

# Hospital Vertical Integration Into Subacute Care as a Strategic Response to Value-Based Payment Incentives, Market Factors, and Organizational Factors: A Multiple-Case Study

INQUIRY: The Journal of Health Care Organization, Provision, and Financing  
Volume 55: 1–9  
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sagepub.com/journalsPermissions.nav  
DOI: 10.1177/0046958018781364  
journals.sagepub.com/home/inq



Tory H. Hogan, PhD<sup>1</sup> , Christy Harris Lemak, PhD, MHA<sup>2</sup>, Nataliya Ivankova, PhD, MPH<sup>2</sup>, Larry R. Hearld, PhD, MBA, MSA<sup>2</sup>, Jack Wheeler, PhD, MA<sup>3</sup>, and Nir Menachemi, PhD, MPH<sup>4</sup>

## Abstract

This study explores the extent to which payment reform and other factors have motivated hospitals to adopt a vertical integration strategy. Using a multiple-case study research design, we completed case studies of 3 US health systems to provide an in-depth perspective into hospital adoption of subacute care vertical integration strategies across multiple types of hospitals and in different health care markets. Three major themes associated with hospital adoption of vertical integration strategies were identified: value-based payment incentives, market factors, and organizational factors. We found evidence that variation in hospital adoption of vertical integration into subacute care strategies occurs in the United States and gained a perspective on the intricacies of how and why hospitals adopt a vertical integration into subacute care strategy.

## Keywords

vertical integration, hospital strategy, cross-case analysis, reimbursement mechanisms, rehabilitation centers, subacute care, skilled nursing facilities, delivery of health care, integrated/utilization, value-based payment

### What do we already know about this topic?

Very little is known about the ways in which hospitals approach their strategies toward subacute care or the factors which organizations consider when determining their integration subacute care strategy.

### How does your research contribute to the field?

The findings highlight the unique intrinsic thought processes that health care administrators go through to determine the correct strategic approach to managing patients who move from acute care to subacute care.

### What are your research's implications toward theory, practice, or policy?

Our findings identified factors associated with hospital vertical integration strategies into subacute care, which provide valuable insights in how health care leaders should evaluate their organization's subacute care strategy.

## Introduction

The US health care system is undergoing systemic change as a result of the Affordable Care Act (ACA).<sup>1</sup> The ACA attempts to curb unnecessary health care spending and eliminate quality gaps through payment reforms that incentivize improved care delivery through care coordination.<sup>2</sup> As a result, some hospitals are becoming systems that have the capabilities to manage patients as they move through the continuum of care. Systems that manage patients through the continuum of care may be acute care centers with an integrated skilled nursing facility, home health agency, outpatient rehabilitation centers, and outpatient physician networks. Some providers have

<sup>1</sup>The Ohio State University, Columbus, USA

<sup>2</sup>The University of Alabama at Birmingham, USA

<sup>3</sup>The University of Michigan, Ann Arbor, USA

<sup>4</sup>Indiana University, Indianapolis, USA

Received 31 August 2017; revised 23 April 2018; revised manuscript accepted 4 May 2018

### Corresponding Author:

Tory H. Hogan, Assistant Professor, Division of Health Services Management and Policy, College of Public Health, The Ohio State University, 1841 Neil Ave, Cunz Hall 200C, Columbus, OH 43210, USA.  
Email: Hogan.323@osu.edu



**Table 1.** Case Characteristics.

Regional health system	Location in the United States	Ownership status	Hospital location within system		Bed size	
			Urban	Rural	<200	>200
Case 1	West	Investor	X		X	X
Case 2	Midwest	Not for profit	X	X	X	X
Case 3	Throughout the United States	Not for profit		X	X	

Note. "X" indicates the presence of a hospitals within the health system that meets the criteria.

