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Strategy and Risk-Sharing in Hospital-Post-Acute Integration

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Abstract

Post-acute care has been identified as a primary area for cost containment. The continued shift of payment structures from volume to value has often put hospitals at the forefront of addressing post-acute cost containment. However, hospitals continue to struggle with models to manage patients in post-acute institutions such as skilled nursing facilities (SNFs) or in home health agencies (HHAs). Recent research has identified post-acute network development as one mechanism to improve outcomes for patients sent to post-acute providers. Many hospitals, though, have not utilized this strategy for fear of not adhering to CMS requirements that patients are given choice when discharged to post-acute care.

A hospital's approach to post-acute integration will be dictated by environmental uncertainty and the level of embeddedness hospitals have with potential post-acute partners. Hospitals, though, must also consider how and when to extend shared savings to post-acute partners, which will be based on the complexity of the risk-sharing calculation, the ability to maintain network flexibility, and the potential benefits of preserving competition and innovation among the network members. For hospital leaders, post-acute network development should include a robust and transparent data

management process, start with an embedded network that maintains network design flexibility, and include a care management approach that includes patient-level coordination.

The design of care management models could benefit from elevating the role of post-acute providers in the current array of risk-based payment models and these providers should consider developing deeper relationships with select post-acute providers to achieve cost containment.

Issue/Trend

The 2013 National Academy of Medicine (formerly Institute of Medicine) report identified post-acute care as one of the biggest sources of variation in Medicare spending. (Institute of Medicine, 2013) One potential contributor to the variation could be the lack of accountability for hospitals with respect to the care of patients post-discharge. In other words, hospitals have historically had little incentive to consider the cost and quality of care provided to discharged patients in post-acute care institutions. However, with the advent of rehospitalization penalties and as the healthcare system continues to shift to other value-based payment models like accountable care organizations (ACOs) and bundled payments, hospitals have greater incentive to enhance care management strategies post-discharge. (Mechanic, 2014) In fact, many ACOs, a Medicare-sponsored value-based payment model, targeted post-acute spending as an early focus on cost savings. (McWilliams, Gilstrap, Stevenson, Chernew, Huskamp, & Grabowski, 2017) However, the “specific mechanisms mediating these savings have yet to be elucidated.” ((McWilliams, 2016), page 2219)

According to a 2015 report, 42% of Medicare fee-for-service payments were tied to value-based models. (Catalyst for Payment Reform, 2015) Additionally, 30% of Medicare beneficiaries are enrolled in Medicare Advantage (MA) plans that are paid on a per-member capitated basis and have, thus, always had incentive to better manage patients post-discharge from an inpatient stay. Some hospitals even see MA as an area of growth, with 22% of MA enrollees in 2015 enrolled in vertically integrated provider-sponsored MA plans. (Johnson, Lyon, & Frakt, 2017) As hospitals are increasingly aligning payment models with value and/or managing patients through vertical integration of MA plans, hospitals now, more than ever, have a clear imperative to consider more integrated models with post-acute providers to improve quality and contain costs.

Approximately 80% of total post-acute Medicare spending occurs in skilled nursing facilities or by home health providers. (see Figure 1 for Number and Percent of total Medicare fee-for-service spending by post-acute provider)

“In 2015, about 15,000 SNFs furnished 2.4 million Medicare-covered stays to 1.7 million fee-for-service beneficiaries” and over 12,300 home health agencies provided care to approximately 3.5 million beneficiaries, costing the Medicare program about \$29.8 and \$18.1 billion, respectively. ((MedPAC, 2017), page 2) (MedPAC, 2017) As hospitals consider mechanisms for cost containment in post-acute institutions, there are two critical aspects to evaluate. First, patients must be discharged to the appropriate post-acute provider. On the margin, there are most likely patients that could be safely cared for in a lower cost setting (e.g., home health instead of SNF or SNF instead of an inpatient rehabilitation

facility). Second, hospitals, especially those already in or entering into risk-based payment models, will need to develop deeper relationships with select post-acute providers to achieve maximum cost containment and provide greater value to patients. (Mor, Rahman, & McHugh, 2016) The strategies available to hospitals include either 1) refer to higher quality post-acute providers or 2) influence post-acute care processes, or use both strategies.

