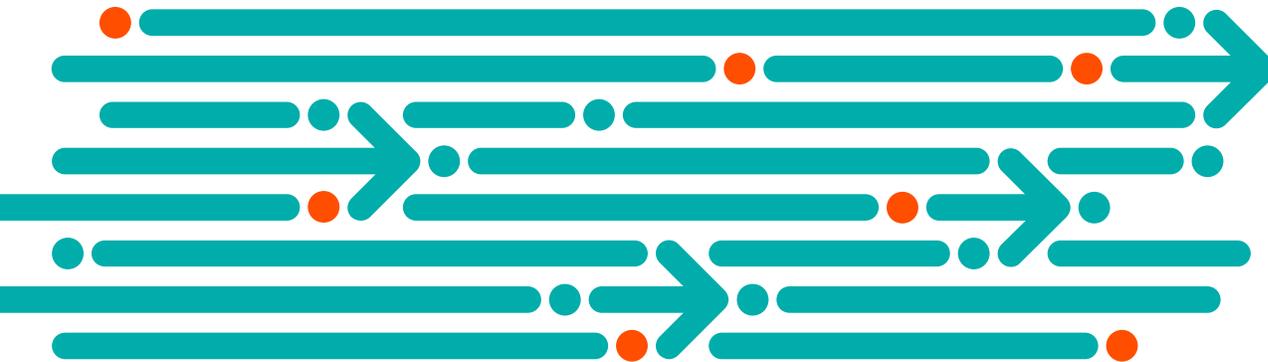


2016 Strategic Viewpoint

Preparing For a Less Forgiving Future:
A Macroeconomic Point of View



There are at least two risks associated with developing strategies in a turbulent health care marketplace. The first is potential snow blindness – becoming disoriented by the appearance of so much apparent turmoil and losing focus on the horizon. The second risk is being swept up in a wave of enthusiasm for ideas that are intuitively appealing but which have relatively little probability of taking us anywhere new. The first category of risk can cause an organization to set off in a number of different directions, searching for the right path while consuming limited resources in a series of strategic fits and starts. The second category of risk has the potential to lurch an organization in a set direction, only to discover later that it may have been a circular path leading back to where we started. Avoiding both categories of risk requires the focus to see through a blizzard of distractions while resisting the temptation to follow the crowd in what everyone is sure must be the way out.

Paying close attention to four economic changes will bring the horizon back into focus while providing a reliable foundation on which to anchor potential strategies:

- Retail medicine and remote/virtual care redefine health care's front door for low acuity patient needs
- Price compression for commodity services (defined as widely available, undifferentiated services believed by consumers to be of comparable value across providers), most intensely felt in imaging and ambulatory settings, squeezes spending out of the system, leaving nowhere to hide
- Acute bundled pricing introduces "scope risk", extending financial accountability beyond the anchor provider's own four walls
- Longitudinal risk evolves from statistically unstable population-based spending targets and shared savings to prospective payments for chronic/complex episodes of care.

Redefining Health Care's Front Door

Traditionally, going to the doctor meant going to the doctor. Patients drove, parked, walked, and waited. Fifteen minutes spent with a doctor often took hours if not most of a day. When patients encountered urgent but not emergent needs outside of regular office hours, a call to their doctor was typically met with a recorded message instructing the patient to visit an emergency room if the problem was emergent. Many patients did just that, often unable to distinguish between emergent, urgent, or simply uncomfortable.

The confluence of higher insurance deductibles, meaning patients have an economic stake in low acuity decisions, and the emergence of low cost/easy access alternatives like retail clinics combine to encourage the healthy majority of any population to reconsider where they seek care for uncomplicated problems. Walgreens and CVS are now active in 35 states with over 1,400 operational retail clinics. The number of visits to retail clinics has seen a ten-fold increase since 2006, and is up by 76% in the last

three years.ⁱ The proportion of the population who has used retail clinics grew from 15% in 2013 to 26% in 2015.ⁱⁱ In addition to bringing capital, brand equity, scale, and operating savvy to what had largely been a cottage industry, the most valuable asset that commercial pharmacies bring to low acuity ambulatory care is real estate. Located on virtually every attractive intersection in many markets, commercial pharmacies have the potential to bring low acuity access to patients rather than perpetuating the traditional physician office-based model.

The business models of Walgreens and CVS have diverged. CVS continues to staff and operate their retail clinics; they sometimes partner with local providers for medical directorships and co-branding, but they typically employ the onsite clinicians who provide the hands-on care. Walgreens has begun contracting with local providers to staff its retail clinics. Partnerships with local providers having strong brand equity may affect the pace of adoption by patients. One in 3 survey respondents indicate that they would use a retail clinic only if it was affiliated with a local provider.ⁱⁱⁱ Early movers in retail medicine see the strategy as a relatively low investment/low risk hedge bet – a long-term generational play to align with millennials who are less likely to value traditional primary care physician (PCP) relationships or delivery models, while responding to increasing demand by baby boomers for alternatives to the traditional office-based model for primary care. There is more than a remote chance that the landscape for low acuity primary care will shift dramatically, especially as commercial insurance deductibles increase. Whether by evolution or revolution, signs point to PCPs ceding low acuity services to easy access alternatives.

An interesting phenomenon emerged as health systems created free-standing urgent care centers in an effort to provide alternatives to costly emergency department (ED) visits. With capabilities and staffing patterns lower than hospital EDs but higher than most physician offices, urgent care centers may have landed in an uncomfortable “financial no-man’s land” – less costly than an ED but more expensive than a physician’s office, urgent care centers attract patients from both. Neither fish nor fowl, urgent care centers risk the fate of mid-level retailers like Sears...more expensive than low cost discounters and lacking the services of high-end competitors. The niche that retail clinics strive to fill lies below PCP offices on the acuity scale, not above. Health systems operating higher cost urgent care centers would be wise not to overestimate their cost competitiveness as entry level access nodes for low acuity care.

Retail clinics are an inefficient fishing net for high acuity cases; their value proposition is neither short-term return on investment nor as a source of large scale complex referrals. In some markets, they may turn out to be a cost of doing business – the equivalent of an ante in poker. A largely unseen risk as retail clinics emerge is the potential for selection bias if a health system is participating in either capitation or population spending targets like shared savings plans or accountable care organizations (ACOs). Imagine a health system that loses just 2,500 capitated or attributed lives to a competitor who attracts the

migrating population with retail clinics. The 2,500 relocated lives take \$10.1 million in capitated revenue or budgeted spending with them.^{iv} Retail clinics differentially attract younger, healthier individuals, with average annual health care spending of only \$500 per member per year.^v While budgeted spend (or worse, capitated revenue) declines by \$10 million, only \$1.5 million of actual spending leaves with it. The costs for the sickest subset of the population remain, but \$8.85 million in funding surplus from the healthy majority is no longer available to subsidize the costliest beneficiaries. If selection bias occurs under a population spending target arrangement, like an ACO, the game is lost before the first pitch is thrown.

