

WHAT IS DRIVING TOTAL COST OF CARE?

An Analysis of Factors Influencing Total Cost of Care in U.S. Healthcare Markets

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EXECUTIVE SUMMARY

■ EXECUTIVE SUMMARY

In a combined quantitative and qualitative analysis of factors that may be influencing total cost of care in healthcare markets across the United States, researchers from the Healthcare Financial Management Association (HFMA), Leavitt Partners, and McManis Consulting found that:

- **The penetration of population-based value-based payment (VBP) models is not yet having an impact on curbing growth in total cost of care.** The efficacy of these models in reducing growth in total cost of care has not yet been proven, however, as even in markets where these models are more prevalent, most models do not yet incorporate sufficient financial incentives to impact care delivery significantly.
- **Although more time and evidence are needed to prove the efficacy of population-based VBP models, there are other models that may be more appropriate for different populations.** Alternative VBP models of interest to stakeholders interviewed for this study include episode-based payments, reference-based pricing, on-site health centers for employers and their employees, consumer-driven models tied to more effective transparency tools, and models that target the needs of specific patient populations.
- **The question of “what type” of competition may be more important than “how much” competition.** Lower-cost markets appear to benefit from competition among healthcare systems with well-organized provider networks and geographic coverage across their market. Health plan competition also appears to be a significant factor, especially with respect to encouraging innovation in payment models and plan design within a market.
- **Lower-cost markets also appear to benefit from organized mechanisms, including state-sponsored or endorsed reporting agencies and employer coalitions, for more transparent sharing of information on provider quality and costs.** Interviewees also believe that greater transparency of quality and cost information for consumers is necessary, while acknowledging that transparency tools that have been offered thus far have had limited impact.
- **Healthcare leaders across markets believe that further changes to payment and care delivery models are inevitable and will likely include value-based components.** In most markets, however, it is not yet clear what or who will be the catalyst to push further change.

Impact of Population-Based Value-Based Payment Models

A quantitative analysis of possible correlations between population-based VBP models and total cost of care found no statistically significant correlation during the period analyzed (2012-2014). A higher level of population-based VBP model penetration also had no statistically significant impact on quality outcomes.

In our qualitative analysis, several explanations for this lack of correlation emerged. They include:

- **The period studied was too early for effects on total cost of care to be realized.** Participation in programs such as the Medicare Shared Savings Program (MSSP) was just beginning during the 2012-2014 period of analysis, and reports of outcomes on performance under the MSSP model indicate that success in achieving shared savings often requires several years of participation in the program.
- **Few population-based VBP models offer significant incentives to manage total costs of care.** VBP contracts for most provider organizations interviewed for this study had upside risk only; very few organizations were yet taking on downside risk. Both health plans and provider organizations felt it was important to take an incremental approach to risk. The result, however, is that financial incentives are not in place for broad-scale changes to care delivery.
- **Incentives have not yet been aligned from the system level to the clinician level.** Across most provider organizations interviewed for this study, clinician compensation remains heavily reliant on productivity-based compensation. Within some physician practices, especially those focused on primary care, there was a sense that change was closer at hand and compensation metrics tied to quality, access, and patient panel size were being introduced.
- **Infrastructure costs can delay positive realization of a return on investment.** For organizations that are participating in population-based VBP models, the infrastructure costs for patient population analytics and care management can be significant and are likely to significantly offset any savings realized during early years in the models.

Given these considerations, the efficacy of population-based VBP models in containing growth in total cost of care has not yet been established. Financial incentives will have to strengthen considerably before the impact of these models can be proven.

Impact of Factors Related to Market Structure

The quantitative analysis identified 23 factors that had a statistically significant impact on variations in baseline total cost of care across local markets. Combined, these factors predicted 82 percent of the variation in baseline costs. The most significant factor in predicting baseline costs was the prevalence of chronic diseases within a local market. Other significant factors included hospital quality (including readmission rates and mortality rates), the percentage of costs related to inpatient care, factors relating to the physical environment, and socioeconomic conditions (including the prevalence of dual-eligible beneficiaries in the market and the proportion of individuals with insurance coverage). Cost of living also affected total cost of care, as a comparison of actual costs and standardized costs for the nine qualitative markets revealed.

These factors proved much less successful, however, in predicting variations in growth in total cost of care across local markets. Combined, they predicted just 27 percent of variation in growth, with the remaining 73 percent attributable to unknown factors. The significance of factors also shifted, with physical environment factors (including average daily maximum and minimum temperatures and metropolitan or micropolitan status) predicting more of the variation in cost growth than prevalence of chronic diseases.

The quantitative analysis also indicated that although health plan and hospital concentration had a statistically significant impact on predicting baseline total cost of care and growth in costs, the impact was relatively small compared to other factors. Market concentration could also have both negative and positive correlations with cost.

The qualitative analysis of nine markets also suggested that competition alone is not the answer: the question of “what type” of competition may be more important than “how much.” A comparison of the nine markets suggested that:

- **Costs were lower in markets with well-organized provider networks.** Sufficient consolidation had occurred in these markets to leave between two and four health systems with good geographic coverage competing within the market.

Physicians in these markets tended to be either employed by the health systems or be in close alignment with a system. Lower-cost markets also tended to have at least one integrated delivery system as a significant competitor in the market.

- **Markets that were less consolidated, or less aligned vertically, tended to be higher cost.** Independent specialty physician groups often competed directly with health systems in these markets, as did specialty surgical facilities or hospitals. Patient care also tended to be more vertically segmented in higher-cost markets, with higher, middle, and lower income groups receiving care from different provider networks.

The qualitative analysis also found that lower-cost markets had good mechanisms for sharing information among care purchasers. Organized employer coalitions or state reporting agencies dedicated to the exchange or public reporting of information on healthcare quality and costs were present in many of the lower-cost markets.

Other Findings

Other findings from the qualitative analysis indicate that:

- **Employers express concern about costs but are reluctant to adopt models that might be perceived as limiting employees' choice of providers.** As unemployment rates go down in most markets, employers are concerned about changing benefit designs that they see as important tools for the recruitment and retention of employees.
- **Payment pressures and pressures on physician practices continue to grow.** For most provider organizations in the nine qualitative study markets, government programs were paying for a steadily increasing percentage of patients. For physician practices, factors such as the costs of electronic health records and other technology, increasing administrative burdens, and pressures on payment rates were presenting significant challenges for small, independent physician practices.
- **The outlook for the Affordable Care Act is tenuous.** Several of the markets visited were not in Medicaid expansion states. The state exchanges in many of the markets were troubled, with high year-over-year premium increases and declining enrollments that affected risk pools for health plans on the exchanges.

Recommendations and Action Steps

Based on our findings, we recommend several key focuses moving forward that we believe could moderate growth in total cost of care.

- **Continue movement toward models that increase financial incentives to manage total cost of care and closely monitor the impacts of doing so.** Given our finding that VBP models may have penetrated *broadly* in some markets, but not *deeply* in most, we recommend that both government and commercial payers continue to experiment with models that increase incentives to make changes to care delivery models that could increase both the quality and cost-effectiveness of care. Experiments should continue with population-based VBP models but should not be confined exclusively to these models. It will be imperative to document the success or failure of VBP models in managing total cost of care to demonstrate the value of adopting these models more broadly.
- **Balance the benefits of competition with the benefits of integration.** Our qualitative research found that lower-cost markets had competition among a few health systems that were highly aligned with physician groups, whether employed or independent. We also found that that lower-cost markets had some degree of competition among health plans and that there was more innovation with payment and care delivery models in these markets.
- **Support more transparent sharing of information on healthcare cost and quality within markets.** Lower-cost markets in the qualitative study had organized mechanisms for the sharing of information on healthcare cost and quality, whether through employer coalitions, statewide reporting agencies, or both. Effective consumer transparency has proved more of a challenge, but there was widespread consensus that with the right tools and incentives, it could have a significant impact.

These recommendations have specific implications for policymakers, health plans, clinicians, health systems and hospitals, employers, and other community leaders. These implications are described in detail in the [“Recommendations and Action Steps”](#) section of the report.

INTRODUCTION

■ INTRODUCTION

Beginning in 2016, the Healthcare Financial Management Association (HFMA), Leavitt Partners, and McManis Consulting launched a study designed to:

- Validate the impact of population-based value-based payment (VBP) models on the total cost of care.
- Identify other market factors (such as clinical integration, quality of care, and market competitiveness) that may influence growth in the total cost of care.
- Describe the relationship of various organizational initiatives to growth in the total cost of care and to the presence or absence of other factors in the organizations' local market.
- Understand why organizations have chosen a particular transition path to VBP, what they are learning, and what financial and clinical changes they have implemented.

The study had two research components. The first research component comprised quantitative analyses of factors potentially influencing total cost of care in markets across the country. One analysis examined the impact of penetration of population-based VBP models, and a second examined other factors related to market structure. The second

research component was a qualitative study of nine geographically and demographically diverse markets across the country. The qualitative study was intended, first, to provide insights into the findings from the quantitative data analyses and, second, to understand how healthcare organizations and other community stakeholders respond to specific combinations of factors within their markets. Together, the two studies sought to provide a snapshot of how markets are evolving, and what the implications might be for policymakers, health systems, clinicians, health plans, employers, and other community leaders.

Combined, the quantitative analyses and qualitative found:

- **It is too early to judge the efficacy of population-based VBP models.** Even in markets where these models are more prevalent, most of these models do not yet incorporate sufficient financial incentives to impact care delivery significantly.
- **Other models may be better at managing costs for certain populations.** Even though more time and evidence are needed to prove the efficacy of population-based VBP models, there are other models that may be more appropriate for different populations.
- **Competition alone is not the answer.** While some degree of competition is important, it may be a less significant factor than has been assumed. A more important question might be market structure, with an emphasis on well-organized, vertically integrated health systems able to compete with a few other similarly organized systems across the geography of a given market.
- **Transparent information on cost and quality matters.** Lower-cost markets also appear to benefit from organized mechanisms, including state-sponsored or endorsed reporting agencies and employer coalitions, for more transparent sharing of information on provider quality and costs. Interviewees also believe that greater transparency of quality and cost information for consumers is necessary, while acknowledging that transparency tools that have been offered thus far have had limited impact.
- **Healthcare organization leaders anticipate further change.** Notwithstanding the current absence of local catalysts in many markets, most healthcare organization leaders agree that further changes to payment and care delivery models are inevitable, particularly in Medicare and Medicaid programs, and will likely include value-based components. Less clear is when and how far different markets will shift.

TOTAL COST OF CARE

Total cost of care can have two different meanings. First, there is the total cost of *producing* care, i.e., the direct and indirect costs that healthcare providers incur to deliver healthcare services (including costs of labor, supplies, facilities, etc.). Second, there is the total cost of *purchasing* care, i.e., the amount spent by consumers, employers, health plans, and other care purchasers on healthcare services. Obviously, the total cost of producing care is one of the most significant factors in the total cost of purchasing care, but other factors, including competition within a market, utilization patterns, and population health status, can also influence the cost of purchasing care within a given market. The quantitative analysis for this study focuses on factors that might be influencing the total cost of purchasing care on a per-beneficiary basis for Medicare costs or per-member basis for commercial health plan costs.

ABOUT THE NINE MARKETS IN THE QUALITATIVE STUDY

The markets for the qualitative study included Baton Rouge, Louisiana; Billings, Montana; Grand Rapids, Michigan; Huntsville, Alabama; Los Angeles, California; Minneapolis/St. Paul, Minnesota; Oklahoma City, Oklahoma; Portland, Maine; and Portland, Oregon. Although there were many differences between these markets, there were also some common patterns seen across them all.

- **An erosion in commercial payments.** For most providers in these markets, government programs were paying for a steadily increasing percentage of patients. In some markets, this was driven by an aging demographic moving into Medicare. In others, growth in Medicaid populations was outpacing growth in commercially insured patients. Across markets, provider organizations were seeing significantly constrained opportunities to negotiate higher rates with commercial health plans to offset slim margins or payments below cost from government programs.
- **Pressures on physician practices.** The days of the small independent physician practice are virtually over in most of these markets. Physicians entering practice today have two choices: large physician practices or employment by a health system. Among the factors cited for this trend were the costs of electronic health records and other technology, increasing administrative burdens (including documentation, reporting, and coding requirements), pressures on payment rates, and in more rural markets, the challenges of setting up an independent practice in areas with limited cultural opportunities or career opportunities for spouses.
- **A tenuous outlook for the Affordable Care Act.** Several of the markets visited were not in Medicaid expansion states, which meant that provider organizations in these states “got only half of the Affordable Care Act apple.” The state exchanges in many of the markets were troubled, with high year-over-year premium increases and declining enrollments that left health plans on the exchanges dealing with “the sickest of the sick.” In several markets, interviewees predicted failure of the exchanges as carriers decide they should simply withdraw.
- **VBP models that vary in breadth across markets, but not in depth.** The penetration of population-based

VBP models ranged, in terms of percentage of population covered, from virtually none in Huntsville, Alabama, to more than 40 percent in Portland, Maine. But regardless of how many patients were attributed to population-based VBP models, in no markets was the term “significant downside risk” applicable—in other words, very few models required that providers refund a significant portion of costs that exceeded the budgeted costs for the attributed population. The quantitative research for this project found no correlation between penetration of population-based VBP models and total cost of care; this lack of depth in the sense of significant financial incentives to maintain or decrease total cost of care is one of several hypotheses that help explain the insignificant impact of population-based VBP models to date.

