The Push–Pull Factors of Physician–System Integration: A Qualitative Study of Washington State Healthcare Executives

Ann M. Nguyen, PhD, Department of Population Health, School of Medicine, New York University, New York, New York; and Suzanne J. Wood, PhD, FACHE, assistant professor, Department of Health Services, School of Public Health, University of Washington, Seattle

EXECUTIVE SUMMARY

The transition from volume- to value-based care calls for closer working relationships between physician groups and health systems. Healthcare executives are in the position of determining when and how physician groups are integrated into healthcare systems. Leveraging the theory of migration, we aim to describe where physician–system integration is headed and offer recommendations on how executives can respond to physician migration to and from integration. We conducted 25 semistructured interviews with CEOs, chief medical officers, chief financial officers, and physician group chief executives from eight of Washington State’s largest integrated delivery systems. These executives predicted tighter integration and more forced alignment; however, some clinician executives were skeptical about whether the physician employment model will be the right course despite the growing demand from younger physicians. The results of these interviews suggest that integration will be driven by push and pull factors stemming from five prevailing forces: social (community), social (physicians), economic, political, and technological. Understanding the factors that influence physicians’ decisions to migrate can provide insight for and guidance to executives contemplating integration in the current climate.
INTRODUCTION
Amid growing vertical integration, healthcare delivery is moving toward a state in which the lines of responsibility begin to blur. As healthcare reform shifts the industry from volume to value, the market is calling for increased care coordination and management. Our focus in this article is on the growing integration between physician groups and health systems, herein referred to as physician–system integration, one of the leading responses to healthcare reform (Neprash, Chernew, & McWilliams, 2017).

Physician–system integration can be structured in a variety of ways, depending on cultural suitability, organizational fit, operations, strategy, finance, and political circumstances. The American Hospital Association (AHA) (2015) defines eight major types of integration contracts (listed in order from loose to tight integration): open physician–hospital organization, closed physician–hospital organization, group practice without walls, independent practice association, management services organization, equity model, foundation, and employment model. As of 2015, 59% of U.S. hospitals had at least one of these integration contracts with physicians. The employment model, in which physicians are employed by a hospital or health system and paid a salary, is the most common type and used by 40% of hospitals (HealthForum, 2017). The American Medical Association reported a related trend: In 2016, for the first time, fewer than half of physicians (47%) owned their practices (Kane, 2017). A 2013 survey conducted by the Deloitte Center for Health Solutions also found that two-thirds of physicians expected increased integration over the next 3 to 5 years.

Healthcare executives are at the center of decisions regarding when and how to integrate physician groups with health systems (Mick & Conrad, 1988). Thus, we are interested in understanding healthcare executives’ perspectives regarding integration and seek to explore the following: how healthcare executives expect the integration between physician groups and health systems to change, if at all, over the next 5 years. We also are interested in the push–pull factors motivating physicians to participate in physician–system integration. Our aim is to contribute to the discussion regarding physician–system integration by sharing executives’ views about where integration is headed and offering recommendations for how organizations should respond.

THEORY OF MIGRATION
Lee’s (1966) theory of migration posits that a physician’s decision to migrate, in this case from physician practice to a health system, is strongly influenced by positive and negative factors associated with the point of origin, destination, intervening conditions, and personal circumstances. According to Mejia, Pizurki, and Royston (1979), countervailing forces at each end of the migratory axis fall broadly into one of several categories: environmental, social, political/legal, economic, historic, and cultural. These authors extended Lee’s classic theory by classifying positive and negative forces as “push” and “pull” factors that affect physician (and nurse) migration. Generally, push factors exist at the point of origin, and pull factors pertain to the destination. Previous studies have applied migration theory to examine the push–pull factors affecting healthcare providers in
The Push–Pull Factors of Physician–System Integration

Therefore, we examine push–pull factors as they relate to physicians through the lens of the healthcare executives who often decide when and how physician–system integration will occur. In physician–system integration, push factors are those that motivate a physician to leave an individual or a group practice (point of origin). A migrant (in this case, a physician) is more likely to perceive push factors accurately than pull factors, given that the point of origin is more familiar than the destination (Lee, 1966). Push factors tend to be perceived as negative. Pull factors may attract a physician to a health system (destination) and tend to be perceived as positive.

