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Running in place: The uncertain future of primary care internal medicine

"My dear, here we must run as fast as we can, just to stay in place. And if you wish to go anywhere you must run twice as fast as that."

—Lewis Carroll

Alice's Adventures in Wonderland

THE FUTURE OF primary care internal medicine physicians is uncertain. According to a 2018 survey of internal medicine residents conducted by the American College of Physicians, only 11% were considering primary care as a career path.¹ In 1998, that number was 54%.²

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Possible reasons are many:

- Lower pay compared with subspecialists in a pay system that rewards procedural competency over mental effort
- Work schedules less flexible than in other specialties (eg, hospital medicine practitioners may have 1 week on and 1 week off)
- Perceived lack of respect
- Increasing regulatory and record-keeping burdens
- Tyranny of 15- to 20-minute appointments (irrespective of patient complexity)
- Scope-of-practice concerns as other providers seek primary care equivalency status (eg, pharmacists, walk-in clinics, advanced practice providers, telemedicine providers).

The result is a projected shortage of primary care physicians of 21,100 to 55,200 by 2030, according to a 2019 report by the

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Association of American Medical Colleges,³ despite an expected growth in advanced practice providers in primary care such as nurse practitioners and physician assistants.

A practical result of this shortage will be even less patient access to primary care physicians. A 2017 national survey found that the average wait time for a new patient-physician appointment has already increased by 30% since 2014.⁴ The wait time to see a primary care physician varied between 29 days in major metropolitan areas (up 50% from 2014) and 56 days in mid-sized markets. The longest waits by market size were 109 days for new patients in Boston, MA, and 122 days for those living in Albany, NY.

What are the implications?

In this issue, Pravia and Diaz⁵ make the case that primary care providers must adapt their practices to meet the needs of younger generations by increasing their use of technology. We agree that telemedicine, wearable medical devices, and enhanced patient communication through the electronic medical record (EMR) are here to stay and should be embraced.

However, we have seen the challenges of adopting technologic advances without first making an adjustment to the volume-driven patient schedule. For such advances to be successfully integrated into a clinical practice, it is vital to be cognizant of the current challenges encountered in primary care internal medicine.

Fewer residents are considering primary care as a career, and the result is a projected shortage

■ UNIQUE BURDENS ON PRIMARY CARE

In addition to the stress of addressing multiple complex medical problems within a short time, evaluating multiple medical problems often leads to increases in results to review, forms to complete, and calls to patients. Even treatment plans initiated by specialists are often deferred to primary care providers for dosing adjustments, follow-up laboratory testing, and monitoring.

Moreover, patients often seek a second opinion from their primary care provider regarding care provided by subspecialists, as they consider their primary care provider to be the doctor who knows them best. And though it can be personally gratifying to be considered a trusted partner in the patient's care, these requests often result in additional phone calls to the office or another thing to address within a complex visit.

A large in-box can be daunting in the setting of increased EMR demands. Whether you have difficulty putting in basic orders or are an advanced user, each upgrade can make you feel like you're using the EMR for the first time. This is a problem for all specialties, but in primary care, one is addressing a large spectrum of concerns, so there is less opportunity to use standardized templates that can help buffer the problem.

A study of primary care providers found that nearly 75% of each patient visit was spent on activities other than face-to-face patient care, including working with the EMR.⁶ Similarly, a study using in-office observations and after-hours diaries found that physicians from various specialties spend 2 hours on administrative duties for each hour that they see patients in the office, followed by an additional 1 to 2 hours of work after clinic, mostly devoted to the EMR.⁷

Clinicians using scribes to help with record-keeping duties often need to see more patients to compensate for the cost. Adding 2 to 3 patients to a daily schedule usually means adding more medical conditions to manage, with an exponential increase in testing and in-box burden.

The additional burden this coverage creates in primary care is often not well understood by those in other specialties.

■ GUIDELINE CONFUSION AND THE DEATH OF THE ANNUAL PREVENTIVE VISIT

Another burden unique to primary care providers is the nearly continuous publication of guidelines that are often confusing and discrepant. Because many high-impact guidelines represent expert consensus or evidence from specialist perspectives, they may not fit the primary care model or values: eg, primary care guidelines tend to place more emphasis on harms associated with screening.

Screening for breast and prostate cancers is a prime example. Both require shared decision-making based on patient preferences and values.^{8,9} Detailed discussions about preventive screening can be difficult to achieve within the context of a medical visit owing to time limitations, especially if other medical conditions being addressed are equally controversial, such as blood pressure target goals. A decade ago, one could easily declare, "It's time for your annual PSA test," and move on to other concerns. Given the changing evidence, an informed patient is now likely to question whether this test should be done, how often it should be done, and whether a prostate examination should also be included.

The push toward population health has raised questions about the value of a preventive wellness visit, especially in healthy patients.^{10,11} Arguments against the annual physical do not account for the value of these visits, which provide the opportunity to have time-intensive shared decision-making conversations and build a trusting patient-physician relationship. The value of the annual physical is not simply to do examinations for which there is limited evidence; it is a time for us to get to know our patients, to update their preventive needs (and the medical record), and to discuss which screening tests they may safely forgo to avoid unnecessary false-positives, leading to excess cost and harm.

This trusting relationship, developed over years, is likely to save both the patient and the healthcare system significant money. For example, it enables us to reassure patients that an antibiotic is not needed for their upper respiratory infection, to encourage them to try a dietary change before proceeding with computed tomography for their abdominal pain,

In one study, nearly 75% of each patient visit was spent on activities other than face-to-face patient care

or to discourage them from inappropriately aggressive screening tests that may result in overtesting or overdiagnosis.

