

An HFMA Value Project Report

Strategies for Reconfiguring Cost Structure



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healthcare financial management association

ABOUT THIS REPORT

This report is the third of five reports planned for HFMA's current phase of Value Project research. Other topics addressed in this phase include:

- Acquisition and affiliation strategies (released June 2014; available at hfma.org/valueaffiliations)
- Physician engagement and alignment strategies (released December 2014; available at hfma.org/valuephysicians)
- Measuring and communicating value (forthcoming)
- Societal benefit and cost structure (forthcoming)

All HFMA Value Project resources, including reports and online toolkits, are available at hfma.org/valueproject.

The findings in this report are based on:

- A March 2014 survey of 146 of HFMA's senior financial executive members, including CFOs and vice presidents of finance
- Interviews with industry analysts
- Input of the 14 health systems that serve as members of HFMA's Value Advisory Group
- Site visits to four systems that actively are pursuing significant reconfiguration of their cost structure to address current market conditions and prepare for the future: Banner Health, based in Phoenix; Benefis Health System, based in Great Falls, Mont.; Providence Health & Services, based in Renton, Wash.; and Vanderbilt University Medical Center, based in Nashville, Tenn.

Site visits took place during the fall of 2014 and winter of 2015. HFMA appreciates the willingness of these systems to share their experiences and expertise.

REPORT HIGHLIGHTS

Value creation for care purchasers depends on both optimizing the efficiency with which care is delivered today and investing in new technologies, infrastructure, and innovations that can improve the quality and cost-efficiency of care delivery in the future. Key lessons from HFMA's research on strategies for reconfiguring cost structure include:

Understand that reconfiguring cost structure is different from reducing cost structure. Hospitals and health systems today must emphasize cost reductions in established operations and services but also increased investments in new care management models and infrastructure.

- Understand the lessons health care can learn from the airline industry's reconfiguration in the special feature on page 7.

Give your organization the benefit of time. Organizations that start their efforts early will have an easier time maintaining staff morale.

- See the three promises Benefis Health System made to staff when it launched its "break even at Medicare" initiative on page 12.

Look within the organization for the knowledge required to accomplish the organization's goals. Individuals within an organization know where opportunities to improve efficiency lie, and also understand the obstacles to realizing those opportunities.

- Learn how Banner Health and Vanderbilt University Medical Center (VUMC) leveraged organizational knowledge through the use of internal project management teams on pages 13.

Work to sustain the gains your organization achieves.

Gains in labor productivity can be eroded if a system does not have a strategy for maintaining or building on them.

- Read about Benefis Health System's use of a position control committee to review new staffing requests on page 14.

Realize that standardization can be overdone.

Standardization is important to ensure consistent quality and patient experiences across a system, and can save money on supplies. But a "one size fits all" approach can be inappropriate or limiting in some settings. Also remember that words matter. For example, "reducing unnecessary variations in care" will resonate with clinicians more than "standardization," which may suggest an effort to overly restrict a clinician's ability to make decisions based on individual patient needs.

- See how examples from Banner Health demonstrate the need to standardize at the appropriate level on page 15.

Develop strong physician leadership models to achieve savings from clinical transformation. HFMA members

identify clinical transformation as the area with the greatest potential to achieve savings, but clinicians must trust that transformation efforts will be best for their patients. As earlier Value Project reports have noted, it is important to emphasize quality in clinical transformation; typically, cost savings will follow. Physician leadership is critical to building trust that the focus of clinical transformation will be improved quality of patient care.

- Learn how Providence Health & Services and Banner Health use physician consensus models for clinical transformation on page 18.
- Read about VUMC's diagnostic management teams on page 19.

Account for local market and political considerations when seeking to rationalize assets or service lines.

A decision to consolidate service lines in a single facility or reduce the capacity of a facility can have both competitive and economic effects.

- See the factors that can influence service line and asset rationalization decisions on page 19.

Invest in population health management infrastructure for the long term, but be alert to opportunities for returns in the short term.

Investments in networks and infrastructure capable of managing—and assuming risk for—the health of a population can be equated with “laying the cable” for the next generation of healthcare delivery. Even so, systems can realize savings from these investments in the short term that can help mitigate the expense.

- See how Banner Health Network identifies cost-saving opportunities within its accountable care organization on page 24.
- Learn how clinicians at Swedish Health Services developed a business plan to realize a positive return on a requested investment in population health infrastructure on page 24.

Embrace the likelihood of disruption in health care by investing in innovation.

An organization is better off disrupting its own business model than having it disrupted by others.

- Learn how Providence Health & Services is funding and operationalizing an innovation agenda for the system on page 25.

Consider affiliation as a cost-effective alternative to ownership when developing a population health management network.

Affiliating can help healthcare organizations avoid the substantial costs of acquiring new facilities, minimize antitrust concerns, and help network participants achieve economies of scale while maintaining their independence and local governance structures.

- See how the Vanderbilt Health Affiliated Network benefits its members on page 26.

INTRODUCTION

The need for health systems to reconfigure their cost structure is being driven by two imperatives in today’s market. The first is the reality of declining payments. A combination of legislative actions in recent years—including the Affordable Care Act (ACA), the American Taxpayer Relief Act, and the Budget Control Act of 2011 (which introduced automatic budget sequestration)—amounts to cumulative reductions in Medicare and Medicaid payments to hospitals of an estimated \$460 billion from 2014 through 2023 (see the exhibit below); reductions in the ACA alone account for 85 percent—or \$390 billion—of this total. Not surprisingly, almost two-thirds of respondents to an HFMA survey cite decreased Medicare and Medicaid payments as the main external driver of the need to control costs (see the exhibit on page 4).

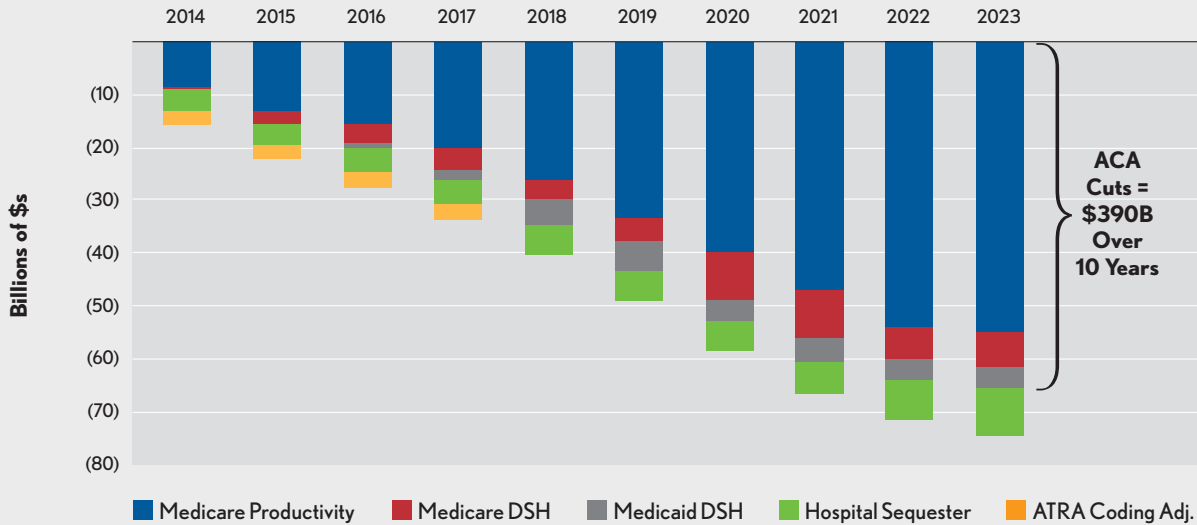
Whereas cuts in public programs traditionally have been balanced by a “cost shift” to other payers, this option is growing increasingly limited. More than 70 percent of

respondents to a recent HFMA survey indicated that they are unable to offset declining revenue from government payers with increased commercial rates. Indeed, commercial payers are feeling pressure from both employers and insurance exchanges (both public exchanges created pursuant to the ACA and private exchanges emerging in response to market demand) to keep rates low.

The pressure of declining or flattening revenue streams is compounded in many markets by declines in utilization, identified by HFMA survey respondents as the second most significant driver of the need to control costs. Industry analysts are still debating the reasons for these declines—arguably a combination of continuing economic headwinds from the Great Recession, the impact of increasing consumer exposure to healthcare costs through the growing use of high-deductible health plans, and changes in healthcare delivery that already are starting to affect utilization of higher-acuity services. Regardless of the cause, declining

ESTIMATED REDUCTIONS IN MEDICARE AND MEDICAID PAYMENTS

85% of Projected \$460 Billion in Hospital Federal Cuts Are ACA-Related



Sources:

1. HFMA analysis
2. Elmendorf, D.W., Congressional Budget Office, letter to Speaker John Boehner, July 24, 2012.
3. Bank of America, "2-Year Budget and 3-Month Doc Fix Legislation," Dec. 12, 2013.
4. Mitchell, A., *Medicaid Disproportionate Share Hospital Payments*, Congressional Research Service, Dec. 2, 2013.
5. Hatch-Vallier, L., "Medicaid and Medicare Disproportionate Share Hospital Programs," CHRT, Jan. 22, 2014.
6. American Hospital Association, "Hospitals Have Absorbed Nearly \$122 Billion of New Cuts Since 2010."

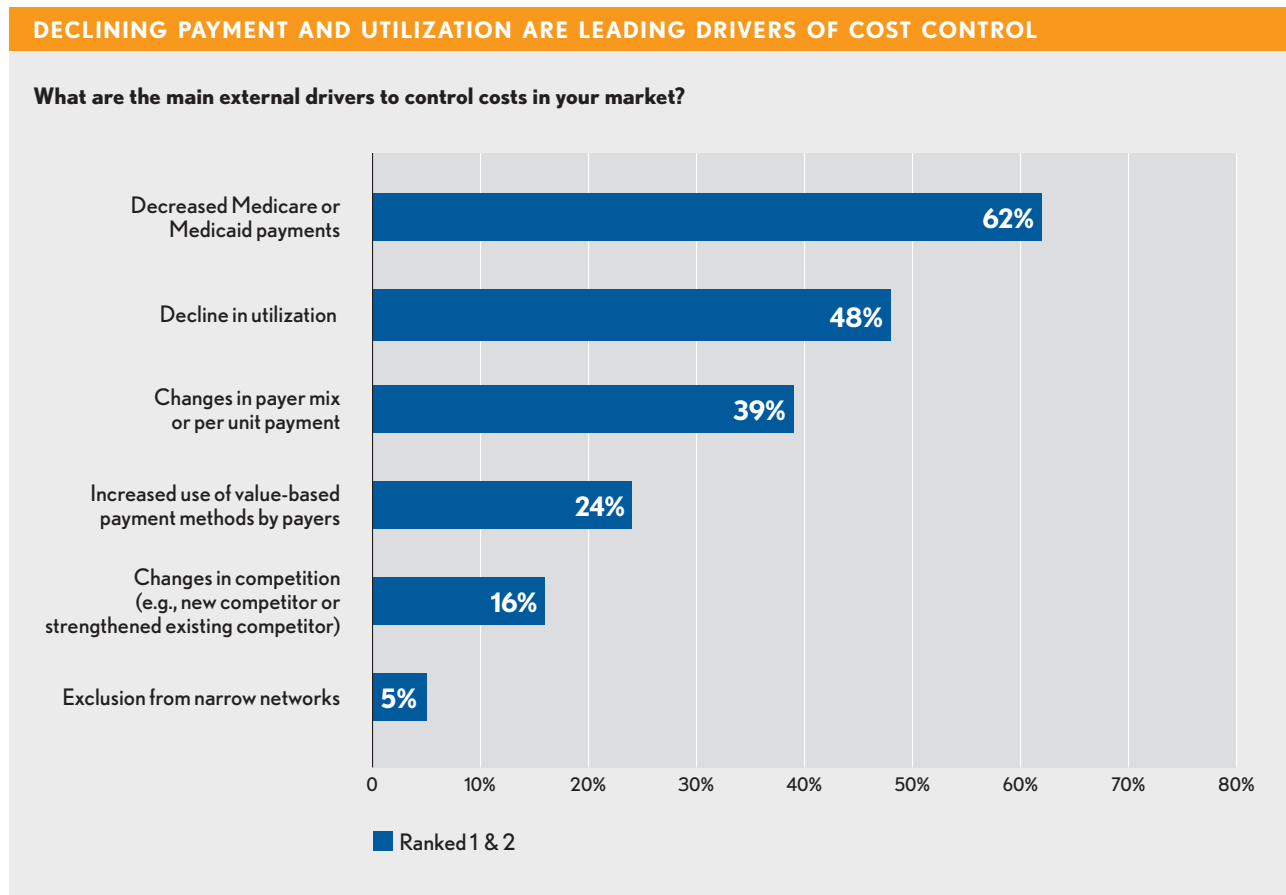
utilization is a reality for many health systems, especially those in more mature markets that are not experiencing population increases.