METHODS
This study was part of a larger analysis that explored the question, “What makes physician–system integration successful?” In March 2016, the University of Washington institutional review board granted an exempt determination (Human Subjects Division study 51683). We adhered to COREQ (consolidated criteria for reporting qualitative research) standards for reporting qualitative research (Tong, Sainsbury, & Craig, 2007).

Study Population
Using purposive sampling, we selected integrated delivery systems (IDSs) located in Washington State. We limited our selection to Washington State to minimize contextual variation and maintain feasibility of the study given resource limitations. We adapted the participant selection criteria used in Remaking Health Care in America (Shortell, Gillies, Anderson, Erickson, & Mitchell, 1996). We targeted IDSs that (1) had a primary service area in Washington State, (2) had a formal affiliation with a physician group, (3) owned hospitals, (4) were well established, with a strong likelihood of ongoing viability, (5) had leadership willing and able to participate, and (6) were not government owned. Nine systems met the eligibility criteria.

Next, based on a case definition of vertical integration theories suggesting that players in physician–system integration were hospitals, physicians, and payers (Mick & Conrad, 1988), for each IDS we targeted the largest system-affiliated hospital and requested interviews with the hospital’s CEO, chief medical officer (CMO), chief financial officer (CFO), and the chief executive of the largest affiliated medical group. We contacted CEOs by e-mail and phone, and eight agreed to participate. The declining IDS was the only for-profit organization.

Data Collection
We conducted 25 interviews, giving us a participation rate of 69.4% (25 of 36). One-on-one interviews took place between April and September 2016, and were conducted by the principal investigator in person or by phone. The semistructured interviews lasted 45 to 60 minutes each and were audio recorded with the interviewee’s permission. We stored the recordings on secure servers and sent encrypted files to a transcription service.

Data Analysis
We examined each transcript using an inductive (open) thematic analysis to triangulate key themes aligned with the main research question: “How do you expect the
integration between the physician group and health systems to change, if at all, over the next 5 years?” We then met after each coding iteration to discuss alignment and discrepancies, using person triangulation and space triangulation (Denzin, 1970), and to review axial coding techniques uncovering themes and associated quotes to identify participant insights that most directly related to push–pull factors of physician–system integration. Data analysis was complete when we reached consensus that all quotes were appropriately coded and themes were saturated and stable. We completed coding using Dedoose software (version 7.6), a web-based qualitative data analysis package (SocioCultural Research Consultants, 2015).

RESULTS
Of the 25 healthcare executives, 8 (32%) were CEOs, 7 (28%) were CMOs, 4 (16%) were CFOs, and 6 (24%) were physician group chief executives (PGCEs). Most participants were male and non-Hispanic white, with clinical training (MD or RN) and formal business training (leadership certification or master’s degree). On average, they had been with their organizations for 14.7 years and in their current positions for 5.3 years. Table 1 summarizes the executives’ profiles.

To provide context for the participants’ answers, we summarized hospital characteristics (Table 2). The participants represented eight hospitals that belonged to eight of Washington’s largest IDSs. All hospitals were acute care and non-profit and ranged in size from medium to large. One hospital was rural. On average, the hospitals brought in an annual patient revenue of $2 billion and had 93,531 patient days. The average Total Performance Score, a measure of quality calculated by the Centers for Medicare & Medicaid Services, was 35, and the average patient experience rating was 3 of 5 (Medicare.gov, 2018).