Continued advances in technology that enable remote or virtual visits by facilitating low acuity interactions with fewer face-to-face encounters may erode retail clinic market share or even leapfrog brick and mortar clinics entirely. Eight percent of the population reported utilizing remote or virtual encounters in 2013; by 2015, that number had grown to 12%.^{vi} While remote/virtual visits are still in the early stages of development, the concept appears to be gaining traction. Portable monitoring devices and other telemedicine enabled alternatives for ongoing patient surveillance are likely to make additional inroads to traditional office or facility-based volumes. There are no assurances that remote/virtual care will reduce health care spending; and in fact, spending could increase if it turns out to be an “and” rather than an “or” phenomenon. Numerous examples exist of new technology, pharmaceuticals, or other scientific advances that add incremental cost without realizing an offsetting reduction in other expenditures. The larger the magnitude of anticipated spending on remote/virtual care, the greater the risk that offsetting reductions in other expenditures will be insufficient to result in net savings.

To the extent that remote/virtual care contributes to lower chronic/complex episode spending, for example by reducing the frequency with which patients decompensate to the point of requiring inpatient admissions, offsetting savings would mitigate a portion of the incremental cost of the new technologies. A significant portion of the avoidable spending associated with chronic and complex episodes, however, is not dependent on new technology for solutions. Reducing excess chemotherapy or radiation treatment, redundant imaging or diagnostic testing, non-palliative surgeries on stage IV cancer patients, or other interventions that fail to improve the quality of a patient’s life would realize a large portion of available savings; remote/virtual care would play a minimal role in these categories of spending reduction. Nearly 1/3 of the \$3 trillion national spend arises from single events, such as appendectomies, cholecystectomies, childbirth, or accidents and injuries.^{vii} Many of these single events are unpredictable and most are unavoidable. Relatively little savings potential exists in this component of the national spend that could be attributed to incremental spending on remote/virtual care.

In the low-acuity ambulatory care space, it is easier to imagine retail clinics and remote/virtual care resulting in incremental spending and more difficult to envision net savings. It may be possible for

remote/virtual care to partially dislodge retail clinics, but it is more difficult to believe that PCPs will radically reduce their practices and incomes. Unless the role of PCPs – and more importantly the sources of their incomes – shift away from low acuity services and toward the management of complex and chronic episodes of care, incremental spending on retail clinics and remote/virtual care will almost certainly be additive. For the math to work, spending on retail clinics and remote/virtual care must be carefully managed to limit incremental expenditures so that offsetting reductions in spending elsewhere are sufficient to generate net savings. Examples of such discipline in the health care sector are unfortunately few and far between. If spending for remote/virtual care grows at rates hoped for by the entrepreneurs who are developing the technology, chances are good that overall health care spending will rise rather than fall as a result of the advances.

Commodity Price Compression

A macroeconomic driver central to last year's environmental assessment has intensified and is expected to become increasingly important as insurance deductibles continue to rise and more beneficiaries migrate to high deductible plans. Twenty-four percent of covered workers are now in high deductible health plans (HDHPs), up nearly 85% in the last five years.^{viii} Approximately 90% of insurance exchange purchasers chose bronze or silver plans in 2015.^{ix} HDHP beneficiaries spend 10% less annually compared to peers covered by more traditional benefit plans. Roughly 70% of the reduction in spend arises from lower utilization, while the remaining 30% is due to price shopping. The unintended consequences of increased deductibles could have serious implications over time. HDHP members with existing chronic conditions are less likely to receive treatment for those conditions than non-HDHP patients with the same diagnoses, and their adherence to recommended guidelines was generally lower than expected. Additionally, research has shown that HDHP members may forego certain preventive screenings.^x

Wide variation in contractually allowed payments (the effective price) – as much as two or even three-fold differences between the 25th and 75th percentiles within a given market for routine ambulatory services such as diagnostic tests or major imaging studies – are commonly observed. The prevailing prices for ambulatory MRIs performed in a hospital outpatient setting are roughly double the prices charged by physician offices or free-standing MRI facilities. Patients who pay less than 10% of the allowable charges out-of-pocket receive almost 44% of their MRIs from hospital outpatient departments. Among patients who pay over 90% of the cost out-of-pocket, only 26% receive their MRIs from hospitals; the rest are treated in physician offices or free-standing facilities where prices are 50% lower.^{xi}

Multiple studies have shown that only about one-third of employer-sponsored insurance spending involves services that lend themselves to possible price-shopping by patients. Price-insensitive outpatient

services, prescription drugs, and inpatient care (where patients are highly likely to exhaust their out-of-pocket liability, making prices irrelevant) account for roughly two-thirds of commercial spending. By contrast, the majority of all out-of-pocket spending by patients themselves occurs outside of the hospital, either in the form of fixed copayments or financial responsibility incurred prior to the satisfaction of their deductible. In 2011, over 50% of the out-of-pocket spending by commercially insured patients occurred prior to the satisfaction of their deductibles, while another 25% of out-of-pocket spending was associated with fixed copayments, where patients would have no incentive to shop based on price.^{xii} The large majority of price-sensitive out-of-pocket spending by patients occurs prior to meeting their annual deductibles, suggesting that the most elastic demand is associated with relatively low cost services provided very early in an episode of care or outside of longitudinal episodes altogether.

Services that are ordinarily considered commodities such as imaging or diagnostic testing, when rendered in the course of an episode of care involving either an inpatient confinement or total expenditures that exhaust a patient's out-of-pocket exposure, are not subject to the price sensitivity that they experience when delivered on a standalone basis. Theoretically, such commodities might sustain higher pricing when associated with more extensive episodes of care but from a practical standpoint it is challenging to maintain a side-by-side pricing strategy that differentiates price based on patient circumstances. Some providers are segmenting services by site; services rendered in distal off-campus locations are priced differently from similar services when rendered in higher cost on-campus locations, where patients are more likely to be involved in more complicated episodes of care. It is realistic to assume that intra-market price variation will be compressed for commodity services that are routinely incurred by patients who have not yet satisfied their annual insurance deductibles and who tend not to be involved in extensive episodes of care.

Commodity price compression is like a severe weather pattern: avoiding it is not likely an option, so preparation is key. For health systems that acquired physician practices and converted those practices to "hospital-based" billing sites for Medicare, sustaining separate facility fees in the commercial sector becomes increasingly difficult as deductibles increase. Price sensitivity will be highest for physician specialties that involve repetitive encounters that are not included in global surgical fees. Patients can be expected to search for alternatives if faced with substantially higher out-of-pocket responsibility when seeing physicians who engage in hospital-based billing. Site of service neutrality may be coming under Medicare; until it does, the option of billing Medicare as a hospital-based service while forgoing the facility fees in the private sector may be a strategy worth considering.