Integration across organizations is designed to align incentives related to cost and quality. This is especially important for the “high-cost,” “high-utilizers” that may require more enhanced care management due to high, and possibly wasteful, levels of post-acute and long-term care spending. (Blumenthal, Chernof, Fulmer, Lumpkin, & Selberg, 2016) (Long, et al., 2016) (McCarthy, Ryan, & Klein, 2015) To best align incentives, the design of care coordination models could benefit from elevating the role of post-acute providers in the current array of risk-sharing models. Specific to ACOs, only 18% formally included skilled nursing facilities and services and 34% included home health. (Colla & al., 2016) In this article, we provide a rationale for recommendations to embrace post-acute care providers in order to adequately manage post-acute transitions, improve patient outcomes and quality of care, and help contain costs. Specifically, we ask whether efforts to integrate post-acute providers with the hospital should occur through organizational collaboration (organization-to-organization integration), through a focus on the patient in the transition experience (patient-level integration), or both.

Theoretical Analysis/Presentation

The shift to value-based payment models today is similar to the emerging managed care models of the 1990s, though with some key differences. (Burns & Pauly, 2012) Literature related to post-acute integration was more focused on integration among post-acute providers, rather than vertical integration with hospitals. (Currie, 1996) The majority of literature from that time was focused on hospital mergers and physician group integration rather than hospital-post-acute integration. For instance, Robinson and Casalino examined the advantages and disadvantages of “vertical” versus “virtual” integration of large, primary care physician groups with hospital partners and specialty physicians. (Robinson & Casalino, 1996) They find “excess capacity and the need for external sources of investment capital as major short-term determinants of vertical versus virtual integration decisions.” ((Robinson & Casalino, 1996), page 8) The paper concludes that “firms confront a trade-off between the advantages of coordinated adaptation through vertical integration and the advantages of autonomous adaptation through contractual networks... however, there will be considerably more contractual relationships and considerably less vertical integration than predicted by some advocates of hospital-centered delivery systems.” ((Robinson & Casalino, 1996), page 21) As it relates to hospitals and post-acute providers, excess capacity in post-acute supply may influence a hospital’s integration strategy, meaning a hospital may be less likely to pursue vertical, or even “virtual,” integration, and pursue more patient-level integration strategies. However, it is highly unlikely that a post-acute provider would have greater access to capital than an acute-care hospital and, as a result, we would not predict capital to be a driver of the make-versus-buy decision from the hospital’s perspective. Finally, given the large number of post-acute providers to which hospitals often refer,

vertical and virtual integration are not mutually exclusive strategies as they would be with a physician group.

Shay and Mick offer two perspectives of integration under the Affordable Care Act. First, the authors apply the perspective of transaction cost economics to the ways in which organizations may rationalize vertical integration in an accountable care organization, but also recognize the complexity of administrative structures emerging from post-acute network development. (Mick & Shay, 2016) In Shay and Mick's second perspective, the authors apply transaction cost economics and network theory to hospital and post-acute integration under the ACO and bundled payment models, suggesting that integration between acute and post-acute providers will fall along a spectrum of solutions based on the environmental uncertainty and network embeddedness. (Shay & Mick, 2013) We build upon both perspectives, using transaction cost economics and network theory/embeddedness as two components in an array of organizational theories that can help to understand integration between hospitals and post-acute providers. However, we do not consider vertical and virtual integration to be mutually exclusive in an organization's approach to post-acute network development, we make the distinction between organization-to-organization integration and patient-level integration, we introduce considerations for hospitals to include post-acute partners in risk-sharing models, and we offer managerial implications to the discussion.

Organization-to-organization integration ranges from contractual arrangements to organizational acquisitions, in which a hospital can vertically integrate with one or more post-acute providers. Under alternative payment models like bundling and ACOs, participating hospitals are accountable for the care provided (both cost and quality) to a patient after hospital discharge (Centers for Medicare and Medicaid Services, 2017); as the cost of unintended re-hospitalizations and other transfers in the post-acute continuum has negative financial consequences, the choice of post-acute provider is increasingly relevant and can have significant influence on hospital outcomes. (Rahman, McHugh, Gozalo, Ackerley, & Mor, 2016) As a result, hospitals may seek greater integration with post-acute partners, leading to an increase in contractual agreements between hospitals and post-acute providers or, potentially, full vertical integration (i.e., acquiring a SNF facility or home health agency) if the volume of transfers is high enough. The build or buy decision thus depends on the benefits of ownership (e.g., lower patient transfer costs, less costly integration) outweighing the risks or costs (e.g., fixed asset risk, uncertain future volumes, administrative complexity).