pursued these capabilities through vertical integration. Vertical integration is defined as "the provision of a continuum of office-based care, acute care, and post-acute care services within a single organizational or joint ownership structure, allowing for a coordinated progression of services across the patient care spectrum."<sup>3(p16)</sup> Researchers have long argued that organizations pursue vertical integration strategies in an effort to reduce market transaction costs,<sup>4,5</sup> increase market share,<sup>6</sup> and mitigate environmental threats<sup>7,8</sup>

Policy makers believe that care coordination will improve outcomes and address unnecessary spending in our health care system.<sup>9,10</sup> The ACA payment reform programs, such as Accountable Care Organizations (ACOs), bundled payments and performance based reimbursements, link organizations, which have traditionally received separate payments, together through reimbursement mechanisms. This encourages providers to coordinate patient care across the continuum of care.<sup>11,12</sup> Within the potential providers along the continuum of care, researchers have predicted that hospitals will vertically integrate into subacute care (SAC) in response to payment reform and adoption of ACO models.<sup>3,13,14</sup> SAC provides inpatient care to patients who no longer require acute care services but still require 24-hour care during this phase of their recovery.<sup>15,16</sup> Theoretically, vertical integration into SAC may have the potential to improve communication between acute care providers and SAC providers, facilitate safer patient transfers between providers, and enable hospitals with the ability to take advantage of new payment systems, although very little is known empirically about such potential benefits. There are also potential downsides that should be noted; vertical integration may create large internal costs and perpetuate inefficient organizational processes, and has high opportunity costs as it is capital and resource intense to adopt and implement.<sup>17</sup>

This article explores the extent to which payment reform and other factors have motivated hospitals to adopt a vertical integration strategy. It also looks at the conditions under which hospitals have pursued a vertical integration strategy. Through the utilization of a qualitative, multiple-case study research design,<sup>18</sup> this study provides in-depth perspective into hospital adoption of SAC vertical integration strategies across multiple types of hospitals and in different health care markets.<sup>19</sup>

## Methods

### Sample and Research Design

The study included 3 multihospital health systems located throughout the United States. The health system was chosen as the unit of analysis because it is able to address the perspective of multiple hospitals in different types of markets and geographic locations. Previous research has found that hospital ownership, location, and system affiliation are associated with the likelihood that a hospital will be vertical integration into SAC.<sup>20</sup> Therefore, we selected 3 health systems based on a variety of market and organizational variables (hospital ownership, location and size). A list of the factors associated with each case is available in Table 1.

We used a multiple-case study design to understand why, and in what ways, hospitals adopt an SAC vertical integration strategy. This design is ideal for understanding and describing this phenomenon,<sup>21</sup> with multiple health systems included to increase the robustness of the study<sup>22</sup> and enable us to follow a replication design.<sup>18</sup>

Each case (health system) included in our sample has at least 1 facility that was vertically integrated into SAC, meaning that each organization either had a free-standing SAC facility or a SAC facility that was physically located in the same place as another health facility. Each case has hospitals within their system that were vertically integrated into SAC and others that were not. This information was confirmed through the organization's website and the American Hospital Association's Annual Hospital Survey.

### Data Collection

We triangulated multiple data sources to generate rich descriptions of the themes and cases.<sup>23</sup> We collected data from the following data sources: (1) 30 minute, in-depth semistructured interviews with health system executives, such as the chief strategy officer, chief financial officer, and the senior vice president of Post-Acute Services (n = 13); (2) information posted on health system websites (n = 3); (3) Annual Reports (n = 2); (4) news articles about the health system and organizational strategy (n = 3); (5) The American Hospital Association's Annual Survey (n = 3); and (6) Center for Medicare and Medicaid Services (CMS) reports (n=3). The in-depth semistructured interviews were our primary data

**Table 2.** Cross-Case Results.

	Case 3	Case 2	Case 1
<b>Value-Based Payment Incentives</b>			
Reducing hospital readmissions rates	x	x	x
Implementing Accountable Care Organizations	x	x	x
Responding to demands of bundled payments		x	x
Dealing with changing Medicare payment incentives		x	x
Reducing length of stay		x	x
<b>Market Factors</b>			
Responding to SAC market competition	x	x	x
Anticipating population changes		x	x
Geographic location of acute care center	x	x	
SAC market competition/availability	x		
<b>Organizational Factors</b>			
Appropriate organizational knowledge	x	x	x
Potential strategic alternatives	x	x	x
Availability of financial resources	x	x	x
Aligning complementary acute care services		x	x

