INTEGRATED BENEFITS INSTITUTE

Research Summary: The Business Value of the Patient-Provider Relationship

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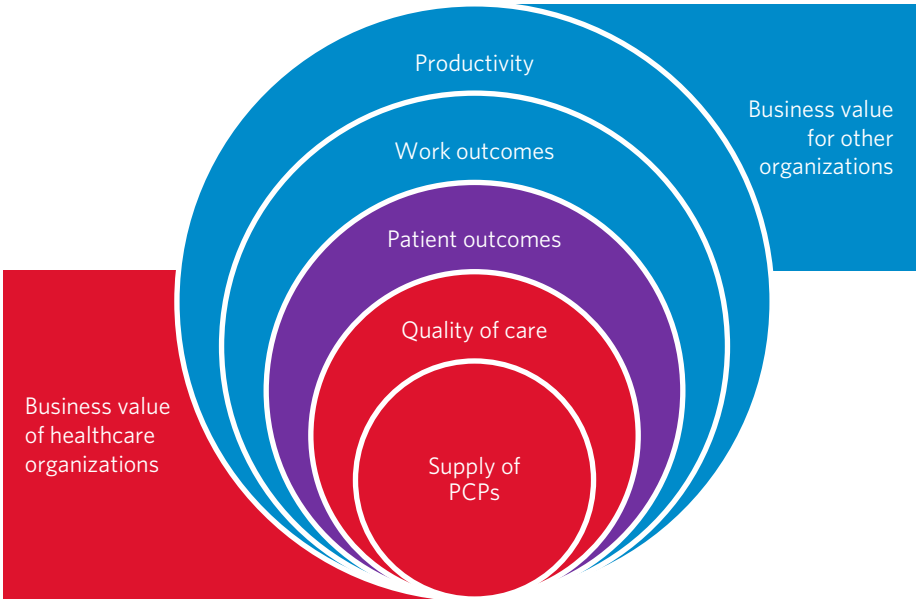
Background

In the United States, the healthcare workforce can provide unique insights for the study of health and productivity. First, healthcare is the largest employment sector in the U.S. economy, with almost one in nine employees working in the ambulatory services, hospitals, or nursing and residential services industries.[1] Second, given the organization of healthcare work—with many skilled employees working as members of teams performing time-sensitive tasks—business operations in healthcare systems and physicians' practices suffer greatly when employees are unavailable for work.[2] Third, quality of care impacts many patients' ability to participate fully in paid work, protect their earnings capacity and be more productive at their jobs.

How the healthcare workforce performs is therefore a critical driver of the larger labor force's productive capacity. Seen in this light, patient outcomes measure more than simply how well a healthcare organization delivers care. They measure the value it provides to the larger business community.

Patient outcomes link the business value of healthcare organizations to value for the larger business community



A new study of disruptions in patients' relationships with primary care providers (PCPs) by Adrienne Sabety, a Harvard Ph.D. candidate in economics and 2018 recipient of IBI's Thomas Parry Research Fellowship award, encapsulates the larger productivity implications of healthcare organizations' performance.[3] Sabety's findings suggest that the loss of a PCP leads patients to sever ties with a clinic (potentially damaging its bottom line). This in turn contributes to declines in patients' health and their greater demands for costly services such as emergency department (ED), urgent care, and specialty visits. While clinics may be able to deliver the same standard of patient care after the loss of a PCP, they do so by increasing the remaining PCPs' workloads. This situation raises longer-term concerns about turnover and care quality arising from staff burnout.[4-7]

