

Size should matter

Five ways to help healthcare systems realize the benefits of scale



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Executive summary

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Over the past two decades, U.S. hospitals have undergone a continuous wave of consolidation, seeking to become more profitable through mergers, partnerships, and other strategic alliances. The implicit logic of these arrangements is that by getting larger, hospitals and healthcare systems will generate scale and reduce operating costs while still delivering the same level of care — or better. Yet, based on our experience, most transactions have failed to deliver the promised benefits of scale.

To better understand the issue, we analyzed data from the Centers for Medicare & Medicaid Services (CMS) regarding patient encounters for more than 5,600 individual facilities and 526 healthcare systems nationwide, including for-profit and nonprofit organizations, and both teaching and non-teaching hospitals. (*See "Methodology," page 19.*)

We tested the data to see if larger facilities and systems benefited from scale effects. The results show that for individual facilities, larger hospitals (across all categories) have a lower cost per encounter than smaller hospitals. Yet for healthcare systems comprising multiple facilities, the data indicates no relationship between size and cost. Bigger companies are not yet able to convert their size into operating efficiencies.

The data also shows that there is no correlation between quality and cost per encounter. Spending more money does not necessarily lead to better outcomes. Similarly, the data demonstrates no relationship between facility size and quality.

The primary explanation for the absence of scale economies is that healthcare systems are often run as de facto holding companies — i.e., a collection of highly autonomous hospitals — rather than as integrated organizations that have standardized procedures and systematically reduced costs. We believe that healthcare systems can improve this performance and realize scale benefits that will help them reduce costs by 15 to 30 percent. To do so, however, they will need to standardize procedures — administrative as well as clinical. They will also need to revamp their operating model to emphasize overall system performance, establish appropriate decision rights, measure their progress, and accommodate separate, dissimilar cultures in any consolidation.

Consolidation in healthcare, but little scale

The U.S. healthcare industry is experiencing a tsunami of change. As reimbursement rates decline for both public and private payors, hospitals and healthcare systems face declining revenue, pressuring them to reduce costs by 20 to 25 percent in the short term.

In this environment, mergers, partnerships, and strategic alliances are becoming more popular as healthcare systems realign themselves to establish the right set of clinical specialties, referral networks, and geographic coverage. Institutions that cannot compete become attractive M&A candidates. And many faith-based healthcare systems are seeking new corporate arrangements to become more viable healthcare system partners. By Strategy& estimates, roughly 1,000 hospitals — or one in five across the U.S. market — will be realigned during the next decade.¹

The core logic of this realignment is that larger healthcare systems will be able to achieve economies of scale, and thus reduce both administrative and clinical costs. Yet in many cases, scale economies seem perennially just out of reach. Our industry research suggests that scale is possible in healthcare mergers — with the potential to reduce costs by 15 to 30 percent — yet many healthcare systems fail to capture this advantage, leaving them burdened with unnecessarily high cost structures. Moreover, we have found that there is little or no correlation between a healthcare system's cost structure and the quality of its care.

Analyzing the numbers

We analyzed the cost structure of 526 healthcare systems and 5,661 individual facilities in the U.S., of various sizes and clinical specialties. We segmented this universe of providers along two dimensions — teaching versus non-teaching, and for-profit versus nonprofit — resulting in four principal groups (*for more details, see "Methodology"*). Our analysis looked for any correlation between cost and size, and also between cost and quality.

The results include several key findings:

- Stand-alone hospitals have been able to generate economies of scale. For these facilities, there is a statistically significant correlation between facility size, as measured by the number of beds, and the normalized cost per encounter; larger hospitals tend to have lower unit costs. Although the scale effects are more pronounced among the for-profit hospitals than the nonprofits, the situation is consistent across the full sample. As expected, we also found that length of stay is a central factor in the reduced costs. On average, patients at larger hospitals have shorter stays.
- For healthcare systems comprising multiple facilities, however, the data shows no such scale effects. There is no statistically significant correlation at the system level between bed capacity and cost per encounter across all four groups of health systems we considered. Notably, this is true even for for-profit, non-teaching systems, which are typically operated with the bottom line in mind (*see Exhibit 1, page 10*). And the lack of correlation also holds for nonmedical expenses such as sales, general, and administration (SG&A).