- **Factors that outweigh cost in care purchasing decisions.** Although the high costs of health care were frequently raised in interviews, cost does not appear to be the driving factor for many care purchaser decisions. This is especially true for employer-sponsored plans. Employers in most of the markets are reluctant to change benefit design or opt for health plans that might be perceived as limiting their employees’ choice of provider. This reluctance has increased as unemployment rates have gone down and employers are more concerned with recruiting and retaining talent. Employers are more interested in payment models that offer price predictability, such as bundled payments or reference-based pricing. For consumers with insurance, convenience, choice, and brand reputation often outweigh cost. Significant exceptions to this pattern lie within individual markets and within state Medicaid programs.

Beyond these commonalities, however, our qualitative research confirmed the maxim, “all health care is local.” Differences in market structure, local culture and politics, and geography and demography are real, and suggest that different markets will evolve at different rates, using different approaches, and potentially with different end goals in sight.

[For more information on the nine markets, see the “About the Study” appendix to this report.](#)

**IMPACT OF
POPULATION-BASED
VALUE-BASED PAYMENT
MODELS ON TOTAL
COST OF CARE**

■ IMPACT OF POPULATION-BASED VALUE-BASED PAYMENT MODELS ON TOTAL COST OF CARE

The first quantitative analysis looked at possible correlations between penetration of population-based VBP models and total cost of care. Data on penetration of these models was drawn from Leavitt Partners' database of publicly announced population-based VBP models: models, both governmental and commercial, for which a provider is at risk for total cost of care of an attributed population (in most cases, these are accountable care organizations, or ACOs). In the period analyzed (2012-2014), there was no statistically significant correlation between penetration of population-based VBP models and lower growth in the total cost of care across local markets. A higher level of population-based VBP penetration also had no significant impact on quality of care outcomes.

Because the Leavitt Partners database tracks only population-based VBP models, the analysis did not account for the influence of other VBP models such as bundled payment (in which the provider and payer agree to a price for a bundle of services across an episode of care). But discussions with health plans and providers in the nine site visit markets suggested additional reasons why penetration of population-based VBP models would not yet be having an impact on total cost of care within the years studied. These reasons include:

- The period studied for the quantitative analysis was too early for the effects on total cost of care to be realized.
- To the extent population-based VBP models were present, few entailed significant incentives for the provider organization to manage total cost of care.
- Incentives have not been aligned from the system level to the clinician level.
- There is a time lag between initial investments in infrastructure and the realization of positive returns on investment.

Several interviewees also expressed skepticism about the value of population-based, accountable care structures as a vehicle for managing total cost of care. These concerns are discussed in the [“Alternatives to Population-Based Value-Based Payment Models”](#) section of this report.

Most of the population-based VBP models available today “are just fee-for-service in disguise.”

The period studied was too early for effects on total cost of care to be realized.

The quantitative analysis used data from January 1, 2012, through December 31, 2014. While there are now 480 ACOs participating in the Medicare Shared Savings Program (MSSP), the largest of the Medicare ACO programs, only a fraction of this number were started during 2012 (65 total), the first year of the program. While numbers increased over the remainder of the data period, less than half of the current total were active by the end of 2014 (207 total).¹ Even in 2017, with 480 active MSSP ACOs, only 9 million Medicare beneficiaries were attributed to an MSSP patient population, just over 15 percent of the 55.5 million beneficiaries nationally.

When looking more broadly across population-based VBP models that held provider organizations responsible for total cost of care of an attributed population—including both government and commercial models—the story is very much the same. Nationally, only 1.7 percent of patients were attributed to such models at the beginning of 2012, and that number had risen to only 5.6 percent by the end of 2014. Within the nine markets visited for the qualitative study, these numbers were even lower in three of the nine markets visited (Baton Rouge, Huntsville, and Oklahoma City), with less than 1 percent of patients attributed to population-based VBP models throughout most of the period analyzed.

The fact that many ACOs were just getting started during the period analyzed is significant because studies of ACO performance have indicated that length of time in the program correlates with the ability to generate savings. An analysis by the Accountable Care Learning Collaborative of Center for Medicare & Medicaid Services (CMS) data on the MSSP for the 2015 performance year found that only about 20 percent of ACOs were able to generate savings after one year in the program, while approximately 50 percent of those that had been in the program for four years were able to generate savings.²

In markets that already had low total costs of care, there were questions as to whether significant savings were even available, regardless of length of time in an accountable care program. An interviewee in Portland, Maine, noted their ACO had very low benchmarking in the MSSP initiative, “which makes it harder to see opportunities to improve. We feel undercompensated and punished for historical performance as a relatively low-cost Medicare provider.” Similarly, an interviewee in Montana commented that “many hospitals in the state are already starting at a relatively low-cost level, with low readmission levels as well,

leaving little room to go in producing further savings.” In other words, length of time may correlate generally with improved savings opportunities, but those opportunities also depend on the amount of savings that is available within a specific market.

Few population-based VBP models offered significant incentives for providers to manage total cost of care.

Although the breadth of penetration of population-based VBP models across markets varies significantly, the depth of penetration does not: few models have financial incentives that are significant enough to justify major investments in changes to care delivery.

This study defined population-based VBP models as those for which a provider was at risk for the total cost of care of a patient population. But this definition comprises models for which there is upside risk only (i.e., the provider receives additional payments if certain quality or cost targets are met, but is not required to refund money if costs exceed a targeted budget). Even when a model might include downside risk, requiring a provider to refund a portion of costs that exceed budgeted costs for the attributed population, that risk could be (and in our qualitative study typically proved to be) minimal. In the words of one interviewee, most of the population-based VBP models available today “are just fee-for-service in disguise.”

Looking again at current data for the MSSP program, more than 90 percent of the 480 ACOs participating in the program as of 2017 are in Track One of the program (i.e., they have one-sided, or “upside,” risk only). The Center for Medicare & Medicaid Innovation (CMMI) has introduced more advanced ACO programs, including the Pioneer ACO and Next Generation ACO, that require provider organizations to take downside risk, but the number of participating organizations in these models is quite low. (Only eight organizations remained in the Pioneer ACO program, while just over 40 were enrolled in the Next Generation ACO program at the time this report was published.)

In the qualitative study, there was no organization that claimed significant exposure to downside risk. An interviewee at one health system in the Minneapolis/St. Paul market, which has a higher penetration of population-based VBP models than most of the markets we visited, believed that “incentives in value-based payment arrangements are now big enough to change care delivery for specific patient groups, but not big enough to focus on big topics like procedure utilization.” In Portland,

Clinicians do not need to get bogged down in the details of specific payment arrangements, but they do need to understand the imperative for changes in care delivery and have a “big picture” sense of how the system is faring financially.

Maine—another market that had a significantly higher-than-average penetration of population-based VBP models—an ACO that had 17 value-based contracts had exposure to “real downside risk” in just two of those 17 contracts (including a contract for the sponsoring health system’s own self-funded employee health plan).

Both provider organizations and health plans felt it was important to take an incremental approach to risk. A health plan interviewee noted that “many providers are not yet ready to jump to full risk. We will start with upside-only risk contracts, see how it goes, and then move to fuller risk if appropriate.” On the health system side, a comment representative of what we heard at many health systems was, “our negotiations are very much driven by our perception of how much risk we are willing to take. To date, we have been wary on risk and are focused on incremental change.”

Interviewees were also divided on who within the healthcare system should ultimately bear risk for VBP models, as well as the value of taking on risk. In the Los Angeles market, risk has long been located with large, capitated physician groups, which one health system interviewee said, “has had a profound impact on the nature and exchange of the hospital industry in Los Angeles, driving the fortune of hospitals that didn’t have a strategy or a position to resist by, for example, reducing their dependence on referrals from these physician groups.” An interviewee at a skilled nursing and assisted living system noted that when physicians hold risk, “they tend to be more assertive in their demands on partners.”

In other markets, there was resistance to locating risk with physicians (or at least with certain types of physician, particularly primary care). A health plan interviewee in Montana believed that putting risk on physicians does not change costs as much as access: “How much do we want physicians adjusting utilization because they are taking a compensation hit?”

As noted above, health systems are taking a cautious, incremental approach to risk. But some had taken on downside risk, either voluntarily or as part of a program mandate. In Oklahoma City, which was one of the markets selected for CMMI's mandatory Comprehensive Care for Joint Replacement (CJR) bundled payment pilot, a health system interviewee expressed his discomfort with that program's placement of risk for the bundled payments "entirely on the hospital, which controls very little of the activity covered by the bundle—including physician services and post-acute care." But another interviewee at the same system described mandatory participation in the CJR program as a positive catalyst: "It has allowed for more conversations about implants, and it has also been an impetus for conversations with post-acute providers, which is good."

Others see participation in population-based VBP models as an active choice to learn how to improve care delivery, despite potentially negative short-term impacts on revenue. A health system interviewee in Portland, Maine, noted that his organization had participated in CMMI's Pioneer ACO Program and is now in the Next Generation ACO program, both of which include downside risk. Although the organization "lost money in the Pioneer ACO program, it didn't want to drop out because it saw it as a vehicle for driving care delivery change." In the Minneapolis/St. Paul market, a health system interviewee said that "if the system were making short-term decisions, no plan would be offering enough for us to change a thing. The efforts we are making are more an act of will." But they participated in the Pioneer ACO and the Next Generation ACO programs, which "have been more rewarding because the populations are more amenable to care management." The programs "offer an opportunity to learn to do things right and then spread that knowledge to other populations." One lesson learned already is that "a paradoxical barrier to population management is that there has been an historic aversion to the idea of providing differing levels of care based on insurance status."

"In what remains a predominantly fee-for-service world, the value of care management comes from relieving some of the burden on primary care physicians so they can see more patients."

What these discussions of risk suggest is that, in the few programs and markets where some level of downside risk has been assumed, it can drive change in organizational behavior and care delivery.

Incentives have not been aligned from the system level to the clinician level.

In our interviews with health systems and physician practices, we asked about current models for physician compensation. And as an indication of the continuing predominance of fee-for-service payment, we heard that physician compensation remains heavily reliant on productivity-based compensation across provider organizations. This also points to the lack of impact that population-based VBP models have had on total cost of care—physicians are still being compensated primarily on volume, not on the quality or efficiency of the care delivered. But as exposure to these models deepens, some of these organizations are beginning to discuss changes to their compensation structure.

One health system that was deliberately, if incrementally, moving toward population-based VBP contracts noted that its compensation model had not yet been designed around population management: it simply had not reached a level where such a change would make sense. Within some physician practices, especially those focused on primary care, there was a sense that change was closer at hand. One group had begun tying a portion of physician compensation to quality, access, and patient panel size. The group also employed a substantial number of advanced clinical practitioners, including nurse practitioners and physician assistants, and had made half of their time non-productivity based so they could manage patient panels and keep costs of care down.

When we interviewed health systems, we also asked how aware their clinicians were of the various payment models that system was piloting, and whether it was important for clinicians to know the details of these payment models. The answer to this question was consistent across health systems: clinicians do not need to get bogged down in the details of specific payment arrangements, but they do need to understand the imperative for changes in care delivery and have a "big picture" sense of how the system is faring financially. Several health system interviewees emphasized that, regardless of payment structure, physicians needed to maintain a consistent focus on what is best for the patient. Another emphasized the importance of focusing on data that showed internal variation among practices within the system, and among referral partners. Again, this was not tied to specifics of payment method, but

was instead an effort to get clinicians thinking consistently about quality and cost and how it might contribute to shared decision making with patients. In some instances, this system would put a flag in the electronic health record for patients who were in programs for which specific waivers were in place (for example, the Next Generation ACO's waiver of the rule requiring a three-day inpatient stay before discharge to a skilled nursing facility) because "you want to focus the clinician's attention on where there are specific things you want them to do."

In one market where virtually no VBP contracts were in place, the health system was still emphasizing that it needed clinicians

[w]ho can follow the cheese when it moves. We tell the physicians not to worry whether we are paid for something today; think about where the cheese is going. Act like you're in a different market. We want to get to the right of the bell curve, and we need to do the right stuff all the time. This is a zero sum game; if you're an early adopter, you're going to win. If your scores are bad on quality metrics, for example, it takes at least two years to get those scores up.

Infrastructure costs delay realization of a positive ROI.

For organizations that are participating in VBP models, the infrastructure costs for patient population analytics and care management can be significant and are likely to significantly offset any savings realized during early years in the models. One analysis found that most participants in the MSSP would need more than three years to recoup the investments required to participate in the program.³ As an example of the investment required, care management for 60,000 lives in a risk-based insurance product in the Portland, Oregon, market included \$1.5 million spent annually in fees for care management technology, as well as between \$3.5 million and \$4 million in labor and other related costs: a total spend rate of approximately \$6 million annually for 60,000 lives.

Inadequate funding for infrastructure, combined with spending to assist physicians who are feeling the weight of "program fatigue," has a particularly significant impact on physician practices that do not have the financial reserves of larger health systems. A multispecialty physician practice in Portland, Oregon, is experimenting with the use of scribes in examination rooms to assist with documentation and give physicians more face-to-face time with patients. It hopes that the costs of the scribe services will be offset by physician productivity gains. A primary care practice in Minneapolis/St. Paul notes that its biggest risk point right

"CMS moves too slowly. To the extent provider groups moved early, they are now licking their wounds. Why take a higher level of risk when there are seemingly no gains to be made?"

now is its electronic health record. They are seeing a decline in service from their current vendor, but do not feel they can afford to invest in a significant upgrade unless they align with a system.

At the same time, some interviewees were beginning to see positive return on care management investments, although these returns sometimes came from sources other than shared savings derived from participation in a population-based VBP model. An interviewee at a Grand Rapids health system noted that "in what remains a predominantly fee-for-service world, the value of care management comes from relieving some of the burden on primary care physicians so they can see more patients." Having a registered nurse (RN) assigned to practices allowed physicians to see four or five additional patients each day, as the RN took over such duties as Family and Medical Leave Act paperwork renewals and suture removals. The RNs also will be given "triage power" to put same-day patients on the schedule without consulting physicians. For attributed patients in VBP models, this helps create the "stickiness" needed to keep patients in the health system's population. Looking forward to more population-based approaches, this interviewee also believed that an appropriate support team would enable a primary care physician to handle a patient population of between 3,500 and 5,000 patients.

