleveland Clinic for cardiovascular care.

Whether direct contracting by big employers "sticks" and increases will be based on whether or not the contracts deliver the intended results—lower costs and higher quality. This movement could have substantial volume implications for hospitals and health systems not selected for participation. Direct contracting excludes providers who cannot offer quality services at lower costs, as well as the "middle man" insurer, for example, the local Blue Cross or Blue Shield affiliate.

### Medicare Advantage and Managed Medicaid

Finally, through the Medicare Advantage (MA) and managed Medicaid programs, commercial insurers are making significant inroads into coverage traditionally provided by these government programs.

## TREND 3: HEALTHCARE AS A RETAIL TRANSACTION

As noted above, defined-contribution and high-deductible insurance plans put decisions regarding healthcare purchasing firmly in the consumer's court. Consumers can evaluate and select their health insurance and provider network from an array of options.

The result is that the purchase of healthcare moves from a *wholesale* transaction that is dependent on employer and payer arrangements that are mostly invisible to the consumer, to a *retail* transaction in a more open marketplace shaped to meet customer needs. Points of competition in a retail healthcare world include brand, access, convenience, customer satisfaction, IT connectivity, consistent quality, a service culture, and price.

Healthcare providers and plans increasingly will compete for individual consumers through unique combinations of these factors. The consumer decides what to purchase based on data offered through payers, employers, providers, and other stakeholders.

Informed consumers with increased cost sharing are likely to choose the low-cost/high-quality providers that are consumer-focused, timely, electronically-savvy, convenient and cost effective.

Technology-enabled consumers want information on their smartphones—24/7/365. These consumers are moving the healthcare marketplace from opacity to transparency with lightning speed. For the Healthcare Company of the future, customer relationship management ("CRM") and satisfaction are imperative for success.

The Company must determine how to engage, keep track of, and retain these individuals. IT connectivity through the Cloud, Internet, wireless, and app-based programs will enable consumer health and wellness monitoring, provider-patient communication, appointment scheduling and follow up, and the hundreds of other applications that will emerge during the next decade.

Healthcare consumerism has not missed the attention of U.S. retail giants, such as Walmart, CVS, Walgreens and Amazon, which have all moved into the healthcare provider or insurer arenas, as described later. These retail giants have strong brand recognition and do everything possible to protect that brand through the provision of consistent quality, a service culture, and competitive pricing. Only a few healthcare systems currently have national or even regional brand recognition. Healthcare Companies will need to develop their brand, reinforce it through consistent care quality and competitive pricing, and relentlessly promote and protect it. This will lead inevitably to a consumer-oriented healthcare system, at least for those outside of Medicare and Medicaid.

*Hospital-centric service delivery will not meet the access requirements of retail healthcare*. Ease of access, speed, efficiency and positive outcomes will be lead to competitive strength. All types of services must be conveniently located in all types of settings, including the community and the home.

## TREND 4: FLAT TO DECLINING UTILIZATION

Utilization rates for inpatient and certain hospital outpatient services are declining in many areas of the country, reflecting fundamental changes brought by the value-based business model being pressed on the market by CMS and enlightened employers. The speed of utilization decline varies by market or region, but the nation may now be reaching the "tipping point" where healthcare is no longer inpatient-centric.

Structural drivers of utilization declines also include the following:

- Focused work by hospitals to reduce readmissions: This work resulted in 70,000 fewer readmissions in 2015 compared to the previous year.
- Transition of patients to observation status: Care provided in an observation unit, which reduces crowding in emergency departments, also may prevent an unwarranted admission or readmission that is not covered by insurers.
- Increased use of case managers outside the hospital walls: Use of nurses and other allied health professionals has a growing track record of success in coordinating the care of at-risk patients and ensuring their effective transitions between providers and settings.
- Development and adoption of medical "homes:" This team-based approach for comprehensive and continuous patient care has demonstrated success in reducing emergency visits, hospitalizations, and costs.
- Early Discharge and Discharge to Home care models wherein the patient is treated and the episode of care is managed with a plan to move the patient at discharge to their own home instead of to a step-down facility or nursing home. This involves increasing use of eHealthcare telecommunications-based care delivery systems and models of care.

Improved ability to transmit test results between providers: The increased adoption of secure electronic medical record systems by hospitals and physicians will reduce unwarranted, repeat testing.