Finally, we tested whether higher costs bear any correlation to higher quality. Many management teams argue that it's impossible to reduce costs without hurting the quality of care. Again, however, we found no correlation between cost per encounter and quality scores across both stand-alone facilities and healthcare systems (*see Exhibit 2, page 11*). Similarly, we also found no correlation between the size of a facility or system and the quality of care at that system (*see Exhibit 3, page 11*).

What goes wrong

There are several factors that help explain why the scale synergies that can be realized at the individual facility level do not show up at the healthcare system level.

Individual facilities within systems often operate independently

Many facilities within healthcare systems continue to operate with a high degree of autonomy, rather than as part of the integrated company. Most hospital executives continue to wield significant control over operations within their facility, and they make decisions to improve the performance of that facility, rather than collaborating to achieve the broader objectives of the entire system.

Underlying this independence is a belief that healthcare is local and personal, and that individual facilities can deliver the greatest value by remaining autonomous. Most healthcare leaders believe that their local brand supersedes that of the overarching system. They are also likely to believe that the preferences and affinities of patients and members are shaped by individual — and personalized — experiences including nonmedical amenities such as art in the lobby and cafes, as well as whether physicians and staff members recognize and connect with individual patients over time.

Because they believe so strongly in these local elements, facility leaders and physicians fear that standardization and efficiency protocols across a healthcare system would erode the unique aspects that attract patients. A familiar refrain among physicians and nurses in these facilities is that system-wide measures would mean less time with patients and less personalized care.

There are no system-wide standards

If part of the challenge is that leaders at individual hospitals prefer to operate independently, an analogous challenge is that healthcare system management teams don't take measures to overcome this tendency. For example, most management teams still evaluate hospitals by their profit-and-loss statements, quality scores, and other metrics based on the performance of the single institutions — rather than the overall system. Similarly, many employee incentives reward star performers at hospitals, not within the integrated company. As a result, facilities within a system effectively compete against one another, and often have conflicting marketing and promotional campaigns that cannibalize volume among them.

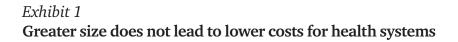
Cost synergies are not the main focus of the merger

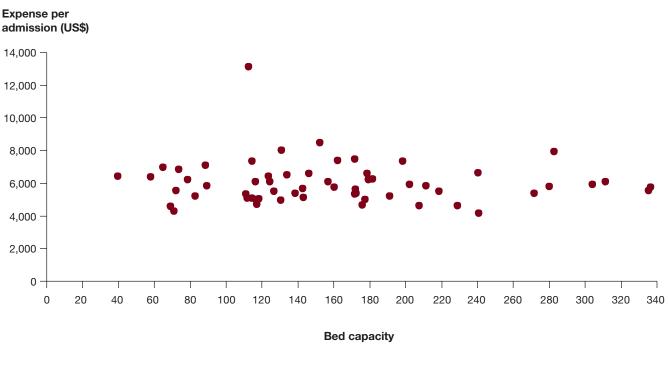
In many cases, companies launch acquisitions as a competitive response to another system; as a means to fill out the portfolio from a geographic, service-line, or technological perspective; or as a way of gaining negotiating leverage with payors. In many transactions, there is no pressure on management to identify and realize synergies (especially given that some healthcare system mergers do not involve shareholders and investors pressuring managers for rapid results).

Leaders focus on closing the deal, rather than integrating the new entity

The final explanation for a lack of system-wide scale is that management teams are focused primarily on the short-term objective of closing the deal, rather than the longer-term task of integrating the new acquisition into the existing system. Even when synergies are an explicit goal in a merger, the focus is frequently on reducing SG&A costs rather than clinical costs, which are more difficult to capture.







Note: Data for for-profit, non-teaching facilities; expense per admission considered up to \$30,000.