Of the 25 participants, 19 (76%) reported that their largest affiliated physician group had been integrated through an employment model, 3 (12%) did not know, 1 (4%) indicated they used an open physician–hospital organization, 1 (4%) used a closed physician–hospital organization, and 1 (4%) used multiple integrating contracts.

| TABLE 1 | Profile of Interviewees |
| --- | --- |
| Demographics (n = 25) | Number (%) |
| Male | 17 (68) |
| White non-Hispanic | 21 (84) |
| Received formal clinical training | 15 (60) |
| Received formal business training | 21 (84) |
| Position |  |
| CEO | 8 (32) |
| Chief medical officer | 7 (28) |
| Chief financial officer | 4 (16) |
| Physician group chief executive | 6 (24) |
Integration in 5 Years

Participants’ responses were consistent with Deloitte survey results, which predicted increased physician–system integration over the next 3 to 5 years (Deloitte Center for Health Solutions, 2013). Participants in our study also envisioned further integration and more employed physicians; however, their nuanced descriptions about physician–system integration were particularly telling.

Executives’ views aligned around what could be described as a growing interest in integration, with some responding broadly and others more focused on particulars. Broadly conceptualizing integration, one CEO shared that, in 5 years, “We’ll just get more integrated and more aligned.” Taking a more intensive approach to describing the climate, one CFO said, if the physicians were able to make it on their own, that could be a preferable financial model, but it wouldn’t be a model that would work well in the future [considering] where everything

| TABLE 2 | Profile of Hospitals |
|-------------------|-----------------------|
| Characteristics  | Statistic             |
| Short-term acute care facility (%) | 100 |
| Type of control (%) |                      |
| Governmental hospital district | 25 |
| Voluntary nonprofit, church | 37.5 |
| Voluntary nonprofit, other | 37.5 |
| Total no. of staffed beds |             |
| Minimum | 137 |
| Maximum | 642 |
| Mean | 338 |
| Total annual patient revenue ($) |         |
| Minimum | 700 million |
| Maximum | 4 billion |
| Mean | 2 billion |
| Total no. of patient days |             |
| Minimum | 32,829 |
| Maximum | 184,677 |
| Mean | 93,531 |
| Total Performance Score quality score (number) |         |
| Minimum | 27.50 |
| Maximum | 52.58 |
| Mean | 35.86 |
| Patient experience rating (5 = maximum) |       |
| Minimum | 2 |
| Maximum | 4 |
| Mean | 3 |
Push–Pull Factors

Executives described an anticipated migration of physicians from individual practices and groups toward tighter integration contracts with health systems. Using the theory of migration, we found that executives considered push and pull factors affecting physicians from five prevailing forces: (1) social (community), (2) social (physicians), (3) economic, (4) political, and (5) technological. Again, a key difference between push and pull factors is that push factors are negatively oriented, while pull factors tend to be more positive (Lee, 1966). Table 3 summarizes the push–pull factors described by healthcare executives, and we examine the details of each.

Social (Community)

In terms of social factors, we found that the community played a large role in pushing physicians to migrate toward physician–system integration. Executives reported growing public pressure for physicians to focus on the social determinants of health and individualized care. One CMO noted that federal initiatives to increase transparency in healthcare meant that there were more opportunities for the public to critique population-wide quality changes. “There is a lot of scrutiny from external organizations regarding quality, various quality metrics, and it’s becoming more public.” Another executive, a CEO, spoke about the implications of public pressure, suggesting physicians ask more focused, contextual questions of patients. They must ask, “What is your social situation? What is your economic situation? What is your support situation?”

The pull from the community pertained more to the potential to improve
The Push–Pull Factors of Physician–System Integration

| Push Factors (Origin)                                                                 | Integration Forces       | Pull Factors (Destination)                                                  |
|-------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------|
| Public pressure to focus on social determinants of health and individualized care   | Social (community)       | Shared accountability toward population health                             |
| Increased workload in an independent practice setting, despite a national cultural shift toward work–life balance | Social (physicians)      | Partnerships with other physicians and administrators                      |
| Job insecurity resulting from changing revenue stream to value-based reimbursement | Economic                 | Improved job stability derived from a health system’s high value placed on physician inputs |
| Health reform pressure to transition from volume- to value-based care               | Political                | Opportunity for expanded care across the continuum                        |
| Frustration with information technology systems                                     | Technological            | Electronic health record integration between physician groups and health systems can improve communication and data management |

Executives reported that there was increased demand from the public for physicians to focus on population health and shared accountability, which may facilitate the pooling of resources. This position was captured most precisely by a CEO:

The patients who need to go to the hospital [now] tend to be much sicker, much more acute. And a much smaller piece of the whole healthcare delivery [system] is now inpatient care. And so the only way that I see this ever working is if you have some integration of inpatient services and outpatient services, and some kind of joint accountability for patient outcomes. To me, the only way that works is if you have an integrated model, where you are equally accountable for an individual’s health outcomes or quality of life.