Disruptions in the Patient-Provider Relationship: Learning from Medicare

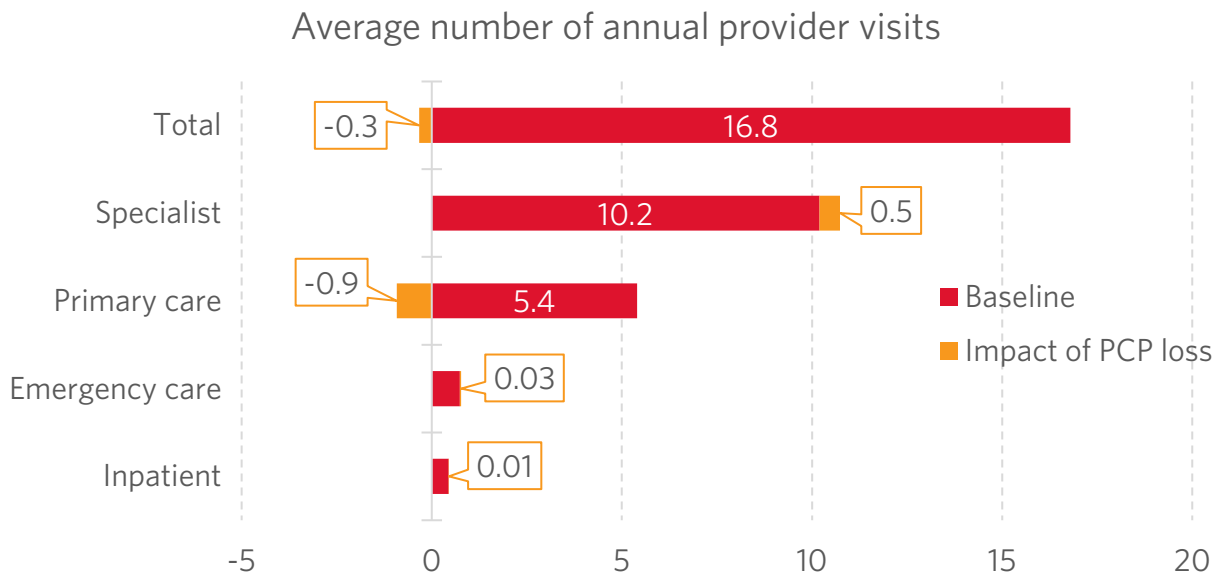
The study links Medicare administrative fee-for-service claims to specific PCPs, clinics, and patients from 2002-2016. While this older population of Medicare patients may be in worse health than the overall employed population, their experiences may nonetheless provide clues into how patients generally respond to disruptions in their usual source of care. This may become particularly important as the US workforce ages. By 2028, nearly 1 in 10 US workers will be at least 65 years old—a 50% increase compared to 2018.[8]

The findings may also apply broadly to the employed population if changes in employers' plan designs result in the elimination of some health systems or providers or if large numbers of employers adopt narrow networks based on expectations of lower costs.[9-11]

The Loss of a PCP Impacts Patients' Care and their Health

The findings from the study make it clear that disruptions to the patient-provider relationship make it more difficult for patients to obtain consistently high-quality care. Patients' who could no longer see their PCP experienced a 17% decrease in the number of annual primary care visits. These were partially offset by increased specialist (+5%) and (to a much smaller extent) urgent care visits (+14%).

The loss of a PCP results in less primary care, and more specialist and emergency care



Notes: Adapted from Table 2 of Sabety (2019). The baseline refers to the average number of annual visits prior to the loss of a PCP. Results for urgent care visits are not shown.

The impact on patients' health is indicated by a significant 5% increase in ED visits and a 3% increase in inpatient visits. Patients also experienced significant reductions of flu vaccinations (-6%), annual exams (-24%), and preventive screens (-2%).

These altered patterns of care are not temporary. For example, up to four years after the loss of a PCP, neither primary care nor specialty utilization returned to baseline levels, and one in four patients did not replace their PCP. This suggests long-term implications for the patient's health—but also for the financial health of the clinic.

Disruptions in The Patient-Provider Relationship Threaten a Clinic's Business Operations

The loss of a PCP compromises a clinic's professional mission of providing patient care, which in turn impacts patients' health. While a reputation for mediocre or poor care would surely (if slowly) undermine a clinic's ability to attract new patients, a PCP's departure has a more immediate business impact through declines in current patients' visits.

Immediately after their PCP's departure, patients visit the same clinic about half as often as prior to the PCP's departure. The clinic experiences this loss of business for at least the next four years. Patients of PCPs who remained at the clinic did not reduce their visits by nearly as much.

At the same time, clinics replace PCPs and their practice capacity only slowly. Two years after a PCP's departure, remaining PCPs see more patients per month, and replacement PCPs see fewer patients than the departing physician.

The Broader Lessons for Health and Productivity

PCP TURNOVER REPRESENTS ONLY ONE THREAT TO PATIENT-PROVIDER RELATIONSHIPS

While Sabety focuses on turnover from retirements or relocations, the findings may be relevant to other disruptions that prevent PCPs from scheduling appointments. Extended leaves of absence for health reasons—including acute stress, burnout or other unaddressed physical and mental health conditions—represent one potential source of disruption. For example, one study found that about one in three physicians screened positively for depression[12]—which has been linked to disability lost work time.[13] Redesigned provider networks that eliminate providers or clinics already used by plan participants represent another potential type of disruption.