Source: Strategy& analysis

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Exhibit 2 **Higher spending does not correlate to better quality**

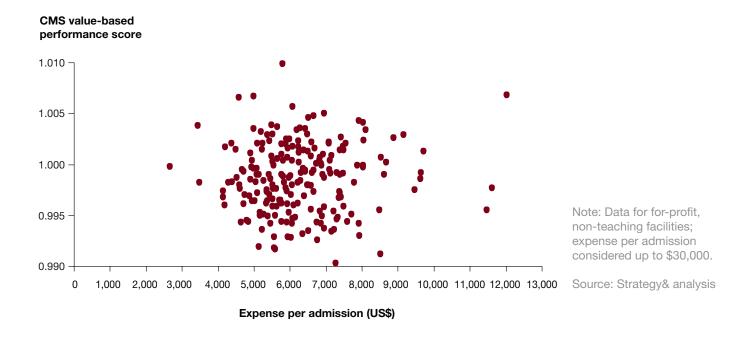
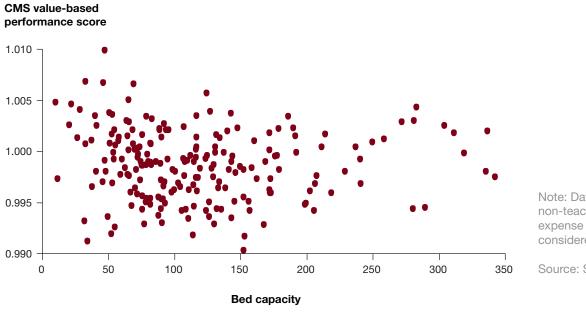


Exhibit 3 Larger hospitals and health systems do not correlate to better quality scores



Note: Data for for-profit, non-teaching facilities; expense per admission considered up to \$30,000.

Source: Strategy& analysis

Ways for healthcare systems to generate scale

During the last few years, health systems have faced significant cost pressures. Most systems have already been through multiple rounds of cost cuts, and there is not much juice left to squeeze. Very little remains that health systems can capture by better managing individual facilities. Our experience shows that healthcare systems now have no choice but to expand their approach and look to improve operations with a systemwide lens.

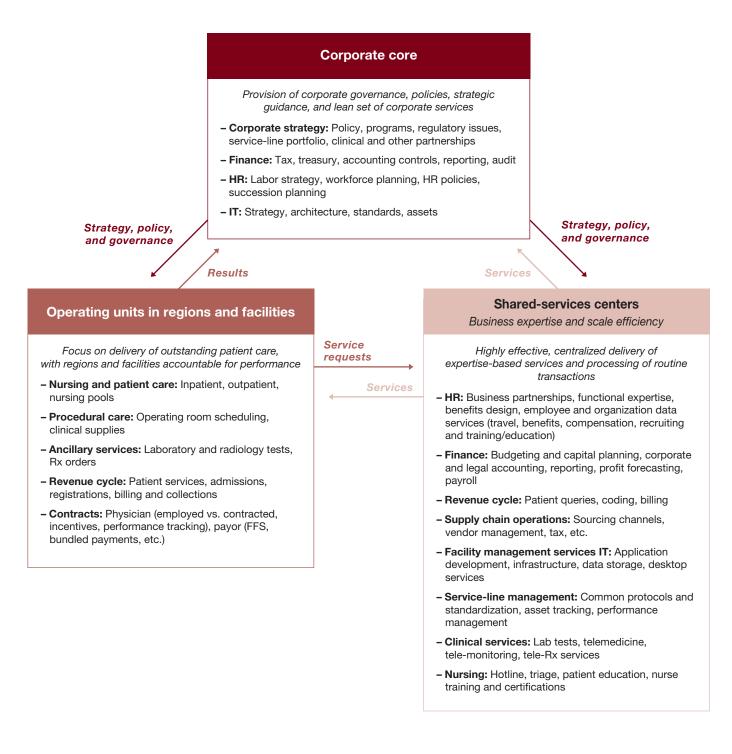
We believe management teams should focus on five key areas in order to capture scale and reduce costs across the entire system.

1. Redesign the operating model

First and foremost, healthcare systems need to revamp their operating models to bring more accountability and control at the system level — rather than at the level of individual facilities. The objective is to strike the right balance of centralized control over most transactional operations, such as reporting, while accommodating local nuances in areas where it truly matters, such as pre-procedure education. Of course, this is not a simple or quick exercise and will require system leaders to engage facility leaders and jointly develop the new operating model. Buy-in from facility leaders is key. A leader of a large healthcare system recently shared his view on this with us: "Of course, this is hard. That's why we call this work."