Social (Physicians)
Social push factors are also associated with the physician community, through peers and physician leaders. The executives in this study noted a national, cultural shift toward a more overt work–life balance advocated by a new generation of physicians. A PGCE described this push factor: “The work ethic has changed. [Physicians] have families. They have different priorities.” The executives suggested that physicians may want to migrate from historically loose integration contracts, under which they shoulder the administrative workload themselves, and toward employment contracts, under which health systems may assume that workload. Another CEO commented, “I believe that physicians
coming out [of training] actually want to be employed because they have an easier time striking that work–life balance.”

The pull for physician migration toward integration is the opportunity to partner with other physicians and administrators in settings that enable work–life balance. The dyad model, in which an administrative leader is paired with a physician leader, was cited frequently by our interviewees as a facilitator of work–life balance through redistribution of responsibilities, as well as an organizational benefit resulting in more comprehensive decision-making. A CEO elaborated on dyad partnerships:

Traditionally, a physician leader [is] paired with a nonphysician leader. That may not always be true, but we really try to bring that business and clinical piece together and have partners. One, because it blends both, and it’s nice to have somebody you can collaborate with. So leaders are important, but it’s also having the right people on the bus.

A CFO expressed hope that through dyad partnerships, physician leaders would understand more about administrative issues, and administrators would understand more about physicians’ day-to-day issues.

Economic
Executives reported that the shift from volume- to value-based reimbursement was changing the revenue stream, leading to physician job insecurity, a push factor. A few cited employing more cardiologists in recent years as an example of a specialty that has been struggling for economic survival. One PGCE reflected that he had been approached by many physicians who had reached “peak value” in terms of reimbursement. Another PGCE expressed a similar opinion, pointing to the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) as the culprit: “There will be a group of physicians who are looking for what I call shelter, and that refers to the MACRA.”

Physicians who were concerned about job stability were pulled toward integration on finding out that health systems placed high value on physician inputs. This pull factor was captured by one CFO: “Physicians have the ability to influence 80% of the operations that go on in a hospital, right from the quality matrix to supply utilization to staffing and use of appropriate staff.” The economic value of physician inputs is especially true for specialists, as one PGCE commented:

We are going to [need] a bigger net for some specialty services that we don’t want to outmigrate to other places because we don’t have [those specialty services in-house]. And there is a cross-subsidization, right? I mean, neurosurgery and orthopedics and cardiology pay for nephrology, endocrinology, and primary care. And so we will need to expand those too, as we look at market share and look at gaps for outmigration.

Many interviewees felt that the past few years had been about integrating primary care but the next few years would be about integrating services and specialties that currently have smaller roles in the
The Push–Pull Factors of Physician–System Integration

inpatient setting, such as endocrinology, rheumatology, and dermatology.

**Political**

Executives stressed that healthcare reform’s transition from volume- to value-based care, a political push, puts pressure on physicians who may not have had the resources to change the way they delivered care. A CMO noted, “Payers and quality monitors are looking at entire systems and groups as good or bad, and not [looking at] individual providers.” In other words, healthcare reform was going to change how physicians behaved, favoring larger systems. A CMO gave an example: “Certainly one game changer is bundled payments. Our medical groups are going to have to figure out how to deal with that.” Another CMO stated that with bundled care, “all different aspects of the health system have an impact on patient care and could potentially share in the gains or losses financially.” One CEO and one CMO remarked that managing changing reimbursements would be especially challenging for independent physician groups because of their absence from or underrepresentation in policy discussions about how to handle changes. Highlighting and extending this point, another CMO expressed, “We have to start doing things that we are not used to doing, and we might have to place more value on certain things in terms of care coordination or trying to meet certain outcomes that physicians are not used to.”