Nonetheless, the overall impact of infrastructure and care management investments on the realization of positive gain under VBP models was summed up by a health system interviewee in Portland, Maine. He noted that there are many investments made under risk-based models that are not reflected in the claim: "There need to be more CPT codes for interventions that reduce the cost of care, but CMS moves too slowly. To the extent provider groups moved early, they are now licking their wounds. Why take a higher level of risk when there are seemingly no gains to be made?"

IMPACT OF MARKET STRUCTURE ON TOTAL COST OF CARE

■ IMPACT OF MARKET STRUCTURE ON TOTAL COST OF CARE

A second quantitative analysis, in this case focused on Medicare costs only, analyzed the impact of a wide range of market variables on both baseline costs and cost growth across local markets. The analysis identified 23 variables that, combined, predicted 82 percent of the variation in baseline costs across local markets (see Figure 1).

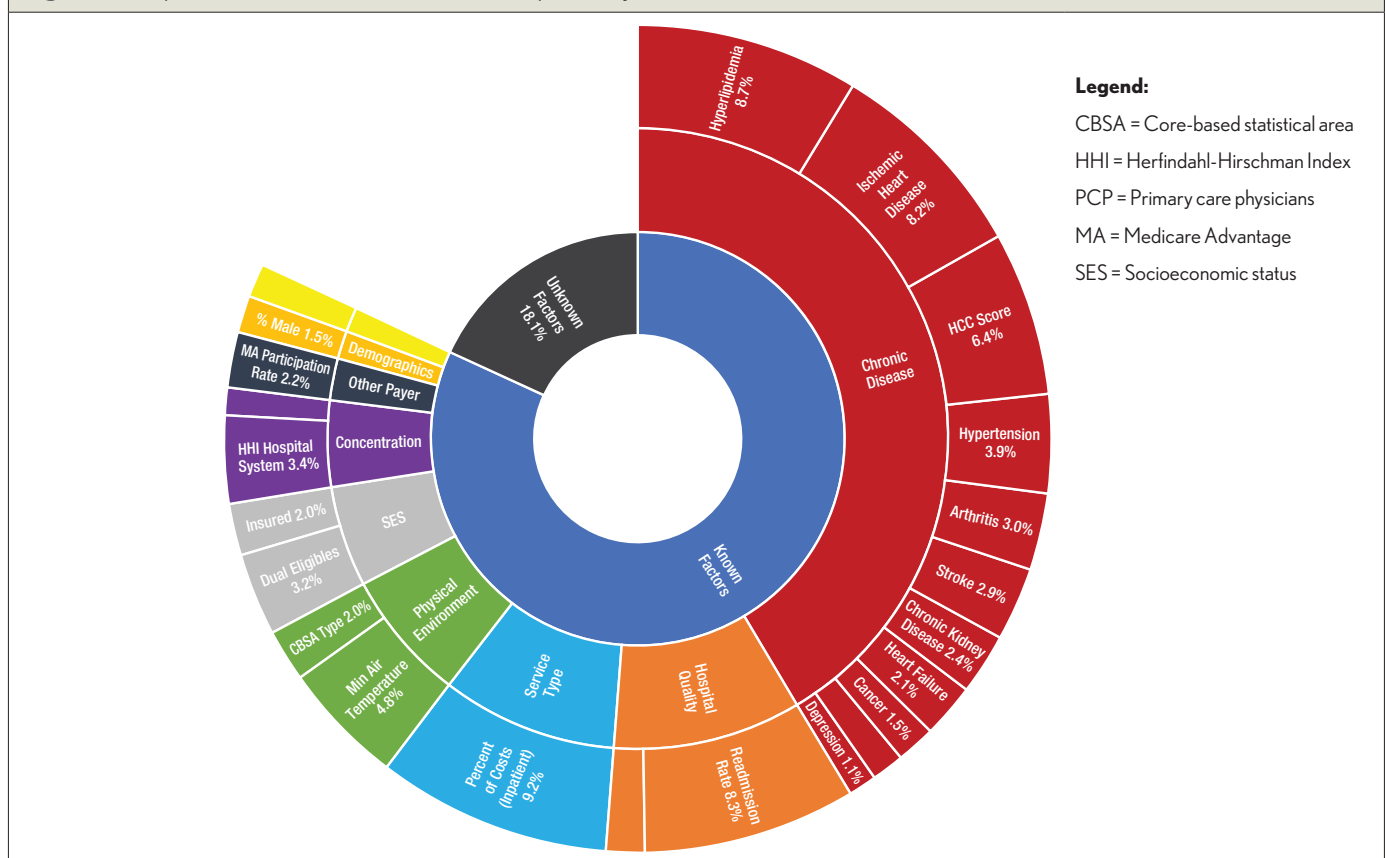
As Figure 1 shows, prevalence of chronic disease within a local market was the most significant predictor of variations in baseline costs. Ten of 14 chronic disease areas analyzed had a significant impact on costs, with eight having a positive association (i.e., a higher prevalence correlating with higher costs) and two having a negative association (i.e., a higher prevalence associated with lower costs, here hyperlipidemia and osteoporosis).

The impact of socioeconomic status factors on baseline costs was also significant. Two variables—the prevalence of dual eligible beneficiaries and the proportion of individuals with insurance coverage—were significant, and in both cases a higher prevalence or proportion was associated with lower baseline costs.

Health plan and provider market concentration had differing impacts on variations in baseline costs. Higher concentration (i.e., less competition) among health plans correlated with marginally higher costs, but higher concentration among hospital systems correlated with lower baseline costs (see Figure 1). The impact of market concentration was reversed when looking at cost growth—that is, higher health plan concentration resulted in slightly lower cost growth, while higher hospital system concentration resulted in slightly higher cost growth—but the impact of both factors combined on cost growth was small in comparison with other factors (see Figure 2).

In some cases, a correlation between an individual factor and lower baseline costs would not be a desirable outcome. For example, in the area of hospital quality, higher mortality rates correlated with lower costs of care, presumably because once a patient has died, costs of care fall off dramatically. In the same area of hospital quality, however, higher readmission rates correlate with higher costs of care, and would be an appropriate target for improvement.

Figure 1: Proportion of Variance in Baseline Costs Explained by Model



While the variables analyzed in the study were able to predict more than 80 percent of the variance in baseline costs, they were significantly less able to predict cost growth (see Figure 2). The known factors that had a statistically significant impact explained just under 27 percent of cost growth, with “unknown factors” representing roughly 73 percent of growth. Notably, the significance of certain factors in predicting cost growth shifted from the significance in predicting baseline costs. For example, “physical environment” factors (average daily maximum and minimum temperatures; metropolitan vs. micropolitan status) were more significant than prevalence of chronic diseases.

Although the quantitative analysis indicates that no single factor has a highly significant impact on growth in total cost of care, the qualitative analysis did find some similarities and differences among the nine markets studied that might help explain why these markets fell into lower-cost or higher-cost clusters. In analyzing actual total cost of care across the nine markets, the lower-cost cluster included Billings,

Grand Rapids, Minneapolis/St. Paul, and Portland, Oregon, with Huntsville and Portland, Maine, coming in as very close seconds. At the higher-cost end of the scale were Baton Rouge, Los Angeles, and Oklahoma City (see Figure 3). One significant factor that explains some cost differentials among the site visit markets is differences in cost of living. The impact of this factor is especially pronounced in the Los Angeles market. When costs across the nine markets are standardized to account for cost of living, Los Angeles remains a higher-cost Medicare market, but is much closer to the lower-cost markets for commercial costs (see Figure 4).⁴

It is important to note that the nine markets visited for the qualitative study represent a very small sample size. Nonetheless, there were significant similarities between markets in different clusters, and significant differences between clusters, and these similarities and differences aligned with some of the quantitative factors that helped to predict variance in baseline costs, if not cost growth.

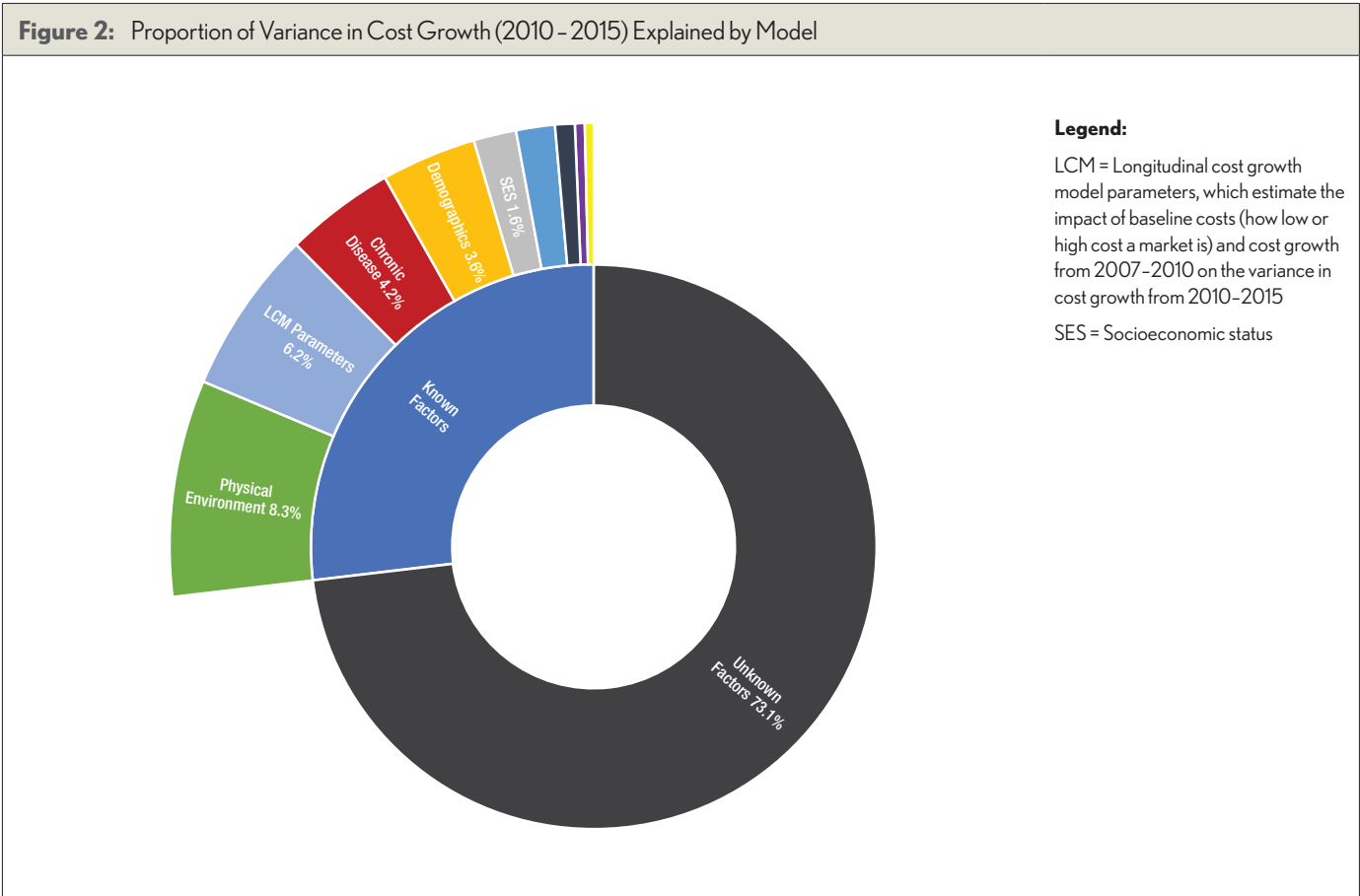


Figure 3: Actual Medicare and Commercial Costs Across Nine Site Visit Markets for 2014