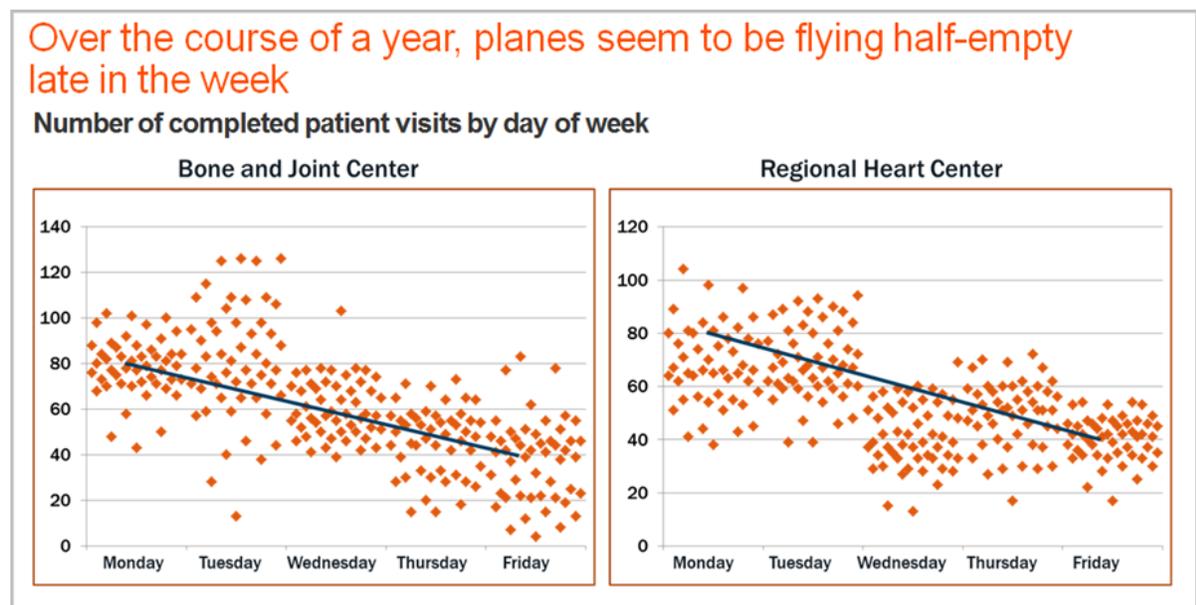
As commodity price compression intensifies, access and ambulatory throughput efficiency will become increasingly important. Patients will expect more and tolerate less as they absorb an increasing share of

the costs. What may have been acceptable when the patient paid little or nothing out of pocket can become unacceptable when they are footing the bill. Forward-thinking providers are reevaluating the criteria that they use to assess the acceptability of appointment waiting times. Medical necessity is giving way to what the patient deems to be an acceptable lag to the next available appointment.

Capacity management becomes mission-critical as commodity prices fall. Ambulatory care facilities are not unlike airplanes – capital-intensive assets with extraordinarily high fixed operating costs. Airlines know that their planes lose money every minute that they spend on the ground. Southwest Airlines abandoned assigned seating not in an effort to alienate customers, but because their boarding system enables them to turn an airplane at the gate more quickly, increasing the effective load capacity of each plane over the course of a day. As the contribution margin that each commodity service makes toward fixed costs decreases, optimizing the use of capacity becomes paramount.

Making optimal use of ambulatory capacity is particularly challenging for academic medical centers (AMCs) and teaching hospitals, where faculty physicians balance teaching and/or research responsibilities with clinical time. Unless carefully orchestrated, the multiple missions of these organizations can result in significant peaks and valleys in the utilization of ambulatory capacity. Exhibit 1 illustrates an all-too-common pattern whereby physical space is highly productive early in the week but clinic activity drops substantially by the latter part of the week. In the airline metaphor, this utilization pattern would be like the airlines flying six flights per airplane on Monday and Tuesday, only two flights on Thursday and Friday, and parking the planes over the weekend. In a high fixed cost industry, uneven use

Exhibit 1



Source: University HealthSystem Consortium Access and Throughput Initiative, 2015.

of capacity is economically unsustainable. Exacerbating the ambulatory throughput problem, at least among many, if not most AMCs and teaching hospitals, is the perception of scarcity. Providers who are in clinic during peak weekly time slots perceive ambulatory capacity to be scarce. When attempts to add additional physician manpower during peak weekly time slots meets resistance, there is a natural tendency to seek more space. Most organizations “need” more space on Tuesday mornings, but have ample unused capacity later in the week. Adding more physical capacity to expand peak time throughput would create even more unused space at other times during the week. The only economically sustainable strategy, particularly as prices are falling, is to shift manpower and create patient availability during off-peak time slots, in effect reducing the amount of time that planes fly half-empty, or do not fly at all.

Higher deductibles and increased price transparency have implications for negotiation strategies between providers and commercial insurers. Health systems with stronger bargaining clout have traditionally negotiated higher payment rates with insurers, leveraging their indispensability in the insurers’ networks. As patients absorb an increasing proportion of the cost for low acuity, commodity services in the form of higher deductibles, providers would be wise to shift their negotiation focus to differentiated or high acuity services. Higher prices for services typically rendered during the course of an inpatient confinement, or those commonly part of chronic or complex episodes of care are least likely to trigger price elasticity of demand. By contrast, increasing contractual prices for services likely to be paid for by patients out of pocket exposes the provider to a competitive threat. A transformational negotiation strategy for health systems with significant bargaining clout would be to move away from piecemeal pricing and to convert contracts to bundles and episodic payments. Providers who are able to convert to prospective episodic payments and drive utilization toward evidence-based norms have the opportunity to generate margins while the utilization curve turns downward. Providers under strictly fee-based contracts risk encountering a revenue cliff if utilization changes. Prospective episodic payments enable providers to take longitudinal risk without incurring incidence risk, which has been the Achilles’ heel of all population spending target initiatives (such as ACOs). Incidence risk is best left to insurers. Prospective episodic payments involve management risk – providers are accountable for resource consumption once a patient is diagnosed, but are not financially accountable for the prevalence of disease in their risk pools. As commodity price compression occurs, longitudinal risk assumption should evolve from population spending targets to prospective bundles and episodic payments.