CLIENT RELATIONSHIPS ARE KEY IN OTHER INDUSTRIES

Though Sabety's study focuses on the health care sector, the work informs the broader management literature on the value of knowledge within the context of specific relationships. In this case, while a patient's medical records should be intelligible to any physician, subtle but important information known to the patient's PCP from years of interaction—such as their work schedule, home life situation, past difficulties maintaining continuity of care—is more difficult to transfer to another provider. Thus disruptions in patient-provider relationships may produce gaps in "tacit knowledge" or "soft" information critical to maintaining a high standard of care.[14]

From this perspective, Sabety's findings complement other studies showing how disruptions in client relationships impact business performance in other high-skilled service sectors such as banking.[15,16] The long-term impact to clinics suggests that a firm that loses access to an employee's specific client knowledge due to turnover, retirement, or extended leave may see their business performance decline for some time—even if they rely on co-workers or temporary contract workers to shoulder the weight temporarily.

Implications for Employers

Employer-sponsored health insurance covers almost half of Americans' healthcare. In this light, the findings provide a reminder that plan design changes that disrupt ongoing patient-provider relationships may have long-term implications for enrollees' health and wellbeing.

When disruptions occur, employers that provide health benefits may see an increase in utilization of costlier specialty and emergency care treatments. They may also incur productivity losses from sick days and disability leaves if employees with chronic health conditions cut back on necessary prescriptions or care management visits.[17-20] In turn, any resulting operational losses from extended absences may persist for some time due to the loss of specific knowledge, and may only be recovered at a cost that exceeds the absent employees' normal wages.[2] Future studies may examine patient-provider disruptions among commercially insured, working-age populations, extending the patient outcomes to include productivity outcomes such as illness-related lost work time and gaps in employment.

Clearly, the links between care quality, health and employee productivity are not specific to the topic of patient-provider relationships—and certainly are not limited to service sector organizations. Nonetheless, Sabety's approach connects organizational performance (measured by patient outcomes) directly to the availability of an employee's labor, while simultaneously driving home the point that other employees' own human capital (also measured by patient outcomes) is mediated by their care. In this way, the findings suggest the *interconnectedness* between the performance of healthcare systems and the performance of the larger business community.

Practical Guidance for Employers

Primary care physicians serve as the "medical home" for patients, helping them to navigate the complexities of the healthcare system as they seek both preventive care and treatment for illnesses and injuries. However, when patients lose this trusted first point of contact for accessing medical care, they can feel lost and turn to other pre-existing sources of care, all of which can cost more than a standard PCP office visit. These other sources include specialists, hospital emergency departments and freestanding urgent care facilities. These substitutions for primary care providers can also result in a less holistic approach to an individual's patient care.

The longer a patient's relationship with their primary care physician, the more likely they are to compensate for the end of that relationship by relying on specialists for care. As this research demonstrates, for at least four years following the disruption of the patient-provider relationship, there is a reduction in the use of preventive care services and recommended screenings, as well as an increase in emergency department use and inpatient admissions. Sabety reports that this leads to a $4,640 increase in annual per-patient medical spending.

Employers considering adopting narrow provider networks with a limited number of PCPs need to take into consideration that this cost-cutting strategy could backfire if employees lose their much-valued medical homes and turn to higher-cost sources of care. To help employers avoid these unintended consequences, IBI sought input from members of its Board of Directors, which includes several large employers and other experts in the field of healthcare and benefits management. A summary of their guidance follows.

EDUCATE EMPLOYEES ABOUT THE VALUE OF HAVING A "MEDICAL HOME"

Employers should help employees whose patient-provider relationships have been disrupted by network changes find suitable replacement PCPs. This includes educating them about the value of having a "medical home" to serve as their initial point of entry to the healthcare system. Employers should be mindful of the terminology they use and avoid referring to primary care physicians as "gatekeepers," a term that lost favor during the managed care backlash of the 1990s because it implies restrictions on care. Rather, refer to PCPs as "medical homes" which has a warmer connotation that encourages employees to seek a trusted partner in their healthcare experience.

Primary care practices that serve as patient-centered medical homes take a team-based approach, focusing on keeping patients well, and sharing information about the patient so that everyone is in the loop regarding their care plan. A team-based approach may be able to compensate for the loss of a PCP since other members share knowledge of patients' medical history and treatment protocols.

