

Testimony

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Committee on Energy and Commerce
Subcommittee on Oversight and Investigations

February 14, 2018

Summary Points

- Firms have a business architecture that is a product of leadership, culture and internal controls. Business architectures can lead to a rigidity of business models that is difficult to change.
- The business architecture of many hospitals often revolves around admitting patients for treatment, where financial performance is directly related to the volume of services.
- Innovation can extend to asking hospitals to change their business architecture (organizational innovation), or fostering entry of new business models that replace hospital-centric delivery systems (disruptive innovation).
- In our work, we have documented the limited degree to which hospitals are preparing for a transformation in their business architecture.
- In this analysis, hospital consolidation is often an extension of the current business architecture, and may provide a barrier to novel business models in the market.
- Disruptive innovation offers a model for transformation of care models that offer lower cost and higher quality over time. There is little evidence that large fee-for-service hospital systems are embracing these types of approaches as a replacement for their current business architectures.
- One recent study suggested that 50% of the increase in health care costs since 1996 is related to service price and intensity, a pattern that would be expected from the migration of clinical services to the hospital-based business model. Overall, this is the tremendous price American consumers are paying for the failure of an innovation agenda in health care.

Thank you, Congressman Harper and members of the Committee for inviting me to speak with you.

I'm joined on this panel by two esteemed health economists who have conducted much of the research describing the impact of hospital consolidation on health care costs in this country. It is hard to argue with their findings and I want to applaud their careful methodologic work on this topic.

Today, I would like to address the impact of hospital consolidation on innovation in the health care markets. Specifically, I will address both organizational innovation, or how firms evolve, and disruptive innovation, or how markets evolve.

First, I'd like to discuss a concept called business architecture, or the manner in which firms make decisions that allow them to generate predictable performance over time. A business architecture is a product of leadership, culture and internal organizational controls. The ability to develop a stable business architecture is one of the most revolutionary business concepts of the last century. There is a downside to this construct, however, in that often the business architecture leads to a rigidity of business models that is difficult to dislodge.

I believe that the lens of business architecture is critical to our assessment of health care policy related to hospitals. For the last decade, we have pursued a policy approach of asking hospitals to create new models of care to drive down health care costs. In essence, we have asked them

to change the stable business architectures that have made them successful in a fee-for-service business model, to define a new business architecture.¹ This would be a dramatic transformation if it was achieved.

The business architecture of many hospitals often revolves around admitting patients for treatment, especially patients with commercial insurance or patients who require a test or surgical procedure. The hospital is treated as a profit-center within the system. In other words, the more hospital services provided the better financially for the system. In these models, provider and hospital networks seem to exist to provide patient referrals for inpatient care. Hospital mergers extend this model by making clinical services even more costly in multi-hospital systems.²

To better understand the rigidity of the hospital business architecture, we asked a small sample of Chief Financial Officers of academic medical centers about their planning for this transformation. Specifically, we wanted to understand what types of investments were required to pivot from a fee-for-service business model to the most extreme value-based payment model, capitation. We found that none of the leaders we interviewed had a clear estimate of the investment required for this transformation, and observed that across our sample that there were significant disagreements about how such a transformation in payment models would impact essential components of their budget models.³ In our interpretation, despite almost a decade to prepare for this transformation, there was little evidence of

development of the concrete business planning that would be required to successfully carry out business architecture change.

One approach to organizational change is to create a new leadership role tasked with innovation, in many cases a Chief Innovation Officer (CInO). In principle, these leaders could help guide the transformation of these multi-billion-dollar delivery systems to new models of care. Eighty percent of the largest health systems in the US have created such a role, and we surveyed the majority of these individuals. While the respondents were all enthusiastic and committed to innovation, we were very concerned that these roles were not structured or budgeted for success. For example, when the respondents reported that their role was strategic (rather than operational or financial), their median annual budget was only \$3 million.⁴ Such investments are unlikely to drive significant change in business architectures within large organizations.