While ranked fairly low by respondents to the HFMA survey (see the exhibit below), changes in competition—especially in the form of new entrants into the healthcare marketplace—have the potential to significantly affect the price of healthcare services, particularly in primary and secondary care. Many of these services—including lab and imaging, chronic disease management, and common procedures such as colonoscopies—are “bread and butter” for many hospitals and health systems. Competition-driven reductions in prices for these services would reduce the ability of systems to cross-subsidize less profitable services and would put further pressure on cost structures.

Even as payments come under pressure, health systems are facing a second imperative: to develop the infrastructure and capabilities needed to thrive in the emerging value-based payment and care delivery environment. These

investments include IT and analytics, expansion of primary care services, care coordination, and related technological capabilities to increase patient engagement. While systems are looking to contain costs or reduce spending in key areas of their operations, they simultaneously must plan for increased investment in new areas. Seven in 10 HFMA survey respondents identify investments in IT, clinical data warehousing, and reporting to better manage utilization (see the exhibit on page 5), and more than half predict increased spending in the areas of IT and physician organization and clinical services (see the exhibit on page 6). In short, the need health systems face today is not simply to contain costs, but rather to *reconfigure* cost structure so that spending reductions in one area can free up resources needed for new investments in another.

Accordingly, this report will consider both efforts to reduce costs and strategies to fund the investments in technology, clinical services, and innovation that health systems are making to engage in risk-based contracting



and population health management and to prepare for potential disruptions in the competitive landscape. There can be overlap between these areas: For example, clinical transformation initiatives that seek to reduce variation in clinical pathways and supply choices can both generate cost savings and build capabilities to assume risk.

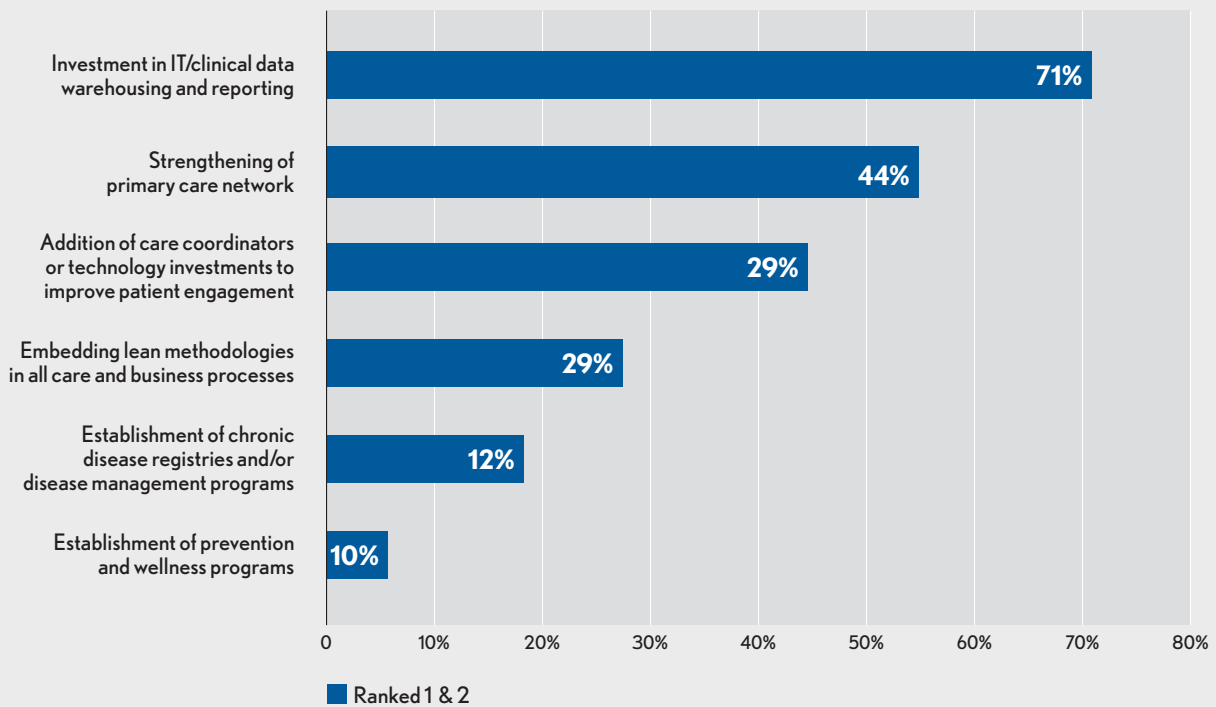
For many years, the industry could afford to pay less attention to costs because the effects of rising healthcare prices to a large extent were not visible to healthcare consumers. With employers eventually reacting to rising prices by raising the deductibles on employer-sponsored insurance, and with health plans increasing deductibles and out-of-pocket maximums to make premiums affordable on the healthcare exchanges, consumers are growing ever more sensitive to the high price of care and are demanding greater value for the significant healthcare dollars they now have at stake.

There clearly are many opportunities to reduce and reconfigure the cost of providing healthcare services.

A report from the Institute of Medicine estimates that excess costs in the U.S. healthcare system in 2009 totaled \$750 billion, with unnecessary services, needless administrative complexity, and inefficiently delivered services representing the three largest categories of waste.^a Results of HFMA’s survey of senior financial executives for this report depict an industry that has not fully addressed the challenges of cost structure reconfiguration: Less than a third of respondents described their cost-reduction capabilities as “strong” in any of the four categories listed on the survey (see the exhibit on page 6). “These are honest survey results,” says Dan Piro, president of MedAssets Advisory Solutions. “Most systems don’t have this figured out; even the systems that are looked to as leaders in the field would probably rate themselves as a 6 or 7 on a scale of 10 in terms of where they think they need to be to thrive in a value-based environment. The key is to have a vision of where your organization needs to go, a plan to get there, and the patience to realize it will take some time to put everything into place.”

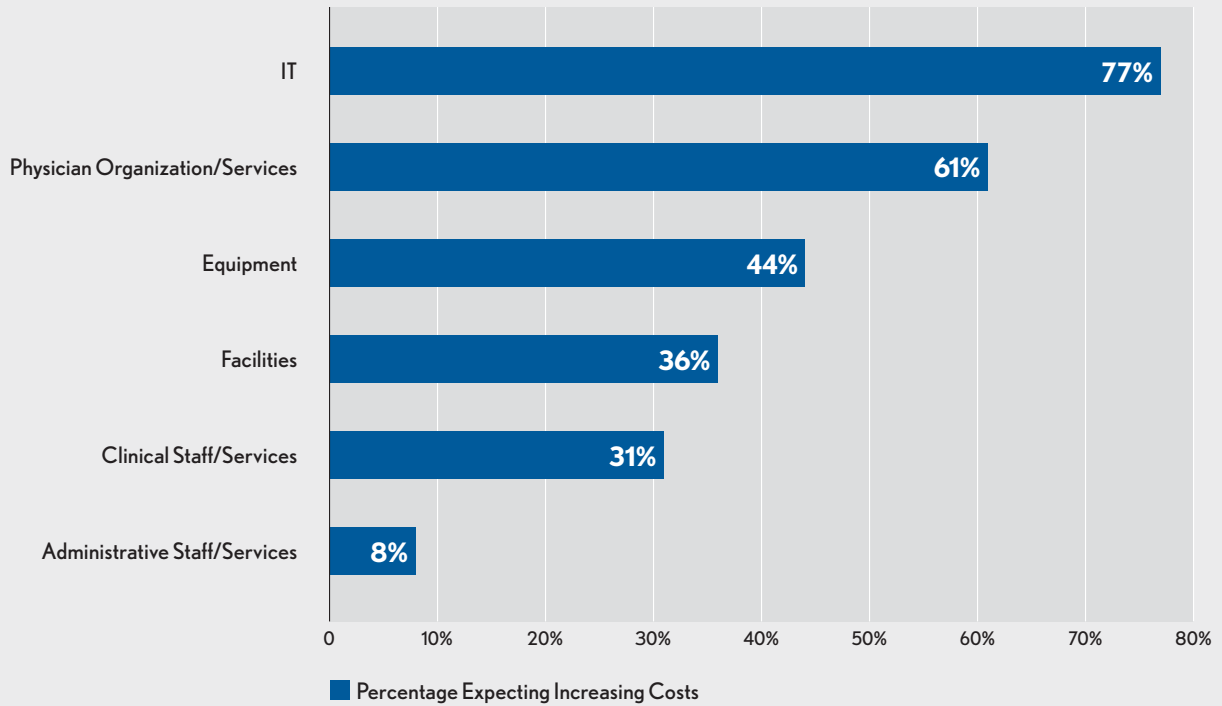
INVESTMENTS TO BETTER MANAGE UTILIZATION

Assuming future value-based payment methodologies will reward appropriate utilization of services, please identify the types of investments your organization is making to better manage utilization.



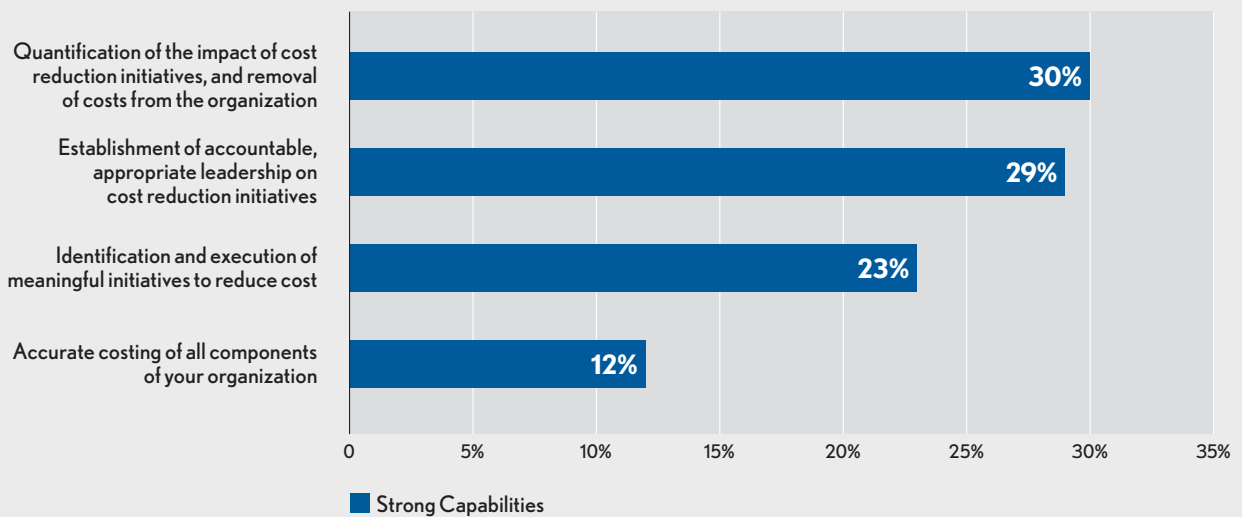
ANTICIPATED CHANGES IN COST STRUCTURE

Five years from now, how do you expect your organization's costs to differ from today?



ASSESSMENT OF COST-REDUCTION CAPABILITIES

Please evaluate your organization's capabilities in the following cost-related areas by utilizing the following scale: (Weak, Moderate, Strong).



LESSONS FOR HEALTH CARE IN THE AIRLINE INDUSTRY'S RESTRUCTURING

The airline industry has been described as “capital intensive, labor intensive, and [with] high fixed costs with revenues and profits closely tied to the nation’s business cycle.”^a It has experienced significant disruptions, beginning with deregulation of fares and routes in 1978 and followed by the emergence of price transparency through the rise of Internet booking. Although airfares, routes, and market entry have been deregulated, the industry remains subject to federal regulatory oversight on issues of passenger safety. Concerns over passenger safety also make the industry vulnerable to crises both natural (e.g., the SARS outbreak of 2002) and human-made (e.g., the terrorist attacks on Sept. 11, 2001). These pressures have created the need for significant cost restructuring.