Additionally, such an approach often employs the practice of precision medicine by tailoring the treatment to each individual patient. For example, a patient whose mother was diagnosed with breast cancer in her 30s might be given a baseline screening mammogram at age 30, rather than the recommended age of 40 for other women who do not have a family medical history of breast cancer.

ENLIST SERVICES OF ANCILLARY PROVIDERS AND NAVIGATION VENDORS TO FILL GAPS IN CARE

Today, there is a severe shortage of primary care physicians but a surplus of ancillary healthcare providers, such as nurse practitioners, physician assistants and pharmacists. Both nurse practitioners and physician assistants are independently licensed providers who are trained to take on some of the roles traditionally held by doctors. Pharmacists have a thorough knowledge of the proper dosing of drugs used to treat chronic conditions such as diabetes and hypertension. These ancillary healthcare providers encounter patients far more often than their PCPs do. For example, nurse practitioners and PAs serve as the first point of contact for patients before they see their doctors, while pharmacists see patients each time they fill a prescription. Nurse practitioners and PAs can serve as PCP surrogates in many cases, while pharmacists can be tapped to provide medication counseling support.

Employers also can enlist the services of navigation vendors that assist employees, either online or telephonically to patients seeking specialized medical treatment. These services typically guide patients with complex conditions who need specialist consultations but do not have a primary care physician who can refer them. Navigation vendors also provide decision support tools to help educate patients about their conditions and the various treatment options available.

CONTRACT DIRECTLY FOR PRIMARY CARE SERVICES

Many large employers have begun contracting directly with Centers of Excellence to provide surgical and related services on a bundled payment basis, but few have entered into direct contracts with primary care practices. The Centers for Medicare and Medicaid Services is launching a new program in 2020 to shift primary care from fee-for-service to a capitated fee model where clinicians and hospitals could assume varying amounts of risk. Bonuses or penalties will depend on their ability to keep their patients healthy. The first model aims at small primary-care practices, offering three options with a flat monthly fee per patient:

- A "professional option" in which providers would assume 50% of the risk, including savings and losses.
- A "global option" in which providers would take on full risk.
- A "geographic option" in which health systems or insurance plans could assume the risk for the total cost of primary care for a swath of communities within a particular region.

Although this model is voluntary and applies only to Medicare patients, employers should pay attention to how this experiment unfolds to determine if a similar strategy might work for private payers.

Similarly, many employers have opened onsite clinics to make access to care easier for employees and reduce their time away from work. In some cases, employees are relying on these clinics as their medical homes. This research found that there was less disruption of patient-provider relationships when patients were using larger clinics versus smaller ones. Employers should take note of this when staffing their on-site and near-site clinics.

MINE DATA TO MEASURE IMPACT OF DISRUPTION AND FINE-TUNE DISEASE MANAGEMENT

Before implementing narrow networks, employers typically perform an impact study that identifies which providers have relationships with the largest number of their employees. This study should go a step further and examine quality and outcomes for each of these providers to determine which ones are truly high performers. This analysis also should risk-adjust for providers who are treating higher-risk populations. If the analysis shows that certain doctors are improving the health status of these employees, they should be kept in network. In addition, incentives should be provided in the benefit plan to steer employees to them.

Employers also can use data tools available to them from their health plans and third-party administrators to identify employees with chronic conditions and then tap into the outreach services provided by their disease management vendors to ensure these patients are accessing necessary care. In some cases, the patient's lack of engagement may be due to deficiencies in health literacy. This is an area where disease management outreach services can help by educating patients whose relationship with a primary care physician has ended. Additionally, disease management counselors can be enlisted to encourage these patients to find a new medical home to ensure continuity of care.

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References

1. U.S. Department of Labor, Bureau of Labor Statistics. Occupational Employment Statistics (OES). 2018; https://www.bls.gov/oes/home.htm.

2. Nicholson S, Pauly MV, Polsky D, Sharda C, Szrek H, Berger ML. Measuring the Effects of Work Loss on Productivity with Team Production. *Health Economics.* 2006;15(2):111-123. https://onlinelibrary.wiley.com/doi/abs/10.1002/hec.1052

3. Sabety A. *The Value of Service Sector Relationships: Evidence from Health Care* [Dissertation]: Economics, Harvard University; 2019.