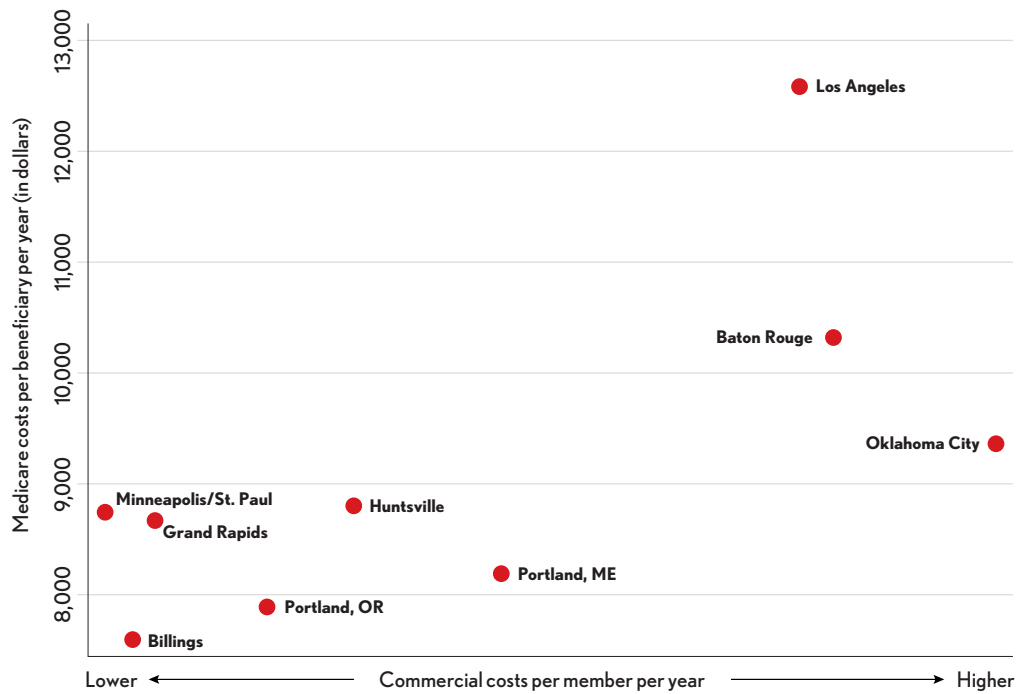
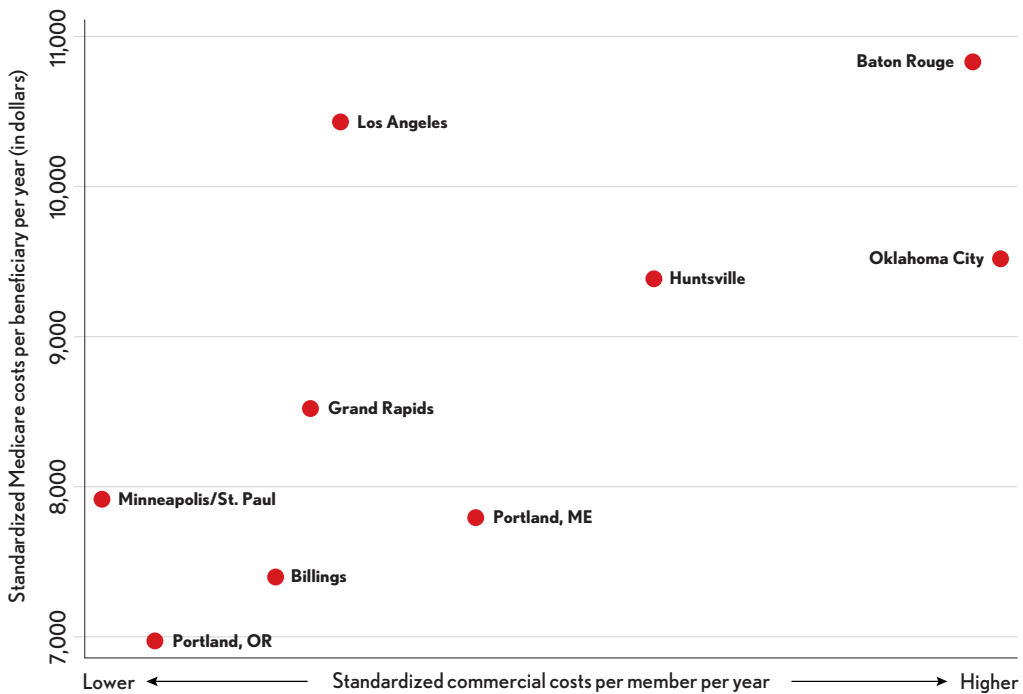


Figure 4: Standardized Medicare and Commercial Costs Across Nine Site Visit Markets for 2014



Comparing similarities and differences between lower- and higher-cost markets, we noticed three significant distinctions:

- **Costs were lower in markets with well-organized provider networks.** The quantitative analysis indicated that hospital system concentration had minor impacts on baseline costs of care or cost growth and was in fact associated with slightly lower baseline costs. While this is not an argument for monopolies (and all interviewees agreed that competition in a market is beneficial), it does suggest that the competitive structure of markets might merit closer attention. In most of the lower-cost markets in this study, sufficient consolidation has occurred to leave between two and four health systems with good geographic coverage competing within the market. Physicians in these markets tend to be either employed by the health systems or be in close alignment with a system. Some of these networks could be tracked back to the 1990s, when networks were formed to accept risk under managed-care models, but most have grown or changed in the intervening decades, often because of consolidation (both within health systems and physician practices). Notably, lower-cost markets in the study typically had at least one integrated delivery system as a competitor (the Billings Clinic in Billings; Spectrum Health in Grand Rapids; HealthPartners in Minneapolis/St. Paul; and Providence Health & Services and Kaiser-Permanente in Portland, Oregon), suggesting that integrated delivery systems may have a “spillover effect” on other healthcare organizations in their markets.
- **Markets that are less consolidated, or less aligned vertically, tend to be higher cost.** In contrast, in the higher-cost markets there are large numbers of provider groups compared to the size of the population. Independent specialty physician groups compete directly with health systems, and often own specialty surgical facilities or hospitals. There appear to be important distinctions between specialty physician groups and multispecialty groups; multispecialty groups appear much more interested in managing total cost of care and were notably more willing to participate in interviews for this study. Patient care also tends to be more vertically segmented in higher-cost markets, with higher, middle, and lower income groups receiving care from different provider networks.
- **Lower-cost markets had good mechanisms for sharing information among care purchasers.** Organized employer coalitions or state reporting agencies dedicated to the exchange or public reporting of information on healthcare quality and costs are

present in many of the lower-cost markets (including Minneapolis/St. Paul, Portland, Oregon, and Portland, Maine). In Billings, employers have worked closely with third-party administrators (TPAs) and consulting firms to understand costs of care across providers. In addition, the largest health plan in Montana has run a patient-centered medical home initiative since 2009 with required reporting on five chronic conditions and 28 metrics, with annual payments tied to achievement of metric benchmarks. Across the markets, the focus has been more on quality than cost of care, but as the quantitative analysis suggests, higher quality is predictive of lower baseline costs.

The value of integration

Notable among lower-cost markets was the presence of integrated delivery systems (Billings, Grand Rapids, Minneapolis/St. Paul, and Portland, Oregon). Consolidation had also occurred (or was occurring) within these markets, leaving between two to four systems with geographic coverage across the market and either employed or highly aligned physician practices. On the other hand, the more highly competitive and less integrated markets—Baton Rouge, Oklahoma City, and Los Angeles—tended to be higher cost.

There was no question among interviewees that competition was a positive factor in a marketplace; the more interesting questions are how much and what type of competition have the greatest impact on total cost of care.

On the question of “how much competition,” the answer might be “not very much.” In Montana, the Billings market is one of only two markets across the state in which there are two competing health systems (the other market is Missoula), and there was consensus across both health plans and employers that it was a highly competitive market (although the competition was not always focused on reducing cost). The Minneapolis/St. Paul market has witnessed significant consolidation among healthcare organizations in recent years but was viewed as clearly the most competitive and lowest cost market in the state, where smaller metropolitan areas outside the Twin Cities have just one or two health systems. Competition within the Minneapolis/St. Paul market is further heightened by the Mayo Clinic, which has a small presence with the metropolitan area but is headquartered just 90 miles away. Price competition with the Mayo Clinic within the Twin Cities was particularly intense for tertiary and quaternary services for which individuals might be willing to travel.

The influence of an integrated delivery system model within the lower-cost markets also appears to contribute to a more cost-conscious culture of care delivery. An interviewee in the Portland, Oregon, market noted that utilization of hospital beds in Oregon trends very low—typically 49th or 50th among the states. Some attribute this to the long presence of Kaiser Permanente in the state, although an interviewee at a Portland health system thought that the “Kaiser impact” may be less in Portland than in other markets. The same interviewee noted, however, that Portland health systems had been very effective with managed care in the 1990s.

In Billings, both health plans and employers saw real value in the integrated care delivery model at the Billings Clinic. One health plan interviewee said, “You can really track patients and outcomes, and from a payer perspective, you can more easily address the whole system of care.” An employer interviewee believed that “there is more value in an integrated delivery model, especially for the patient. If patients are sent to multiple locations and are encouraged to ‘doctor shop,’ they lose consistency of care.”

The impact of managed care

Some lower-cost markets also had long histories of managing care through organized care delivery networks. A Portland, Oregon, health system interviewee said that organizations in the market had been very effective with managed care in the 1990s, and interviewees at a Portland physician practice noted that 80 percent of their business had been capitated in the 1980s and 1990s. (The practice had just terminated its last capitated contract within the past year.) A health system interviewee in Grand Rapids observed that the market had significant experience with HMOs in the 1980s, and the backlash to HMOs had not been as severe in Grand Rapids as in other markets. The state Medicaid plan has continued to use an HMO structure, and Medicare Advantage plans represent about 50 percent of the Medicare market. In addition, “there have been organized physician groups working on quality metrics for many years.” An interviewee at another health system noted that the market had run at lower cost than the national average for at least 20 to 25 years.

As the quantitative analysis indicated, however, experience with managed care cannot be singled out as a factor that significantly influences total cost of care. The three markets with the greatest penetration of managed care do have comparatively lower total cost of care on the commercial side (Grand Rapids, Portland, Oregon, and Los Angeles). But Minneapolis/St. Paul, with a managed care

penetration of just over 20 percent (half or less of Los Angeles or Portland, Oregon) also has comparatively low costs. Oklahoma City and Portland, Maine, have a significantly higher penetration of managed care than Billings or Minneapolis/St. Paul, but also have higher commercial costs (See Figure 5). Variations are even more pronounced on the Medicare side. Here, Los Angeles and Portland, Oregon, the two markets with the highest penetration of managed care, have among the highest (Los Angeles) and lowest (Portland, Oregon) total per-beneficiary costs (See Figure 6).

The potential costs of competition

By contrast, in less integrated, higher-cost markets, there was often intense competition. But there also appeared to be less focus on utilization, which could be a factor driving higher total cost of care. A recent report on the Oklahoma City market had identified 28 acute-care hospitals within the market, many physician-owned. Commenting on the relatively high presence of physician-owned ventures in the Oklahoma City market, a health system interviewee noted that “they have been able to operate very efficiently, but volume and utilization issues are an unanswered question.” Another interviewee noted heavy competition in the development of specialty ERs in the market, which were being used as a referral base for additional patients.

Baton Rouge is not a certificate-of-need market and has a relatively high number of physician-owned facilities that compete with larger health systems for business. A health plan interviewee noted that this enhances the number of providers competing in the Baton Rouge market, but also raises issues of ancillary costs as well as hospital costs. He said that “if one looked solely at unit costs in the Baton Rouge market, they would be in line with expectations. But utilization is slightly higher in the market.”

In Los Angeles, a health system interviewee commented that “while the Los Angeles market has an abundance of healthcare assets, it has a lot of wrong assets for the wrong things.” Many hospitals have focused on “drastically cutting stuff that doesn’t pay and focusing on things that do, but all are now competing for a shrinking number of things that pay well.” Comparing Los Angeles to other, lower-cost West Coast markets, another health system interviewee noted that “while other markets are focused on reducing total cost of care, most in the Los Angeles market are still looking at what will generate the most revenue.” A third interviewee identified “a very high number of physicians for the population, with potential over-utilization of services.” (This interviewee also observed that Los Angeles “is still the Wild West in terms of provider consolidation.”)