As the healthcare industry experiences what is likely to be a significantly disruptive period of change, the experiences of the airlines can offer hospitals and health systems lessons to help guide their own transition.

AIRLINE INDUSTRY DISRUPTIONS

In 1978, the federal government’s Airline Deregulation Act opened the industry to free-market forces, ending the Civil Aeronautics Board’s tight regulation of airline fares, routes, and entry to the market.^b Deregulation was followed by the emergence of low-cost carriers, a significant disruption to the business of the “legacy” airlines that had existed previously. Whereas the mission of legacy airlines is to provide service from anywhere to everywhere, operating complex hub-and-spoke systems that require relatively high investments in labor and aircraft, low-cost carriers primarily operate point-to-point services from and between select cities. They typically have high aircraft utilization rates, with quick turnaround times between operations, and fleets consisting of just one or two types of aircraft. Their focus has been primarily on price-sensitive traffic, especially leisure travelers. Their market share grew quickly, from 11 percent in 1998 to 30 percent in 2006.

A second significant disruption to the airline industry was the emergence of the Internet as the predominant means of booking tickets. Although this method is less expensive for airlines than are traditional travel agencies, it also has given consumers the ability to compare ticket pricing and schedules. Increased transparency has been a significant factor in downward pressure on airfares.

The combination of low-cost carriers and price transparency on the Internet commoditized the airline industry. In other words, it created a market in which products are largely undifferentiated—particularly on routes on which both low-cost carriers and legacy carriers compete—with price a significant factor in consumers’ choices. Commoditization of the product has affected carriers’ ability to improve financial performance through revenue enhancement and cost containment. Moreover, the emergence of these disruptive forces has significantly reduced opportunities for legacy carriers to cross-subsidize services and flights by charging higher prices on some routes to make up for losses incurred elsewhere (e.g., at less frequented airports or less traveled routes).

THE AIRLINES’ RESPONSE TO CHANGE

To meet the new challenges to their businesses, legacy airlines focused on three main strategies: cost containment, revenue enhancement, and consolidation.

Cost containment strategies. The tactics used by low-cost carriers opened significant cost gaps between them and the legacy airlines. In 2004, for example, there was a 36 percent gap in operating costs per available seat kilometer between Southwest Airlines and the three largest U.S. legacy airlines.^c The two primary reasons for the cost gap were labor costs and asset utilization.

Labor costs. As in health care, employee-related expenses are the highest cost factor for any airline. As legacy carriers have addressed the issue of high fixed labor costs, the most effective strategy has been to file for Chapter 11 bankruptcy protection to allow for restructuring of pension arrangements. Legacy carriers also have found opportunities to address ground personnel staffing by engaging in “load smoothing.” This strategy seeks to diminish spikes in departure and arrival loads during peak times, which require excess labor capacity on the ground. Fewer opportunities exist with respect to in-flight personnel because the Federal Aviation Administration largely dictates in-flight staffing requirements.

Asset utilization. Legacy airlines have older fleets and require more types of aircraft than do low-cost carriers. An older, more diverse fleet increases costs of maintenance, fuel, and pilot

training. Moreover, the legacy airlines' hub-and-spoke model makes them unable to operate their aircraft for as many hours per day as low-cost carriers can with their point-to-point operations. Legacy airlines have taken on debt for new aircraft and other capital expenditures, but also have chosen to reduce capacity in some areas, especially on routes where they compete head-to-head with low-cost carriers and face low or negative profitability.

Revenue enhancement strategies. Legacy airlines have become experts at finding new opportunities for incremental revenue based on passengers' willingness to pay for such "extras" as early boarding, exit-row seats, or aisle seats near the front of the cabin. They also have become more sophisticated in pricing differently on different days of the week, based on analysis of past demand. They also tend to increase rates for open seats on dates close to the date of travel, knowing that travelers who book late are likely to have a high need for travel. In many cases, extra services are offered to the customer after booking, keeping base rates more competitive on price comparison websites.

Consolidation strategies. Since Delta merged with Northwest in 2008, Continental has merged with United and American Airlines has merged with US Airways, reducing the number of major legacy carriers in the United States to just three. Low-cost carriers are also beginning to consolidate, as with Southwest's acquisition of AirTran in 2011.

Consolidation has provided advantages in terms of both cost and revenues, especially for the legacy carriers. By consolidating routes and operations, and rationalizing capacity on routes, airlines using a hub-and-spoke model can optimize key industry metrics, including:

- Revenue per passenger mile (the average price an airline is able to charge per mile flown by a passenger)
- Load factor (the ratio of the number of occupied seats to the total number of seats flown)
- Flight stage (the average distance of flight per leg of travel; longer flight stages—more typical of the legacy airlines, with their international networks—lessen the overhead impact of takeoffs and landings and reduce exposure to cascading network disruptions caused by flight delays)

Consolidation also is generating some pricing power among carriers.

VALUE CREATION

Have the various disruptions to the airline industry led to increased value for the airlines' passengers? The evidence is mixed. Passenger safety clearly has improved, evidence of price savings to the passenger is uneven, and quality (including the passenger experience) arguably has suffered. One industry observer sees in the legacy airlines "a group of battered, eternally struggling companies trying to come up with a sustainable industry model."^d In short, significant disruptions of an industry create a lot of dust—and it can take a very long time for the dust to settle.

LESSONS FOR HEALTH CARE

"Legacy" providers in health care are likely to experience effects similar to some of those experienced by the legacy airlines.

Federal action to spur competition. The airline industry experienced deregulation, while health care is experiencing a host of new regulations passed pursuant to the Affordable Care Act (ACA) and other recent laws. In both cases, however, the government's intent is to spur competition among providers on the basis of price, service, and quality. The value-based payment provisions of the ACA are an example of federal efforts to improve value in health care.

Emergence of low-cost alternatives. Just as low-cost carriers emerged as a major disruptor of the airline industry, so too are low-cost providers expected to disrupt healthcare delivery. Stand-alone radiology centers, urgent care options and retail clinics in strip malls and pharmacies, and independent labs already have appeared on the scene. Also on the horizon are cost-effective technological solutions for care that today is delivered in person.

Commoditization of services. It is widely expected that the ACA insurance marketplaces will to some degree commoditize the health insurance market, particularly among cost-sensitive individual purchasers. The exchanges seem quite similar to the use of the Internet to purchase airline tickets; over time, evidence has shown that online ticketing contributed to undifferentiated products and downward pressure on prices. Between that trend and the emergence of new low-cost providers, it is likely that hospitals and health systems, as with the legacy airlines, will need to minimize or forgo cross-subsidization of services over time to remain competitive.

Elasticity of demand. Due to continuing financial pressures, improved care coordination, commoditization of the market, and further cost shifting to patients, the healthcare industry may experience increased elasticity of demand for services that perhaps are overutilized or unnecessary.

Such effects may also trigger strategic responses in health care that mirror some of those deployed by the legacy airlines, including:

Transitioning from fixed to variable costs. The legacy airlines took extreme action to reduce some of their most significant fixed costs, most notably labor. In health care, the biggest challenge may lie in moving from a traditional bricks-and-mortar care delivery system to one that is more decentralized or, in some instances, virtual. As they do this, hospitals and health systems may have an opportunity to reduce the variety of physical assets they manage, just as low-cost carriers have gained a cost advantage by managing relatively uniform aircraft.

Customer segmentation and revenue enhancement. Just as airlines have sought incremental revenue enhancement through improved access, convenience, or comfort for segments of their passenger base that are willing to pay more for these services, healthcare providers are likely to become more focused on segmenting customers and developing innovative new service enhancements for some segments of their market. To do so, they will need a clear understanding of their value proposition for different segments and an objective view of whether they can meet targeted customers' needs better than their competitors can.

Rationalization of services. As airlines have shed or reduced traffic on routes where over-capacity exists, so too are hospitals and health systems likely to eliminate or reduce service lines if sufficient capacity exists elsewhere in the market.

Consolidation. As documented in HFMA's Value Project report on acquisition and affiliation strategies (hfma.org/valueaffiliations), healthcare organizations of all types and sizes are considering opportunities to improve scale through affiliation, acquisition, or merger. The value to passengers of consolidation within the airline industry still is being debated, and has attracted the scrutiny of federal antitrust agencies. As consolidation among healthcare organizations increases, they also will be challenged to tangibly demonstrate the value of consolidation to patients and other care purchasers.

While there are obvious differences between the airline industry and health care, there are many similarities as well. As the U.S. healthcare system embarks on what likely will be decades of significant transformation, the experiences of the airline industry may provide some guidance on strategies to remain financially viable during this period of change.

Note: This feature is based on an analysis prepared for HFMA by McManis Consulting.

Footnotes

- a. General Accounting Office, *Commercial Aviation: Legacy Airlines Must Further Reduce Costs to Restore Profitability*, August 2004.
- b. Passenger safety remained subject to regulatory oversight by the Federal Aviation Administration.
- c. International Air Transport Association, *Airline Cost Performance: IATA Economics Briefing #5*, July 2006.
- d. Fox, J., "Which Is Worse: Airline Monopolies or Airline Competition?" *Harvard Business Review*, Aug. 15, 2013.

RECONFIGURING COST STRUCTURE: OPPORTUNITIES, CHALLENGES, AND STRATEGIES

Most members of the healthcare industry would admit that there are opportunities for cost savings throughout the system, and this report will not attempt an exhaustive inventory of these opportunities. Instead, it will focus on major cost categories that represent the greatest opportunities for savings: labor and productivity improvement, supply chain, clinical transformation, and service line and asset rationalization.

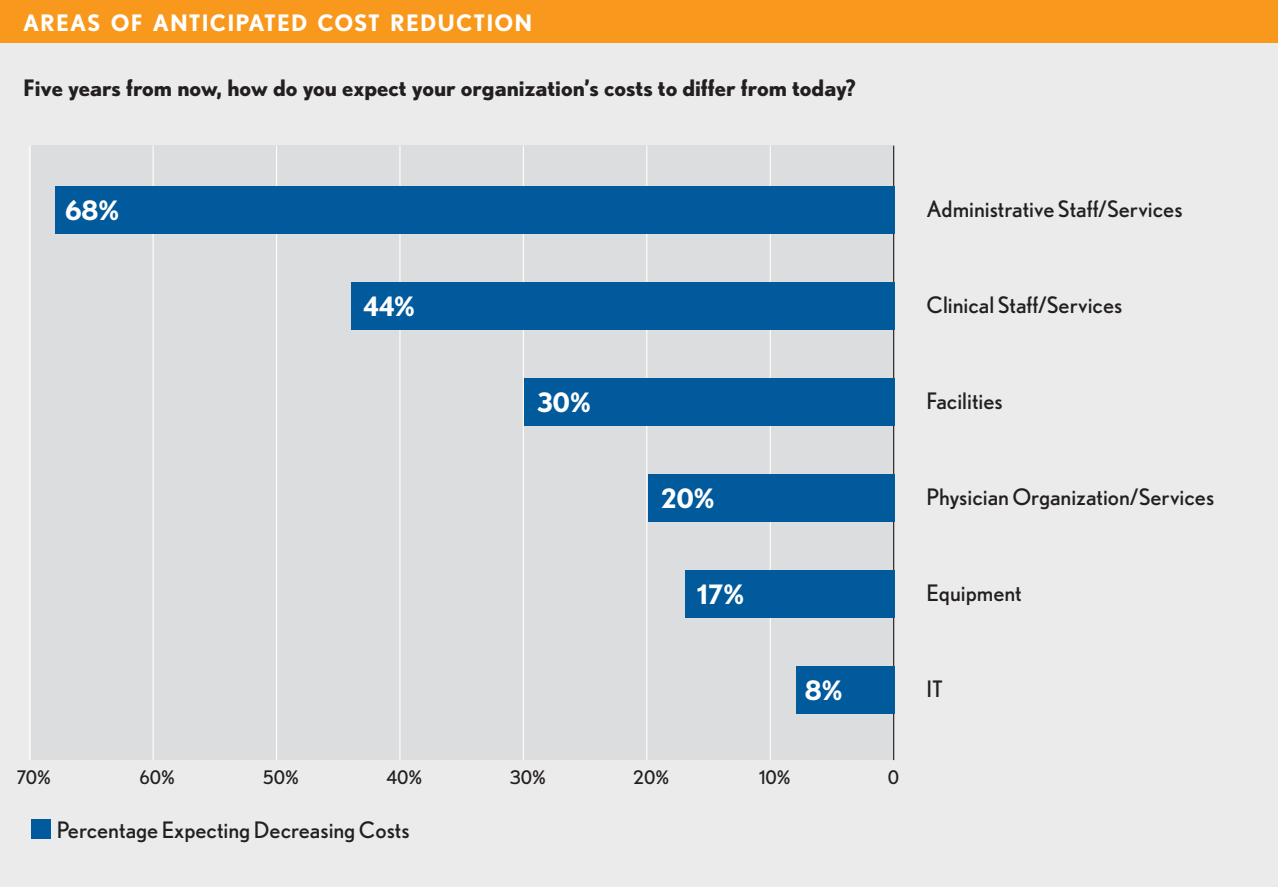
This report will not draw major distinctions between “fixed” and “variable” costs, with the understanding that many costs considered fixed today will become variable over time. As Piro of MedAssets notes, “All costs are variable in the long run. The magnitude of cost reductions necessitated by the dynamics of today’s healthcare marketplace has not been encountered before. Cost restructuring must be foundational, with all cost categories on the table.”