As the industry migrates to a value-based system, revenue likely will decline as well, even for hospitals and health systems that are able to maintain their market share during the transitional period. Medicare expenditures will have to be constrained into the future. Rates for exchange plans negotiated with hospitals are likely to be below (and in some markets, well below) rates currently in place with commercial PPO contracts. There will be less money for acute-care providers as care shifts to primary and lower-acuity settings, and care and payment models eliminate unnecessary utilization. Note the change in the Ascension system, the largest faith-based hospital network, from and inpatient care focus to an outpatient care focus in 2018.

The decline in utilization rates presages a significant change in the inpatient business model. Use

rates for inpatient and certain hospital outpatient services are declining in many areas of the country, reflecting fundamental change brought by the new business model. Importantly, there also appears to be a correlation between the level and pace of a market's shift toward value-based care and the level and pace of utilization decline.

This trend has significant strategic and financial implications for healthcare providers. Specifically, providers that embrace the migration to value-based care will need to work aggressively to eliminate unnecessary and/or ineffective activities in order to thrive under risk contracts. This requires a fundamental change in mindset, culture, and attitude about volume and activity. It also requires providers to rethink the organization and structure of their delivery networks to avoid supporting unnecessary capacity, and to drive patients into the lowest-possible cost setting in which quality care can be delivered. This constitutes the emergence of a "systems-approach" to enterprise and risk management, similar to traditional market behavior in the financial services and manufacturing industries and it leads to a consumer-oriented market focused on total health and safety risk management.

The goal will be to manage a population's health across the care continuum, keeping patients healthy through preventive and primary care services, and *out* of acute care facilities whenever possible. The right place to provide the right care at the right time with the right quality, cost, and access increasingly will be a setting other than a hospital or nursing home. By eliminating waste and redirecting patients to ambulatory centers, physician offices, clinics, and online and/or telephonic interactions, less work will be done in the hospital and fewer patients will be housed in nursing homes. To reduce well-documented overutilization, tests and services deemed inappropriate or unnecessary based on medical evidence will be eliminated in all settings. Acute care will be one, and only one, component of the population-centric health management services continuum that will be centered in the community and not the hospital.

Those providers that choose not to participate in the movement toward value-based care will suffer the consequences of an economic livelihood tied to a business model based on a level of "activity" that will deteriorate significantly.

As health care transforms from a hospital-centric to a community/population-centric model, the speed of utilization decline will vary by market or region, but growth-rate declines — leading possibly to real declines in volume — could occur across much, if not most, of the nation. The needs of aging baby boomers, and those newly insured through provisions of the Affordable Care Act, may slow utilization declines in the short-term, but are not likely to diminish lower inpatient use rates long-term.

In addition, it is hard to fathom that Federal and state fiscal challenges, and the growing proportion of U.S. gross domestic product consumed by health care, won't ensure that the

downward pressure on usage rates is here to stay. Factors lowering utilization will be cumulative and interdependent. In addition to macroeconomic forces, drivers bending the utilization/cost curve include:

1. Changes in medical practice that focus on coordinated, collaborative care across the continuum of care and places of service;
2. Increased use of standardized care approaches (protocols) to reduce care variation;
3. Care process redesign to reduce every bit of unnecessary work in all care settings;
4. Optimized service distribution to ensure the right care at the right site; and
5. Financial incentives of new value-based payment models that reward elimination of waste and redirection of patients to lower-cost settings.

## Implications for Hospitals and Healthcare Systems

The end of the hospital-centric model will change how hospitals participate in their local care delivery systems, presenting hospital leadership with significant new requirements to maintain the hospital organization's essential role in its community.

*Culture.* The most fundamental requirement for hospital leaders will be a mindset or cultural shift that is oriented toward delivering value, and not necessarily acute-care diagnostic and treatment activity. The culture shift needs to be framed within the context of delivering quality care and doing the right thing for the patient/consumer. Clinical activity that is not indicated by the patient's condition must be moderated or eliminated. Being accommodating to requests for the next test or service may not be appropriate. Physicians, patients, and family must participate in this shift; education and incentives will be needed. The culture will be become outcome- and prevention-focused and consumer-oriented and driven. Naturally, brand names will emerge and branding will take a front and center role in consumer relationship management.