Note. "X" indicates the that the case results included the subtheme. SAC = subacute care.

source for developing themes and subthemes within and across cases. Findings from the secondary data sources were largely confirmatory and helped to enhance the research team's understanding of the emergent themes and subthemes. To maintain anonymity of each organization selected for the case study, we do not provide citations from any secondary data sources (annual reports, news articles, and health system websites). We conducted at least 3 interviews with each case. We interviewed individuals who were considered the most important and most informed regarding the organization's SAC strategic decision-making because they were in positions that deal with organizational strategic decisions. To identify these individuals, we examined the websites of each case and compiled a list of potential individuals with titles associated with strategy, postacute care, or SAC. Upon initial contact with these individuals, participants provided additional names and titles of individuals whom they identified as having experience during their organization's strategic decision-making process with respect to SAC. Due to the complex nature of organizational strategy, the use of the cross-case design and the participants' ability to clearly communicate their organization's SAC strategy, 3 interviews per case allowed the team to identify patterns across multiple cases and the identification of unique characteristics within each case. A list of the titles of all participants interviewed can be found in the appendix.

All interviews were completed over the telephone and were digitally recorded using Smart Voice Recorder. Interviews were then transcribed verbatim using the transcribing service Rev.com. All data were entered into NVivo 11, which was used to store and code interview transcriptions. This allowed us to identify themes within the data. Participants and organizations were assigned pseudonyms for analysis and reporting

to maintain anonymity. Next, we completed our analysis within each case and across the cases.<sup>24</sup> As suggested by Creswell,<sup>25,26</sup> the analysis proceeded through the following steps: (1) preliminary examination of the data where the primary author reviewed the transcribed interviews and took notes; (2) coding each interview within each case; (3) using the codes to develop themes and subthemes; (4) verifying the themes and subthemes with other members of the research team; (5) connecting and interrelating themes; (6) constructing a case study table consisting of themes, subthemes, and illustrative quotes for each case; and (7) constructing a cross-case thematic analysis. To complete our cross-case analysis, we compiled a list of all themes and subthemes identified across all cases and then compared the cases based on the commonalities and differences in the associated themes and subthemes. We also determined which themes were most prominent throughout the cases and which themes were unique to specific cases. The data verification process included triangulating different sources of information within each case,<sup>27</sup> and member checking by confirming the interviewer's understanding of the interviewee's response by summarizing and paraphrasing throughout the interview,<sup>28</sup> crafting rich descriptions of the cases, and confirming information from the interviews with publicly available information.

## Results

### Cross-Case Analysis

Three common themes emerged from the cross-case analysis that help explain why hospitals adopt an SAC vertical integration strategy. These themes, related subthemes, and their presence across cases are presented in Table 2.

*Theme 1: Value-based payment incentives.* Each participant described several value-based payment incentives that were established through the ACA which created an incentive that had more control over the SAC part of the continuum.

The first subtheme, *reducing hospital readmissions rates*, was consistent across all 3 cases. Hospital and health system managers were paying close attention to readmissions rates because they were associated with a financial penalty for the hospital. For example, the Chief Financial Officer from case 1 stated that “we look at all our readmissions, but we obviously pay, and every hospital pays, closest attention to the ones that are attached to a penalty.” In all 3 cases, administrators explained that they examined their SAC providers and whether vertical integration was an appropriate part of a larger strategy to reduce their readmissions rates. For all 3 organizations, readmissions were a direct threat to the organization’s revenue, and SAC was seen as an area that could directly impact a hospital’s readmissions rate. Vertical integration was described as a strategy that may enable the organization to better manage readmission rates.