LABOR COSTS AND PRODUCTIVITY IMPROVEMENT

With labor comprising 50 to 60 percent of total costs for the average health system, any effort to reconfigure cost structure should address the efficiency of the labor force and seek opportunities to optimize staff productivity.

Administrative and clinical staff and services. When seeking labor productivity improvements or opportunities to reduce the size of the labor force, most systems are segmenting between administrative and clinical staff. More than two-thirds of respondents to the HFMA survey expect to decrease administrative staff and services over the next five years, while fewer than half expect to decrease the costs of clinical staff and services (see the exhibit below).

The health systems that participated in site visits for this project similarly have emphasized administrative over



clinical staff and services in their cost reconfiguration efforts. When Banner Health initiated a transformational change initiative to reduce costs approximately three years ago, it began with the system's general and administrative expenses—an effort it described as corporate services optimization (CSO). Internal cross-functional teams identified and brought to senior leadership 123 recommendations for CSO, 116 of which were approved for implementation. The CSO initiative generated \$31 million in savings in 2012 (including estimated efficiency gains), an additional \$27 million in 2013, and an estimated additional \$13 million for 2014.

When Vanderbilt University Medical Center (VUMC) launched its Evolve to Excel initiative, it deployed a team of 30 individuals taken from their regular positions and placed in a program management office. Their task was to look at staffing levels across academic, clinical, and support functions and establish targets for reductions. The team emphasized reductions in administrative and management positions, not those involving direct clinical care. Reductions were accomplished through substantial restructuring. For example, VUMC streamlined administrative support for its research enterprise—moving from support services dispersed across more than 30 units to centralization within four new “regional pods” that handle finance and human resources functions for the various departments within the pod.

At the time of HFMA's site visit, Providence Health & Services was approximately two-thirds of the way toward meeting the system's goal of consolidating many of its administrative services—including revenue cycle, finance, human resources, real estate, and IT—at the system level. As this process nears completion, the organization is beginning to reduce administrative and operational expenses at the regional and facility levels. The challenge now is determining the right level of support to maintain at these levels.

Banner Health also has begun centralizing support services. Prior to its CSO initiative, each facility had a public relations representative on-site. The PR group was realigned around separate service categories (e.g., owned media, earned media) and centralized to provide the same level of service at a lower cost.

While initial focus typically is on administrative staff and services, many systems have also identified

opportunities to optimize the efficiency and productivity of clinical staff. As part of its “break even at Medicare” initiative, for which the goal was to achieve a neutral to positive margin on Medicare services, Benefis Health System sought to substantially reduce its use of premium labor. Nursing staff agreed to “flex up” two shifts per quarter (i.e., they agreed to be scheduled for up to two shifts above the regular FTE load). At the same time, nurse managers agreed to be on each of the three nursing shifts at least once per month, which Terry Olinger, president of Benefis Acute Care Group, describes as “a huge morale booster” for the nursing staff. As a result, at the time of HFMA's site visit in late October 2014, the system had used no “traveler” nurses since 2003.

Providence Health & Services relies heavily on benchmarking of productivity across both administrative and clinical services. Benchmarks are derived from a variety of industry services (e.g., state hospital associations, professional associations, consulting groups), and the system then budgets to benchmarks, with annual improvement goals built in. Local facilities are asked to develop their own strategies to achieve the benchmarks, with a good deal of flexibility in implementation so the appropriate mix of “under” and “over” benchmark decisions can be determined based on facility-specific factors, even as the facility manages to the overall benchmarked number. Dan Harris, CFO of Swedish Health Services, an affiliate of Providence Health & Services, notes, “The system does not necessarily strive to be in the top decile of benchmarks. In clinical areas, for example, Providence has adopted the 35th percentile as its productivity benchmark, in the belief that a harder push may lead to sacrifices in quality of care and morale.”

Outsourcing and insourcing. Significant cost savings can be achieved through outsourcing appropriate services or, in some cases, bringing outsourced services back in-house.

Having accomplished its staff reduction goals, VUMC is considering which services can be outsourced. It already has outsourced servicing of desktop computers within the system to a national vendor, with estimated savings of 15 to 20 percent on a \$5.6 million budget. Providence Health & Services likewise is looking for savings within its IT budget. Given the size of the organization, it has a sufficient volume

of business to support an IT equipment distribution center located at the system's new consolidated service center in Lacey, Wash. The center offers centralized formatting of all IT equipment before it ships and a vendor-certified repair service for damaged equipment.

Conversely, Banner Health has realized an estimated \$6 million in annual savings by insourcing a formerly out-sourced service. Banner had contracted with a vendor to perform secondary physician reviews for observation-status patients and denials management. The vendor was paid "by the click," with a minimum number of clicks required by contract. Banner realized that the vendor's physician advisors were talking with Banner physicians over the phone, but not fully engaging with them on potential underlying issues. Banner created a new position, medical director of care coordination (MDCC), and put MDCCs into its larger facilities as well as in a central hub. The MDCCs have helped assign the correct status to patients up front, and they can go immediately to the physician for a secondary review if any issues arise. They also have helped with concurrent care denials and in engaging the system's physicians in clinical

QUESTIONS TO IDENTIFY LABOR EXPENSE REDUCTION OPPORTUNITIES

Banner Health has developed a series of questions to help managers identify labor expense reduction opportunities in their departments:

- If our goal is reduce labor expenses as a percentage of revenue over the next six to eight years, how do you think we can reduce labor expense each year? For example, can we reduce overtime, callback, and premium/casual labor?
- In thinking about reducing labor costs, is there an opportunity to improve or change your department's skill mix to ensure associates are working at the top of their credentials? Alternatively, is there an opportunity for self-service or automation?
- Have you considered FTE mixes: 1 (80 hours), 0.8 (60 hours), 0.6 (48 hours), etc.? The best balance of full-time and part-time staff? Interns? Temporary contract employees?
- Do you employ any temporary or contracted staff to handle volume or the cycle of your work?
- Have you adjusted your staffing for any recent acquisitions or new lines of business?

documentation. Most importantly, they spend a considerable portion of their time on-site and have been able to develop strong working relationships with Banner's physicians.

Strategies for implementation. Because efforts to reduce the size of staff or increase productivity can have a significant impact on an organization's culture and morale, a strategic approach to labor- and productivity-focused initiatives is critical. The following considerations are especially important.

Timing. Benefis Health System purposely launched its "break even at Medicare" initiative in 2009, before the system was feeling the full impact of reductions in Medicare and Medicaid payment rates (it achieved its goal in 2012). With approximately 70 percent of its patient revenues coming from government payers, the system knew it had to reduce its cost structure to remain viable over the long term. By getting an early start, the system was able to make three promises to its staff when it launched the initiative:

- There would be no staff layoffs
- There would be no cuts to staff benefits
- There would be salary increases each year

"The commitment to no layoffs and regular salary increases was very important for employee trust, and was enabled by the fact that Benefis was looking ahead instead of being reactive with the initiative," Olinger says.

The three promises to Benefis staff were supported by two additional emphases: to "retain and retrain" employees, moving people into new roles or asking them to take on new responsibilities; and to communicate regularly and openly with staff. "Communication is key to employee satisfaction," says system CEO John Goodnow. "We sponsor employee open forums three times per year, make use of an internal newsletter, and send an annual thank you letter to staff after the holidays congratulating them on the year's accomplishments."

A system may not always enjoy the benefit of time, of course. Rapid changes in the payer environment left VUMC facing a \$250 million gap, and the system needed to respond quickly. It decided to eliminate both vacant and filled positions over a short time period (approximately four months), thus minimizing the duration of the inevitable pain caused by staff reductions. C. Wright Pinson, CEO of Vanderbilt Health System, describes the biggest

lesson from the experience as the need to identify and act upon problems as quickly as possible, ideally creating a greater time frame for action. “A system our size naturally turns over approximately 2,500 people each year, and our targeted staff reductions of 1,100 positions were less than half this number,” Pinson notes. “With more time, we could have handled the problem primarily through attrition.”

Regardless of the time available, systems that are reconfiguring the size of their labor force should also remember that, as positions are eliminated or combined, work flows must be redesigned to align with new staffing models—ideally before the new model is implemented.

Use of internal project management teams. Both Banner Health and VUMC created special internal teams to identify opportunities for staff reductions and workforce reconfiguration. At VUMC, as noted previously, a team of 30 individuals were taken out of their regular jobs and assigned to a program management office full-time. Team members were chosen based on their knowledge of the health system and were guaranteed a return to their regular positions. The team included analysts, registered nurses, finance department members, and IT staff who could help with data pulls. The team went unit by unit through the system, looking at existing staff levels and establishing targets for reductions. The review was based on a “rank and select” process that considered factors such as needed skill sets and degree credentials for the positions. Out of 15,000 positions reviewed, 1,100 were identified for elimination.

For its CSO initiative, Banner Health put together eight cross-functional teams, comprising middle managers, a consultant from a firm Banner had engaged for the initiative, and a sponsor or steward from the system’s leadership team. Each team was given an eight-week schedule to identify changes that would drive cost reductions within each division of corporate services. The work of the teams was done confidentially, an approach that has both pros and cons. “On the one hand, it ensures that there are no ‘sacred cows’ and that team members can talk about anything,” says Kirsten Drozdowski, Banner’s optimization senior program director. “On the other hand, it can undermine employee morale and means that individuals who are not members of the team can dispute data or other premises of the team’s work.” On balance, the short time period that team members were given to identify recommendations probably helped

WORKING WITH CONSULTANTS

Most of the health systems interviewed for this report have engaged consultants to assist in their efforts to identify opportunities for cost savings and to implement strategies to achieve those savings. Consultants often bring a valuable outsider’s perspective on a system’s operations that can identify opportunities not readily apparent to individuals who are working within the system on a daily basis. They also have experience in implementing cost-reduction strategies across a variety of organizations. At the same time, systems should take care to distinguish between what a consultant recommends and what the system is willing to “own.”

Some tips gleaned from our conversations with health systems include:

Use consultants to validate the need for cost reductions, but own the issue. When Vanderbilt University Medical Center (VUMC) faced what it projected as a \$250 million gap, the opinion of an outside consultant verifying the need to address that shortfall gave management the support it needed to pursue cost reductions. At the same time, VUMC’s leadership made clear that it was taking full responsibility for an initiative, known as Evolve to Excel, that took those costs out of the system. For example, VUMC leadership, not the consultants, made any public presentations to staff.

Understand that recommendations must be paired with realities. Very few systems will be able to achieve all the cost-saving opportunities that a consultant might identify. Leadership typically will have a much stronger sense of an organization’s unique culture and capabilities than will an outside consulting firm. Consider all recommendations, but give priority to those that seem the most achievable.