*Physicians and Care Delivery.* A strong physician platform will be mandatory to hospital and medical center success going forward. To drive the real change that lowers utilization, physicians who are employed, affiliated, and independent must be organized and incentivized for value-based care. Physicians should lead the care redesign effort, eliminating inefficient, ineffective, or unnecessary processes in the hospital setting. When care is indicated, physicians must direct the patient to the lowest-cost/highest quality setting possible. In consultation with experts and physician leaders, hospital management teams can identify and implement the specific physician-hospital integration models that will produce the needed cultural, financial, and clinical changes in their communities.

*Communication and HIT.* The provision of high-quality care in lower-acuity settings — whether in homes, clinics, physician offices, post-acute facilities, or other sites — will present

communication and coordination challenges of a magnitude not encountered in the hospital-centric model. To support effective communication and efficient care delivery beyond the hospital walls, hospitals will need to continue taking the lead in developing and maintaining health information technology (HIT) infrastructure and capabilities. The ability of other organizations in the care continuum other than the employer to do so is limited. Hospital- and employer-financed HIT data and analytics "platforms" will be key to determining what appropriate care is, and is not, across the delivery system. Analytics will support care delivery redesign by driving care-efficiency improvements and Rapid Application Development ("RAD") will be required to give consumers rapid access to new solutions for personal and chronic care management. We don't need to "boil the ocean" to be successful, we just need to implement consumer-oriented processes for "incremental" change in outcomes and costs, over time and various populations at risk. We are not going to cure melanoma in the U.S. beach-loving populations right now, but RAD platforms can be used to develop genetic, clinical and behavioral precision healthcare models for those at risk and reach out to them with pervasive telecommunications to get them to act in ways to prevent a lesion.

*Facilities.* Capacity planning and major building projects that are in the early stages should be rethought and reevaluated by hospital leadership teams. Organizations can no longer sustain the costs associated with overbuilding or duplicating expensive services in many locations. Conversely, investments may be necessary and helpful in lower-intensity cost settings, such as immediate/urgent care centers and clinics, physician offices, and ambulatory sites. Efficient use of all current resources, and rationalization of services and facilities throughout a system and region will be critical.

*Contracting.* Employers and providers may need to take the lead in pushing insurers toward value-based care, as insurer receptivity to value-based concepts varies widely across markets. Examples include Advocate Health Care, whose leaders worked hard to obtain the support of Illinois insurance plans to experiment with shared savings and quality-improvement incentives and Geisinger in Pennsylvania. The faster providers can develop competencies and build a value-based patient population, the better.

*Making the Transformation.* Employers and hospitals will operate in both a fee-for-service and value-based payment system during at least the next 10 years. However, some hospital management teams are beginning to work *now* to prepare their organizations for a value-based world with a much different utilization profile. Provider revenues will be under severe pressure as volumes decline through marketplace and providers' own initiatives. *A revenue solution will not be available*. Proactive organizations are taking steps to fundamentally restructure their approach to service delivery by redesigning care (particularly for patients with chronic conditions and Millennials), eliminating unwarranted clinical practice variation, reorganizing their service delivery system, driving down costs and becoming more consumer-oreinted.

Spurred by declining utilization, healthcare's business model is changing. To achieve success in a value-based system, employers, hospitals and health systems will be required to reassess existing leadership and business models, and transform the care delivery system in their communities.

## TREND 5: THE FORMATION OF MEGA-SYSTEMS

New deals continue to reshape the healthcare landscape as large systems merge to further increase their scale and build their capacity to be *the* market-essential Health Care Company in geographic areas. Large players are combining through both full integration and partial integration arrangements.

## TREND 6: NEW COMPETITORS EMERGE

New competitors are emerging, blurring the traditional lines and roles of industry stakeholders. For example, expanding beyond a pharmacy role, Walgreens is entering the healthcare business in a big way. It has been providing basic care to millions of people through retail clinics staffed primarily with nurses. These clinics are meeting needs for convenient, after-hours access to primary and preventive services. Among retail clinics, more than 44 percent of visits occur on the weekends or during weekday hours when physicians' offices typically are closed.

Walgreens announced that its 370 retail clinics are now venturing into the diagnosis, treatment, and monitoring of patients with chronic conditions, such as diabetes, asthma, and high blood pressure. Walgreens certainly looks to be positioning itself as a Healthcare Company. DaVita Inc., the nation's leading provider of kidney dialysis care, also recently extended its business base, using an acquisition deal with HealthCare Partners (HCP), an operator of physician groups and networks, to become DaVita HealthCare Partners. The combined company is expected to extend HCP's physician-centric model, which has a track record of providing care efficiently and effectively under risk arrangements.