Acute Bundled Pricing Introduces “Scope Risk”

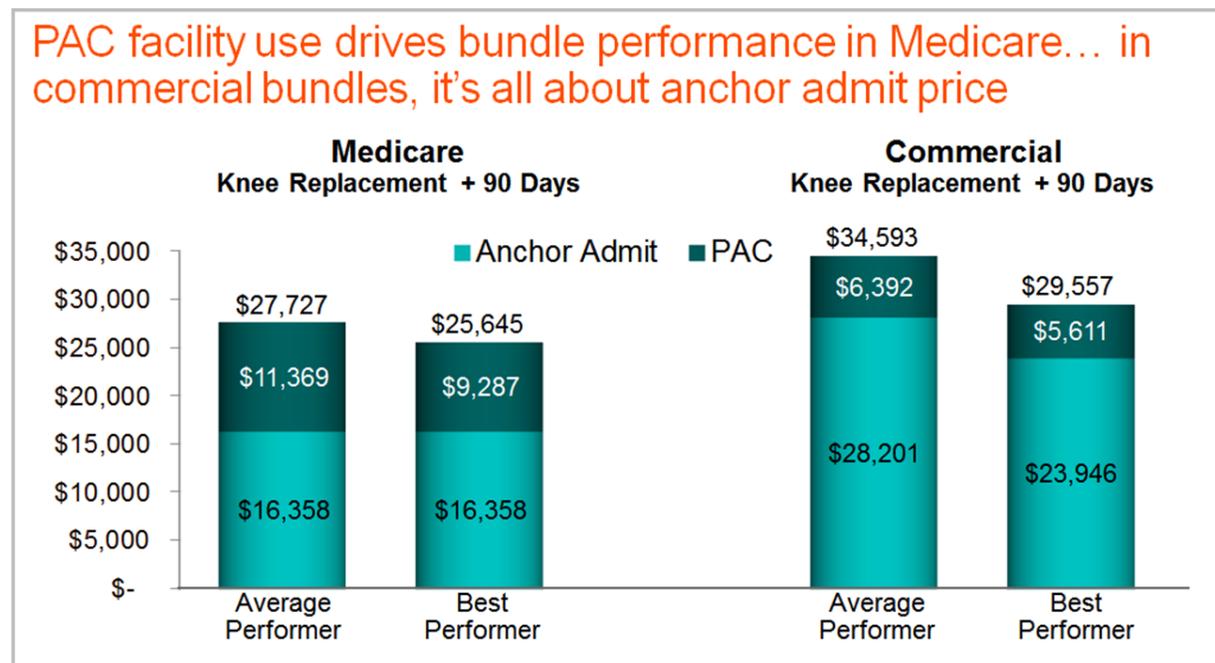
Acute bundled pricing is not a new concept. Cardiac surgery was paid for based on all-inclusive fees (hospital and physicians) in the 1980s and organ transplantation has been paid based on global bundles for over twenty years. What is different with the most recent incarnation of acute bundles is the introduction of “scope risk” – financial accountability for services that extend beyond the inpatient

admission and which occur outside the four walls of the institution. Acute bundles place the anchor provider at risk for complications and readmissions, not only to the anchor hospital but to any inpatient facility. The most significant financial risk, however, involves post-acute care (PAC) facility utilization, most commonly skilled nursing facilities (SNFs) and inpatient rehabilitation.

In uncomplicated Medicare joint replacement cases, among typical providers, roughly 40% of the entire episode spend is incurred by PAC facilities. More efficient providers reduce PAC costs by almost 20%, in part by managing post-acute length of stay, but more importantly by dramatically reducing the proportion of patients who are discharged to PAC facilities – sending those patients home instead.^{xiii} Prior to the introduction of financial responsibility for PAC facility use, SNFs and inpatient rehabilitation provided a pathway to earlier discharge, freeing scarce inpatient bed capacity for the next admission. Relatively little attention was paid to the financial repercussions, since PAC costs were borne by someone other than the anchor institution. It is not uncommon for anchor hospitals to be completely unaware of the average length of stay among their joint replacement patients who were discharged to PAC facilities.

Exhibit 2 shows the relationship between average performers and better performers with respect to PAC facility costs for uncomplicated knee replacements. In Medicare cases, the underlying inpatient component of the bundled spend is fixed. The variation in total cost per case arises from differences in PAC utilization. The result is an 8% margin if bundled prices are initially set at average episode spending.

Exhibit 2



Source: Vizient Research Institute and Milliman analysis of Medicare and commercial claims, 2009-2011; Vizient Clinical Data Base.

Competitive performance on joint replacement bundles in the commercially insured sector depends almost entirely on the effective price of the anchor surgical event. In the private sector, PAC facility utilization is roughly half of that experienced by Medicare patients, with relatively little variation between average and better performers. The largest source of variation in commercially insured joint replacement episode spending is the price of the anchor event, where 20% differences between hospitals in the same market are not uncommon. Pressure to rationalize site of service within health systems will intensify as acute bundled pricing gains a foothold. Bundled services will be concentrated in system facilities with cost structures that support operating margins at prevailing market prices.

A common reaction by health system executives when initially confronted by acute bundled pricing is to assume that they should acquire PAC facilities in order to control spending across the “continuum of care”. In fact, that intuitive reaction is not supported by the economics. There is a two-fold variation in PAC cost per case between high cost and low cost joint replacement episodes in the Medicare program. High cost providers can save \$3,500 per case if their PAC facility use was reduced to the average. Average cost providers could realize savings of \$2,000 per case if PAC use mirrored best performers.^{xiv} When acute bundled pricing arrives, PAC facility utilization will decline sharply; owning SNFs simply ensures that lower utilization will hit the health system’s revenue. The opportunity under bundled pricing is to reduce unnecessary utilization of someone else’s services and then apply the savings to the rest of the episode. A bit counterintuitive at first, the key is managing, not owning the care continuum.

With mandatory bundled pricing for joint replacements a reality in 67 metropolitan markets, and continued expansion of the scope of the new payment method expected, interviews conducted with Vizient members between September and December of 2015 pointed to four things that providers are doing to get ready:

- Extend interactions with referral sources beyond intake to coordinate PAC upon the patient’s return.
- Treat PAC facility use as spending our own money...soon it will be.
- Become far more selective in which PAC facilities we use, and insist on constant communication to ensure appropriate lengths of stay and to avoid patient decompensation and avoidable readmissions.
- Secure privileges for our medical staff at high volume PAC facilities – then round on our own patients.

Acute bundled pricing will raise two important questions for health systems: How? And where? For Medicare bundles, where the anchor admit price is virtually fixed and financial sustainability is dependent on controlling resource consumption during the surgical stay but more importantly on managing PAC

facility use, systems will ask, “How can we reduce variation and improve economic viability under fixed prices?” In the commercial sector, where multiple hospitals within a single health system have widely varying cost structures and traditional anchor event pricing, the question of how to reduce variation remains crucial, but it is joined by the question, “Where within the system can we most efficiently deliver these services?” The introduction of scope risk under bundled pricing causes providers to look outside of their own four walls to deliver economically sustainable acute episodes.

The Evolution of Longitudinal Risk

The assumption of risk by health care providers in the form of population spending targets or “shared savings” programs such as ACOs suffers from dubious mathematics unless an attributed population exceeds 100,000 – in which case the probability of an adverse statistical event is relatively low but the financial magnitude of such an unexpected turn of events could be overwhelming. At the root of the problem for ACOs as demonstrated in a 2011 University HealthSystem Consortium Research Institute study, is the likelihood that a bonus or penalty would occur for an ACO due solely to statistical chance.^{xv} Unintended consequences can occur with alarming frequency because the baseline spending target and each of the subsequent performance years are subject to statistical fluctuation. The claims costs for 5,000 attributed lives will randomly fall within the ACO’s risk-free corridor (plus/minus 2%) less than half of the time. If an ACO had no impact on costs whatsoever, an unwarranted bonus would accrue more than 25% of the time, while unearned penalties would be assessed more than 26% of the time, due solely to random fluctuation. Aggregate claim distributions are not symmetrical (there is no ceiling to equate to a floor of zero), so the group randomly falling above the 2% penalty threshold is slightly larger than the group randomly falling below the 2% bonus threshold. In other words, the game is stacked against the providers before play begins.