Use consultants to “train the trainers” within your organization. Consultants can bring valuable skills in project implementation and management to an organization. Leaders should identify staff who are strong project managers and make sure they have the opportunity to observe and learn from the consultants’ work. Banner Health assigned staff to learn the process for facility-based optimization efforts from its consultants so the work could be continued internally at additional facilities within the system.

Bring talented consultants in-house. Consulting firms are incubators for industry talent. System leaders should consider making an offer to employ individuals who have displayed standout skills.

to mitigate any negative consequences that a more drawn-out period of confidential work could have amplified.

Maintaining and building on gains. Gains from a significant reconfiguration of staff can be eroded if a system does not have a strategy for maintaining or building upon those gains. At Benefis, a position control committee has been put in place to review all requests for staffing. Comprised of six to seven members, the committee is peer-staffed and includes managers, directors, and the chief administrative officer. When a request for staffing is made, the committee looks first at working with the manager making the request to see whether changes in work flow or processes would make a new position redundant. The committee also looks at how well the requesting manager is performing against his or her productivity and budget goals, and scrutinizes a request more closely if these goals are not being met. Peter Gray, executive director of Benefis senior care, currently leads the committee and notes that its ability to make timely adjustments to system finances is a big part of its success. “If Benefis is having a more difficult month, the committee

can ‘turn off the spigot’ for new hires,” Gray says. “When the system rights itself, the spigot reopens.”

At Banner Health, the CSO initiative was successfully transferred to several of the system’s facilities and then system-wide. Staff from several Banner facilities had served as “external” members of the CSO cross-functional teams to give feedback and challenge the team’s assumptions. Members of the Banner-University Medical Center (formerly Banner Good Samaritan) staff who had participated on the CSO teams suggested making a similar effort at the hospital, and identified almost 100 ideas for implementation at the facility. Subsequently, the idea was taken up at Banner North Colorado Regional Medical Center, Greeley, Colo. Results of the facility-based optimization projects, reported in the *Harvard Business Review*, included a reduction of 15 percent in Banner-University Medical Center’s cost structure, with \$15 million in direct savings realized over 12 months; and savings valued at 17 percent of Banner North Colorado’s labor and non-labor cost base, with more than \$13 million in annualized savings captured in the first year.^b Banner since has launched

OPTIMIZING “SYSTEMNESS”

Multi-facility health systems have the opportunity to magnify the gains that one facility is able to achieve. They also can tap into a depth of expertise not available to smaller organizations. These advantages may not be realized, however, unless a system makes a conscious effort to optimize “systemness.” Examples of these efforts include:

Clinical performance groups. Both Providence Health & Services and Banner Health are assembling clinical groups that draw members from across their organizations, organized around a particular clinical area or specialty. While these groups are useful in defining clinical pathways and protocols on behalf of their peers, they also serve as networking opportunities within a specialty, bringing to the surface different areas of expertise that may not have been recognized before.

A “broadcast” approach to cost savings. Doug Bowen, vice president of supply chain management for Banner Health, distinguishes between a “broadcast” approach and a “serial” approach to cost savings. In a broadcast approach, many different things are happening in different places at

the same time. In a serial approach, the organization as a whole is pursuing the same objective via the same series of steps. Bowen notes that a big, system-wide serial approach “can take up a greater amount of time and energy than 100 smaller projects that achieve the same result.” When a broadcast approach is able to produce a lot of good ideas, the impact of those ideas can be multiplied by sharing them across the many facilities within a system.

System-level services. Providence Health & Services has made a significant effort in recent years to consolidate administrative services at the system level. As the process nears completion, the system can reduce administrative and operational expenses at the regional and facility levels.

Again, optimizing systemness requires a conscious effort—and a smaller size can have its own advantages. An interviewee at Benefis Health System who formerly worked for a large system notes, “What you can lose with economies of scale is accountability. Benefis is more lean and nimble, and it is impossible to hide here.”

a system-wide optimization effort across its acute care hospitals and healthcare facilities.

SUPPLY CHAIN

Supply costs are second only to labor, with supply chain and purchased services budgeted at approximately 18 to 20 percent of net healthcare revenue at the health systems HFMA visited for this report. While supply chain optimization has been a focus of many systems in recent years, supply chain managers are under constant pressure to compensate for inflation, new technology, and other new areas of spend.

Several interviewees commented on the impact of specialty pharmaceuticals. For example, Doug Bowen, vice president of supply chain management for Banner Health, notes that in 1985, 4 percent of the supply spend was on pharmaceuticals. By 2014, that share had grown to 28 percent, with the increase attributable to the rise of biological drugs, new cancer drugs, and other specialty pharmaceuticals. Dave Hunter, vice president of supply chain management for Providence Health & Services, cites similar statistics, noting that the organization's spend on specialty pharmaceuticals rose from 25 percent to 33 percent of total supply spend over the past five years. Although little can be done to check the rise in the cost of specialty pharmaceuticals, these increases add to the imperative to find savings elsewhere in the supply chain.

Physician preference items. Supply chain managers actively are seeking opportunities to collaborate with physicians, and are putting in place formalized structures for clinical participation in supply chain management and review of supply chain spend. At VUMC, supply chain leader Teresa Dail works closely with the Medical Economics and Outcomes Committee, members of which are on stipend and focus on new product and technology acquisitions and requests to deviate from established vendors. The committee is increasing its engagement with the system's patient care centers (including surgery, oncology, and cardiology) to demonstrate how opportunities with different suppliers could help reduce variations in care and produce more consistent patient outcomes.

At Banner Health, Bowen is working closely with Terry Loftus, MD, Banner's medical director of surgical service and clinical resources, to assist physician value-added

analysis teams representing each specialty in the development of supply formularies. Banner is committed to the belief that reduced variation in clinical care produces high-quality, reliable outcomes. Accordingly, when a formulary has been developed for a specialty or service line, physicians must request an exception and present evidence on why an exception is justified.

At Providence Health & Services, one of the largest not-for-profit healthcare organizations in the nation, consolidation of supply chain operations at the system level is enabling a cross-system view of spending, which is helping to reduce "special spends" by clinicians and promoting greater standardization of clinical supplies. Clinicians requesting "special spend" items now are required to complete a product request form. Before making the purchase, supply chain management can check a database to see whether the system already has contracted for that supply at another facility and, if it has, see the contracted price. It can then either insist on the contracted price for the "special spend" request or negotiate a better price based on increased volumes for the supply.

Standardization of supplies. Standardization—or "reduced variation," as it is known on the clinical side—is a focus of most supply chain managers. Less variation means greater volume of the "standardized" supply, which can be a bargaining point for a lower price from a vendor. Standardization also is a strong factor in ensuring the quality and reliability of a service or product. But, as Banner Health's Bowen cautions, "Standardization can be overdone, and when you do standardize, you want to do so at the appropriate level."

Bowen offers two examples to support his point. In its operating rooms, Banner was using an evacuator and waste management system that had four manifolds available to evacuate smoke and fluids. A nurse identified a two-manifold device that worked for 80 percent of the cases in the OR. Banner now uses the more expensive, four-manifold device only where needed. "You want to meet specifications, but you don't need to exceed them," says Bowen.

In the second example, one of Banner's facilities wanted to standardize its IV tubing. But there are many different types of IV tubing, ranging from single-port to multiple-port tubes. The only way to standardize would be to go with one "all capable" tube, which would drive up costs because

the more expensive tube would be used in all circumstances, and often when it was not needed. As Bowen observes, “You don’t always need to drive a Mercedes if a Chevy can get you to the same place.”

Strategies for implementation. All of the systems interviewed for this report participate in a national group purchasing organization (GPO). Both Providence Health & Services and VUMC have worked with their national GPO vendor to develop customized contracting models that enable them to operate what is in effect a regional GPO within the framework of the national GPO.

Originally named ProvSource, the contracting model at Providence uses a three-pronged approach to achieve supply chain savings. First, it can use the national GPO’s portfolio. Second, the national GPO’s portfolio options can be enhanced to provide additional benefits to Providence. Third, Providence can develop customized pricing with vendors out of the national GPO’s portfolio to meet unique system needs. Under this structure, Providence is able to negotiate for the custom-pricing arrangements based on price benchmarks negotiated by its national GPO; as ProvSource, it also offered its services to other systems in the Pacific Northwest. ProvSource’s goal was to negotiate pricing 5 percent below contracted price benchmarks negotiated by its national GPO, and it achieved between 11 and 12 percent. The original ProvSource affiliations have changed as participants have merged with other systems and moved out of the arrangement with Providence. Following its affiliation with Swedish Health Services, however, Providence is big enough to maintain the customized pricing model.

VUMC’s Dail also describes the purchasing affiliate her system has created as a regional purchasing collaborative operating inside the framework of its national GPO, with VUMC serving as the contracting agent for affiliate members (note that the purchasing affiliate and its members are distinct from the Vanderbilt Health Affiliated Network, described later in this report). Participation in a particular supply purchase is voluntary for affiliate members—VUMC shows the value it can obtain for the member, which chooses whether it wants to participate. After choosing to participate, an affiliate member signs a letter of commitment and monitors its spend on a monthly basis to ensure that it is meeting its commitment. Dail notes that the arrangement also appeals to vendors because, unlike the national GPO,

VUMC can leverage its relationships with affiliate members to drive compliance with contract terms. This approach lets vendors confidently put the revenue for the supply purchase on their books.

Other strategies for reconfiguring costs in the supply chain include:

Consolidating supply chain functions. As part of its effort to consolidate administrative services at the system level, Providence Health & Services has built a consolidated service center for the organization’s Washington, Oregon, and Montana facilities. The center is moving to “just in time” distribution, which lowers inventory costs, and has invested in carousels that use “pick to light” technology for handling inventory, which can double conveyor rates. The system also has hired industrial engineers to analyze nursing carts, operating rooms, and catheter labs to estimate “just in time” inventory needs and reduce losses from obsolescence and waste, especially on higher-cost items. The fill rate on supply orders in the consolidated service center has gone from between 93 and 94 percent to between 98 and 99 percent.

Establishing vendor expectations. Benefis has established what supply chain leader Bryan Buckridge describes as a strict “we do not price-shop” policy. When working with a new vendor, Benefis does not disclose its current price or engage in lengthy negotiations. Vendors are told to come in with their best offer and that if they fail to do so, they will not be allowed to rebid for a six- to 12-month period. At the same time, an existing vendor is given a “one shot” opportunity to rebid. With this policy in place, Benefis secured \$3 million in savings over the prior year’s budget in 2007-08, an additional \$1.9 million in 2011, and \$956,000 in 2013.

CLINICAL TRANSFORMATION

When asked where they saw opportunities to achieve cost savings, respondents to the HFMA survey identified clinical transformation (clinical-process and work-flow redesign and greater use of clinical pathways based on evidence-based medicine) as the greatest opportunity by a substantial margin (see the exhibit on page 17). Yet this is an opportunity that many systems are just beginning to explore. Clinical transformation can be

a difficult process for a number of reasons: It can require significant changes to a physician culture that has long prized autonomy in clinical decision-making, it can disrupt long-standing relationships between physicians and medical supply representatives, and it requires a delicate balance between reducing variations that do not improve clinical outcomes and giving clinicians adequate flexibility to address individual patient needs.