The second subtheme, which emerged in 2 cases, was *implementing Accountable Care Organizations*. Participants in 2 cases described that their organization’s interest in pursuing a vertical integration strategy into SAC was motivated by their participation or potential participation in the Medicare Shared Savings Program (ACO). For example, an administrator from case 2 explained that they have shifted to focus on SAC, in large part, due to the ACO strategy. Within this focus on SAC, vertical integration was one strategy considered and/or implemented by organizations as a part of their ACO strategy.

The next subtheme, *bundled payment programs*, describes a factor that influenced the adoption of a vertical integration strategy for cases 1 and 2. An administrator at case 2 described how the bundled payment program had directly influenced their organization to adopt a strategy to manage SAC: “I think bundled payments have influenced us greatly. I think it really has driven how we’re going to do, or at least beginning to get us organized around how we work with postacute. Up until this point, I don’t think we much had a strategy.” Administrators from case 1 noted that, through the bundled payment program (Comprehensive Joint Replacement Program (CJR)), they were able to get more information regarding quality indicators such as readmission rates. We were able to confirm the organization’s participation in the CJR program on the CMS website.

Administrators from case 2 described how the bundled payment program was also linked to the fourth subtheme, *reducing hospital length of stay*. Length of stay was noted as a motivating factor that influenced their adoption of a vertical integration strategy. Cases 1 and 2 noted that their organization’s length of stay metric is associated with their success as ACOs and in capturing the full bundled payment possible.

Last, the fifth subtheme, *dealing with changing Medicare payment incentives*, was identified while speaking with

administrators from cases 1 and 2. Different from other subthemes previously mentioned, this subtheme refers to the payment pressure being put on the SAC providers. The general consensus among case 1 and case 2 participants was that CMS programs were moving toward payment systems that would put pressure on the SAC providers. Administrators described the importance of understanding the Medicare policies and being sure that the organizations were working with SAC providers in a way that did not jeopardize the acute care center’s ability to be fully reimbursed. For example, an administrator from case 2 stated,

... organizations have to be creative about how they approach this section [SAC] of the market and then [have to] figure it out as they go along. These are skill sets that we don’t currently have that need to [be] figure[d] out because these payment models aren’t going away.

Utilizing SAC in a way that aligns their organization with health care reform was critical to administrators.

In conclusion, the *value-based purchasing* theme describes how organizations are aligning themselves to take advantage of the value-based payment. Overall, as illustrated in Table 1, case 1 and case 2, which have hospitals in urban areas, have more similarities across this subtheme of value-based payment incentives. Case 3, which is primarily located in rural areas, had fewer similarities with the first 2 cases at the subtheme level.

*Theme 2: Hospital market factors.* In all 3 cases, participants described multiple hospital market factors as influencing why hospitals vertically integrate into SAC. Four subthemes were identified across the cases. The adoption of a vertical integration strategy, while motivated by policy, will be influenced by market and other environmental conditions, as well as by organizational capabilities and resources.

The first subtheme common to each case was *responding to SAC market competition*. Administrators from each case described that their organization’s strategy to vertically integrate or not into SAC was greatly influenced by the availability of high-quality SAC providers in their hospital market areas. Consistent across each case, participants noted that they were less likely to vertically integrate when their hospitals were located in areas where there was a competitive SAC market or the presence of national providers in the market. For example, an administrator from case 3 explained, “. . . if there’s other providers servicing that need or if there is one, then you’ll say, ‘Do we really need to be doing this? Does this make sense?’” For case 2, this type of uncertainty created additional pressure to adopt some sort of strategy toward SAC with the aim of reducing uncertainty and improving the predictability of outcomes for patients who utilize SAC upon being discharged from their facility. Administrators from each case described the market for SAC as being competitive. An administrator from case 3 explained that in rural areas, where there are not enough

beds and some providers of SAC might be struggling to survive, they are considering vertical integration into SAC as a way of keeping SAC beds available in their community.