Figure 5: Commercial Costs vs. Managed Care Penetration

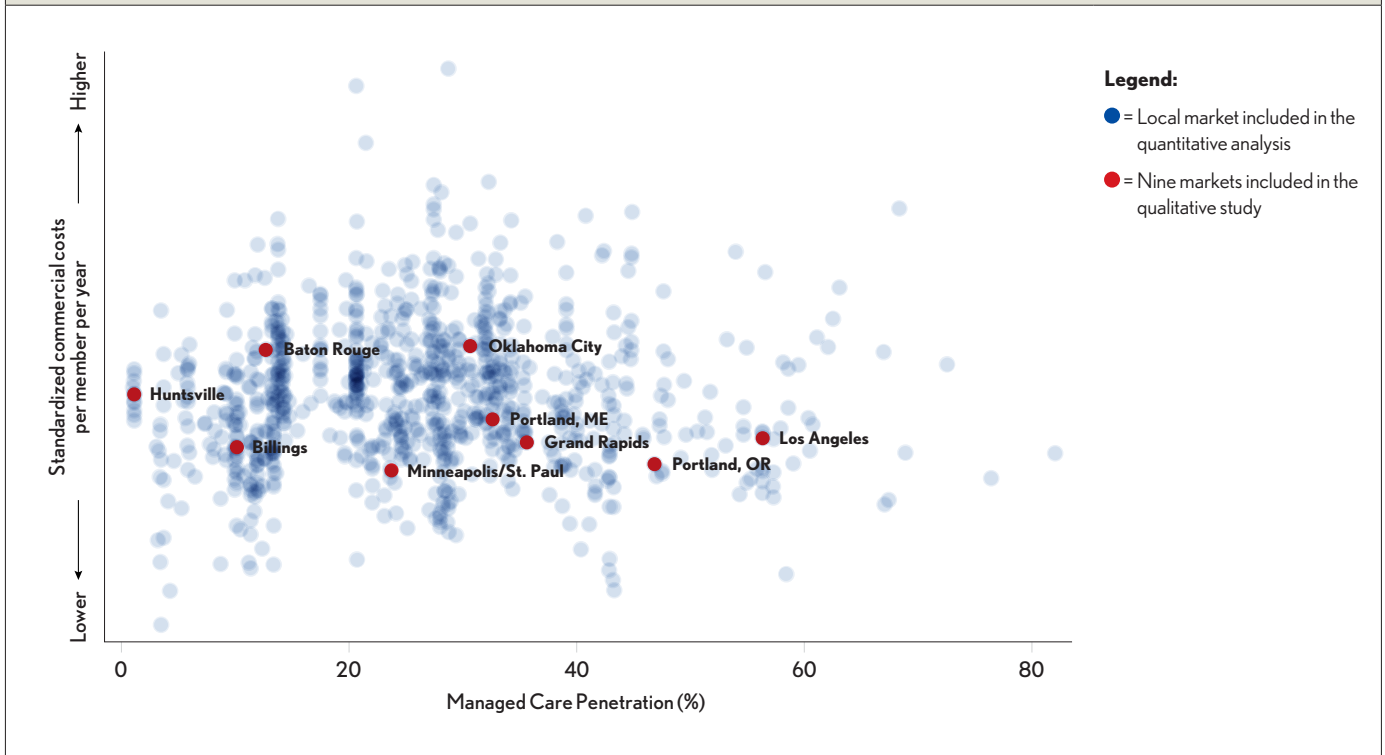
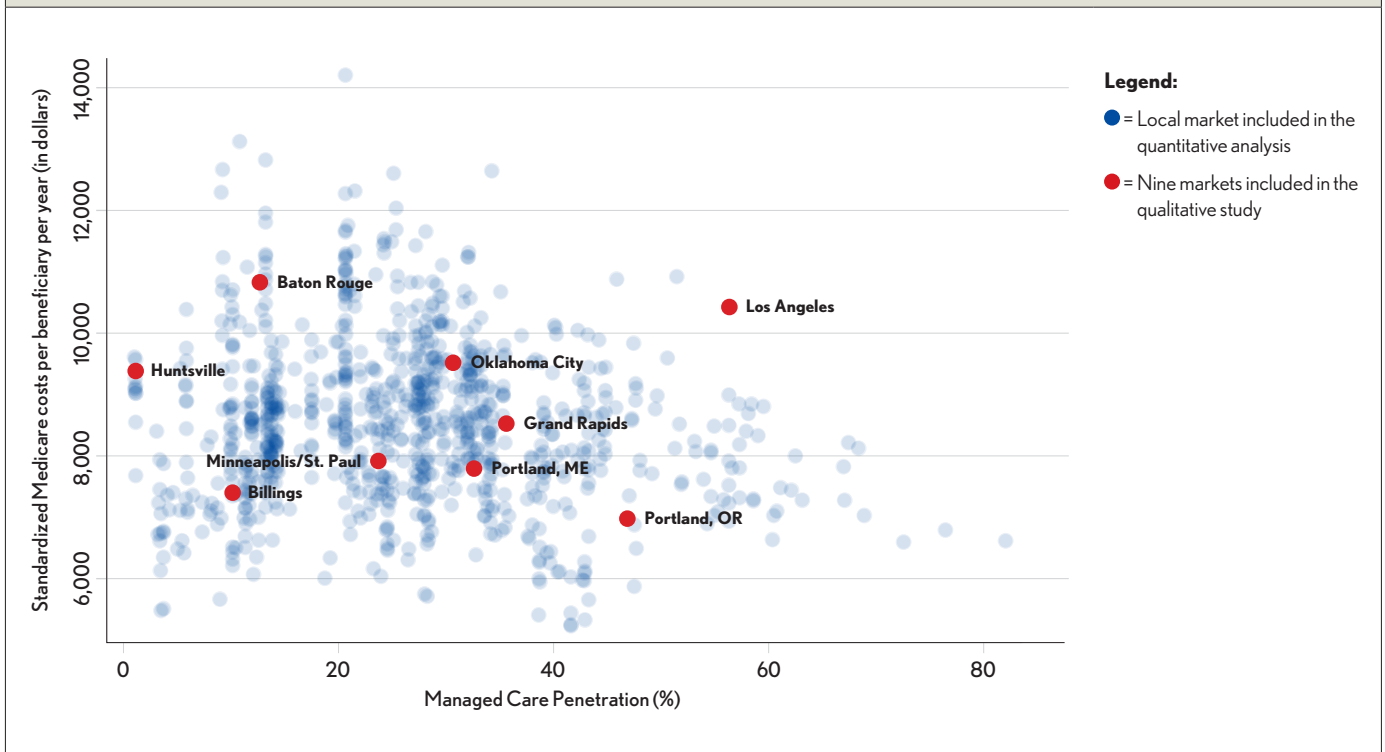


Figure 6: Medicare Costs vs. Managed Care Penetration



Utilization alone cannot fully explain variations in total cost of care: a market may have low utilization rates but high unit prices, or may see competition on unit price but little attention paid to utilization rates. On the commercial side, however, markets with lower utilization (measured here as inpatient discharges per 1,000) also tended to have lower total per-member costs (including Minneapolis/St. Paul, Los Angeles, and Portland, Oregon; see Figure 7). On the Medicare side, both Billings and Minneapolis/St. Paul had significantly higher inpatient utilization rates but significantly lower total per-beneficiary costs than Baton Rouge, Los Angeles, or Oklahoma City; this is likely due in part to data indicating low outpatient spending in the Billings and Minneapolis/St. Paul markets. Two of the three markets with the lowest Medicare inpatient utilization rates of the nine markets studied (Portland, Maine, and Portland, Oregon) did, however, have among the lowest total per-beneficiary costs (see Figure 8).

Competition and segmentation

We also observed that a market's competitive structure can be affected by segmentation of patients and providers within a market. This segmentation was most evident in the Los Angeles market, likely due in part to the sheer size and diversity of the market, but was also present to some extent in smaller markets such as Baton Rouge and Oklahoma City. One potential impact of segmentation is a misalignment of incentives and resources to address total cost of care.

We were able to identify at least three segments of providers and populations. In the first, health systems and other provider organizations with a strong market position and brand reputation provide care for relatively more affluent patient populations and tend to be physically located in more affluent areas of the core-based statistical area (CBSA). Provider organizations in this segment have strong clinical and financial resources, but may also feel less pressure to manage costs of care for their primary patient populations.

Provider organizations in the second segment tend to have greater financial restraints, lower negotiated rates with health plans, and a less affluent patient population. They may be more focused on trying to improve their financial viability or market share than on initiatives to reduce total cost of care. Provider organizations in the third segment serve the least affluent populations, often with a high percentage of Medicaid patients. Given the budgetary constraints of most state Medicaid programs, these organizations often have the greatest incentive to reduce costs of care for their populations, but the fewest resources to do so.

“While other markets are focused on reducing total cost of care, most in the Los Angeles market are still looking at what will generate the most revenue.”

At the same time, interviews with provider organizations serving Medicaid populations suggested that, although they may lack the financial resources of provider organizations in the first and second segments, their lack of resources is compensated by a focus on innovation. For example, an interviewee at a federally-qualified health center (FQHC) in one of the markets noted that while “everyone is pulling bodies out of the river, the goal of the FQHC is to find where the bodies are coming from.” The FQHC had leveraged its skills in managing complex patients to assume care management responsibilities for 20 of a health system's most complex patients (mostly dual eligible), for whom the health system was facing penalties for high rates of readmission. The FQHC agreed on the condition that any savings realized could be used to buy back services at Medicaid rates for the FQHC's patients. “The model was to take over care for 20 patients to buy services for 2,000.” The FQHC is partnering with another health system on a Medicaid managed care pilot and has become an attractive partner, the interviewee suggested, “because what we have built has become appealing to systems that are now trying to prepare for value-based payment.”

Health plan competition

A comparison of the nine markets also suggests that competition among health plans can also contribute to lower total costs of care. The impact of competition was most notable in Huntsville, the one market where there was virtually no health plan competition. Of the nine markets studied, it had the lowest penetration of VBP models—essentially no penetration through the period analyzed in the quantitative study, and little additional movement since. Costs in Huntsville were in the mid-tier range of the nine markets studied, and there is no question that the dominance of a single health plan has been able to hold down rates, particularly for hospitals. At the same time, there is little utilization management and physician utilization runs at or above national averages.

Figure 7: Commercial Costs vs. Inpatient Discharges

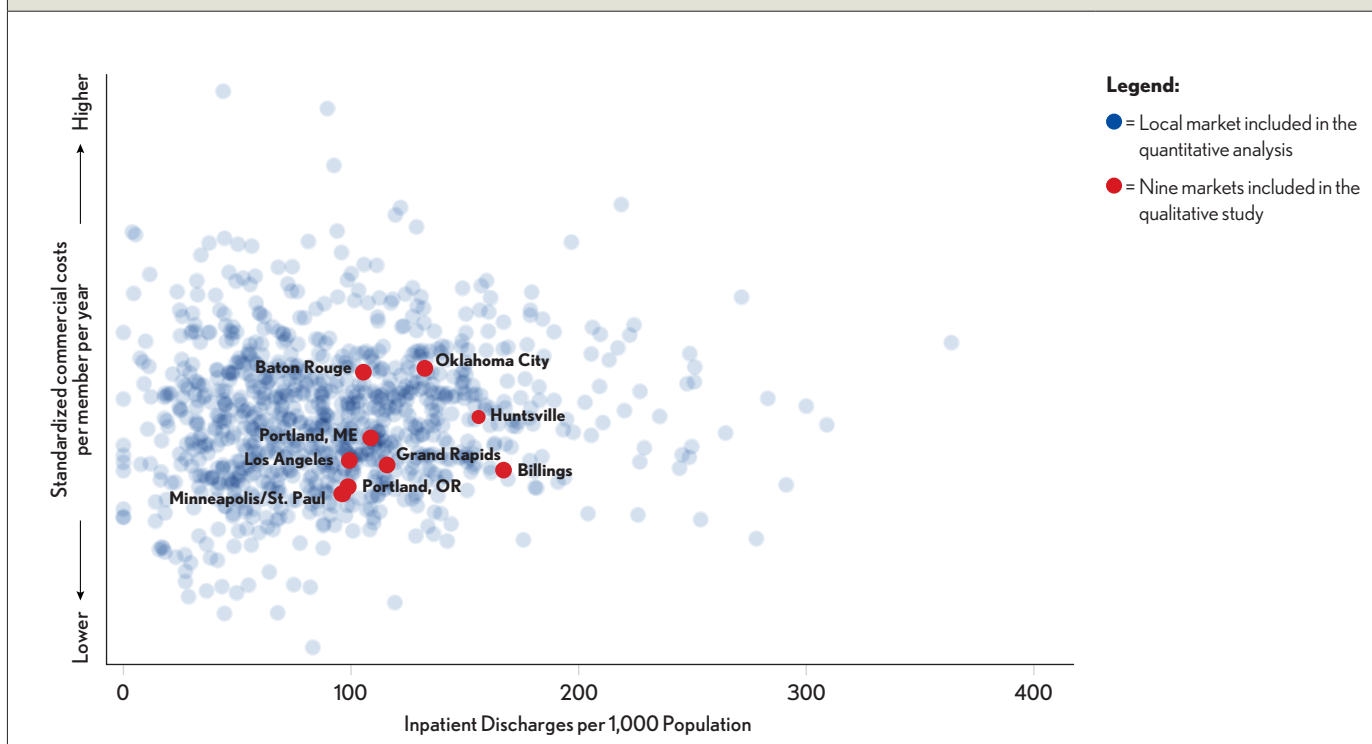
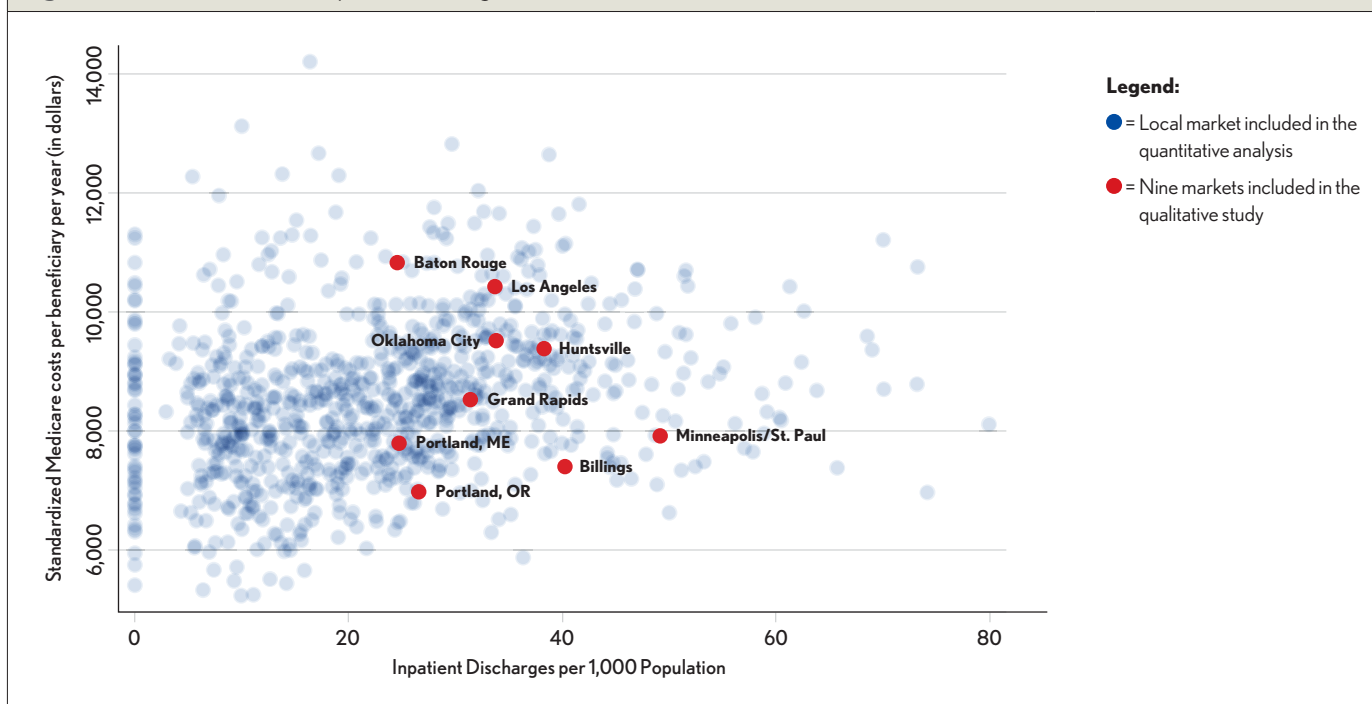


Figure 8: Medicare Costs vs. Inpatient Discharges



The state Medicaid program had been working toward the introduction of Regional Care Organizations (RCOs) for Medicaid enrollees, which could have potentially introduced new competition into the health plan market. In Huntsville, for example, the major health system was partnering with an out-of-state integrated delivery system to draw upon its health plan expertise in managing an RCO for the northern region of the state. But in July 2017, Alabama Governor Kay Ivey announced that the state Medicaid agency would be abandoning the RCO model.