4. Tawfik DS, Scheid A, Profit J, et al. Evidence Relating Health Care Provider Burnout and Quality of Care: A Systematic Review and Meta-analysis. *Annals of internal medicine.* 2019;10.7326/m19-1152. https://doi.org/10.7326/M19-1152

5. Dewa CS, Nieuwenhuijsen K, Hoch JS. Deciphering the Relationship Between Health Care Provider Burnout and Quality of Care. *Annals of internal medicine.* 2019;10.7326/m19-2760. https://doi.org/10.7326/M19-2760

6. Hamidi MS, Bohman B, Sandborg C, et al. Estimating institutional physician turnover attributable to self-reported burnout and associated financial burden: a case study. *BMC Health Services Research.* 2018;18(1):851. https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-018-3663-z

7. Han S, Shanafelt TD, Sinsky CA, et al. Estimating the Attributable Cost of Physician Burnout in the United States. *Annals of internal medicine.* 2019;170(11):784-790. https://doi.org/10.7326/M18-1422

8. U.S. Department of Labor, Bureau of Labor Statistics. Civilian labor force by age, sex, race, and ethnicity. *Employment Projections--2018 to 2028.* 2019; https://www.bls.gov/emp/tables/civilian-labor-force-summary.htm. Accessed January 14, 2020.

9. Dafny LS, Hendel I, Marone V, Ody C. Narrow networks on the health insurance marketplaces: prevalence, pricing, and the cost of network breadth. *Health Affairs.* 2017;36(9):1606-1614. https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2016.1669

10. Masterson L. Could narrow networks be the next big cost cutter? January 9, 2018. *Health Care Dive.* https://www.healthcaredive.com/news/could-narrow-networks-be-the-next-big-cost-cutter/512298/. Accessed August 20, 2019.

11. Kaiser Family Foundation. *Employer Health Benefits Survey, 2019 Annual Survey.* San Francisco: The Henry J. Kaiser Family Foundation;2019. https://www.kff.org/health-costs/report/2019-employer-health-benefits-survey/

12. Shanafelt TD, Boone S, Tan L, et al. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Archives of Internal Medicine.* 2012;172(18):1377-1385. https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/1351351

13. Gifford B. Temporarily disabled workers account for a disproportionate share of health care payments. *Health Affairs.* 2017;36(2):245-249. https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2016.1013

14. Polanyi M. *Personal Knowledge: An Introduction to Post-Critical Philosophy.* New York: Harper and Row; 1966.

15. Drexler A, Schoar A. Do relationships matter? Evidence from loan officer turnover. *Management Science.* 2014;60(11):2722-2736. https://pubsonline.informs.org/doi/abs/10.1287/mnsc.2014.1957

16. Nguyen H-LQ. Are credit markets still local? Evidence from bank branch closings. *American Economic Journal: Applied Economics.* 2019;11(1):1-32. https://www.aeaweb.org/articles?id=10.1257/app.20170543

17. Burton WN, Morrison A, Wertheimer AI. Pharmaceuticals and Worker Productivity Loss: a Critical Review of the Literature. *Journal of Occupational and Environmental Medicine.* 2003;45(6):610-621. https://journals.lww.com/joem/Abstract/2003/06000/Pharmaceuticals_and_Worker_Productivity_Loss__A.6.aspx

18. Goldfarb N, Weston C, Hartmann CW, et al. Impact of Appropriate Pharmaceutical Therapy for Chronic Conditions on Direct Medical Costs and Workplace Productivity: A Review of the Literature. *Disease Management.* 2004;7(1):61-75. https://www.liebertpub.com/doi/abs/10.1089/109350704322919005

19. Loeppke R, Taitel M, Haufle V, Parry T, Kessler RC, Jinnett K. Health and productivity as a business strategy: a multiemployer study. *Journal of Occupational and Environmental Medicine.* 2009;51(4):411-428. https://journals.lww.com/joem/Abstract/2009/04000/Health_and_Productivity_as_a_Business_Strategy__A.4.aspx

20. Loeppke R, Haufle V, Jinnett K, et al. Medication Adherence, Comorbidities, and Health Risk Impacts on Workforce Absence and Job Performance. *Journal of Occupational and Environmental Medicine.* 2011;53(6):595-604. https://journals.lww.com/joem/Fulltext/2011/06000/Medication_Adherence,_Comorbidities,_and_Health.1.aspx

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About IBI

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