The next subtheme identified was *anticipating population changes*. Two cases recalled that their vertical integration strategy was, in part, a response to a change in the population. For example, case 1 vertically integrated into inpatient rehabilitation by building free-standing rehabilitation hospitals and adding inpatient rehabilitation units into existing acute care centers as a result of having a patient population mix that would utilize SAC. One administrator from case 1 said,

[The health system leaders; T.H.H.] identified rehab as an enormous opportunity of growth for the company, and specifically within the company in the [City Name] market, our [Hospital Name] location, really had the patient population mix, the service lines that would support a good rehab program. Overnight essentially, the idea was really agreed upon that we would start branching back out into rehab and starting to put new units back into existing hospitals that may or may not have at one time had them. It quickly became the second fastest growing service line within the company.

In case 2, when an administrator was asked what factors influenced the health system's decision to vertically integrate at a specific hospital location, he or she described how the organization vertically integrated in part due the growth of the community their hospital served.

The third subtheme within Market Factors is *geographic location of acute care center*. This can be described as the health system's location and adhering to the challenges within such geographic locations. Administrators from cases 2 and 3 both described how, when the organization decided to vertically integrate or not, part of this decision was in an effort to manage the transition from acute care to SAC within the challenges associated with rural populations and health care markets. Participants from both cases described the difficulty of ensuring the use of SAC. In particular, because very rural acute care centers—many of which are critical access hospitals—are not within close proximity to the patients' communities, they struggle to ensure their patients utilize SAC facilities. We were able to confirm the location of the hospitals and presence of critical access hospitals based on information on the organization's website. An administrator from case 2 explained the challenges with this part of the care continuum in the following way:

When you're talking about the critical access hospitals, that population is much more spread out and so your ability to say to somebody [you should go to SAC next], who wants to drive 2 counties over to go to the skilled nursing home and actually doesn't have access to transportation, that's a whole different set of issues.

Administrators from case 3 reported that, in light of the isolation experienced by their patient population, they may vertically integrate SAC to ensure that the patients can be in their own community. For example, an administrator stated,

. . . for patients to travel, it's going to be very challenging. It may not be for instance the immediate short term care sites, they have a surgery, but maybe it would be for their subacute care or for their rehab and physical therapy. Instead of having them travel back and forth 80 miles for daddy's physical therapy, they can do that in some of the smaller community hospitals that we work with.

For some organizations, their vertical integration strategy is a critical component of ensuring their patients are able to have access to SAC.

Last, the subtheme *patient demand for SAC* emerged only for case 3. Administrators here explained that, when they were deciding if they would vertically integrate a hospital into SAC, they strongly considered the current demand for the services and how the services would be utilized. As one participant stated, "If there's not enough community demand and need for it, or if there's other providers servicing that need or if there is one, then you'll say, 'Do we really need to be doing this? Does this make sense?'" For case 3, vertical integration was a response to a specific market demand for SAC care services. This theme differs from previous themes in that it describes how the administrators conceptualize who will utilize the services and how vertical integration into SAC will facilitate SAC utilization.

**Theme 3: Organizational factors.** Participants described multiple organizational factors that influenced how and why hospitals vertically integrate into SAC. There were 5 subthemes identified across the cases.

The first subtheme, *potential strategic alternatives*, was consistent across all 3 cases and reflected how participants identified alternatives to vertical integration. Participants from all 3 cases stated that, upon evaluating the current payment incentives, market factors, and their own organizational capabilities, they decided against vertically integrating at certain hospitals. Administrators from each case described how some hospitals within their organization were developing some sort of a network or closer relationship with the current SAC providers in their market. For example, a participant from case 3 argued,

One of the strategies that we employ with the secondary market institutions is not just for the subacute settings but certainly for those, particularly the rehab settings, is to create those relationships with the urban community providers, such that they're in a continuity of care that's quote, 'Under the umbrella' of not a partnership system or a partnered system but sometimes a relationship with an organization where there can be continuity of care.

In line with this perspective, an administrator from case 1 stated,

Yeah, you know for me, it's really about trying to pick the right partners. I don't think . . . We're not in the business of wanting

to own everything, and I don't know that that's a very smart strategy to employ, personally.