In other markets, health plan competition was encouraging innovation. The strong presence of Kaiser-Permanente in the Los Angeles market has led to the development of the Vivity managed care product by a coalition of health systems in partnership with Anthem. Two of the lowest cost markets, Minneapolis/St. Paul and Portland, Oregon, have significant levels of health plan competition. Most notably, the state of Oregon, with approximately 4 million people, has more than 20 health plans, the majority of which are active in the commercial market as well as Medicare and Medicaid. The two major health plans in Grand Rapids, another low-cost market, are highly competitive.

As with provider organizations, the presence of competition seems more important than the number of competitors for health plans. Another key factor is the receptivity of providers and employers in the community to health plan innovation. When asked to describe what a vital health plan market would look like, one health plan interviewee said: “Three active insurers across market segments, with the provider and employer communities receptive to alternatives.”

The importance of information exchange

A final distinction between lower- and higher-cost markets was the presence of organized mechanisms for sharing information on quality and cost among providers and care purchasers. The Minneapolis/St. Paul market has a highly developed model, MN Community Measure, a 501(c)(3) corporation jointly formed 13 years ago by state health plans and the Minnesota Medical Association to focus on the collection and dissemination of data on the quality (and more recently, the cost) of care that can be compared across Minnesota providers. The organization’s board now comprises physicians, hospitals, health plans, consumers, employers, and professional associations. Since 2008, when 85 percent of the state’s primary care providers were already voluntarily submitting data to the organization, state law has

made submission of quality data mandatory. A high rate of insured individuals in the state (approximately 93 to 94 percent of the population) means less data gets “lost” in the system.

Data submissions are a combination of claims data from the state’s health plans and provider quality data submitted from medical records, according to defined and agreed upon metrics. Cost of care data is now being collected using a modified version of a total cost of care tool developed by HealthPartners, an integrated delivery system in the market. Cost of care reporting is not yet mandatory. Tina Frontera, MN Community Measure’s chief operating officer, noted that publicly reported data on quality measures has had significant impacts within the state, with one standout metric on better control of diabetes. Total cost of care reporting is relatively new—only two reports have been published thus far—but providers “pay attention and seem to care how they look, although some live with it and do not intend to be low cost.”

The Minneapolis/St. Paul market also has an active employer coalition, the Minnesota Health Action Group, that forms learning networks to study high-cost, high-variability areas of care: the intent is to help the member employers “become better purchasers of what they’re buying.” Focus areas to date have included back and spine, maternity and infertility, joint replacement, specialty pharmaceuticals, and mental health (anxiety and depression).

Similar models exist in other lower-cost markets. In Portland, Oregon, the Oregon Health Care Quality Corporation plays a role similar to MN Community Measure. It is an independent, not-for-profit organization that measures and reports on quality, utilization, and cost of care data within the state. The State of Maine has implemented the tool developed by HealthPartners in Minnesota to measure utilization and total cost of care.

Maine also has an employer coalition, the Maine Health Management Coalition, that is focused on identifying the most promising VBP options for coalition members to pursue. The Grand Rapids market had an informal group of human resources executives from major Grand Rapids employers who met for many years to share information on the quality and cost of health systems and physician practices in the market. In the Billings market, several TPAs have actively assisted major employers in collecting and analyzing cost data and have shared that data with providers in the state.

ALTERNATIVES TO POPULATION-BASED VALUE-BASED PAYMENT MODELS

■ ALTERNATIVES TO POPULATION-BASED VALUE-BASED PAYMENT MODELS

Our analysis suggests, first, that population-based VBP models have reached neither the level of penetration nor the maturity to affect total cost of care, and second, that differences in market structure might affect both receptivity to and feasibility of these models. We also found in our interviews some skepticism about the value of population-based VBP models. Care purchasers, especially employers, are choosing alternative methods to help contain costs or are opting to stay with the status quo. Some provider organizations also question the long-term viability of population-based VBP models. There are real questions about the effectiveness of these models within more rural parts of the country. And some organizations see current VBP models as “stepping stones” to another form of payment, likely global payment or capitation.

Employer perspectives

In all nine markets visited, employer-sponsored insurance is a much more powerful factor than the individual market. Whether self-funded or fully insured, few employers have yet seen the value in shifting to population-based VBP models. In the words of one large employer interviewed for this study, “the data is not out there yet on the efficacy of value-based care models, and the ACO model is not proven yet.” Another interviewee in Montana noted that just 3 percent of the population accounts for 50 percent of the costs, and that just 0.1 percent drives 10 percent of costs. Getting at costs is not a question of broad population management, in this interviewee’s opinion, but in addressing these few high-cost cases. In Maine, an interviewee noted that he doesn’t think ACOs are effective “and require a lot of work for the outcomes they have produced so far.”

Employers remain focused on specific conditions or inputs that they see as primary drivers of their healthcare costs. These include maternity and fertility, orthopedics and musculoskeletal disorders, cancer, and pharmaceuticals (especially specialty drugs). Relatively few chronic conditions make the list, with the notable exception of mental and behavioral health needs (including depression, anxiety, and substance abuse). Employers seek predictability on the spend for these conditions, both in terms of cost and utilization.

“The data is not out there yet on the efficacy of value-based care models, and the ACO model is not proven yet.”

Local factors also play a role in the willingness of employers to try VBP models and affect the alternative models that are available to them. In the Minneapolis/St. Paul market, one interviewee noted that there is “no homogeneous [employer] group rallying around a burning platform.” Instead, interest in pursuing VBP models is driven largely by the sophistication of the person running the benefits department. Generally, employers are buying what they’re being sold and are not getting involved in product design. One interviewee noted that “employers champion choice but also want lower premiums; to date, however, choice has continued to trump lower costs.” Similar sentiments were expressed in the Grand Rapids market, where unemployment rates are now down to around 3 percent and “employers are not interested in messing with the benefit structures.”

The Grand Rapids market, in western Michigan, is not as heavily unionized as eastern Michigan. But unions have a significant impact on state agencies, and the Michigan state insurance department has, according to one interviewee, been traditionally more conservative and protective of consumers: “They don’t like benefit designs that could have consumer ‘gotchas’ in them.” Speaking from the perspective of an employer, a health system interviewee in the Minneapolis/St. Paul market noted that their staff is highly unionized, and some within the unions “actively don’t like the ACO structure, having a single-payer bias instead.”

In the Oklahoma City market, a boom-or-bust energy economy contributes to employer attitudes toward VBP models. One health system interviewee noted, “we have an economy that is very dependent on energy and doesn’t tend to track the national economy. When gas prices are high, the rest of the nation feels a hit, but Oklahoma City does well. When energy companies were thriving several years ago, they didn’t pay much attention to costs and offered extremely rich benefits to their employees; they have yet to pull back on these.” Another interviewee in Oklahoma City confirmed that while employers had recently showed some interest in getting better predictability on rates, “they haven’t really addressed quality or cost.” One interviewee “detects growing employer interest in value-based payments...but employers will need more financial pain before they move. They smell an HMO and run.”

Employee preferences also affect employer decisions. A health system in Oklahoma City had commissioned a consumer study of the market, and found little familiarity with narrow networks, and little willingness to switch providers. They also looked at price elasticity with changing copayments and found very little elasticity in the market.

Many national companies have a presence in the Huntsville market to support the work of the Redstone Arsenal, but none has a sufficient presence in the market to be a market mover. Blue Cross and Blue Shield of Alabama is a dominant payer presence in the state, and employers are very reluctant to take the Blue Cross card away from employees in the market. One interviewee noted that “receptivity to new players in a market is driven largely by having people who want to do things differently,” and that has not been the case with employers in the Huntsville market.

Local politics can also be significant, especially in more rural markets. In Portland, Maine, an interviewee commented that a move by employers to bring down costs would be characterized as undermining providers in the state. “Most hospitals in Maine are losing money, and there is a real issue about what to do with the cost infrastructure of built hospitals. Also, health care is the fastest growing sector in the state.” In Montana, the biggest challenge to improving outcomes and bending the cost curve for employers is that “while it may be easy to reach theoretical agreement on an issue, there can be a lot to lose for individual stakeholders when the rubber hits the road. The prospect of lost revenues is a legitimate fear that can make it difficult to take a big step.” Efforts in the state that negatively impact rural providers take money out of the rural communities, where the providers are often the largest employers.

Provider perspectives

Several provider interviewees echoed comments heard from employers that questioned the efficacy of broad population-based models. A physician practice interviewee in Minneapolis/St. Paul believed in the value of programs targeted at specific patient populations, but commented that “my pet peeve is the belief that there might be a ‘one size fits all’ approach for care delivery models.” Another physician practice interviewee in Portland, Maine, indicated that he did not fully agree with the Triple Aim objectives, and preferred programs focusing on episode-based payment and care delivery reform. A health system interviewee in Grand Rapids believed that models focused on the top 5 percent of high-cost patients, with an emphasis on chronic care management and palliative care, would be more effective than broad population-based initiatives.

Other provider interviewees thought current VBP models did not offer a long-term solution. A health system interviewee in Oklahoma City viewed shared savings models “as a short-term arrangement, or a stepping stone to something else. When the savings are wrung out,

“While it may be easy to reach theoretical agreement on an issue, there can be a lot to lose for individual stakeholders when the rubber hits the road. The prospect of lost revenues is a legitimate fear that can make it difficult to take a big step.”

something else will have to take their place.” Another health system interviewee in Grand Rapids sees “nothing on the horizon that is changing the trajectory. We need some model that says ‘this is it’ that would force people into doing things that are actually effective.” He believes the U.S. health system remains “deeply embedded in a system designed around getting revenue for doing more stuff. We’re not good at advance directives for people, and we drop huge prices for care on people who don’t know how to shop for health care and who are paying lots of money for things that don’t add much to their quality of life.”

Interviewees also raised questions about the viability of current population-based VBP models in more rural markets. In Maine, health systems are involved in very different markets: a small group of counties in the Portland metropolitan market and the rest of the state, which is much more rural. A health system interviewee noted that “there is a ‘why an ACO’ cultural piece that affects the appetite for ACO work within our system. At our Portland location, things are going very well, but the system is a confederation of small communities and the ACO piece doesn’t always work as well in rural settings.”

Montana represents an even more rural region, with several interviewees noting their preference for the term “frontier” over “rural” to describe much of the state. As one interviewee noted, “to someone living in New Jersey or Maryland, ‘rural’ means the quaint farm site across the street from the subdivision.” Statewide barriers to population-based VBP models identified by interviewees include:

- Low volumes at many hospitals, which make it difficult to track utilization patterns
- Many hospitals that start at relatively low cost levels and readmission rates, leaving little room to go further in producing savings
- A dearth of partners for population health management—particularly problematic for post-acute care, which is often delivered in critical access hospital swing beds

- Delivery of primary care in communities far removed from the larger cities where the health systems that provide more acute or specialized care are based (and which are often the coordinating and risk-bearing organizations for VBP models)
- Difficulties in getting Medicare to pay for telehealth, which is critical to rural population outreach

Several interviewees in Montana also commented on the state's participation in CMMI's Comprehensive Primary Care Plus (CPC+) model. It was difficult for many of the health systems' practices to qualify because patients often travel to the systems only for specialty care, receiving primary care services in their home communities; as a result, the practices had too high of a specialty care mix to qualify. In patients' home communities, primary care is often delivered by FQHCs, which are not eligible to participate in the CPC+ program. In the words of one interviewee: "CMS has not focused on the development of a rural health policy. Their focus is on where they spend their money. Unfortunately, rural areas are where 'one size fits all' doesn't fit."

Alternative models

Episode-based payments

Employers and many provider organizations show significant interest in episode-based and bundled payment programs. For employers and health plans, they offer predictability and opportunities for steerage to high-quality, price-competitive providers. For providers, if structured appropriately, they put the provider at risk for things within the provider's control.

Interviewees identified several keys for success in episode-based payment models:

- **Choose the right prospects.** Identify practices with sufficient volumes, a "willing-to-play" medical staff, and a willingness to assume risk for readmissions.
- **Work closely with post-acute providers.** Make referrals to them contingent on their development of a plan to reduce post-acute costs. Where possible, consider alternatives to inpatient post-acute care (including home-based rehabilitation).
- **Pay close attention to data to track readmissions and their causes.** A Los Angeles health system interviewee said they were using a tool that fed Medicare data into a site that translated the data to a portal "with great visualization on where patients have sought treatment." When they learned that patients were being readmitted

because of redness around the knee following a joint replacement, they reinforced patient awareness of possible knee discoloration in pre-op classes, provided patients with a care navigator number in case they had any post-op questions, and were considering adding additional tools for a virtual services strategy in their patient portal.

- **Pay attention to sites of care.** Several physician practice groups that participated in episode-based models were moving procedures to surgery centers to avoid hospital-based facility fees. This can be politically sensitive, however, for independent physician practices that depend on alignment with health systems for their specialty services.
- **Ensure appropriateness of the episode-based procedure.** A health plan interviewee described plans to move from a surgical model bundle for lower back pain to a pain management bundle that emphasized more conservative treatment options before a patient was moved to surgery. Another had colocated sports medicine specialists with primary care practices to help determine the appropriateness of surgical interventions for orthopedic cases. It was also using a therapeutics outcomes software program that draws upon a national database to identify the number and types of interventions that best match a patient's age and condition.