Patient level integration requires greater management of target patients throughout the continuum, up to and potentially including caring for patients in a SNF. In order to undertake patient level integration, relationships between discharge planners at hospitals and admissions coordinators at SNFs or intake coordinators at HHAs are needed to facilitate information exchange and improve patients' transitions between organizations. Embedded relationships between organizations can benefit from unique opportunities such as long-term cooperation, risk-sharing, and/or shared investment. (Uzzi, 1996) Strong social relationships among hospital and post-acute staff throughout the organizations can also promote positive outcomes. However, some shared risk with the post-acute providers may be desirable since they could become more selective in the admissions process and overall hospital outcomes

could still suffer. (Shield, Winblad, McHugh, Gadbois, & Tyler, 2016) From a hospital perspective, an organizational focus on increased value can guide discharge planners to help patients choose appropriate post-acute providers. This arrangement might include a quid pro quo strategy in which discharge planners can direct more complex and thus difficult to place patients to a partner provider under the assumption that a less complicated patient will be preferentially referred to that provider at a later date. (Shield, Winblad, McHugh, Gadbois, & Tyler, 2016) Anecdotes about such “exchanges” abound.

Hospitals vary in the number of post-acute providers to which they discharge patients, post-acute providers vary in the quality of care provided, market conditions vary and, finally, the strength of the relationship between the hospital and any one post-acute provider varies. Therefore, the post-acute integration decisions a hospital makes will often lie along a spectrum of strategies that are not mutually exclusive. This complex reality is captured by our conceptual framework based on structural contingency theory that is a perspective arguing: “there is no one best way to organize” and “any one way of organizing is not equally effective under all conditions.” (Galbraith, 1973) From this perspective, optimal organization is viewed as a function of the fit between the entity’s environment, strategy, and structure (i.e., the contingencies). Thus, integration strategy is determined within the specific opportunities and constraints posed by the external and internal environment. In the case of post-acute care integration, different types and intensity of environmental pressures stemming from market, technology, and competitive forces as well as the strength of the relationships with post-acute providers enter into consideration of the optimal strategy in the form of organizational integration, patient care integration, or a combination of both.

Using structural contingency theory as an overarching guide, additional theoretical perspectives are useful in identifying how hospitals will approach integration decisions with individual post-acute providers to which they refer patients. For instance, the environmental uncertainty and circumstances that support structural contingency theory, and are relevant to a hospital’s strategic approach, overlap well with transaction cost economics. Transaction cost economics addresses the circumstances governing the “make or buy” decision in health care organizations, that is, the decision to integrate or de-integrate vertically (or virtually). (Williamson, 1989) According to this perspective, in a perfect world of little uncertainty, highly reliable information, and little or no opportunistic behavior in exchange relationships among organizations, all exchanges would be arms-length market transactions and there would be no need to internalize these transactions through vertical integration. But markets are not perfect and exhibit varying degrees of uncertainty and complexity. Overcoming these limitations can entail high transactions costs in market exchange in the form of seeking, making, and enforcing exchange mechanisms. Internalization allows decisions to be made with greater control over environmental uncertainty and complexity. However, since internalization also generates administrative and production costs, organizations must weigh the costs of internalization against the costs of market exchange in the “make or buy” decision.

If an organization becomes “locked in” to another organization because the resources invested in the relationship have lesser value if deployed in another organization, a circumstance known as asset specificity, integration strategies will often be guided by

market uncertainty. (Scott & Davis, 2007) Alternative payment models may increase asset specificity in exchange relationships between hospitals and post-acute care providers in the form of investments in equipment, personnel, and other forms of infrastructure to help contain costs through higher quality transfers and reductions in rehospitalizations. In the presence of asset specificity in market exchange, transaction cost economics maintains that an increase in uncertainty creates a primary motivation to integrate either vertically or virtually. Organizational integration may address provider uncertainties by aligning the incentives of acute and post-acute providers in a single organizational structure.