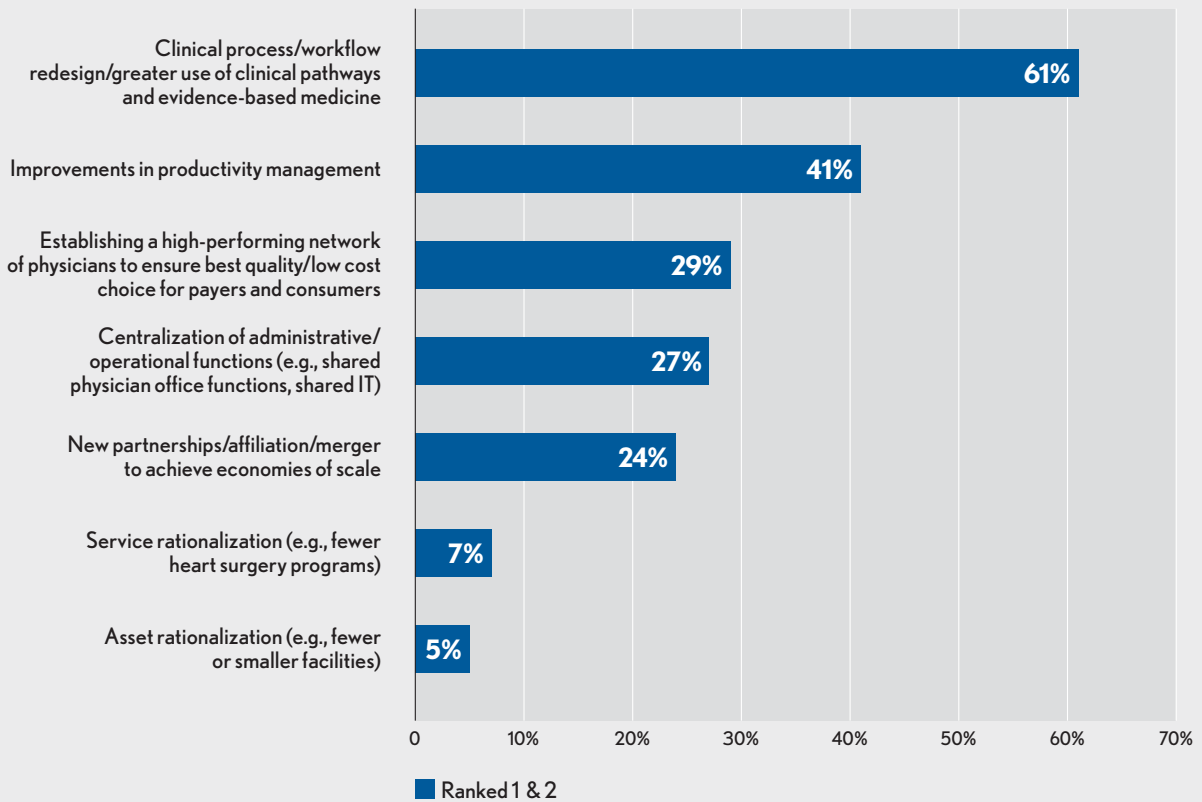
Twila Burdick, vice president of organizational performance at Banner Health, described the system’s emphasis on clinical transformation work as “increasing clinical reliability.” There are clear virtues to reducing variation—particularly when there is good evidence—including delivering superior outcomes, ensuring that patients have a common experience across the system, and creating a platform for ongoing learning and improvement. Banner

is a diverse system in terms of geography and facility size. When the system’s clinical consensus groups get to work on designing a new clinical practice, they address the granular effects at the patient level and the specific needs of patient sub-cohorts. Charles Agee, MD, chief medical officer for Banner’s Arizona West Region, notes, “Our intent is not to implement ‘cookbook’ medicine. Instead, it is to provide basic pathways for patient care that allow clinicians to use their acumen to focus on outliers.”

VUMC in 2011 launched its Vanderbilt Health Affiliated Network (VHAN), a network of health systems and other providers across Tennessee and adjoining states that will be VUMC’s primary vehicle for entering risk-based contracting. William Stead, MD, chief strategy officer for VUMC, and David Posch, CEO of Vanderbilt University Hospital & Clinics and executive director of Vanderbilt

OPPORTUNITIES TO ACHIEVE SAVINGS

What have you identified as the greatest opportunities to achieve savings, either directly or through utilization impacts, over the next three years?



Medical Group, describe a “spine” of care transformation capabilities that VUMC is developing to support the provision of reliable, value-based care across the network. Stead describes the approach to extending these models across the network as “mass customization of a standard chassis” to adapt models to the needs and capabilities of particular network members.

Consensus models for clinical transformation. One of the biggest challenges in clinical transformation initiatives is engaging clinicians in the value of the work and securing their commitment to new clinical pathways and protocols. Physician leadership is critical to meeting this challenge, building on peer-to-peer relationships to establish a foundation of trust. Banner Health and Providence Health & Services have developed clinical transformation models that bring together teams of clinicians from across the organization to address variations in clinical practice, develop evidence-based clinical pathways and protocols, and build consensus on new care delivery models with their peers.

To date, Banner Health has formed approximately 20 clinical consensus groups throughout the system to develop formularies and clinical pathways designed to reduce variations in clinical processes. Each clinical consensus group is co-led by a clinician and a physician (who often is not employed by Banner). Agee notes, “The fact that ideas for new clinical pathways come out of these groups means that change isn’t being driven top-down. Members of the group go back to their colleagues and hospitals and help move them in a new direction.”

Successes so far include discontinued use of adhesion barriers in Cesarean sections and a simplified total knee arthroplasty (TKA) clinical pathway. In the first example, adhesion barriers that were effective in abdominal surgery also were being used for obstetrics, but the clinical consensus group agreed that there was not a sound basis of evidence for their use in C-section procedures. Once the use of the barriers was discontinued in obstetrics, Banner saw \$1 million in annual supply cost savings without an increase in complications for repeat C-sections.

In the second example, a simplified TKA pathway focused on two elements: avoiding placement of a continuous urinary catheter following the procedure and encouraging

early ambulation (avoiding the use of continuous passive motion machines). Banner found that patients who did not have the catheter placed were 5.9 times more likely to ambulate postoperatively on the day of surgery, and that patients who ambulated on the day of surgery then were 2.9 times more likely to ambulate two or more times on the first postoperative day. After adoption of the new pathway crossed the 40 percent threshold, reductions in complications, length of stay, and readmissions amounted to \$3 million in savings and drove overall improvements to patient care.^c

As of the date of this report, Providence Health & Services has brought together 16 system-wide clinical performance groups (CPGs) comprising 2,000 physicians, both independent and employed. The CPGs are related to service lines, but because they take a “condition” rather than a “procedure” view of clinical care, they also may include emergency physicians, primary care physicians, and other clinicians in addition to the relevant specialists.

Efforts of Providence’s CPGs are focused on six “pillars”:

- Resource standardization
- Evidence-based medicine and resource utilization
- Clinical technology assessment and adoption
- Research
- Accountable care and reform readiness
- Optimization of the system’s electronic health record (EHR) and data warehousing

CPG members are recruited from across the system to ensure all of Providence’s nine regions across five states are represented in the groups. Once formed, a CPG holds an initial summit, beginning with general sessions that include information on the effects of clinical practice reform and both national and system perspectives on the CPG’s specialty. The CPG then breaks into rigorously facilitated affinity groups to address key questions and brainstorm ideas related to each of the six pillars.

As an example of the CPGs’ work, the cardiac rhythm management and prevention affinity group within the cardiovascular CPG discovered that Providence had 13 contracts for cardiac rhythm management. Physicians from that affinity group then signed confidentiality and conflict-of-interest documents and engaged in a thorough review of opportunities with vendors. Any vendor product that the group perceived as substandard in terms of quality

immediately was ruled out. After the group identified a list of agreed-upon superior devices, the system posted a request for proposal (RFP) for those vendors and, as a result, saved \$15 million in the first year.

Providence also is forming advisory councils to serve as governance bodies for each CPG. The advisory councils include clinicians and executives from each of the system's nine regions. Clinician chairs are elected internally from each council and are paired with a co-chair from the system's clinical program services team (one of the team's vice presidents, who have a mix of clinical and executive backgrounds) to form a leadership dyad for each council. The advisory councils will lead discussions with the system's leadership about capital needs or business opportunities on behalf of their CPG.

Clinicians engaged in the CPGs are discovering the breadth of expertise that is available across the organization. A longer-term goal for the CPGs as their work progresses is the development of research institutes for CPG specialties that will help drive further clinical transformation within the system and also build Providence's reputation for specialty care to enable greater retention of high-acuity patients within the system.

Diagnostic management teams, predictive modeling, and clinical transformation. At VUMC, the role of the academic medical center as a “convener of significance” for the hospitals and health systems in the Vanderbilt Health Affiliated Network also positions VUMC as an innovation hub for evidence-based clinical transformation initiatives that flow from VUMC's clinical research capabilities. Once VUMC proves the validity of a new clinical model, that model can be disseminated through VHAN, giving clinicians within the network access to cutting-edge, evidence-based clinical practices and strengthening the value of affiliating with VUMC for the VHAN hospitals and health systems.

A primary focus of VUMC's clinical transformation work is developing diagnostic protocols that can be disseminated across VHAN, and potentially adopted on a national scale. Stead, the chief strategy officer, notes, “No one talks about diagnostic error, and it is large. Our goal is to focus on the predictive, not the reactive, in our clinical transformation work.”

The potential of evidence-based standard-ordering protocols (SOPs) for diagnostic testing was demonstrated in VUMC's development of SOPs for cytogenetic and molecular testing that pathologists applied to bone marrow biopsies on adult patients. To develop the SOPs, VUMC implemented a diagnostic management team that brought together clinicians from pathology, hematology, and biomedical informatics. The team compared testing for biopsies performed during the six months before implementation of the SOPs with testing for biopsies performed during the 12 months following implementation. The results included a significant reduction in the total number of ordered cytogenetic and molecular tests, a decrease in the omission of recommended tests, and a reduction in the cost of laboratory testing to payers from an average of \$2,390 per bone marrow in the six months preceding SOP implementation to \$1,948 per bone marrow 12 months after implementation (for a savings of \$442 per bone marrow). Extrapolation of these numbers to an estimated national bone marrow volume of 666,000 annually would result in a savings opportunity to payers of between \$191 million and \$392 million per year.^d

Both the clinical consensus and diagnostic management team models represent physician-led approaches to clinical transformation that leverage cross-functional expertise within a system to develop new approaches that can be disseminated across broader networks. Originating from clinical teams, and carrying the endorsement of those teams, these approaches to clinical transformation are designed to gain acceptance from other clinicians within the system or network.

SERVICE LINE AND ASSET RATIONALIZATION

Service line and asset rationalization holds significant promise for cost reconfiguration efforts. Changing utilization patterns increasingly favor outpatient over inpatient care, and that trend is beginning to create excess hospital bed capacity in some markets. In the longer term, a focus on population health management is likely to reduce demand for certain specialty and high-acuity services. “In many respects, by restructuring a major category of fixed costs for most healthcare systems, service line and asset rationalization goes to the heart of the topic of reconfiguring cost structure,” says Piro of MedAssets. “But restructuring fixed costs is not an easy job. It's also

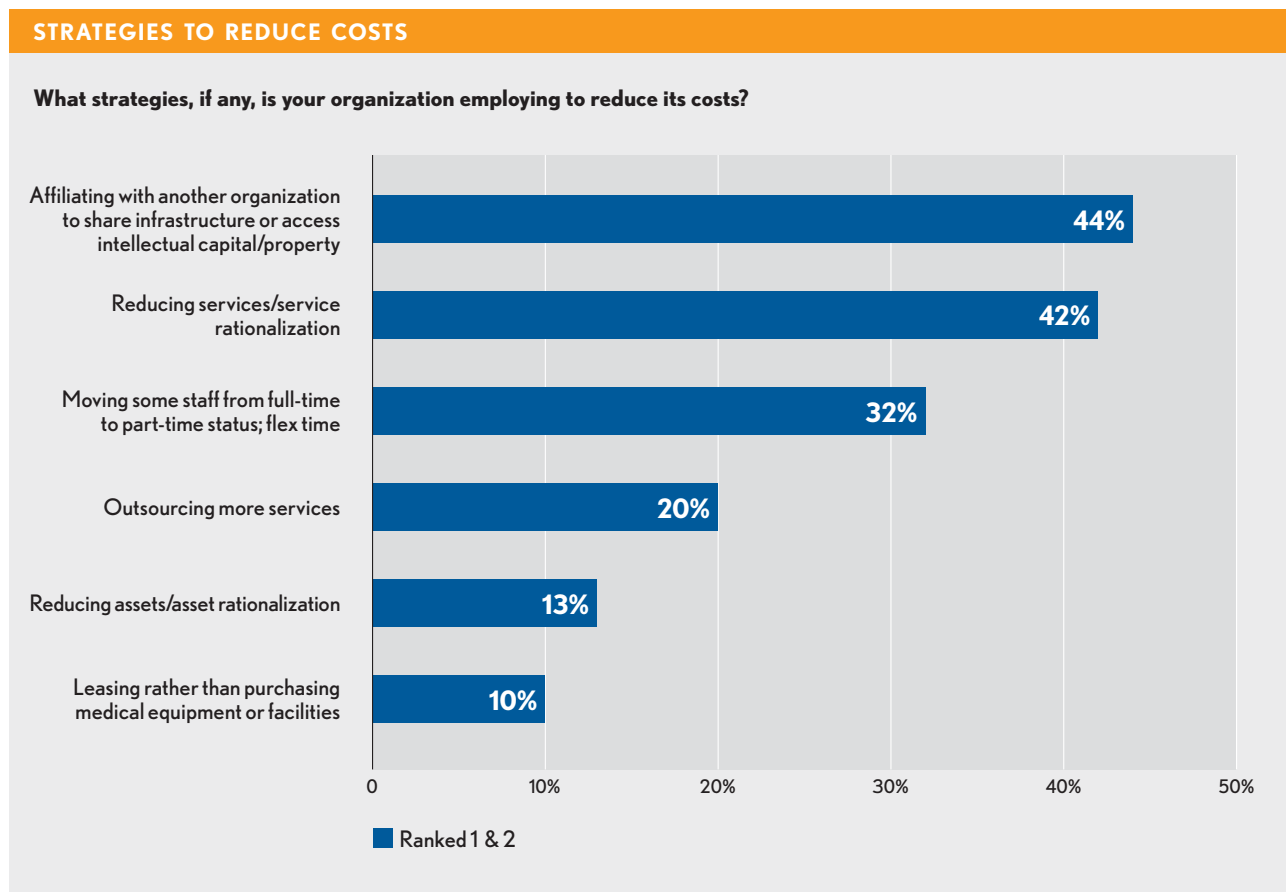
important to note that, as care delivery changes, organizations may seek to eliminate redundant services offered within a market while pursuing new services that support new care delivery models.”