The political pull factor of healthcare reform is the opportunity to expand care across the continuum. Healthcare reform “lends itself to much greater collaboration,” commented one CEO. Executives stated that healthcare reform may have helped rebuild bridges between primary and specialty care, relationships that weakened in the 1990s when the primary care physicians were designated as gatekeepers to specialty care. One CEO reflected that primary care physicians used to come into the hospital and interact with specialists much more often: “There was a better transition of patients from a hospital setting back into the physician’s practice for outpatient care.” Another executive added, “Even within a physician group, there’s a lot of misalignment and lack of cooperation, where specialists and primary care physicians see things differently, where the priorities of and payment structures for specialists versus nonspecialists can be different.”

**Technological**

Executives shared frustration about information technology, which had long been a push factor for physicians seeking integration. Physicians experienced challenges using the data from their electronic health record (EHR) systems in meaningful ways, as described by a CMO: “To get the data for [quality purposes] is very difficult. In [the EHR system], there are lots of ways to document, and if you’re not pulling from one field, you may miss it. So your numbers may be skewed.” The same executive elaborated that physician groups “really need to have their data clean so they can get an accurate picture of the health of their population and can make targeted interventions. But right now, they’re still stuck trying to get the data.” We heard that EHR systems, although beneficial in many ways, were also expensive for physicians to maintain and use.

The opportunity for EHR integration between physician groups and health
systems represented a pull factor for many physicians. Executives believed that EHR integration could improve vertical communication for all stakeholders: physicians, payers, health system executives, and patients. They described EHR integration as having a common EHR system for the two entities or having an improved system that allows data to port from one entity to another. The executives predicted that physician migration via EHR integration would help physicians and systems on the “quality front.” One CEO remarked, “I believe the [EHR] will be a better tool as opposed to something you’ve got to work with and just complain about.” This administrator hypothesized that EHRs will have predictive analytic capabilities in 5 years.

STUDY LIMITATIONS
This study is not without limitations. First, we recognize that, because of the focus on Washington State, our findings may not be generalizable to other areas of the country. To minimize issues of generalizability, we designed the study in the context of physician–system integration rather than geographic region. We selected participants using an evidence-based case definition (Shortell et al., 1996) and theory (Mick & Conrad, 1988). Furthermore, our data analysis involved person-level and space-level data triangulation, which has been shown to improve generalizability (Denzin, 1970).

Second, the interviewee population underrepresents women and people of color. Diversity is an ongoing issue in healthcare, as racially and ethnically diverse employees represent only a small percentage of leadership positions. According to the AHA and the American College of Healthcare Executives (ACHE, 2015), in 2015 91% of hospital CEOs were non-Hispanic white; in comparison, the U.S. population was 62% non-Hispanic white (U.S. Census Bureau, 2015). ACHE’s policy statement regarding the need to increase and sustain racial and ethnic diversity in healthcare management includes support for diversity committees. We invite other researchers to use targeted sampling to explore whether perspectives differ between states and between participants with diverse demographic characteristics.

CONCLUSION
Healthcare executives are key decision makers with regard to determining when and how physician groups integrate with health systems. As the trend toward physician employment continues (Health Forum, 2017), executives, policymakers, and researchers should be ready for the next iteration of physician–system integration. In this study, we examined executives’ perspectives on physician–system integration through the lens of migration theory (Lee, 1966) as it applies to the movement of physicians. Our study findings suggest that tighter integration may occur in 5 years; however, some clinician executives were skeptical about whether the employment model is appropriate, despite growing demand from younger physicians. We submit that five push–pull migration forces influence physician–system integration: (1) social (community), (2) social (physicians), (3) economic, (4) political, and (5) technological. As is common in migration theory, for each of these forces, there are both negative (push) and positive (pull) factors at play.