According to the study cited above, over a 3-year period, 50% of ACOs with 5,000 attributed lives would incur unwarranted penalties arising from random fluctuation; one-fourth would lose an average of \$1 million, while the least fortunate among them would incur more than \$3 million in unearned penalties. One in 10 ACOs that actually reduced the costs of a population of 5,000 by 2% would see those savings more than offset by random fluctuation and would incur average penalties of \$750,000. To virtually eliminate the probability of an unearned penalty, an ACO with 5,000 attributed lives must reduce a population’s costs by more than 7%.

The chance of unwarranted bonuses and unearned penalties persists even when results are pooled over 3 years. Forty percent of ACOs with 10,000 attributed lives would see random claims fluctuation sufficient to generate at least \$500,000 in undeserved penalties over a 3-year period. Unearned penalties of \$1 million to \$2 million would be most common, but the worst case would be a loss of almost \$5 million.

Similarly, 30% of ACOs with 25,000 attributed lives risk undeserved penalties ranging from \$2 million to \$4 million, with the least fortunate facing \$7 million penalties. At 50,000 attributed lives, 1 in 10 ACOs would incur unwarranted penalties ranging from \$4 million to \$8 million.

Random fluctuation means that some ACOs will receive bonus payments despite having no impact on population costs while others will incur penalties while actually reducing population costs by less than the statistical volatility. An ACO must approach 100,000 attributed lives to reduce the probability of an unearned penalty to less than 1%, but even at 100,000 attributed lives, the ACO would still have a 0.3% chance of a \$10 million undeserved penalty. As the population size increases, the probability of random losses decreases, but the magnitude of such losses increases significantly. As a result, moderately sized ACOs (10,000 to 25,000 attributed lives) face a persistent risk of an unearned penalty of \$2 million to \$7 million, even when spread over a 3-year period. For the largest ACOs (more than 100,000 attributed lives), even the slight possibility of an undeserved penalty of \$10 million is cause for concern.

Aside from random claims variation, another design element of the ACO shared savings program tilts the field in favor of insurers over providers. By establishing a +/- 2% corridor around a population spending target, if actual claims costs exceed the expected target, the insurer benefits when providers absorb part of the cost overrun. If actual claims costs are less than the target, the insurer shares a portion of ***their savings*** with providers, but those insurer savings arose because the providers were paid less than everyone expected. Unless all ACO patients represent incremental new volume to the providers (hard to imagine when attribution is based on patients passively selecting the providers), the insurer savings accrue from reduced payments to providers; in effect, shared savings represent a partial return of payments that insurers expected to make to providers but did not. In an ACO arrangement, insurers benefit in all scenarios, enjoying savings when claims are below target and collecting subsidies from providers when claims exceed targets. Providers have significant downside exposure if claims exceed targets but only questionable upside potential if insurer savings arise from patients who the providers expected to treat even in the absence of the ACO. The “shared savings” corridor insulates the insurer while exposing providers to genuine risk.

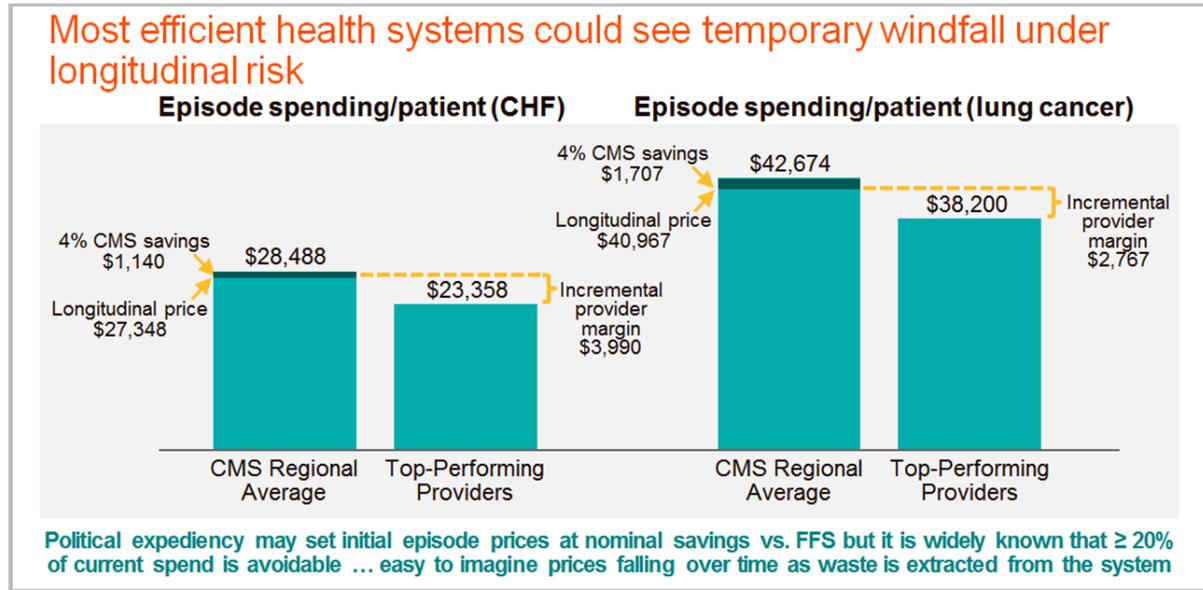
First brought to national attention by the University HealthSystem Consortium Research Institute, the underlying instability of claims costs for populations smaller than 100,000 lives may account for the large scale exodus from the Pioneer ACO program and for the relative lack of traction of the concept over subsequent years.^{xvi} The fragmentation of risk pools introduces unnecessary claims volatility, while exposing health care providers to *incidence risk*. The risk for how many high-cost diagnoses occur in a given population is best borne by insurers, and is most efficiently spread over very large populations (millions, not thousands). Financial accountability for the resources that are consumed in the care of a

patient once diagnosed appropriately rests with medical providers. Population spending targets and population-based shared savings programs are an ineffective way to engage providers in longitudinal risk-sharing. By design, shared savings plans are a stacked deck; they insulate insurers while exposing providers to significant risk with questionable upside potential. Prospective payments – initially in the form of acute bundles, but expanding to include longitudinal episodes of chronic and complex care, accomplish the goal of making providers accountable for resource consumption without undermining the economics by introducing unsustainable incidence risk and its associated random claims volatility.