Reference-based pricing

The State of Montana introduced a statewide reference-based pricing model for hospital services for all state employees in July 2016. Working with a TPA, it repriced its claims for 2014 as a percentage of Medicare payments for the same services and had the data verified by an independent third party. The data showed variances among the state's hospitals ranging from 191 percent to more than 600 percent of Medicare. The state settled on a price of between 230 and 250 percent of Medicare as a "sweet spot" reference price for hospital inpatient and outpatient services. The goal was "not so much to disrupt the hospitals as to make pricing more transparent for the state and its employees." Under the model, the state is paying more on average for some services, but significantly less for others. After some negotiation, it was able to obtain agreements with all the hospitals in the state. At the time of our interview in November 2016, the state's actuary was predicting that \$25 million would be available to be returned to the state's reserves at the end of the year. The state was also predicting no increase in state employee out-of-pocket costs for health care in 2017. Savings in 2016 were driven by overall lower prices, not by utilization, which remained the same.

The success of the state's initiative was attributed to several factors. First, the state is the largest employer in Montana, with enough employees in all the major health system markets in the state to give it some negotiating power. Second, it made sure its data was sound, and did not try to set prices so low that they would disrupt hospital finances. Third, it took a firm line in negotiations, refusing to pay more than the announced reference price to a few holdout hospitals and leaving it to the hospital to explain to the patient why the reference price was not sufficient.

A TPA in Billings had also developed a program that blends features of reference pricing with medical tourism. It uses predictive analytics and claims data to identify patients in need of specialty services. It then provides these patients with quality metrics and price data for potential providers and asks if the patient would be willing to travel. If so, the patient is asked to identify a few facilities they would consider for their care. The TPA then reaches out to these facilities to negotiate a price—ideally an “all in” case rate—in advance. If the facility is out-of-region or out-of-state, the TPA coordinates travel for the patient and a companion. The employer typically adds robust travel benefits and eliminates deductibles and copayments for patients who pick “A-rated” facilities for their procedure. The goal “is not to push people out of state, but to expand the competitive landscape.” In many instances, the preferred facility is in Billings, which has itself become a destination location for patients in Wyoming or the western Dakotas.

On-site health centers

Also in Montana, several employers are experimenting with companies that provide on-site or near-site health centers for employees. (In some instances, these can include lab, pharmacy, and behavioral health services as well as primary care.) One employer described its health center strategy as an effort “to control the specialty spigot, putting a wedge between primary care and specialty referrals.” Another employer was using health centers to manage care for targeted groups of high-risk employees with multiple comorbidities; the company providing the services said that while the clinics typically result in increased utilization of primary care services, employers typically see a 30 percent reduction in their overall healthcare costs.

The U.S. health system remains “deeply embedded in a system designed around getting revenue for doing more stuff.”

Consumer-driven models

The concept of “consumerism” had broad support across several of the site-visit markets; less certain were the features of successful consumer-driven models.

Opinions were mixed on the value of high-deductible health plans (HDHPs). One health plan interviewee noted that people do not like HDHPs, “but they are necessary. Sharing costs is not a bad thing. Payers devalued health care by promising the moon for a \$5 copay.” In another market, however, a health plan interviewee said “the jig is up. The system has been shifting financial burdens to consumers through HDHPs and other mechanisms, but who can you shift to next?” In a third market, an interviewee said that HDHPs “are an ultimate dead end. If you have less consumption, it cuts across both effective and ineffective services. They also increase providers’ bad debt, and the cost shift flips the burden of this right back onto employers.”

Consensus was more consistent on the value of greater transparency, with the recognition that transparency tools have not yet had a significant impact in most markets. Interviewees had several thoughts on how transparency could be improved:

- **Use benefit design or other incentives to encourage or require consumers to use transparency tools.** In the Grand Rapids market, one health plan had developed an employee rewards program, in which an employee receives a share of savings as a reward for shopping for lower-priced providers. With the rewards program, the health plan was seeing a 10 to 15 percent usage rate among employees.
- **Focus transparency efforts on referring clinicians.** One health plan interviewee believed that many physicians would change their behavior if they were made more aware of price differentials in their referral options. Another health plan interviewee also thought that the point of interaction between patient and referring clinician was the appropriate focus for transparency efforts because “if you’re in a doctor’s office with bad news, you want to know where to go next.”
- **Make sure transparency tools include total cost of care.** One interviewee noted that “most tools only measure price up to the consumer’s out-of-pocket maximum, so there is no information provided on total cost of care.” Another interviewee noted that most price transparency tools do not address issues of utilization, so the focus remains on price for units of care instead of total cost of care.

- **Make it easy for employees to access transparency tools.**

A mining company in the Billings market noted that transparency tools tend to be accessible only online, which is not ideal for the company's demographics (mostly male, with at-home spouses who manage the household). The company was planning to adapt kiosks that had been introduced in the mines for paystub information to roll out transparency tools when they become available from the health plan.

- **Focus on prices, not charges.** Charge information is of little use to most consumers, who need to know prices (both patient out-of-pocket and total price) based on the specifics of their health plan.

Tiered pricing models had been introduced in several of the qualitative study markets. These models typically reduce or eliminate copayments and deductibles if a consumer chooses care from a preferred provider (whose preferred status is defined by a combination of quality and cost metrics). An interviewee in Portland, Maine, noted that the State of Maine's tiered model for state employees had definitely "raised boats" within the provider community. The model can be more difficult to implement, however, in rural areas of the state where provider choices are more limited and copay differentials could have a negative financial impact on state employees with fewer options at hand. In Montana, state legislation requires health plans to contract with 80 percent of all providers and 90 percent of all facilities within the state. This makes narrow network strategies difficult for health plans, but tiering is allowed, enabling a strategy of "contract widely, but steer to preferred providers."

Narrow networks, where consumers choose a plan that limits provider choice in exchange for lower premiums, have had minimal traction in employer-sponsored insurance. They have had some success in the individual market, however, where one health plan interviewee notes "individual consumers are more willing to disrupt based on price." Another health plan interviewee pointed to promising new developments in private exchanges, including a technology tool that can offer multiple benefit designs. It gets employers out of the "I'm making the choice for you" position and has enabled some to move to defined contribution plans.

Population-specific models

As an alternative to broad-based population approaches, several organizations expressed a preference for VBP models that would target specific conditions or populations.

"The jig is up. The system has been shifting financial burdens to consumers through HDHPs and other mechanisms, but who can you shift to next?"

A physician practice in the Minneapolis/St. Paul market specializes in care for frail seniors and people with disabilities living in assisted living facilities. It has developed a team-based model to care for the needs of set panels of patients in assisted living, memory care, and group home facilities in three states (Minnesota, Wisconsin, and Florida). In Minnesota, the practice is contracted with three different health plans under a per-member per-month shared savings model to provide care coordination to two population groups: first, senior dual eligible patients (most within the Minnesota Senior Health Options program), and second, people under 65 with disabilities enrolled in the Minnesota Special Needs Basic Care program, which takes the place of traditional Medicaid for this population. For both groups, the practice serves a "public health nurse" role, coordinating durable medical equipment, supply, and specialist needs for the patients, and setting up care plans and managing coordination of services. The practice has also developed a specialized communication tool for the families and caregivers of these patients, who often have many people providing services who do not themselves work for the same organization (e.g., hospices, durable medical equipment suppliers, Meals on Wheels programs, etc.). Service providers enter updates on individual patient profiles accessible by family members and caregivers.

In the Billings market, two health plans and the state Medicaid program are funding a pilot as part of a multistate Project ECHO Medicaid Learning Collaborative that connects psychiatrists from the Billings Clinic with primary care providers in rural parts of the state to help manage behavioral health, substance abuse, and other mental health needs of complex patients.

RECOMMENDATIONS AND ACTION STEPS

■ RECOMMENDATIONS AND ACTION STEPS

Based on these research findings, we recommend several key focuses moving forward that we believe could moderate growth in total cost of care. These recommendations are made with full recognition that they would be deployed across markets with significant variations, and that approaches to and timing of implementation of these recommendations may differ considerably across markets. These recommendations will also have different implications for various stakeholders, which are addressed in the following section.

- **Continue movement toward models that increase financial incentives to manage total cost of care and closely monitor the impacts of doing so.** Given our finding that even though VBP models have penetrated *broadly* in some markets, but not *deeply* in most, we recommend that both government and commercial payers continue to experiment with models that increase incentives to make changes to care delivery models that could increase both the quality and cost-effectiveness of care. Experiments should continue with population-based VBP models, but should not be confined exclusively to these models.

This recommendation comes with significant challenges, particularly a lack of appetite on the commercial side for VBP models that may limit choice of providers. To the extent that government payment models intended to reshape care delivery are now beginning to increase provider exposure to risk, it will be imperative to document their success or failure in managing total cost of care to demonstrate the value of adopting these models in the employer-sponsored and individual commercial markets.

- **Balance the benefits of competition with the benefits of integration.** While there was little doubt among interviewees that competition matters, the answer to the question of *how much* competition is necessary may be “less than assumed.” The quantitative analysis showed little impact on total cost of care resulting from high consolidation; in fact, the most highly consolidated markets started with total costs of care at a slightly lower baseline at the beginning of the period analyzed. Our qualitative research found that lower-cost markets had more restrained competition among a few health systems that were highly aligned with physician groups, whether employed or independent. We also found that that lower-cost markets had some degree of competition among health plans and that there was more innovation with payment and care delivery models in these markets (although again, few of these models entailed significant incentives, such as downside risk, for managing total cost of care). In contrast, the markets in which a single health plan was clearly dominant lagged in the introduction of VBP models.

- **Support more transparent sharing of information on healthcare cost and quality within markets.** Lower-cost markets in the qualitative study had organized mechanisms for the sharing of information on healthcare cost and quality, whether through employer coalitions, statewide reporting agencies, or both. Effective consumer transparency has proved more of a challenge, but there was widespread consensus that with the right tools and incentives, it could have a significant impact. While better information may not change the preferences of healthcare purchasers, it can better inform those preferences. It also can encourage providers and health plans to compete on quality and cost within their market.

Action Steps for Key Stakeholders

The qualitative study indicated that leaders of clinician practices, health systems, health plans, and other organizations expect contracting models to change, with a greater emphasis on value-based payments and other forms of cost-sensitive contracting (such as reference pricing). At the same time, markets lack a clear direction for change. A variety of signals are being sent by CMS and other federal agencies, state Medicaid programs, and employers, but there is no clear signal from the steering wheel to the road. Thus, one leadership task across stakeholder organizations is to define a path forward and manage the transition to that path.

Policymakers

Facilitate competitive structures that support higher quality, more efficient care delivery. An initial focus for policymakers should be facilitation of fewer, larger clinical networks. Competition is important, but for many markets, two or three strong players competing across the geography of a market may lead to the lowest cost of care. There are several reasons for this:

- The costs of preparing for population health—including financial systems, decision support, network development and incentive structures, supplies, training, personnel and other items—can and should be spread over a substantial number of units of care.
- Care coordination tends to be better developed in larger local networks. Smaller networks often have fewer network dollars to spend, and they may not use their available dollars as well. For example, smaller networks report spending more on duplicating the “basics”—such as credentialing physicians—and less on establishing common approaches to care and ensuring that these approaches are being adhered to.

- Strong systems with good geographic coverage can also enhance the appeal of limited network products for local employers and the individual market by providing widespread access to quality care.

Support information exchange. A related focus is to support the exchange of information among organizations. Within most organizations, efforts are underway to create internal efficiencies. In some markets, work is also underway between organizations: the formation of new clinical networks, super clinically integrated networks (networks of networks), data exchanges, and other joint approaches to reducing costs. While these activities are well-developed in some markets, they are nascent or absent in others. Policymakers can help encourage these activities by facilitating the exchange of information on quality and cost effectiveness, helping organizations identify potential partners as well as areas where they may need to focus on improvement. Participation in these information exchanges can be voluntary or mandatory; it is critical, however, that policymakers build stakeholder consensus on the ground rules for participation and the reporting of information to ensure stakeholder buy-in and trust in the information.

For policymakers in public-sector entities, consider acting as a catalyst for change. The qualitative study found many markets where the elements were in place to better maintain or reduce total cost of care, but there was no catalyst to push these efforts. The reasons varied: local employers were more concerned with retaining qualified employees than with reducing healthcare costs, many patients were still largely shielded from the brunt of healthcare costs and were more concerned with quality and access to care, dominant payers or health systems lacked a compelling reason to move away from the status quo. Although the catalyst is not likely to be the same in each market, there were some indications that public-sector entities—including the state or a large municipality in its role as employer or a state’s retirement plan—could make a difference in moving a market.

Health system leaders

Develop a clear health system strategy and intent regarding cost containment and population health. Health system leaders believe that they will need to perform well in a future VBP and care delivery environment, whether or not they are participating in VBP models today. This requires getting ready now to “flip the switch” by, for example, building larger networks through well-chosen consolidations to spread costs and develop attractive networks for patients, strengthening physician/health system relationships and integration, ensuring continuum of care across the networks, and supporting

initiatives that address the causes and most effective treatment of high-cost conditions, such as chronic conditions and end-of-life care. In many instances, these efforts will also help reduce costs in the face of increasing payment pressures today, while better positioning the health system for a value-based environment.

Define a strategy for pursuing value-based contracting opportunities.

Whether to lead or follow in pursuing value-based contracting opportunities is an organization-specific, market-specific choice. Some who decide to lead do so out of a sense of local or national obligation. Others sense that their organization can outperform others in a VBP environment. Other systems are taking a “wait and see” approach, but in many instances are still participating in small-scale VBP pilots to understand the capabilities they will need and the impacts they may experience if and when the market shifts. The best place to start will vary across markets. In some markets, an aggressive, large employer may offer the best opportunity. In other markets, a health plan may be seeking a willing partner to make a move into VBP. In other markets, Medicare Advantage or Medicaid managed care may be attractive options. In all cases, it is important to monitor changes in the provider culture as VBP models take hold and assess the impact of these changes on current business models and additional VBP contracting opportunities.