Both the challenges and the potential of service line and asset rationalization are reflected in HFMA’s member survey. When asked where they saw the greatest opportunities to achieve savings over the next three years (see the exhibit on page 17), only 7 percent of respondents identified service line rationalization (e.g., fewer heart surgery programs) as a highly ranked opportunity, and still fewer chose asset rationalization (e.g., fewer or smaller facilities). At the same time, more than 4 in 10 respondents indicated that their organizations are looking at service reductions or service line rationalization as a strategy to reduce costs (see the exhibit below).

Opportunities for service line and asset rationalization can be limited by both market and political considerations. A system may be reluctant to consolidate a service line if, by taking that service out of a facility, it creates an opportunity for a competitor to move in and take market share. Downsizing or eliminating an existing facility can be politically unpopular if it takes jobs and visitors out of the local economy.

A number of the systems HFMA interviewed have begun to look at opportunities for service line and asset rationalization. In considering these opportunities, key factors include:

- Community needs (e.g., urgent care services may be able to replace more expensive emergency department [ED] services)
- Willingness of patients to travel to a new facility if a service line is discontinued in their primary facility



- Willingness of physicians to refer patients to a new facility
- Degree of competition within the market for the service line in question
- Organizational impediments to service line or asset rationalization (e.g., if individual facilities within a system are held to facility-specific budgets, they may be more territorial when rationalization opportunities across the system are considered)

While many of the systems represented by the respondents to HFMA's survey have not prioritized service line or asset rationalization as one of their top cost management strategies, a majority of the systems that have done so identify reductions in both the number of inpatient beds or inpatient facilities within a system and in imaging equipment as key areas of focus.^e More than a third also are targeting other radiology equipment, and approximately one-fourth are targeting surgery equipment.

ADDITIONAL OPPORTUNITIES

Opportunities for cost reduction or reconfiguration are not limited to the categories described above. A stand-alone hospital or small system that merges with a larger organization may have opportunities to restructure and reduce its debt burden. Systems may be able to reduce administrative costs by simplifying and streamlining governance structures—both Banner Health and Providence Health & Services, for example, rely on essentially a single board for system governance (although they also use advisory boards at the facility or community level). A single technological solution for the organization as a whole can contribute to economies of consistency and avoidance of error.

The key is to build a culture in which individuals are encouraged to pursue opportunities to improve cost efficiencies (and are recognized or rewarded for doing so). In the words of Goodnow, the Benefis CEO, “Health care has become outlandishly expensive; there is so much that can be done on the cost reduction side.”

PREPARING FOR THE TRANSITION TO VALUE

For many organizations, the focus on cost containment in system administration and hospital-based services and facilities is balanced by new investments in networks that systems are assembling to engage in risk-based contracting and population health management. Among the major areas of investment are healthcare IT—including data-warehousing technologies that are able to draw information from disparate EHRs and other data sources—and clinical networks that meet the demand for better management of patient care at the primary and secondary levels to avoid more expensive care at tertiary and quaternary levels.

This reconfiguring of cost structure—reduced spending on administration, facilities, and equipment, and increased spending on physician networks and healthcare IT—is reflected in the results of HFMA’s member survey. Clear majorities expect increased expenses in the areas of healthcare IT and physician organization and services (77 and 61 percent, respectively), while fewer than half anticipate increased costs in other areas. At the lowest end of the scale, just 8 percent of respondents expect increased costs for administrative staff and services (see the exhibit on page 6).

BUILDING NETWORK INFRASTRUCTURE

Approximately three years ago, an RFP put out by a major Washington employer for a narrow network health plan product for Seattle-area employees was a catalyst for Providence Health & Services’ creation of the Providence-Swedish Health Alliance (the Alliance). The Alliance’s product ultimately was one of two selected by the employer. The contract employs a “shadow capitation” methodology: The Alliance commits to a downward cost trend on a per member per month basis over the course of the contract’s five-year term, with any costs above this trend line refunded to the employer on an annual basis. Providence Health & Services has recently built out the infrastructure required to support this new contract—and shared with HFMA the key components of the infrastructure, which also will be used to pursue additional risk-based contracting opportunities.

Joseph M. Gifford, MD, chief executive of the Alliance, estimates that Providence Health & Services has invested approximately \$150 million to build the infrastructure needed to support the Alliance. Investments have been made in the following areas.

Network development. To ensure a network adequate to meet the needs of employees across the Seattle area, Providence Health & Services and Swedish Health Services (an affiliate of Providence Health & Services since 2012) have combined their employed physicians with a number of medical groups that historically have had links with the systems (including Edmonds Family Medicine, the Everett Clinic, Minor & James Medical, Pacific Medical Centers, the Polyclinic, Proliance Surgeons, and Western Washington Medical Group). This arrangement required the development of risk-sharing contracts with each of the network members.

To ensure compliance with federal antitrust guidance on clinically integrated networks, which require a focus on both clinical and financial integration, monthly joint-operating committee meetings are held with physicians and other clinicians from the network member organizations (thus satisfying the requirements regarding clinical integration). In addition, the Alliance’s risk-sharing contracts make at least 30 percent of any member organization’s risk dependent on the performance of the network as a whole (thus satisfying the requirements regarding financial integration).

Healthcare IT and data analytics. The Alliance has made significant investments in ensuring network members’ ability to communicate within a highly complex IT ecosystem. Four instances and multiple versions of the same vendor’s EHR system are in place across network members, as are other vendors’ systems. The network has been able to take advantage of Washington state’s Emergency Department Information Exchange (EDIE), which initially was developed to help emergency physicians track patients who were seeking pain medication from multiple providers. With most systems in the state reporting into EDIE, it has become a good tool for tracking

admissions information across provider organizations. To meet its goal of providing real-time, actionable utilization and quality information to network members, the Alliance is sending out daily reports that combine three different data feeds. The Alliance also has embedded flags in network members' EHRs that enable them to recognize patients who are members of the Alliance's narrow network product.

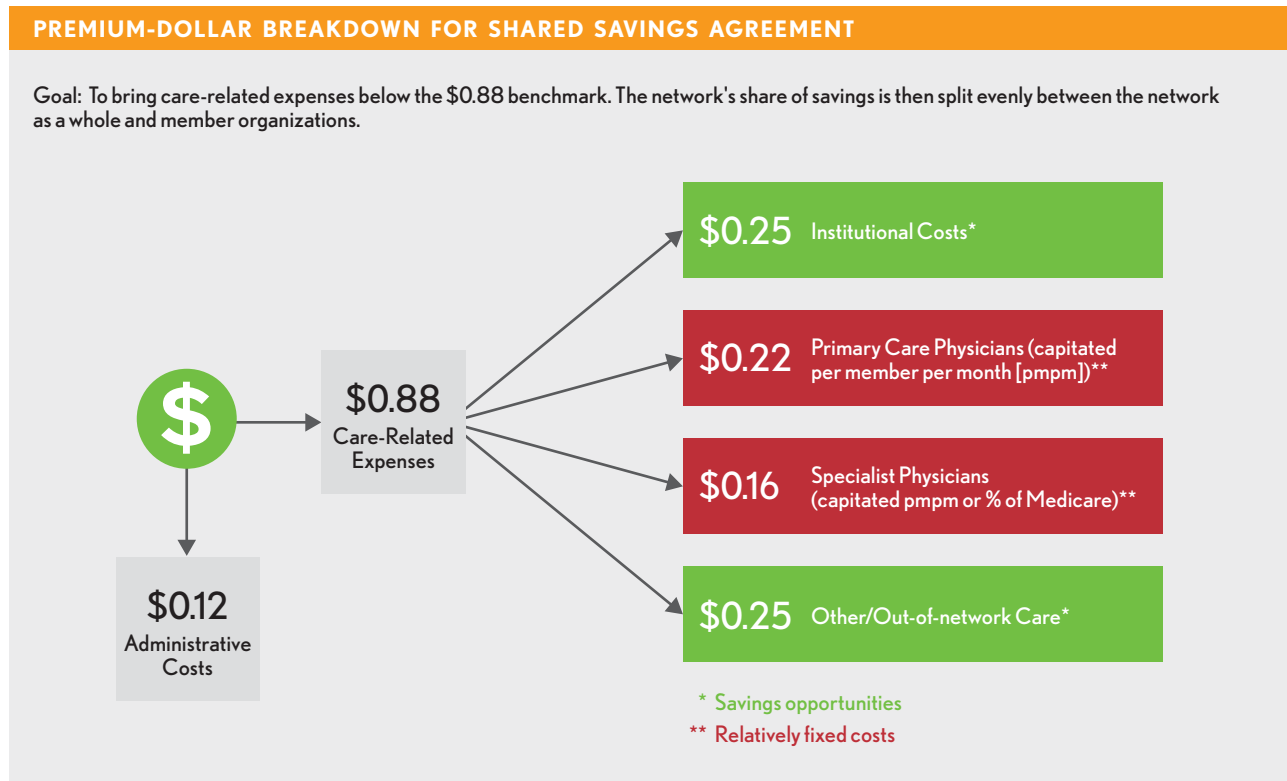
Patient experience. As part of its initial contract with the employer, the Alliance committed to providing an enhanced patient experience. Accordingly, it has developed a high-touch call and concierge center for the network, a web portal for patients to access their electronic medical record, a directory of network providers, and a mobile phone app that gives network members direct access to nurse practitioners.

Care management. The employer is amenable to the Alliance's efforts to keep patients out of expensive sites of care, with a particular focus on reducing unnecessary hospital admissions and ED visits. The Alliance thus

has invested in a variety of care management strategies—including 21 registered-nurse care coordinators, patient-centered medical homes certified by the National Committee for Quality Assurance, and innovative holistic care delivery models developed by organizations such as Geisinger and Stanford—to ensure that network members receive timely care in appropriate settings.

Contract management and benefit design. Another key element of network infrastructure is getting the right benefit design into place to ensure that narrow network members seek their care from in-network providers. Gifford cites an ideal coinsurance differential of 40 percent—in other words, a narrow network member might have 90/10 coinsurance for in-network providers but 50/50 coinsurance for out-of-network providers.

Network support staff. A staff of more than 25 FTEs supports the Alliance, with functions in finance and contracting, analytics, communications and PR, and sales and marketing (a key component in expanding enrollment in the Alliance's network products).



Gifford notes that systems should not expect an immediate positive return on these infrastructure investments. Instead, he equates the investment with “laying the cable” and building relationships with employers in the market.

FINANCING THE TRANSITION TO VALUE

Although the investment in new care delivery networks and methodologies may not produce immediate returns, health systems obviously have an interest in minimizing their losses in the early years and moving to a positive margin or profit as quickly as possible. The health systems interviewed for this report are deploying a number of strategies to help offset the initial costs of new investments.