In addition to networking, administrators from cases 2 and 3 both considered swing beds as an alternative to buying an additional SAC facility. A participant from case 3 said,

Some of our general acute hospitals also have swing-bed programs. They're limited, you have to have, I think it's less than 100 beds from the Medicare perspective, to qualify to have swing-beds. Again, our swing-bed programs are robust enough that they not only can use it for their own patients, but they are beginning to attract patients back into the community. Again, those that have had to transfer out to larger hospitals because of medical needs, now can come back into the community, into the swing-bed program, which is better for the patient and family, I think.

For both cases, swing beds were an alternative for critical access hospitals in rural areas and were described as being a way that organizations can offer SAC services to patients in a setting that is closer to home and more convenient.

The second subtheme, which emerged from 2 cases, was *appropriate organizational knowledge*. This subtheme describes how administrators in each organization consider their internal professional capabilities and knowledge regarding how to provide and run an SAC facility. Participants acknowledged that SAC requires different expertise than what is needed to provide acute care. For example, an administrator from case 2 explained that the organization did not vertically integrate in their largest market, in part due to a lack of organizational knowledge regarding SAC, remarking, "I think probably the driving factor of it is lack of just a knowledge of that area . . ."

The third subtheme, *availability of financial resources*, emerged across 3 cases and describes how organizations evaluated the current financial status and potential financial benefits of vertical integration before adopting a SAC strategy. For example, an administrator from case 2 stated, "Limited capital availability . . . I think, make it prohibitive [to vertically integrate]." Across each case, there was a demand to invest capital to adapt to the demands of the current health care environment, of which SAC was one item on a long list of areas needing resources. A participant from case 3 described how health care administrators in their organizations evaluate the community's financial resources when deciding if they will invest in a vertically integrated SAC facility. For example, "We try to scope the level of services [SAC] and support and resources to the needs and financial capabilities of that particular community." Participants from case 3 believe that, although there are very few financial benefits to vertically integrating and adopting an SAC strategy in general, it is better for the patient, which drives their decision more.

Last, the fourth subtheme, *aligning complementary acute care services*, was identified in cases 1 and 2 and explains