Structural contingency theory also provides the flexibility to consider the strength of hospital-post-acute provider relationships. Other theories, including economic sociology, neo-institutional, and network theories, acknowledge the importance of transactions, but view them within a larger social context. Embeddedness, for example, is the degree to which an organization maintains links or relational ties with other organizations that influence economic activities through social factors and relationships. The concept of embeddedness implies that social forces and institutions influence economic activity; informal, implicit institutional features in these complex entities interact with formal explicit features and create a matrix of relationships called an organizational field. This field is composed of both horizontal linkages to similar organizations (like other hospitals in an acute care network) and vertical linkages to upstream and downstream activities, such as physician groups and post-acute providers. Embeddedness implies close personal and/or professional exchanges that are not based on formal, complicated contractual or legal arrangements but rather on high levels of trust, information transfer, and joint problem solving. (Uzzi, 1996) The openness of embedded relationships mitigates environmental uncertainty. Thus, with respect to post-acute care integration, the extent of embeddedness may reduce the need for organizational integration in favor of integration at the patient care level where care models can be enhanced to improve outcomes, without adding administrative complexity.

From the hospital perspective, environments vary both in uncertainty (high vs. low) and embeddedness (high vs. low). These characteristics can be used to form the axes of a two by two matrix table indicating the most appropriate strategies to use in pursuing relationships with post-acute care providers:

A rationale for how these strategies respond to environmental contingencies, how they align with our theoretical model, and some features of their implementation follows next.

High Environmental Uncertainty

In markets with high environmental uncertainty, hospitals may be faced with high occupancy in skilled nursing facilities or limited capacity in home health agencies leading to intense competition. Or, perhaps, providers are attempting to reduce costs by aggressively shifting post-acute utilization from SNF to home health agencies and therefore, future SNF bed needs may be highly variable but competition among home health providers would increase in intensity. Technological changes can contribute to environmental uncertainty depending on the historic willingness of providers in the market to be early adopters of new technology or interventions. Finally, consolidation contributes to uncertainty, as more fragmented post-acute markets may have higher levels of uncertainty than markets where a few large chains

dominate the market. Applying transaction cost economics to these market conditions would suggest a strategy aligned with greater levels of organizational integration, though the level of integration may vary according to the type of post-acute provider (e.g., home health or skilled nursing) and would vary based on the level of organizational embeddedness.

High Environmental Uncertainty AND High Organizational Embeddedness—At the patient level, a hospital's level of embeddedness with post-acute providers may mitigate some of the environmental uncertainty and would guide the level of integration to pursue with skilled nursing facilities and home health agencies. A high level of embeddedness relies on the strength of the relationships with post-acute providers allowing for patient care and transition management improvements with few or no fixed asset commitments or investments, and may allow the hospital to pursue virtual integration rather than the added risk associated with vertical integration. Virtual integration can include risk-sharing models in which post-acute providers are included in the shared savings equation for patients discharged from hospital to post-acute care (PAC). A virtual network also allows for flexibility in the medium- and short-term to adapt to evolving market conditions. Further, as it relates to skilled nursing facilities, the high level of embeddedness most likely correlates with a critical mass of the hospital's discharged patients at the SNF, allowing the hospital to deploy a team of providers to SNFs in a virtual network, providing enhanced care management at the patient level which might help reduce readmissions for high-risk patients.

High Environmental Uncertainty AND Low Organizational Embeddedness—Where a hospital has low levels of organizational embeddedness and where market conditions are highly uncertain, the hospital would not be able to rely on the strength of the social relationships and therefore pursuit of a vertical integration strategy may mitigate the environmental uncertainty. Most patient level integration, in this scenario, would occur within the context of the vertically integrated providers. However, if there were specific providers where embeddedness was low, but a hospital sent a critical mass of patients, a strategy of patient level integration coupled with an asset commitment such as clinical information system development could be pursued and could shift weaker relationships from low to medium or even high embeddedness. The goal of the patient level integration strategy would be to ensure timely placement of patients in the short-term with maximum flexibility to exit the relationship in the medium- or long-term.

Low Environmental Uncertainty

Stable populations, limited competition, lagging technology adoption, or even a lower than average cost of care per beneficiary may characterize markets experiencing low levels of uncertainty, meaning the immediate need to transform care may lack urgency. The stability of the environment would reduce the need of the hospital to enter into shared risk arrangements with post-acute providers. Thus, transaction cost economics would guide hospitals to more limited organizational integration, but again this would be dependent on the level of embeddedness.