Identify opportunities for cost savings. The Banner Health Network is a clinically integrated network comprising the Banner Medical Group (approximately 1,200 employed physicians), the Banner physician-hospital organization (approximately 1,000 independent physicians), and Arizona Integrated Physicians (a group that consists of approximately 1,000 physicians and is owned by DaVita Healthcare Partners). Major contracts for the network include a Pioneer accountable care organization (ACO); Medicare Advantage plans; shared savings agreements with commercial health plans and Banner employees and dependents; and most recently a major local employer. In total, more than 350,000 patients receive care under these contracts.

Greg Wojtal, vice president and CFO of Banner Health Network, offers a basic breakdown of the premium dollar in the risk-based agreements Banner Health Network has entered into (see the exhibit on page 23). The breakdown assumes a historical average spend of 88 cents of care-related expenses for each premium dollar (the remaining 12 cents go to administrative costs). Opportunities for shared savings lie within the network’s ability to bring the total care-related spend below the 88-cent historical benchmark.

Services for in-network physicians, both primary and specialty, take up just under 45 percent of care-related expenses, and Wojtal sees these expenses (generally paid on a per member per month basis or, in the case of some specialties, a percentage of Medicare) as relatively fixed. Greater opportunities for savings come from controlling the spend on institutional costs and out-of-network care.

Regarding institutional costs, Banner Health Network has identified two of its greatest savings opportunities in end-of-life spending and elimination of redundant testing. Regarding out-of-network care, side, Banner Health Network is developing apps for network physicians that will enable them to see whether a referral will be to an in-network or out-of-network physician, and also has implemented a dashboard that identifies providers who are meeting quality and efficiency goals.

Wojtal also stresses the need to understand how volume can affect the return on an investment in care delivery and help to prioritize investments. How many patients are high-intensity utilizers of care, for example, and what are their primary disease categories? “This information is important,” Wojtal notes, “because you start running into the law of diminishing returns if an investment is not affecting the outcomes of a sufficient number of patients.”

Banner Health Network’s attention to improved outcomes and cost efficiency has produced positive results in both commercial and Medicare shared savings programs. A shared savings product that it offers to Aetna members achieved \$5 million in shared savings and a 5 percent decline in average medical costs per member in 2013 (including 9 percent reductions in both avoidable admissions and radiology services). In the first two performance years of Medicare’s Pioneer ACO program, Banner Health Network produced gross savings of 4 percent and 2.8 percent—among the best results of Pioneer ACO participants.

Identify opportunities for early ROI. As systems move toward greater use of narrow networks, accountable care, and population-based payment, “their continued financial viability is a wild card,” says Harris, the CFO of Swedish Health Services (affiliated with Providence Health & Services). “Moreover, the question of how to invest now in a world that will change in five years and continue to be financially stable is pressing.” Harris’s solution is to promote a model that insists on some return today on investments that are being made for a value-based future.

As an example, a group of clinicians at Swedish Health Services had requested an investment of \$5 million to build a population health infrastructure, including care managers, that could help care for Medicare Advantage populations under a contract featuring a 50-50 split

between the health plan and providers on savings achieved for the health plan's member population. Harris challenged the clinicians to identify returns on the investment that could cover the cost. Working with the third-party administrator of Swedish's self-funded employee plan, the clinicians were able to calculate \$10 million in savings that could be realized if enhanced care management capabilities were extended to employees and their dependents. Opportunities for shared savings with the Medicare Advantage population resulted in another potential \$4 million return to Swedish. With up to \$14 million in returns now tied to a \$5 million investment, the clinicians were given the green light. In the

first year of the program, only \$3 million of the requested \$5 million was spent (in part because of difficulty in finding enough qualified individuals to serve as care managers), but \$4 million of the potential \$14 million improvement in revenue was realized, producing first-year returns in excess of the first-year investment.

Burdick, the Banner Health vice president of organizational performance, clinical, agrees on the need to identify opportunities that generate returns while preparing the system for risk-based contracting. A good example is improving the efficiency of inpatient care. If efficiency can be improved, it contributes to operating margin on the fee-for-service side

INVESTING IN INNOVATION

In addition to its investments in narrow network products and population health management capabilities, Providence Health & Services is funding an innovation agenda to keep the system ahead of potential disruptions in the healthcare marketplace. The innovation agenda has three components:

- A venture fund to invest in developing healthcare IT companies
- A software and digital innovation team dedicated to building new technologies that enhance patient engagement and experience
- A consumer team focused on developing consumer-oriented businesses in areas where Providence believes it has a competitive advantage.

To lead its innovation agenda, Providence recently engaged Aaron Martin as its senior vice president for strategy and innovation. Martin comes to the system from Amazon, where he led the company's self-publishing and North American publishing businesses.

As Martin considers opportunities for innovation in health care, he draws an analogy to the development of self-publishing at Amazon. The core relationship in publishing is between author and reader. The innovation of self-publishing removed "intermediaries" in the form of agencies and publishing houses that acted as potential barriers between author and reader. In health care, there is an analogous relationship between clinician and patient. Identifying the intermediaries that might frustrate this relationship (e.g., time-consuming coding and documentation tasks) and removing or limiting their impact should be the focus of innovation.

The ultimate goal is for the innovation agenda to become self-sustaining—and ideally produce a return for the system.

The potential value of innovation can be optimized in a number of ways.

Emphasize a "small batch" approach to innovation and product development. This approach uses small experiments in fast iterations to determine whether consumers want a particular product or service. The value of some innovations in health care is obvious—the ability to schedule appointments online, for example. But as ideas become more hypothetical and risky, a small-batch approach can gather solid intelligence at relatively low cost.

Pursue online opportunities. "Online services are by their very definition more efficient than 'offline' services, increasing the number of individuals who can be served and reducing the need for physical facilities to serve them," says Martin. When pursuing these opportunities, understanding the share of consumers who have online access is a key metric to determine, for example, what additional percentage of the business could be seen via telehealth technologies. "If you're going to disrupt your own business, you need to measure your progress in doing so," Martin adds.

Recognize the value gained in terms of improved intelligence. "Offline companies survey consumers; online companies observe their behavior," Martin notes. An understanding of consumer behavior patterns provides better intelligence with which to make decisions.

Identify services that consumers want and are willing to pay for. Some services will generate incremental revenue from consumers if they can see the value in terms of enhanced convenience, access, or service.

of the system's business. At the same time, it helps reduce per member per month costs on the risk-based contracting side.

Affiliate instead of own. All four of the health systems interviewed for this report feature organized networks that blend owned resources with affiliations. Benefis participates in the Northcentral Montana Healthcare Alliance, a consortium of 14 healthcare facilities including many of the smaller hospitals that refer patients to Benefis. As noted earlier, Banner Health Network's ACO includes the system's employed medical group, its physician-hospital organization (with independent physicians), and a third medical group owned by DaVita Healthcare Partners. The Providence-Swedish Health Alliance includes several medical groups that have historical relationships with, but are not owned by, Providence Health & Services and its affiliate, Swedish Health Services. And VHAN comprises nine systems and over 40 hospitals serving Tennessee and portions of seven bordering states.

Affiliation offers several advantages over ownership, although systems that organize networks will not completely avoid costs by pursuing an affiliation model. Indeed, they are likely to incur significant costs—for example, in building the IT capabilities that will enable network members to easily exchange data. Still, organizing systems will avoid the substantial costs of acquiring another facility or system. An affiliated network also is more likely than an acquisition to avoid raising antitrust concerns, especially if the network participants remain free to contract with payers independent of the network. Affiliation also can help network participants achieve economies of scale without giving up their independence and local community governance.

Affiliation with a broader network has become a particular imperative for academic medical centers. Pinson, the CEO of Vanderbilt Health System, notes, “The bulk of health care going forward is likely to occur at the primary care level or below, in the world of mobile apps and lifestyle changes. An academic medical center, with lots of expensive physicians, cross-transfers of funds for education and research, and high-cost overhead, cannot compete effectively in this space. Accordingly, it needs partners that will be much more effective in building out everything below the tertiary and quaternary services that the academic medical center is most effective at.” Positioning itself within VHAN enables VUMC to move lower-acuity care back into the community so it can focus on its role as quaternary care provider. “We want our affiliates to have the ‘bread and butter’ business and bring down the cost of care for VHAN overall,” Pinson adds.

VUMC's strategy for VHAN explicitly focuses on affiliation over ownership. It would be cost-prohibitive to acquire a network giving VUMC access to the millions of patient lives that an academic medical center requires to support a full range of quaternary services. “Everybody in health care wants to own and control, but that is not an effective strategy for us,” Pinson says. As Pinson notes, a major academic medical center such as VUMC has advantages as a “convener of significance” to attract affiliations, but the long-term success of the network depends on the strength of the partnerships between VUMC and its affiliates, with affiliates gaining access to VUMC's medical expertise and healthcare IT platform and VUMC benefiting from referrals of high-acuity patients.

CONCLUSION

The dynamics of today's healthcare marketplace are creating a fundamental reconfiguration of care delivery, affecting how, where, and from whom consumers access healthcare services. These dynamics flow from a general demand for greater value in health care—a demand that is increasingly urgent for consumers who face increased financial responsibility for their care—and from an understanding of the many opportunities to reduce cost and build better, more affordable models for care delivery.

As care delivery changes, so too must the cost structure that supports it. Accordingly, the challenge that hospitals and health systems face today is twofold:

- To maintain a continued focus on reducing costs in response to increasing pressures on payments and declining utilization driven by the demand for greater value, especially with respect to inpatient facilities and services
- To invest in the infrastructure that will be needed to successfully participate in risk-based contracting and population health as both public and commercial payers transition to value-based payment models

These efforts are linked: cost savings in one area of the organization enables increased investment in others. Efficiencies gained in reducing operating costs can increase margins under existing fee-for-service arrangements, enable greater flexibility in pricing to meet the demands

of consumers who seek greater value, and prepare an organization for accepting risk-based contracts.

Payment structure, in other words, has little to do with the basic advantages that any organization can gain from careful cost management. To be sure, every hospital or health system in the country could benefit from the cost management strategies highlighted in the first part of this report.

However, the basic advantages that a system can gain from cost containment today will not be sufficient to thrive in the value-based environment being ushered in by changes to payment structures. Already, for example, shifting consumer needs are creating opportunities for new entrants to the healthcare market. Greater price sensitivity and a demand for more convenient and accessible services are prompting consumers to seek alternatives that can provide the desired level of quality and convenience at a reasonable price. Success in this environment will depend on a reconfiguration of resources to manage risk and population health. Health systems also will need to respond to—or create—the inevitable disruptions to healthcare delivery that will continue to emerge in coming years; as noted elsewhere in this report, disrupting your own business model is better than being disrupted by others. As the systems in this report demonstrate, cost containment, cost structure reconfiguration, and innovation can be managed simultaneously. Focusing on all is imperative.

FOOTNOTES

- a. Smith, M., et al., *Best Care at Lower Cost: The Path to Continuously Learning Health Care in America*, Institute of Medicine, 2012.
- b. Dahlen, D., and Bailey, C., “Cutting Costs Without Cutting Corners: Lessons from Banner Health,” *Harvard Business Review*, Oct. 18, 2013.
- c. For more information on the results of the total knee arthroplasty simplified pathway, see Loftus, T., et al., “A Simplified Pathway for Total Knee Arthroplasty Improves Outcomes,” *The Journal of Knee Surgery*; June 2014.
- d. For a full description of Vanderbilt University Medical Center’s bone marrow testing protocols, see Seegmiller, A., et al., “Optimizing Personalized Bone Marrow Testing Using an Evidence-Based, Interdisciplinary Team Approach,” *American Journal of Clinical Pathology*; November 2013.
- e. Nineteen of the 146 respondents to the HFMA survey (13 percent) identified asset rationalization as one of their top two cost reduction strategies.

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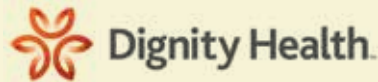
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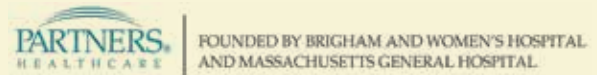
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**STRATEGIES FOR RECONFIGURING
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