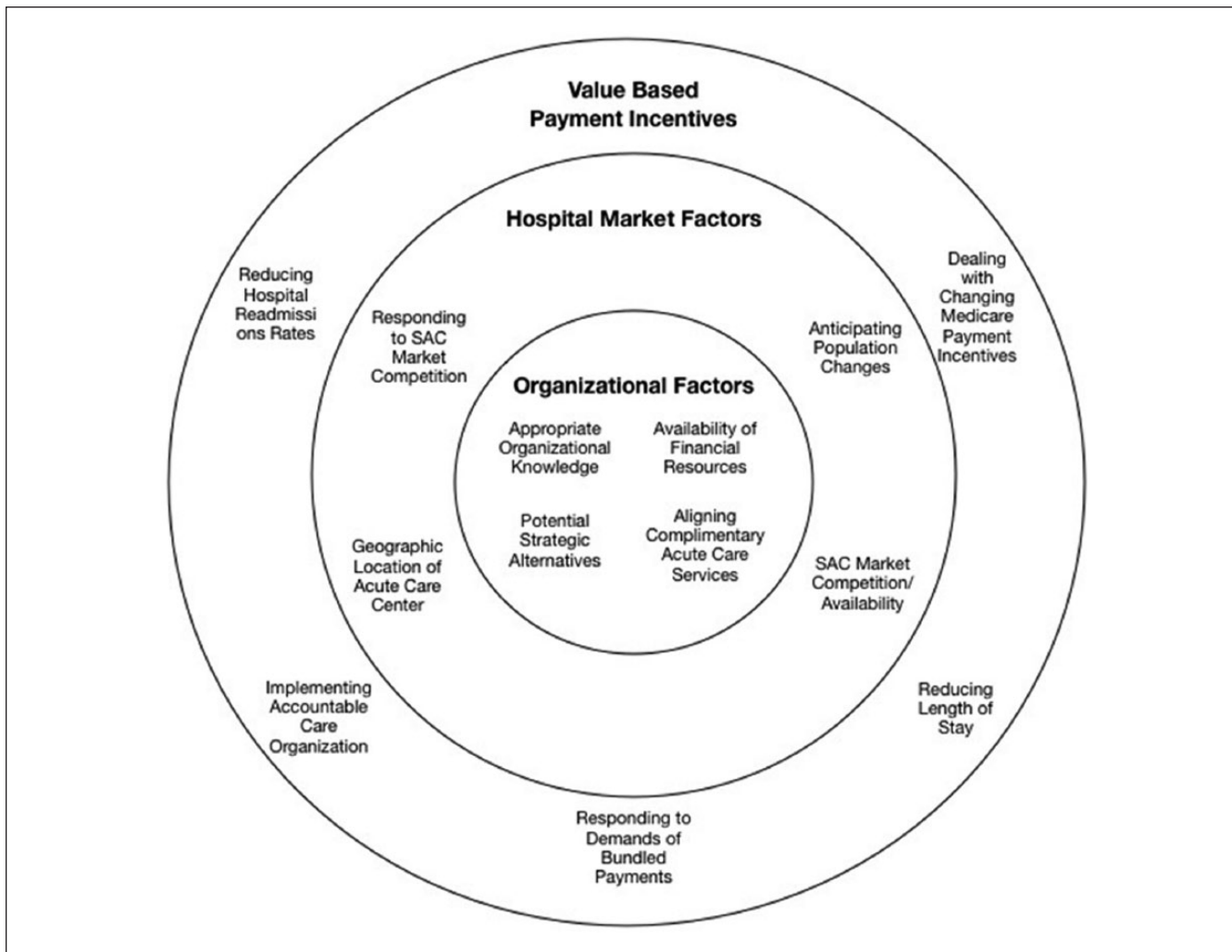
how hospitals look at existing service lines and how these will complement SAC. Some complementary services were cardiac care, orthopedic, and stroke centers. Case 2 vertically integrated SAC in a hospital that provided a large amount of orthopedic services, which was confirmed on the organization's website. For example, an interviewee from case 2 explained, "Yeah, then our facility in [name of community] has a skilled nursing unit in it. Which we opened up as a dual part of this strategy because it made sense with the type of patients and services they focus on in that facility." In line with this, administrators from case 1 also identified that their organization vertically integrated into SAC because they had multiple complementary services that were growing and gaining market share. In conclusion, vertical integration into SAC was seen as a strategy that enabled organizations to gain an advantage against their competitors and enhance already existing service lines. Based on the study findings, we developed a diagram (Figure 1), which summarizes the varied reasons and factors which motivate or work against vertical integration into SAC.

## Discussion

This article presents the results from a cross-case analysis that explored how and why hospitals vertically integrate into SAC. The findings reveal that health systems choose to vertically integrate in response to a variety of value-based payment incentives, market factors, and organizational factors.

The first major finding of the study is that hospital managers are responding strategically, in part to value-based payment incentives outlined as part of the ACA by adopting a vertical integration strategy. This finding is in line with previous health care management research that found that hospitals adopt a vertical integration strategy in response to pressures from their environment.<sup>29</sup> In light of the fact that the CJR, Hospital Readmissions Reduction Program (HRRP), and ACO programs involve providers throughout the continuum of care beyond the hospital, administrators in this study felt their organizations were at risk financially within these value-based payment programs. Policy makers could evaluate the current value-based payment policies to ensure they accurately spread the financial risk to all providers across the continuum.

