VIEWPOINT

Hospital Consolidation, Competition, and Quality
Is Bigger Necessarily Better?

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A wave of hospital mergers during the last several years has raised concerns among US policy makers, regulators, and employers that increasing market consolidation may lead to higher health care spending as larger systems with greater market power extract higher prices from private payers. The number of hospital mergers or acquisitions has doubled since 2009, and many observers have pointed to the Affordable Care Act for transforming the economics of health care in ways that incentivize the creation of larger hospital systems.[1] Although regulators are concerned about the effects of consolidation on health care prices, hospitals seeking to merge argue that larger, integrated systems will be able to provide substantially better care and achieve greater efficiencies.[2] Whether these benefits result from consolidation is unclear. As federal regulators and policy makers weigh these issues, an assessment of the arguments that underlie the consolidation of the medical marketplace, and the potential influence of these arguments on clinical care, is warranted.

The notion that merging of hospital systems can provide better care hinges on 3 sets of arguments: mergers can create high-volume institutions with better outcomes, achieve more "integrated" care, and be better financially equipped to make substantial investments needed to improve quality of care through tools such as electronic health records.[2] Although each of these arguments has merits, none of them is necessarily a by-product of hospital mergers. Policy makers should instead create a market case for quality through strong, meaningful financial incentives that promote better care while containing health care costs to truly shift hospitals toward delivering efficient, high-value care. A more persuasive case could be made for consolidation if large systems could demonstrate price reduction, improved quality of care, and better patient outcomes.

> Higher health care costs from decreased competition should not be the price society has to pay to receive high-quality health care.

The primary argument used by many hospitals is that merging and specializing clinical services across institutions can improve outcomes through increased volume. Although high-volume institutions do have on average better outcomes, important caveats in the volume-outcome relationship have implications for how hospital mergers should be evaluated—when it comes to the delivery of health care, bigger is not always better. The volume-outcome relationship varies widely across conditions and outcomes, with the largest benefits occurring among a small number of technically difficult surgical interventions, such as esophagectomy and pancreatectomy. For most other conditions, the benefits of volume are less pronounced and the volume-outcome relationship is usually not linear.[3] Rather, the volume effects usually taper off after a critical threshold is achieved—and for many conditions, a majority of hospitals already have clinical volumes above that threshold. Therefore, these institutions are unlikely to see significant improvements by simply increasing their volumes. Most importantly, there is emerging evidence that volume may simply be a proxy for other processes, such as having systems in place to recognize and effectively manage complications. To improve the delivery of high-quality care, hospitals should instead focus on improving the processes that create better outcomes for patients. High-quality hospitals often have large market share because they are recognized as being good hospitals.[4] Relying on increased volume to create quality may be confusing cause and effect.

The second argument advanced by advocates of hospital mergers is that mergers can lead to greater "integration" of care, which can be especially helpful in managing the care of chronically ill patients. However, consolidation is not integration. Clinical integration requires meaningful data sharing, systems for effective handoffs, and streamlined care transitions. These processes can be achieved through other mechanisms, such as participating in health information exchanges. Although there is much room for further growth, there has been a rapid increase in the availability of health information exchanges across the nation and many hospitals are now participating in these arrangements. Care integration results from the sharing of clinical information with all who might care for the patient. Larger systems may be less motivated to join health information exchanges, assuming that they already capture a large proportion of patients' clinical information internally. In such instances, hospital mergers may create new islands of data in which information is seen as a tool to retain patients within their system, not as a tool to improve care.

Third, advocates of hospital consolidation maintain that larger hospital systems will be better equipped to make investments in quality measurement and improvement. While this notion is attractive, there is little evidence to suggest that smaller institutions cannot make the investments needed to make care better. Qual-

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ity improvement does not necessarily depend on expensive technologies but rather results from engaged leadership that prioritizes quality and works to achieve better care. Many quality improvement interventions, such as checklists, are relatively inexpensive, although they require a commitment to effective implementation, data collection, and focusing on monitoring and evaluation.[5] Even for electronic health records, which are potentially expensive, small institutions can do quite well. The federal government has created a financial incentive program to encourage the adoption and meaningful use of electronic health records, and the evidence to date suggests that small hospitals are keeping up with larger ones in new adoption of health information technology.[6]

If hospital mergers are not necessary for better care, can competition instead play a helpful role in improving quality? Possibly, especially if policy makers and private payers make meaningful commitments to payment reform. The evidence suggests that hospitals in competitive markets tend to have better management—presumably because poor management is associated with more substantial costs in such markets.[7] But to date, the presence of better management has not translated consistently into better care because these managers are, in a fee-for-service environment, being incentivized primarily to focus on volume. With more robust pay-for-performance, payers can in effect create a market case for quality. For example, hospitals can currently justify performing few cases of high-risk surgeries such as esophagectomy because there are few or no financial costs associated with high rates of complications or mortality. However, if Medicare and other payers paid substantially lower amounts for poor outcomes, many low-volume institutions would likely stop providing these technically difficult procedures, allowing institutions providing higher-quality care in those markets to naturally become regional hubs—and volume would follow quality. Similarly, if payers tied incentives to longer-term outcomes, such as 90 days after an event, centers that provide truly "integrated" care through smarter data sharing and better communication would be rewarded, irrespective of whether they were part of a small or a large delivery system. With large enough payments tied to long-term outcomes, the perverse incentives that encourage health care organizations to restrict the flow of clinical data and fragment care would be mitigated.

The hospital industry is undergoing remarkable changes, and as institutions try to merge, they often point to large, integrated hospital systems—organizations like Geisinger and Intermountain Health—as examples of "larger is better." However, these organizations are exemplars not because they are large but because they have had a longstanding commitment to quality. The delivery of high-quality care reflects priorities more than resources or size. Many small health care organizations are excellent, proving that size is no prerequisite for delivery of high-quality care. Higher health care costs from decreased competition should not be the price society has to pay to receive high-quality health care.

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