While much attention has been devoted to shared savings programs with population spending targets (e.g. ACOs), those initiatives are still founded on fee-for-service (FFS) payments. Prospective bundled payments, whether acute bundles or fixed payments for chronic/complex episodes of care, fundamentally alter the payment system and by doing so have the potential to change provider decision-making. Voluntary programs like the Bundled Payments for Care Improvement (BPCI) initiative typically precede mandatory projects like the Comprehensive Care for Joint Replacement (CJR) model; with voluntary episodic bundles for cancer care emerging, it would be prudent to anticipate the possibility of mandatory episodic payments for chronic/complex conditions.

An evolution of risk-sharing from population spending targets to prospective episodic payments (think longitudinal DRGs), would benefit the most efficient health systems. Exhibit 3 illustrates the potential for top performers to increase their margins on chronic and complex episodes of care compared to the traditional FFS system. The regional average CMS expenditure per congestive heart failure (CHF) episode is \$28,488; in the same region, top-performing providers are paid only \$23,358, due largely to lower hospitalization rates and less frequent visits to EDs.^{xvii} If a longitudinal DRG price was established at 96% of the area average spend, resulting in a 4% savings for CMS, the most efficient providers would see an increase in revenue per episode of \$3,990, 17% higher than the payments they receive under FFS. Similarly, the average CMS expenditure per lung cancer episode is \$42,674, compared to only \$38,200 for episodes provided by top performers. Adopting the same approach to establishing a longitudinal DRG payment, with 4% savings to CMS, the top performers would see their revenue per episode increase by \$2,767 or over 7%. Rather than asking providers to chase a population spending target that is susceptible to random claims variation, in the hope of reducing their own revenue by 2% in order to get half of that back, longitudinal DRGs would reward the most efficient providers by increasing revenue per case by 7% to 17% for chronic and complex patients. At the same time, providers would avoid incidence risk, which can doom a deal to failure before the game even begins.

Exhibit 3



Sources: Vizient Research Institute, analysis of Medicare claims, 2010-2013; Centers for Medicare & Medicaid Services, 2014 Annual Quality and Resource Use Report, September 2015.

In contrast to amorphous “population health” strategies, managing chronic and complex episodes of care more efficiently can be reduced to five key measures:

- Fragmentation of physician services for chronically ill patient populations
- Hospitalization rates for chronic patient cohorts
- Six-month chemotherapy costs per newly diagnosed cancer patient
- Medical admits and ED use among chemotherapy patient cohorts
- Palliative care uptake and hospice utilization among terminally ill patients

A focus on these five areas will position any health system to prosper under prospective episodic payments for chronic and complex illnesses...it is worth noting that the same five focus areas are the keys to success under population spending targets or shared savings programs such as ACOs.

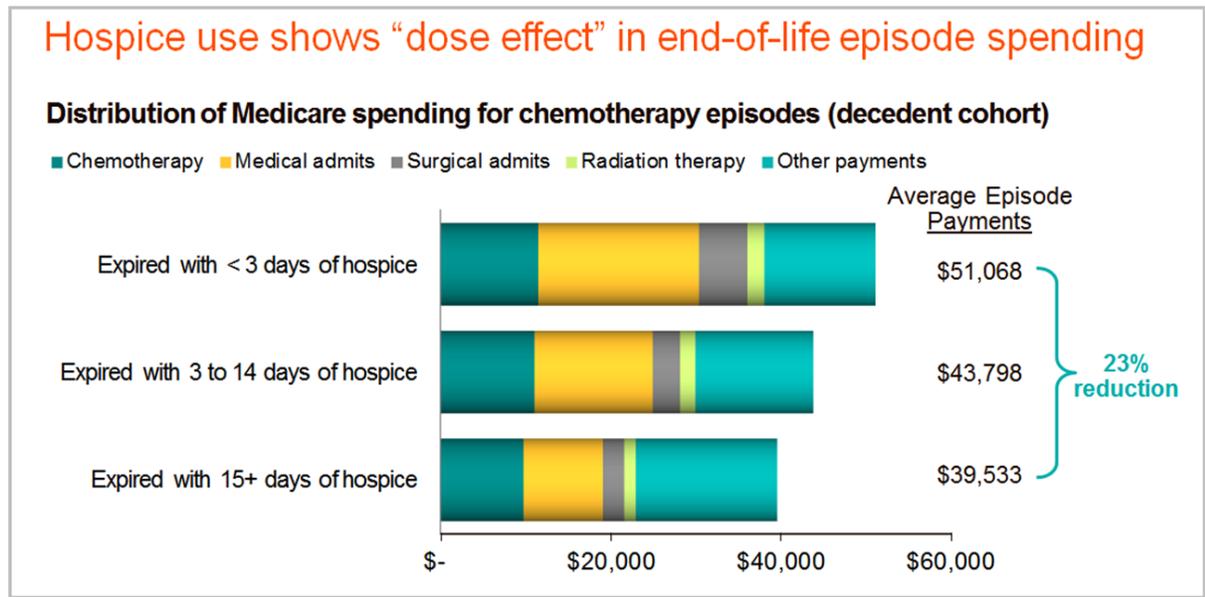
A recent discovery made by the Vizient Research Institute has practical implications for health systems undertaking risk, whether in the form of population spending targets or prospective bundled payments, either acute or longitudinal. A comparison of Medicare spending per chronic disease episode showed that patients who received over 90% of their physician services from a single multispecialty group cost significantly less than clinically similar patients who received less than 50% of their physician care from any single source. Chronic episodes involving fragmented physician care cost 40% to 60% more than single-source episodes.^{xviii} Consolidating care management for chronic episodes creates a competitive advantage for health systems, and is a key to financial sustainability under risk-bearing arrangements.

Among any CHF population, roughly half of the patients are never hospitalized in any one year. As a result, they account for only 13% of total cohort spending.^{xi} About 1 in 4 CHF patients is admitted once during a two-year episode; that group's costs are proportionate to their composition in the cohort. It is the frequently admitted subsets of the CHF population that account for the majority of spending. One-fourth of all CHF patients are admitted 2-4 times, spending \$57,760 per capita, while the patients who are admitted 5 or more times over two years represent only 2.9% of the CHF population but average \$122,443 in episode costs.