If healthcare executives want to promote physician–system integration, we
recommend that they conduct a market scan for push factors affecting physicians at the point of origin (see Table 3). Given that the healthcare system is the destination for physician migration, executives must also act on pull factors in the following ways:

- **Social (community):** Build shared accountability structures focused on population health, which allow physicians to recognize a unified goal.
- **Social (physicians):** Build dyad leadership teams, which help ensure physician input into major clinical and nonclinical decisions.
- **Economic:** Anticipate and plan for major policy initiatives and their impact on individual physician workload and system-level operations.
- **Political:** Establish communication mechanisms across the care continuum (e.g., between outpatient and inpatient delivery teams, as well as between primary care and specialty services).
- **Technological:** Make upfront investments in EHR systems integration.

Environmental push–pull factors associated with migration theory provide executives with a framework through which they can assess the likelihood of physician migration.

The uncertainty surrounding U.S. healthcare reform is reflected in our findings. As one CMO said, “Nobody knows what it’s actually going to look like, even in 5 years.” A PGCE remarked, “Some of [the changes] are known, some of them aren’t, and you know there will be some surprises.” As our results indicate, understanding factors that influence physicians’ decisions to migrate can provide insight for and guidance to executives contemplating physician–system integration in the current healthcare climate.

**REFERENCES**

American College of Healthcare Executives. (2015). Professional policy statement: Increasing and sustaining racial/ethnic diversity in healthcare management. Retrieved from https://www.ache.org/policy/minority.cfm

American Hospital Association. (2015). AHA data: Frequently asked questions. Retrieved from http://www.ahadataviewer.com/help/aha-dataviewer-frequently-asked-questions

Deloitte Center for Health Solutions. (2013). Deloitte 2013 survey of U.S. physicians: Physician perspectives about health care reform and the future of the medical profession. Retrieved from http://www2.deloitte.com/content/dam/Deloitte/us/Documents/life-sciences-health-care/us-lshc-deloitte-2013-physician-survey-10012014.pdf

Denzin, N. K. (1970). *The research act: A theoretical introduction to sociological methods*. Chicago, IL: Aldine Publishing Co.

Health Forum. (2017). MACRA and trends in hospital–physician arrangements and employment. In *AHA Hospital Statistics* (pp. vii–xvi). Chicago, IL: American Hospital Association.

Kane, C. K. (2017). Updated data on physician practice arrangements: Physician ownership drops below 50 percent. Retrieved from https://www.ama-assn.org/sites/default/files/media-browser/public/health-policy/PRP-2016-physician-benchmark-survey.pdf

Lee, C.-P., & Shim, J. P. (2007). An exploratory study of radio frequency identification (RFID) adoption in the healthcare industry. *European Journal of Information Systems, 16*, 712–724. Retrieved from https://link.springer.com/article/10.1057/palgrave.ejis.3000716

Lee, E. S. (1966). A theory of migration. *Demography, 3*(1), 47.

Medicare.gov. (2018). Hospital Compare: Total Performance Score information. Retrieved from https://www.medicare.gov/hospitalcompare/data/total-performance-scores.html
PRACTITIONER APPLICATION:
The Push–Pull Factors of Physician–System Integration: A Qualitative Study of Washington State Healthcare Executives

Olugbemiga E. Jegede, MD, CPE, FACP, medical director, Cone Health Community Health & Wellness Center, Greensboro, North Carolina

The physician–system integration topic presented by Nguyen and Wood is especially relevant in our current healthcare landscape, where the emphasis is on patient-centric, value-based care as opposed to the volume-based, fee-for-service care model of the past. This shift makes it difficult for physicians to remain independent and self-employed because navigating through the muddy waters of business economics, as well as the growing administrative and governmental regulations, is extremely laborious. For successful physician–system integration, healthcare leaders must be deliberate in their planning and careful in the execution of the model they choose—the initial decisions they make will eventually have significant impact on the quality and efficiency of care they deliver.

Nguyen and Wood found that among their 25 study participants, 19 (76%) reported integration through an employment model, 3 (12%) did not know, 1 (4%) reported an open physician–hospital organization, 1 (4%) a closed physician–hospital organization,