Low Environmental Uncertainty AND High Organizational Embeddedness—

In this stable environment, where a hospital has a high level of embeddedness with post-acute providers, the hospital can focus on patient level integration with little to no capital investment required. In this scenario, the hospital may exploit the strength of its relationships through patient level integration to ensure that discharge planners can fulfill discharge orders in a timely manner and the embedded network gives the hospital the opportunity to enhance care management post-discharge and perhaps deploy provider teams to see patients in a skilled nursing facility. If market conditions change and become more uncertain, the high level of embeddedness allows for an easier transition to a virtual network with more formal administrative structures (e.g., contractual relationships).

Low Environmental Uncertainty AND Low Organizational Embeddedness—

In markets with low uncertainty, hospital-post-acute provider pairs characterized by low organizational embeddedness may focus on patient level integration with post acute providers, but can also commit to some level of investment such as clinical information system development with select post-acute providers. The intent of the asset commitment is to shift the relationship from low to medium or even high embeddedness, allowing for an easier transition to a virtual network if environmental uncertainty intensifies.

Structural contingency theory suggests that the best structural “fit” given the organizational contingencies will optimize performance. Therefore, the strategies described above are designed to optimize return on investment based on future market and organizational changes; however, it is also possible one cannot effectively implement facility-level integration without patient-level integration and vice versa. Despite their different methods of integration, both approaches benefit by the existence of a preferred network of post-acute providers to ensure a critical mass of volume at a select number of providers. That is, patient-level integration would be difficult to implement without movement toward some level of organizational-level integration.

Organizational-level integration adds costs to managing each organizational relationship. Therefore, when there is not a critical mass of volume at a particular PAC provider and the costs outweigh the patient care benefits, the value created by investing in a particular provider is diminished. Unless a provider has a critical mass of patients, the cost of extending care management practices may be too high; similarly, the quid pro quo strategy may fail without a steady flow of patients. Therefore, care management strategies between hospital and PAC provider may be easier and the costs lower if the hospital has a limited set of “preferred” providers to suggest to a patient during the discharge process (Lage, Rusniak, Carr, Grabowski, & Ackerley, 2015) (Livingston, 2016).

Practice Implications**Conditions for Shared Risk with Post-Acute Providers**

In addition to the hospital’s integration strategies, with greater focus on care management and 42% of Medicare fee-for-service payments tied to value-based models, (Catalyst for Payment Reform, 2015) hospitals must also consider which providers along the care continuum are included in the risk calculation and which providers are essential care

management elements, but should not be included in risk payments. PAC integration may depend on whether the PAC provider(s) should be a component of the care continuum without shared risk, or whether post-acute care is essential enough to warrant actual participation in a governance model or risk-sharing calculation.

There are several factors to consider in deciding whether or not to include post-acute providers in a risk-sharing scenario: complexity, flexibility, and competition and innovation. A description of each point follows.

Complexity—One of the more complex components of risk calculations is savings attribution, especially given wide variation in patient complexity. In the hospital-PAC transfer, it is often unclear if positive and negative outcomes are a result of care provided in the hospital or by the post-acute provider. Furthermore, if one provider performs worse than another, risk-adjustment and the complexity of patient populations may drive risk-sharing discussions, creating a platform for multiple negotiations with partners. In markets with high uncertainty, where transaction cost economics would suggest tighter integration, risk-sharing may be yet another tool to align organizational incentives and extend accountability to the post-acute providers, though if the costs (time and money) of managing inter-organizational relationships begin to outweigh the overall savings, it would be difficult to make an argument for shared risk with post-acute providers. An easier approach may be to pay providers a fixed per diem or per episode rate and manage care with post-acute providers through flexible, global agreements with partners.

Flexibility—Achieving the level of integration necessary to share risk may require actually or virtually acquiring the organization, which, in the case of a SNF provider, adds fixed asset risk. At a minimum, it will require very tightly managed contractual agreements with partners. With uncertainty surrounding future institutional volume (inpatient and SNF) growth, it is often not in the hospital's best interest to add more fixed assets to its real estate portfolio. (McHugh, Trivedi, Zinn, & Mor, 2014) Both acquisition and contractual agreements also concentrate referral patterns to a fixed geography, potentially complicating new growth opportunities. As it relates to HHAs, the hospital may be more willing to vertically integrate, as there is no fixed asset risk, and the hospital can maintain staffing flexibility to respond to changing needs.