Everyone is also watching Amazon and its partners as they form a new healthcare company in Boston to benefit from the intense technology, insurance and clinical environments in the region.

Additionally, insurers are moving into the care-provision space. For example, not-for-profit Highmark Health Services (Blue Cross Blue Shield of Pennsylvania) acquired West Penn Allegheny Health System and two other hospitals in order to build an integrated healthcare delivery system that would compete with the dominant provider in western Pennsylvania based on a high-quality, low-cost strategy. The Cleveland Clinic is also buying hospitals in Florida and building hospitals in the U.K. and Dubai.

The competitive arrangements described herein either are already changing or have the potential to change healthcare. When large organizations fundamentally rethink their business models and the types of partnership arrangements they are willing to use to support those models, change can occur much faster and be much more dramatic than what has occurred to date.

## THE IMPLICATIONS FOR HOSPITALS AND HEALTH SYSTEMS

If not abundantly clear at this point, business as usual for U.S. hospitals and health systems is no longer a viable strategy. A new problem—learning to manage population and precision health—must be solved. More and bigger consolidation will be necessary to remain relevant and to assemble the intellectual and financial capital required to successfully absorb and manage risk arrangements.

### Success Requirements

Core competencies will need to evolve; different capabilities will be required for different roles. For example, "major participants" will need a rational service distribution system and the right governance, management, and incentive structure for value-based care delivery. Population and precision health managers will need these capabilities plus network development and maintenance experience, as described earlier. All of these activities will need to be coordinated with the employer and employees who are paying for the services and are the new consumers of healthcare services.

The core competencies going forward are oriented around consumer and managed care expertise. They include population health management, precision diagnostic skills, clinical care delivery excellence, customer and consumer relationships and engagement, employer/insurer relationship management, provider network development, brand management, cost effectiveness, financial strength, and capital capacity. Above all, a consumer-oriented approach to the design and provision of services will be paramount.

Providers are starting to undergo a "mass sorting" to reflect their capabilities. Every organization should be developing expertise in something. The pace of progress toward achievement of functional competencies must be rapid in many markets. Simply advancing capabilities may not be good enough; advancing at a rate equal to or greater than the rest of the marketplace may be required. Well prepared organizations have identified key organizational competencies and are moving into an execution phase that involves investing in strategic and capital resources. The right strategy for the development of the core IT platforms for Total Consumer Health Care will determine the speed-to-market and efficiency of providers who can become part of a successful Healthcare Company as a supplier of high-value services.

Effective cost structure management is fundamental now and going forward. Doing less (volume/utilization) with less (costs and cost infrastructure) is the new normal. Market (employer and government) reaction to failure to achieve cost efficiencies and effectiveness, among other competencies, is increasingly harsh. Management teams and boards should be working hard both on developing and integrating competencies, and on understanding the implications of the trends described earlier.

Health systems positioning themselves to be *the* Healthcare Company in their communities

will need to move forward aggressively to build or acquire the technology and physical infrastructure required for population health management, precision medicine, and the delivery of consumer-centered health services. The organization's position on the transformation spectrum will depend on factors including:

- Market issues including competitive position, scale, geography, and payer preference for risk models
- Financial/capital position including potential reserve requirements, impact for rating agencies, and the required level of investment in infrastructure and working capital
- Management skills to drive change in non-traditional areas such as utilization management, membership management, network management, premium pricing, claims processing, and other functions that are not in the traditional realm of health systems
- Efficiency factors across all aspects of the provider spectrum, not just hospital and physician practices
- Culture and the ability of the organization to accept new goals, incentive plans, and reporting requirements
- Ability to meet payer requirements for participation in population health management

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## Conclusion

Population health management, precision medicine, the transformation of employer and insurer markets, healthcare's movement from a wholesale to a retail transaction, the formation of mega-systems and the environment of flat to declining utilization of "sick care" services are driving healthcare in a new direction. We believe that these trends are fundamental and robust, and that they will drive the agendas of employers, governments and health care providers for years to come.

Treehouse Technology provides strategic consulting, IT solutions and Rapid Application development platform technology for Total Consumer Health Care.

For more information, contact your Treehouse Technology representative.

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