For example, healthcare systems should design their operating model around three clearly defined entities: (1) the corporate core, which handles areas such as strategy, finance, HR, and IT; (2) shared-services centers, which can serve as a repository of expertise and scale, and include clinical areas; and (3) operating units, which can implement patient care procedures and other aspects that will impact financial performance, such as ancillary services and physician contracts (*see Exhibit 4, next page*).

Exhibit 4 Healthcare system operating model (illustrative)



Source: Strategy& analysis

This operating model construct can be powerful and effective, but only when supported by a governance structure that establishes new roles and decision rights at the right levels (*see Exhibit 5, next page*). The governance structure should also provide incentives at both the system and facility levels to promote collaboration and improve performance for the overall company, rather than within any one hospital.

2. Standardize clinical processes

Common care protocols can significantly reduce costs by ensuring that patients have a consistent, high-quality experience regardless of which facility they visit. Critically, these protocols require a focused change effort by management. This is not an easy or quick process, yet it presents a unique opportunity to engage physicians as change leaders. Rather than imposing processes in a top-down fashion from headquarters, companies should assemble a multifunctional, physicianled team to design consistent care models and protocols. This kind of collaborative approach can generate buy-in from participants, build morale in the organization, and increase the odds that the new processes will take root.

In fact, during mergers or acquisitions, companies can apply this approach early in the process by convening a physician team to define clinical goals for the transaction. This team could also define a highlevel prioritization of medical and surgical specialties to rationalize and a potential road map to realize merger synergies. Most physicians and healthcare providers understand the financial imperatives of running a health system, and mergers can enable new corporate structures to lead to clinical improvements as well.

3. Eliminate redundant service lines

After completing a string of acquisitions, partnerships, and strategic alliances, many large healthcare systems now have significant redundancies in service lines, staff, equipment, and other assets. Some organizations have multiple service lines in facilities that are just a few miles apart. The challenge is to combine these assets in the most efficient manner possible — and eliminate overlapping resources and services.

Rationalizing service lines requires analyzing both supply and demand, in terms of markets and disease-specific activities. It also requires assessing service-line profitability across facilities and sites of care, and an understanding of competitive threats and patient preferences.

Exhibit 5 **A decision matrix for key health system decisions**

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Decisions	Corporate	Clinical service- line leadership	Functional leadership	Regional/facility leadership
Define organizational mission, vision, goals	\checkmark			
Define service-line protocols		\checkmark		
Rationalize portfolio	\checkmark	\checkmark		
Define service delivery model			\checkmark	
Set performance targets	\checkmark			
Develop operational plan			\checkmark	
Approve investments and budgets	\checkmark			
Implement service delivery model			\checkmark	
Operate and track performance				\checkmark

Source: Strategy& analysis

For example, after merging, an academic medical center (AMC) and two community medical centers (CMCs) in the same region provided overlapping cancer care services. By looking at the entire care pathway, the health system determined that it could reduce costs by handling primary and secondary care functions (including surgical prep) at the two CMCs, and more complex procedures (such as surgery, chemotherapy, and radiation) at the AMC (*see Exhibit 6, next page*).

4. Measure performance on a system level

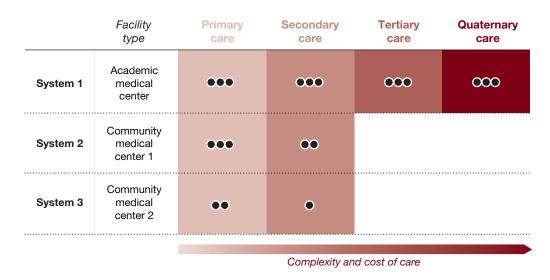
As noted above, many healthcare systems fail to capture scale because they still evaluate their facilities as independent entities, rather than as parts of the larger whole. These systems should change their evaluation process and create new balanced scorecards that focus more on company-wide metrics — including productivity, utilization, and access — and the contribution of facilities to those goals. To be sure, management should still track "heart of the mission" and clinical outcome metrics such as patients' average length of stay and hospital readmission rates. A balanced approach ensures that they are succeeding at both a facility level and a system level.