Explore options for expanding the health system’s network.

A health system may expand its network through an acquisition strategy, but systems are sometimes wary about taking on a business in which they do not have expertise (such as post-acute care). Organizations may also want to gain access to a larger network but maintain an independent board and management team. In these instances, “virtual” consolidations may be an option, built on memoranda of understanding, agreed-to-financial splits, and other tools. However, the qualitative analysis found several instances where virtual consolidations are not performing well. Differences can emerge in implementation and the “glue” within the consolidated organization may not be sufficiently strong to hold the pieces together. Partners should enter these consolidations with an understanding that flexibility is critical, as well as a willingness to revisit initial divisions of responsibility and financial risk and reward. Consolidation is always hard, and often can be even harder if separate governance systems are in place.

Clinician leaders

Get in front of the movement toward population health and VBP. Primary care physician groups are proving to be key players in the move toward VBP in many of the markets in this study, and are often

succeeding in gaining additional income for their members. Several steps are necessary for primary care groups to be in position to take advantage of VBP opportunities as they emerge in their markets. These include the following.

Assemble a significant number of like-minded clinicians.

Larger groups can gain economies of scale in cost structure and in the size of the patient population. These economies can also be achieved through participation in a clinically integrated network of groups that can include employed clinicians, independent clinicians, or both. Groups should consider the appropriate mix of primary care physicians and advanced practice clinicians to optimize care management of patient panels. The key is a common understanding throughout the group of the potential benefits of assuming and managing populations under risk-based contracts and a willingness to pursue these benefits.

Partner with a willing investor to mitigate the risk to individual members of the group. Although there are exceptions, primary care groups that try to generate capital from their own physicians are often less successful than those that use an outside source. The investment source may be a health system, a health plan, or an outside investor. The investment source has to be patient, as the group works through changes in care delivery and management, changes in compensation models, etc. Capital is needed to:

- Pay for infrastructure, such as population health tools
- Supplement early years' cash flow while the group learns how to manage care effectively
- Smooth the movement toward changes in physician compensation structure that move away from straight relative value unit (RVU)/productivity-based compensation models.

Partner with a willing payer. The payer may or may not also be the group's investment source. In any case, the payer must be willing to work collaboratively to share claims data and other information on the patient population and develop and refine approaches. As the group gains confidence in its results, it can consider expanding to a full range of VBP contracts, incrementally adding additional risk with more contracts, more types of payers, and new patient populations. With the assumption of additional risk, continue to shift the group's culture from fee-for-service to VBP.

Adjust compensation structures for physicians and other primary care clinicians slowly to reflect quality, cost, and other VBP considerations. Many groups are still in the early stages of this transition. Other leadership approaches—including measurements of success, group goals, and other nonfinancial incentives—are being used to keep an emphasis on physician production (e.g., RVUs) while markets are changing.

If expanding a primary care group to include more specialists, be aware of significant differences in compensation and incentives for primary care physicians and specialists. Primary care groups must be willing to tolerate significant differences in physician compensation models if they decide to add specialists to the group. Although specialists' interest in VBP is substantial, there are still many questions as to how different specialties should be incentivized under VBP models. In some markets, bundled payments have provided early examples of specialty-focused VBP models, but further refinements to these models, including additional focus on appropriateness and utilization, are likely. Primary care practices should seek out specialty groups that share an interest in cost-effectiveness and appropriate utilization of services as referral partners for managed patient populations. At present, there are many unrealized opportunities for specialists to affect both the cost of procedures and total cost of care.

Health plans

Explore the benefits in increasing the emphasis on total costs of care. Health plan leaders interviewed for this study recognize a general obligation to lower the total costs of health care. However, the amount of effort devoted to this goal varies by plan. Health plans' strategy and areas of emphasis vary based on:

- The expressed desire and purchasing decisions of the plan's key constituencies. In many markets, employers (both self-funded and fully insured) continue to value factors such as quality, brand reputation, or access more than cost. Cost is a more significant element within the individual market, but that generally represents a smaller percentage of the health plan's constituencies.
- Opportunities to expand or maintain the health plan's market position.
- The plan's historical contracting position vis-à-vis provider organizations (e.g., adversarial, collaborative, interested in innovation).
- The presence in the market of provider organizations willing to collaborate on VBP models.

Consider opportunities to change markets. As with other healthcare organizations, health plans often are waiting for a catalyst to emerge in their market. But the qualitative study provides numerous examples of health plans acting themselves to change the direction of markets. Opportunities include:

- Combining with one or more strong provider network to offer VBP models and other market-responsive plan offerings
- Coalescing similar minded-employers into a larger purchasing group and offering new plan designs
- Developing joint approaches with providers, employers, or other health plans or payers (including federal and state Medicare and Medicaid agencies) to standardize and reduce the costs of healthcare transactions, quality reporting, and communications with patients

Employers

Educate employees on the impact of healthcare costs on total benefits. Employees with employer-sponsored health insurance remain largely unaware of the impact of healthcare costs on their overall compensation and benefits, even if they participate in an HDHP through their employer. Several employers interviewed for this study have begun educating their employees on the impact that healthcare spending has on their compensation and benefits, connecting the dots between the amount the employer pays in total for employee healthcare costs and the amount that is available for employee salaries and other benefits. To be most effective, employers should also be willing to share with their employees any savings in healthcare costs achieved through greater employee engagement with healthcare spending decisions through salary increases, bonuses, or other benefit enhancements.

Seek out health plans that offer effective tools to increase employee engagement in healthcare spending decisions.

Many employers and health plans interviewed for this study believe that greater transparency on quality and prices could affect employee healthcare spending decisions, but acknowledge that most transparency initiatives to date have not had a significant impact. Employers should continue to push for incentives and tools that better motivate employees to consider both quality and cost elements in choosing a healthcare provider.

Form employer coalitions to exchange information and potentially act as a market catalyst.

In markets where they exist, employer coalitions have been a key catalyst in building infrastructure to share information on the quality and cost of health care. However, there has not yet been enough common purpose among employers to sustain limited networks or other health plan designs that could change the trajectory of healthcare costs within their market. With the possible exception of large public-sector employers, in most markets a single employer will not have sufficient presence to act as a market catalyst alone.

Patient advocacy groups

Increase focus on the total cost of care. Patient advocacy groups have clearly influenced policymakers, employer coalitions, health systems, and others on specific issues. Collectively, if they also focused on total cost of care, they could have the opportunity to make a significant impact.

Leaders acting together

Reduce the financial and nonfinancial costs between entities.

Organizations are working hard individually to improve efficiencies within their purview. However, much less attention is paid to the transaction costs between entities. Several markets have made efforts to develop common databases and improve healthcare transparency, but the need to reduce transaction costs goes well beyond this effort. Unnecessary costs are left on the table when, for example, organizations collect the same data from patients and from each other without any additional value added. And unnecessary costs remain undiscovered when organizations fail to distinguish between information and processes that need to be kept separate for competitive reasons and information and processes that are more efficient when they are shared or conducted collectively. Leaders also need to consider when one party is increasing the costs of another party without any benefit to either. This includes costs between health plans and provider organizations, costs between health systems and clinician groups, and costs that health plans, health systems, clinicians, and employers collectively place on the patient.

Effective change within markets will require a coalescing of stakeholder interests that defines the best path forward. This path will clearly be different for different markets. But it is also clear that stakeholders in every market think they can do better.

APPENDIX: ABOUT THE STUDY

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For the quantitative research, analyses were done for all core-based statistical areas (CBSAs) in the U.S. for which data was available.⁵ Medicare and commercial cost data for the CBSAs were compared with data on such factors as penetration of VBP models, provider concentration, health plan concentration, percentage of physicians in primary care and specialty practices, population health status, and other population demographics. The study investigated potential correlations among these factors using multivariate analysis.

The qualitative study focused on site visits in nine markets, chosen for their diversity in adoption of population-based VBP models, competitive landscape, population size, population health status, geography and climate, and socioeconomic status (see Table 1). The nine markets included:

- Baton Rouge, Louisiana
- Billings, Montana
- Grand Rapids, Michigan
- Huntsville, Alabama
- Los Angeles, California
- Minneapolis/St. Paul, Minnesota
- Oklahoma City, Oklahoma
- Portland, Maine
- Portland, Oregon

Table 1: Characteristics of Nine Qualitative Study Markets

	Baton Rouge Louisiana	Billings Montana	Grand Rapids Michigan	Huntsville Alabama	Los Angeles California	Minneapolis/ St. Paul Minnesota	Oklahoma City Oklahoma	Portland Maine	Portland Oregon
ACO Penetration (2015)	18.5	8.5	10.2	11.2	7.9	15.7	0.4	56.1	21.3
HHI of hospital system net patient revenue	0.28	0.48	0.37	0.58	0.04	0.38	0.17	0.45	0.23
HHI of commercial insurers	0.31	0.28	0.57	0.90	0.20	0.31	0.24	0.23	0.14
Population estimate	830,480	168,283	1,038,583	444,752	13,340,068	3,524,583	1,358,452	526,295	2,389,228
Percentage of FFS beneficiaries with hypertension	60.3	44.5	53.7	62.9	52.7	40.8	57.1	47.2	39.4
Percentage of FFS beneficiaries with arthritis	31.2	26.9	30.5	36.9	32.0	22.5	32.4	25.3	21.3
Percentage of FFS beneficiaries with cancer	8.6	7.4	7.1	8.5	8.5	6.3	7.4	7.0	6.3
Percentage of FFS beneficiaries with chronic kidney disease	20.7	16.8	19.2	21.6	19.6	16.9	17.6	15.1	15.4
Percentage of FFS beneficiaries with depression	18.1	21.4	22.0	15.6	15.0	21.1	19.5	22.2	16.3
Percentage of FFS beneficiaries with heart failure	14.2	11.5	12.9	13.3	14.6	10.0	14.3	11.6	11.3
Percentage of FFS beneficiaries with hyperlipidemia	45.1	30.4	39.4	51.4	45.0	26.6	41.2	38.9	28.9
Percentage of FFS beneficiaries with ischemic heart disease	25.9	19.5	23.5	26.2	28.3	18.3	31.7	20.7	17.3
Percentage of FFS beneficiaries with osteoporosis	5.1	6.9	5.8	6.7	8.9	4.5	4.9	5.4	4.7
Percentage of FFS beneficiaries who had a stroke	4.9	2.7	3.4	4.3	4.0	3.1	3.6	3.4	2.8
Median age	34.7	38.8	35.5	38.0	36.0	36.6	34.7	43.0	37.6
Sex ratio (males per 100 females)	96.9	96.7	97.5	96.8	97.2	97.8	97.2	94.4	97.6
Percentage of the population who are Hispanic or Latino	3.7	5.0	8.9	4.9	44.9	5.6	12.2	1.8	11.3
Percentage of the population who are White	57.5	87.9	79.8	68.0	30.6	77.4	66.0	92.8	75.1
Percentage of the population who are Black or African American	35.1	0.6	6.2	21.6	6.5	7.5	9.9	1.7	2.7
Average daily maximum air temperature (F)	81.8	54.7	56.3	71.8	69.8	55.1	77.6	54.1	56.0
Average daily minimum air temperature (F)	56.9	38.0	41.3	52.5	53.3	35.5	52.7	41.4	41.3
Average pay per employee (in \$1000s)	48.5	41.9	42.9	48.3	53.7	54.3	44.5	44.5	53.9
Percentage 25 years and over – high school graduate	32.1	31.1	27.9	23.5	20.0	22.5	27.4	27.5	21.6
Percentage 25 years and over – Bachelor's degree	18.3	20.1	20.2	22.7	20.9	26.1	18.8	24.2	22.6
Civilian labor force - unemployment rate	7.4	4.1	7.5	8.4	9.4	5.8	5.5	5.6	8.4
Percentage of people whose income is below poverty level	17.6	11.6	13.9	13.8	16.9	10.4	15.3	10.9	13.6

The quantitative analysis focused on data for three calendar years (January 1, 2012, through December 31, 2014). Site visits were conducted between October 2016 and June 2017.

■ ENDNOTES

- 1 See the 2017 Medicare Shared Savings Program dataset (updated June 29, 2017) at <https://data.cms.gov/Special-Programs-Initiatives-Medicare-Shared-Savin/2017-Medicare-Shared-Savings-Program-Organizations/28pq-6hh8>
- 2 Presentation by David Muhlestein, Leavitt Partners, for the Accountable Care Learning Collaborative, September 14, 2016. Analysis based on CMS data for 2015.
- 3 Trent T. Haywood and Keith C. Kosel, "The ACO Model – A Three-Year Financial Loss?", *New England Journal of Medicine*, vol. 364 (April 7, 2011): e27.
- 4 For Medicare data, the quantitative analysis relied on CMS calculations of actual and standardized costs for the nine site-visit market CBSAs. Medicare calculations were then used to create a multiplier to standardize commercial cost data. For example, if a market's actual Medicare costs were \$1 million, and the standardized Medicare costs were \$1.3 million, the multiplier to identify the percentage difference would be calculated as $(\$1.3 \text{ million} - \$1 \text{ million}) / \$1 \text{ million} = .3$ or 30 percent higher. In this example, to estimate standardized commercial costs, 30 percent would be added to actual commercial costs.
- 5 As defined by the Office of Management and Budget, a core-based statistical area is a geographic area associated with at least one core of at least 10,000 in population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.

**WHAT IS DRIVING TOTAL COST OF CARE?
AN ANALYSIS OF FACTORS INFLUENCING TOTAL
COST OF CARE IN U.S. HEALTHCARE MARKETS**

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