Next, our study revealed differences in the types of value-based payment incentives that health care systems noted were associated with their likelihood of considering an SAC strategy. Administrators from systems which are either primarily or entirely in urban areas described how their organization's focus on an SAC strategy was largely incentivized by their participation in the ACO shared savings program, bundled payment/CJR program, and the HRRP program. Meanwhile, administrators from system entirely in rural markets stated that their SAC strategy is incentivized primarily by the HRRP program. Previous research which has cited that rural hospitals struggle to respond to the health care marketplace pressures in ways that urban hospitals do not.<sup>30,31</sup> If policy makers want to fully implement the



**Figure 1.** Concentric circles models of hospital vertical integration into subacute care.

value-based payment incentives outlined in the ACA, they need to understand the organizational and market environments that rural hospitals operate within and create programs with obtainable and fair evaluative criteria.

Our study also identified that hospital administrators are considering virtual integration (through networks) as an alternative to vertical integration. Each case documented that they have adopted a network approach in place of a vertical integration strategy. This finding is consistent with arguments made my pervious theoretical research in health care management.<sup>3,16</sup> Our research validated the theoretical arguments and also shed light into the complexity associated with the adoption of such networks. Each case described complex processes associated with adopting and managing such virtual integration strategies. In addition, this research identified that vertical integration and virtual integration strategies may be pursued simultaneously within an organization and are not mutually exclusive.

As the US health system continues to become more diverse and complex, health providers are consolidating and

becoming more integrated. Very little is known about the outcomes associated with such integration strategies. In light of our findings, policy makers should focus efforts toward understanding how vertically integrated SAC centers manage patients through the care continuum and impact cost. Our study also provides valuable insight into how health policies drive change among acute care hospitals.

Despite the valuable contributions of our research, our study has several limitations. First, both our case study approach and our selection of the cases create limitations regarding the generalizability of the study. This is a limitation of cross-case study design.<sup>32</sup> Next, the small number of participants per case may influence our findings. Although we interviewed individuals who self-identified as being a part of the decision-making process as it relates to hospital strategy, our study could be enriched by gaining alternative perspectives. In addition, we were not able to interview every decision maker in the organization. This was not feasible given our timeline and resources available to collect the data. Third, each interviewee worked at the system level of the

organization. Each participant indicated that they were a part of the strategic decision-making process at the hospital level. In addition, we were able to confirm data points from each interview through triangulation with other sources. Unfortunately, we were not able to conduct interviews at the hospital level which may limit the perspectives captured.

Further studies are needed to understand the relationship between the various value-based payment mechanisms and SAC strategy adoption. Our findings identified these programs as factors associated with vertical integration strategies into SAC, but it is unclear exactly what magnitude the programs play in the decision process and strategic behavior. Next, some hospitals are also adopting a network approach as an alternative to a vertical integration strategy or in conjunction with a vertical integration strategy because the vertical integration strategy is not sufficient to meet their SAC needs. Further research is needed to understand

how hospitals develop networks, the characteristics of SAC networks, how they evaluate their networks, and the outcomes patients experience as a result of these networks.

## Conclusion

The findings highlight the unique intrinsic thought processes that health care administrators go through to determine the correct strategic approach to managing patients who move from acute care to SAC. As value-based reimbursement, such as ACOs, become more widely implemented, acute care providers will continue to adopt strategies which enable better management of the SAC part of the care continuum.<sup>33,34</sup> While vertical integration offers the potential to reduce costs, health care administrators face significant barriers from their environments as they try to position their organizations to most appropriately respond to these changes while meeting their organization's mission.

## Appendix

### Titles of Participants.

Case	Interview 1	Interview 2	Interview 3	Interview 4
Case 1	Chief Executive Officer, Rehabilitation Hospital & Health System Market Leader for Post Acute Care	Chief Financial Officer	Vice President of Orthopedic, Neuroscience and Spine	
Case 2	Chief Strategy Officer	President and Chief Executive Officer of Clinically Integrated Network	Strategy Director	
Case 3	Chief Executive Officer	Chief Operating Officer	Senior Vice President, Quality, Patient Safety and Care Management	Vice President, Clinical Services Post-Acute Services

## Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

## ORCID iD

Tory H. Hogan  <https://orcid.org/0000-0001-8403-9735>

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