Competition and Innovation—Maintaining an arm's length relationship with partners can also help foster innovation as organizations compete for patient referrals through improved processes to produce better outcomes. This is consistent with transaction cost economics that tends to suggest implementing the least complicated structure given changes in the cost of transfer. This strategy also minimizes switching costs and dependence on select providers; a hospital then has the flexibility to change referral patterns if a PAC provider underperforms or if another provider develops a particularly innovative care management solution.

Health system risk models could potentially achieve the highest level of integration by incorporating PAC providers. However, in a dynamic market that is rapidly evolving, the cost of managing the network and the complexity of the risk model has the potential to

outweigh any incremental benefit. There is potential for a hospital to lose its commitment to care management improvements without a well defined set of incentives applied to the network's cost reduction and quality improvement goals. Hospitals can minimize switching costs, foster an environment of innovation through competition, and simplify the patient transfer process by developing a robust network of skilled nursing facilities and home health agencies and either leveraging high embeddedness or achieving a high level of embeddedness. While hospitals benefit from developing networks (Rahman, Foster, Grabowski, Zinn, & Mor, 2013) (McHugh, et al., 2017), they should carefully examine the costs and benefits of including providers in the risk calculation.

Network Development Approaches for Hospital Leaders

Hospitals can benefit from starting network development with willing participants. Hospital leaders can approach PAC integration using the strategies described below. Applying the principles that follow will help improve outcomes for patients discharged to post-acute providers and keep partners engaged in improving care management along the continuum.

Develop a Robust and Transparent Data Management Process—Network development requires significant amounts of data to evaluate facilities and decide on target partner institutions. The process can be overwhelming and must be methodically managed from the outset, including being transparent with partners. (McHugh, et al., 2017) Skilled nursing facilities and home health agencies should be aware of how they are being scored relative to competitors, and ideally should have input into the scoring process as they will know their business better than the hospital executive team. (Lage, Rusniak, Carr, Grabowski, & Ackerley, 2015) It is also important to better understand quality within the target institutions, an area where hospital administrators probably lack strong knowledge. This may include utilizing Nursing Home and Home Health Compare and other publicly available tools, but also working with the post-acute providers to define the best measures to evaluate organizations. This can be achieved in a relatively timely manner through town hall meetings, request for information processes, and/or site visits to potential partners in the case of SNFs. Administrators and clinicians who understand the discharge and transfer process between hospital and PAC can manage the resulting process. Annual updates should be sufficient to make any necessary adjustments to the preferred list (e.g., underperforming PAC providers, new geographies, etc.), though some hospitals may advocate for bi-annual or even quarterly updates.

Start with an “Embedded” Network—Network development does not have to be complicated. Historic referral patterns and post-acute providers where the hospital has high levels of embeddedness are a perfect starting point to building more in-depth care management relationships. These partnerships may be the easiest to maintain, given a certain level of trust inherent in an “embedded” network. Further, it may be easier to advance the relationship from being a common referral destination to being a quality improvement partner. Hospitals can foster innovation among PAC partners via regular (e.g., quarterly) sessions with network organizations. Finally, since patients have already “chosen” these providers due to the historic referral patterns, this particular network model will be the

easiest to adhere to the CMS requirement to provide patients the choice of post-acute provider at discharge. (Social Security Administration)

Maintain Flexibility—In order to maintain network flexibility, hospitals may want to limit any major capital investments, such as complicated IT connectivity with partners. Extending care management capabilities to the PAC provider would require read-only access to the hospital EMR that need not require connecting the hospital record with the PAC provider record. This, though, should be weighed against the need for reciprocal information sharing if there is a post-acute provider, especially one that is part of a virtual network, that has higher numbers of long-term care patients transferred back to the hospital. For these providers, there may be a need to extend the SNF EMR to hospital staff in the hopes of better managing the patient in the SNF and avoiding unnecessary transfers. Only in the case of high environmental uncertainty and low embeddedness should a hospital consider full acquisition of a SNF, in order to minimize real estate risk. However, if the hospital must pursue a vertical integration strategy, seeking the potential for a joint venture with a SNF operator in which the hospital does not assume fixed asset risk would be a preferred strategy. Limiting capital investment and organizational acquisition permits the hospital to minimize switching costs if the hospital needs flexibility in including new or removing existing providers from the preferred PAC list.