Large hospital systems can have other impacts on innovation. In our analysis of the literature, we were very concerned that vertically integrated organizations were good at developing standard business processes, but were not conducive to the type of physician-driven innovation that could enable new care models.⁵ In part, this concern could explain why there is little evidence that the quality of health care improves when hospitals pursue physician employment models.⁶

One way to reconcile these findings is to realize that rather than pursue the business transformation we seek, hospitals have been actively pursuing an agenda related to market power. The impacts of market power on business strategy and hospital investments can have sustained effects over long periods of time.⁷

The other type of innovation I would like to discuss is disruptive innovation, or changes in business models within markets. We have seen wholesale changes in business models in many markets in the US and globally, all enabled by the tremendous changes in information technology over the last few decades. Clay Christensen has described how technology innovation allows business model innovation to bring about cost and quality improvements for consumers.⁸

At the core, Christensen suggests that often the business architecture of existing firms is so rigid that they cannot respond to the market changes that they plainly see, and so they are replaced by new entrants. This cycle of creative destruction of firms is responsible for the remarkable changes we have seen in the technology markets.

Hospital-led organizations are the types of large, inefficient firms that this theory suggests should be replaced in the market by new business models. Would you rather go to your physician's office, pay to park by the hour, wait in a waiting room to be seen for 15 minutes, and then find out you don't need a prescription after you have lost two hours away from work, or would you prefer to just receive a Telemedicine consult to determine whether your

symptoms are those of a virus requiring treatment with hot tea or those of a strep throat requiring confirmation and antibiotics? There is little evidence that large fee-for-service hospital systems are embracing these types of approaches as a replacement for their current business architectures.

The lack of disruptive innovation is a critical shortfall in the healthcare market. Not only could disruptive innovation drive development of novel clinical services for patients, emphasizing care at the lowest possible cost (generally far away from the hospital), but it could also serve as a significant catalyst to spur existing hospitals and systems within a market to more fully embrace an innovation agenda.

This lack of innovation in the business architecture of health care firms has an enormous cost for all of us. It is no secret that health care costs have increased by 56% since 2008.⁹ One recent study suggested that 50% of the increase in health care costs since 1996 is related to service price and intensity,¹⁰ a pattern that would be expected from the migration of clinical services to the hospital-based business model. In 2017, employer and employee contributions for health insurance reached \$18,764 per household,¹¹ with employee contributions rising 270% since 1999.¹² Moreover, these escalating costs are found despite a significant shift to less generous benefit designs such as high-deductible health plans (now 28% of the health insurance market¹²).

Overall, this is the tremendous price American consumers are paying for the failure of an innovation agenda in health care.

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³ Poku M, Schulman KA. We Interviewed Industry Leaders About Their Industry and They're Worried. *Harvard Business Review*. December 14, 2016.

⁴ Sneha P. Shah, MBA; Lauren McCourt, BA, BS; Kristina Jakobson, BA; Amy Saddington, BS; Kate Harvey, MBA; Kevin A. Schulman, MD. Leading Change—A National Survey of Chief Innovation Officers in Health Systems. *Health Management, Policy and Innovation*, 2018. www.hmpi.org. (pre-publication draft attached).

⁵ Huesch MD, Schulman KA, Douglas PS. Could accountable care organizations stifle physician learning and innovation? *Health Management, Policy and Innovation*. 2014;2(1):18-28.

⁶ Kirstin W. Scott, MPhil, PhD; E. John Orav, PhD; David M. Cutler, PhD; Ashish K. Jha, MD, MPH. Changes in Hospital–Physician Affiliations in U.S. Hospitals and Their Effect on Quality of Care. *Ann Intern Med*. 2017;166(1):1-8.

⁷ Robinson J. Hospitals Respond To Medicare Payment Shortfalls By Both Shifting Costs And Cutting Them, Based On Market Concentration. *Health Aff (Millwood)*. 2011 Jul;30(7):1265-71.

⁸ Christensen CM. *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Harvard Business Review Press. 1997.

⁹ Centers for Medicare and Medicaid Services. NHE Projections. <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountsprojected.html>. Accessed on February 4, 2018.

¹⁰ Joseph L. Dieleman, PhD¹; Ellen Squires, MPH¹; Anthony L. Bui, MPH²; et al. Factors Associated With Increases in US Health Care Spending, 1996-2013. *JAMA*. 2017;318(17):1668-1678.

¹¹ The Henry J. Kaiser Family Foundation. 2017 Employer Health Benefits Survey. <https://www.kff.org/health-costs/report/2017-employer-health-benefits-survey/>. Accessed on January 30, 2018.

¹² The Henry J. Kaiser Family Foundation. Employer Health Benefits Survey 2017. <http://files.kff.org/attachment/Release-Slides-2017-Employer-Health-Benefits-Survey>. Accessed on January 30, 2018.