Wide variation in average chemotherapy costs per Medicare episode, where unit payment rates are fixed, points to utilization differences that become either an opportunity or vulnerability if longitudinal DRG payments emerge. Variation of 25% to 35% between the 25th percentile and 75th percentile chemotherapy cost per episode is consistently observed across lymphoma, lung, breast, and colorectal cancer. Among Medicare patients undergoing chemotherapy for lung cancer, breast cancer, or lymphoma, hospitalization rates and ED utilization varies by as much as 88% between high performing providers and their peers.^{xx} Specialty pharmacy and biologics are contributing to a rapid escalation in spending for chronic and complex episodes of care and accounted for nearly 1/3 of all U.S. spending for prescription drugs in 2014. Specialty pharmacy expenditures are growing by 30% per year, compared to 6.4% for all drugs. The median cost per patient has reached \$10,000 per month. By 2016, 8 of the 10 top-selling drugs will be biologics.^{xxi}

Among a decedent Medicare cohort, a nearly 25% variation was observed in CMS spending during end-of-life episodes. As all patients studied were deceased, outcome was not a variable. Patients who expired with less than 3 days of hospice care incurred an average episode cost of \$51,068, as seen in Exhibit 4. Patients expiring with 3 to 14 days of hospice care incurred an average cost of \$43,798, while patients who expired with over 15 days of hospice care incurred an average episode cost of \$39,533.^{xxii} The cohort with little or no hospice care received more chemotherapy, more radiation therapy, and was more likely to have surgery. Inpatient hospitalization rates account for the largest cost difference between the cohort receiving little or no hospice care and those patients who received over 15 days of hospice care. Terminally ill patients, when asked, most frequently express a desire not to die in the hospital.^{xxiii} However, patients receiving little or no hospice care receive more aggressive therapeutic interventions and spend considerably more time hospitalized during the end of their lives.

Exhibit 4



Source: Vizient Research Institute, analysis of Medicare claims, 2010-2013.

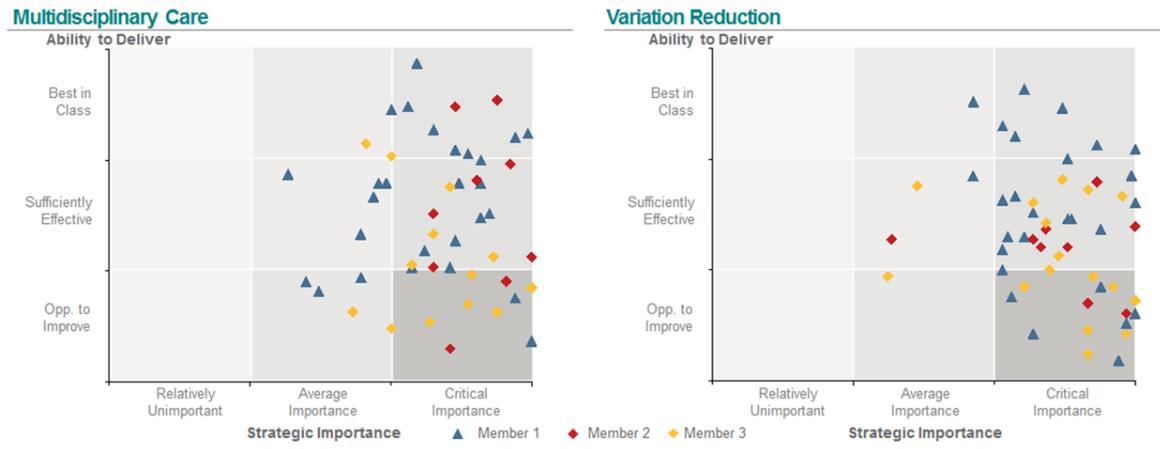
Market Consolidation Still Outpacing Care Coordination

The environmental changes on the horizon raise the stakes for health systems. Bargaining leverage, a traditional benefit of provider consolidation, becomes less important in an increasingly price-sensitive market for widely available, undifferentiated services. Managing a system becomes more important than expanding it when bundled payments introduce financial responsibility for unnecessary utilization. Tolerance for avoidable variation becomes costly when episode spending becomes the health system's money. Structural transactions remain relatively constant, averaging about 100 per year, but there has been a perceptible shift from mergers and acquisitions to joint ventures, affiliations, and partnerships.^{xxiv} Fifty-five percent of general acute care facilities were part of health systems in 2006. By 2015, that had grown to 64%, accounting for over three-fourths of all inpatient admissions, up from 65% ten years earlier.^{xxv} Meanwhile, the Federal Trade Commission cites a track record of price increases with no offsetting reduction in utilization when it challenges deals in court.^{xxvi} Scrutiny is intensifying on health systems to demonstrate measurable economic value to the buyers, both patients and payers. As shown in Exhibit 5, Vizient members consistently acknowledge the strategic importance of coordinating multidisciplinary care and reducing avoidable variation in utilization rates, but there is no consistent confidence in their ability to achieve it. After years of system formation and provider market consolidation, efficient and consistent care coordination appears to remain a largely unmet promise.

Exhibit 5

Historic emphasis on “doing deals” has left hard work of genuine system integration largely undone

Vizient members acknowledge strategic importance of coordinating multidisciplinary care and reducing variation...but are not consistently confident in ability to deliver



NOTE: “Variation Reduction” defined as the following capability areas: a.) Physicians hold each other accountable for adherence to evidence-based standards of care; and b.) Consistent patient care delivery and experiences provided across all health system locations among patients with similar clinical profiles. “Multidisciplinary Care” defined as the following capability areas: Physicians practice multidisciplinary team-based care (vs. siloed sub-specialty practice) for patients with serious illnesses.

Five Steps to Get Ready

Health systems can take a number of calculated, purposeful steps to avoid the risk of strategic snow blindness or being swept along a circular path in a wave of enthusiasm that ends not far from where we began. The best strategies are often uncomplicated. Here are five steps for health systems to consider when facing a less forgiving market.

1. Prepare for a shift in consumer demand for low cost/easy access alternatives for low acuity needs.

While there may be a generational shift coming as millennials redefine consumer expectations for low acuity care, the baby boomers are also embracing alternatives to the traditional brick and mortar delivery model. Retail clinics represent a more diffuse distribution of low acuity resources while remote/virtual encounters and technology lurk just over the horizon. Unless at least as much cost is eliminated from traditional delivery settings to offset incremental spending on retail clinics and remote/virtual care, the end result will be inflationary.

2. Anticipate intensification of commodity price compression.

The confluence of higher deductibles and price transparency makes commodity price compression nearly impossible to avoid. Ambulatory enterprises with high fixed costs must ensure unimpeded access to avoid turning away volume in what will become an increasingly competitive battleground. More effective

capacity management – ensuring that the planes are full most of the time – will be essential to economic survival in a price-sensitive market.

3. Prepare for scope risk – put PAC facility use under microscope.

Acute bundled prices will mean business as usual is no longer sustainable. Discharging patients to PAC facilities in order to free inpatient capacity for the next case will carry a price tag. Health systems must become more selective in which PAC facilities they use and much more careful about how often they use them. Communication and care coordination following discharge will become paramount. Managing, rather than owning the continuum of care will be the key to success.