Approach Management Through Patient Level Coordination Efforts—Regardless of the organizational-level integration, hospitals should approach enhanced care management efforts at the patient level. For patients discharged to SNF, this coordination requires either a team of providers (e.g., physician and nurse practitioner) to see patients in the SNF or integrating with SNFs by placing a medical director in partner organizations. The team would be in place to care for patients in the facility and only transfer back to the hospital in true emergency situations. By placing a medical director in a SNF, the hospital is able to influence the care provided by the SNF nursing staff, (McHugh, et al., 2017) improve continuity of care and facilitate smoother transitions by patients. (Gittell, 2011) Neither approach requires significant investment beyond ensuring connection to the hospital EMR in the partner SNF facilities. In the case of an HHA, this coordination includes evidence-based models such as the Coleman model or others that ensure proper management of the patient in the home setting. (Coleman, Smith, Frank, Min, Parry, & Kramer, 2004) (Berkowitz, Fang, Helfand, Jones, Schreiber, & Paasche-Orlow, 2013) (Naylor, Aiken, Kurtzman, Olds, & Hirschman, 2011)

As hospitals contemplate the development of post-acute networks, it will be important to develop realistic and measurable metrics to determine success of the intervention. Often, realizing the benefits of network development can take time and will have to be weighed against the short-term expectations of the hospital leadership team. For policy makers and researchers, continued focus on the cost and outcome implications of network development can help to inform ongoing discussions related to payment policies and patient choice.

Conclusion

Regardless of current or future efforts to repeal and replace the ACA, hospitals will have to continue reducing costs and improving outcomes for patients. Focusing on post-acute care, as many ACOs have done, is a logical first step to reducing variation, which requires greater integration between hospitals and the post-acute providers in their environs. As we have described, hospitals should find ways to integrate with PAC providers that limit capital investment, maintain network flexibility, and coordinate care management efforts at the patient level. As it relates to value-based payment models, market conditions should drive risk-sharing decisions, given the complexity of risk calculations and the potential for the costs to outweigh the benefits. For hospitals with high percentages of Medicare Advantage (MA) patients, the same post-acute integration conclusions apply, except that the MA plan(s) may already have a post-acute network which can serve as a starting point for development and, if not, the MA plan(s) needs to be engaged in the process. Hospitals would be wise to support efforts such as those described in this paper to expand the scope of care management efforts, including the formal development of post-acute networks to reduce costs and improve quality.

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Figure 1.
Number and Percent of Total Medicare fee-for-service spending, by post-acute provider type, 2016
Source: MedPAC, June 2017.

Theory Applied	Key Takeaways	Implications for Post-acute Integration
Structural contingency	<ul style="list-style-type: none"> Optimal organization is a function of the “fit” with organization’s environment, strategy, and structure Integration strategy determined by opportunities and constraints posed by the external and internal environment 	<ul style="list-style-type: none"> Organizational strategies will fall along a spectrum. Strategies are not mutually exclusive and will be guided by the intersection of environmental uncertainty (as described by Transaction Cost Economics) and the strength of post-acute relationships (as described by Network Embeddedness)
Transaction Cost Economics	<ul style="list-style-type: none"> Environmental uncertainty and complexity contribute to greater transaction costs Internalization of processes or transfers through vertical or virtual integration can mitigate uncertainties Benefits of internalization must be weighed against additional administrative and structural burden 	<ul style="list-style-type: none"> Competitive, technological, demographic, and other factors can all increase environmental uncertainty in acute-post-acute exchange Greater integration through virtual or vertical integration can better align incentives, especially within alternative payment models
Network Embeddedness	<ul style="list-style-type: none"> Transactions occur within a larger social context Social forces and relational ties influence economic activity Exchanges are not based on formal, complicated contractual/legal arrangements but rather on high levels of trust, information transfer, and joint problem solving 	<ul style="list-style-type: none"> Stronger post-acute relationships can help to mitigate environmental uncertainty Care models can be enhanced through embedded relationships, improving outcomes without adding administrative complexity

Figure 2.
Key Theoretical Concepts

		Organizational Embeddedness	
		High	Low
Environmental Uncertainty	High	Patient integration AND virtual integration	Vertical integration AND patient integration
	Low	Patient integration (no fixed asset commitment)	Patient integration (asset commitment like CIS development)

Figure 3.
Choice of Integration Strategy