5. Don't underestimate the power of culture

One of the key reasons that system-wide initiatives often fall short is that management doesn't factor in the organization's culture. An organization's cultural ethos can be a major barrier to change, but it can also be a powerful tool for driving change. In leveraging culture to drive change, healthcare system executives should apply a few central principles.²

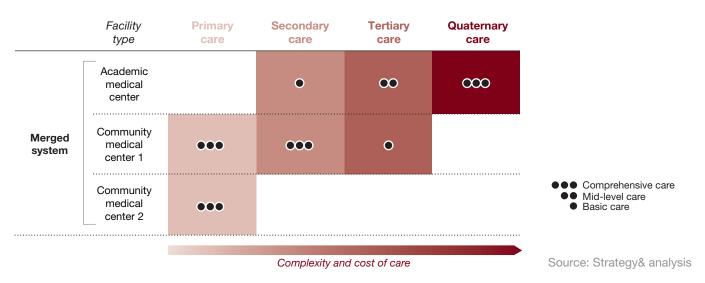
- Convert culture from an obstacle to an ally. Management should understand the deeply engrained, self-reinforcing behaviors, beliefs, and mind-sets that drive "how we do things around here," and use those to change the conversation.
- Translate high-level, strategic objectives into very specific, tangible changes in day-to-day behavior, and lead the change in a visible way.
- Start small with just three or four key behaviors that embody the larger change and build from there.
- Communicate simply and directly, and explain precisely what the changes will mean, with a minimum of jargon.
- Engage physicians and nurses. They are the frontline troops with the most direct knowledge of how work actually gets done each day, and they will have invaluable insights and ideas regarding how to improve it. The key is getting them involved in the right way.

Exhibit 6 **After a merger, facilities can eliminate overlapping clinical services**



Pre-merger: Individual cancer care services

Post-merger: Rationalized cancer care services



Conclusion

In sum, our evidence shows that despite a wave of consolidation, most healthcare systems have not yet realized the potential scale efficiencies from these mergers. Scale efficiencies are possible, yet capturing those efficiencies requires a change in management philosophy, an emphasis on standardization and integrated operations, and an investment in cultural transformation. Collectively, such elements could lead to cost reductions as high as 15 to 30 percent. This is an ambitious effort, and it will require much hard work on the part of executive teams. Yet it is certainly worth the effort if the ultimate prize is more satisfied patients and higher-quality care at lower costs.

Survey

Do you believe that your organization is operating at peak effectiveness and efficiency? We have developed a survey to validate your opinion. The survey analyzes publically available data from the Centers for Medicare & Medicaid Services to compare your responses to those of peer groups. We invite you to take our proprietary *Fit for Growth*^{*} survey and identify potential opportunities to improve your organization's costs and efficiency.

https://surveycenter1.pwc.com/Community/se.ashx?s=251137455E5459DA

* *Fit for Growth* is a registered service mark of PwC Strategy& LLC in the United States.

Metholology

We used 2013 cost data from the Centers for Medicare & Medicaid Services (which is adjusted to accommodate the variety of cases and the geographic disparity in wages). The normalized hospital data set included variables such as expense per admission, number of beds, average length of stay, full-time employees (FTEs) per bed, discharge per bed, total facility FTEs, SG&A costs, operating margin, and number of admissions. We analyzed the data to identify any correlation of multiple variables against expense per admission for stand-alone facilities and aggregated healthcare systems. For quality, we used CMS quality scores.

Endnotes

¹ Philip Betbeze, "M&A Forecast: 1 in 5 hospitals to realign over next decade," *HealthLeaders Media*, Jan. 25, 2013. Gerald Adolph, Gary D. Ahlquist, Anu Sharma, and Brett Spencer, "The coming surge in health provider M&A: How historical forces and healthcare reform will combine to drive activity," Strategy&, 2012.

² Igor Belokrinitsky and Chase McCann, "5 pitfalls to avoid in managing the cultural aspect of health system integration," *Becker's Hospital Review*, Mar. 5, 2015.

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