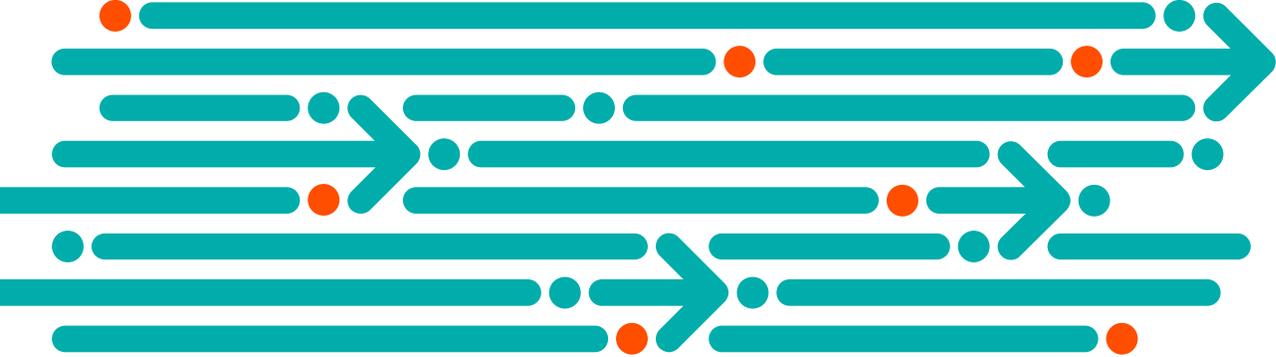
4. Accelerate the evolution of longitudinal risk from population spending targets to episodic payments.

Health systems would be wise to use their bargaining clout to move toward prospective episodic payments and away from commodity service price hikes. Higher allowed charges for commodity services will become a vulnerability as insurance deductibles continue to increase. Population spending targets are susceptible to random claims volatility and selection bias, either of which can doom a contract to failure before the game begins. Shared savings programs insulate insurers while exposing providers to significant downside risk and only questionable upside potential. Under prospective episode payments, top performers can generate margins that are higher than those traditionally realized under FFS payment systems while avoiding incidence risk.

5. Meet the unmet promise of chronic/complex care coordination.

Whether risk assumption comes in the form of population spending targets (e.g., ACOs) or prospective episodic payments, at the core of financial success are more efficient chronic/complex episodes of care. The evidence is in – patients receiving fragmented care cost significantly more than patients who receive the majority of their physician services from a single multispecialty group. Health systems must advance from talking about care management to delivering on the promise. The “three Cs” of a genuine group practice are essential components of success: communication, coordination, and consistency. It is not clear that a health system can achieve the efficiencies of a genuine group practice by merely aggregating horizontally or vertically; the ball is squarely in the health systems’ court to demonstrate that they can reduce variation and avoid unnecessary utilization.

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- ⁱ Kyle Bentle, "Visits to urgent care and retail clinics on the rise," Chicago Tribune, October 9, 2015, <http://www.chicagotribune.com/ct-visits-to-urgent-care-and-retail-clinics-on-the-rise-20151008-htmlstory.html>.
- ⁱⁱ Oliver Wyman, "The New Front Door to Healthcare is Here," 2016, <http://www.oliverwyman.com/content/dam/oliver-wyman/global/en/files/insights/health-life-sciences/2016/The%20new%20front%20door%20to%20healthcare%20is%20here.pdf>.
- ⁱⁱⁱ Oliver Wyman, "The New Front Door to Healthcare is Here," 2016, <http://www.oliverwyman.com/content/dam/oliver-wyman/global/en/files/insights/health-life-sciences/2016/The%20new%20front%20door%20to%20healthcare%20is%20here.pdf>.
- ^{iv} Health Care Cost Institute, "2013 Health Care Cost and Utilization Report," October 2014, <http://www.healthcostinstitute.org/2013-health-care-cost-and-utilization-report>.
- ^v IMS Institute for Healthcare Informatics, "Healthcare Spending Among Privately Insured Individuals Under Age 65," February 2012, http://www.imshealth.com/files/web/IMSH%20Institute/Reports/Healthcare%20Spending%20Among%20Age%2065/III_Spending_Report.pdf.
- ^{vi} Oliver Wyman, "The New Front Door to Healthcare is Here," 2016, <http://www.oliverwyman.com/content/dam/oliver-wyman/global/en/files/insights/health-life-sciences/2016/The%20new%20front%20door%20to%20healthcare%20is%20here.pdf>.
- ^{vii} Vizient Research Institute and Milliman, analysis of commercial claims, 2011.
- ^{viii} Kaiser Family Foundation and Health Research & Educational Trust, "2015 Employer Health Benefits Survey Report," 2015, <http://files.kff.org/attachment/report-2015-employer-health-benefits-survey>.
- ^{ix} Kaiser Family Foundation, "Marketplace Enrollment by Metal Level," December 31, 2015, <http://kff.org/health-reform/state-indicator/marketplace-enrollment-by-metal-level/>.
- ^x Truven Health Analytics, "The Impact of Consumer-Directed Health Plans on Costs, Utilization, and Care," April 2015, <http://truvenhealth.com/portals/0/assets/consumer-directed-health-plans.pdf>.
- ^{xi} Vizient Research Institute and Milliman, analysis of commercial claims, 2012.
- ^{xii} Health Care Cost Institute, "Spending on Shoppable Services in Health Care," March 2016, http://www.healthcostinstitute.org/files/Shoppable%20Services%20IB%203.2.16_0.pdf.
- ^{xiii} Vizient Research Institute, analysis of Medicare claims, 2010-2013.
- ^{xiv} Vizient Research Institute and Milliman, analysis of Medicare and commercial claims, 2009-2011.
- ^{xv} University HealthSystem Consortium, "Accountable Care Organizations: A Measured View for Academic Medical Centers," May 2011.
- ^{xvi} University HealthSystem Consortium, "Accountable Care Organizations: A Measured View for Academic Medical Centers," May 2011.
- ^{xvii} Vizient Research Institute, analysis of Medicare claims, 2009-2012.
- ^{xviii} Centers for Medicare & Medicaid Services, 2014 Annual Quality and Resource Use Report, September 2015.
- ^{xix} Vizient Research Institute and Milliman, analysis of Medicare claims, 2009-2010.
- ^{xx} Vizient Research Institute, analysis of Medicare claims, 2010-2013.
- ^{xxi} America's Health Insurance Plans, "Specialty Drugs: Issues and Challenges," July 2015, https://www.ahip.org/wp-content/uploads/2015/07/IssueBrief_SpecialtyDrugs_7.9.15.pdf.
- ^{xxii} Vizient Research Institute, analysis of Medicare claims, 2010-2013.
- ^{xxiii} Irene J. Higginson and G.J. Sen-Gupta, "Place of care in advanced cancer: a qualitative systematic literature review of patient preferences," *Journal of Palliative Medicine* 3 (2000): 287-300.
- ^{xxiv} Dan Diamond, "Hospital Mergers Are Out. 'Strategic Alliances' Are In. Is Obamacare Responsible?" *California Healthline*, July 30, 2014, <http://californiahealthline.org/news/hospital-mergers-are-out-strategic-alliances-are-in-is-obamacare-responsible/>
- ^{xxv} American Hospital Association (AHA) Data Viewer, accessed May 1, 2016.
- ^{xxvi} Robert Pear, "FTC Wary of Mergers by Hospitals," *New York Times*, September 17, 2014, http://www.nytimes.com/2014/09/18/business/ftc-wary-of-mergers-by-hospitals-.html?_r=1



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