Unfortunately, it is nearly impossible to accurately quantify these substantial benefits to the healthcare system and patients. And there is a real potential that recommendations against the annual physical may eventually affect future reimbursement, which would add to the time pressures of an already overburdened primary care workforce.

■ DO PRIMARY CARE PHYSICIANS MAKE A DIFFERENCE?

As medicine and technology evolve, patients have more ways to access care. However, the Internet also provides patients with access to more conflicting information than ever before, making it even more important for clinicians, as trusted partners in their patients' health, to help patients navigate the waters of information and misinformation.

Studies have shown that having a primary care physician is associated with a longer life span, higher likelihood of reporting good health, and similar clinical outcomes for common conditions such as diabetes and hypertension when compared with subspecialty care, but at a lower cost and with less resource utilization.^{12,13} In a study published in 2019, Basu et al¹² found that for every 10 additional primary care physicians per 100,000 population, there was an associated 51.5-day increase in life expectancy, compared with a 19.2-day increase for specialists. Cost savings also occur. Similarly, a review by the American College of Physicians¹³ found that each additional primary care physician per 10,000 population in a US state increased the state's health quality ranking by more than 10 spots and reduced their overall spending per Medicare beneficiary. In contrast, an increase of 1 specialist per 10,000 population was linked to a 9-spot decrease in health-quality ranking and an increase in spending.

■ WHY CHOOSE PRIMARY CARE?

As medical students, we fell in love with internal medicine because of the complexity and intellectual challenges of working through a diagnostic dilemma. There is a certain excite-

ment in not knowing what type of patients will show up that day.

Primary care's focus on continuity and developing long-standing relationships with patients and their families is largely unmatched in the subspecialty field. It is satisfying to have a general knowledge of the human body, and the central vantage point with which to weigh different subspecialty recommendations. We feel such sentiments are common to those interested in primary care, but sadly, we believe these are not enough to sustain the future of primary care internal medicine.

■ IS THE FUTURE BRIGHT OR BLEAK?

Primary care internists must resist the call to "run twice as fast." Instead, we need to look for ways where our unique skill sets can benefit the health of our nation while attracting students to internal medicine primary care. The following are potential areas for moving forward.

The aging of America

The US Census Bureau projects that by the year 2035, older adults will outnumber children for the first time in US history, and by the year 2060, nearly 25% of the US population will be 65 or older.¹⁴ The rise of the geriatric patient and the need for comprehensive care will create a continued demand for primary care internists. There certainly aren't enough geriatricians to meet this need, and primary care internists are well trained to fill this gap.

The rise of the team approach

As we are learning, complex disease management benefits from a team approach. The rise of new models of care delivery such as accountable care organizations and patient-centered medical homes echo this reality. The day of a single provider "doing it all" is fading.

The focus on population health in these models has given rise to multidisciplinary teams—including physicians, nurses, advanced practice providers, social workers, and pharmacists—whose function is to help manage and improve the physical, mental, and social care of patients, often in a capitated payment system. The primary care internist can play a key role in leading these teams, and such partnerships may help lessen reliance

Having a primary care physician is associated with longer life and better health

on the current primary care hustle of 15- to 20-minute visits. In such models, it is possible that the internist will need to see each patient only once or twice a year, in a longer appointment slot, instead of 4 to 6 times per year in rushed visits. The hope is that this will encourage the relationship-building that is so important in primary care and reduce the time and volume scheduling burdens seen in the current fee-for-service system.

Technology and advanced diagnostics

The joy of digging into a diagnostic dilemma has been a hallmark of internal medicine. The rise of technology should enable primary care internists to increase their diagnostic capabilities in the office without an overreliance on subspecialists.

Examples of technology that may benefit primary care are artificial intelligence with real-time diagnostic support, precision medicine, and office-based point-of-care ultrasonography.¹⁵⁻¹⁷ By increasing the diagnostic power of an office-based visit, we hope that the prestige factor of primary care medicine will increase as internists incorporate such advances into their clinics—not to mention the joy of making an appropriate diagnosis in real time.

Reimbursement and the value of time

Time is a valuable commodity for primary care internists. Unfortunately, there seems to be less of it in today's practice. Gone are the days when we could go to the doctors' dining room to decompress, chat, and break bread with colleagues. Today, we are more likely to be found in front of our computers over lunch answering patients' messages. Time is also a key reason that physicians express frustration with issues such as prior authorizations for medications. These tasks routinely take time away from what is valuable—the care of our patients.

The rise of innovative practice models such as direct primary care and concierge medicine can be seen as a market response to the frustrations of increasing regulatory complexity, billing hassles, and lack of time. However, some have cautioned that such models have the potential to worsen healthcare disparities because patients pay out of pocket for some or all of their care in these practices.¹⁸

Interestingly, the Centers for Medicare

and Medicaid Services recently unveiled new voluntary payment models for primary care that go into effect in 2020. These models may allow for increased practice innovation. The 2 proposed options are Primary Care First (designed for small primary care practices) and Direct Contracting (aimed at larger practices). These models are designed to provide a predictable up-front payment stream (a set payment per beneficiary) to the primary care practice. Hopefully, these options will move primary care away from the current fee-for-service, multiple-patient-visit model.

The primary care model allows practices to “assume financial risk in exchange for reduced administrative burden and performance-based payments” and “introduces new, higher payments for practices that care for complex, chronically ill patients.”¹⁹ It is too soon to know the effectiveness of such models, but any reimbursement innovation should be met with cautious optimism.

In addition, the Centers for Medicare and Medicaid Services has recently moved to reduce requirements for documentation. For example, one can fully bill with a medical student note without needing to repeat visit notes.^{20,21} Such changes should decrease the time needed to document the EMR and free up more time to care for patients.

■ A CALL TO ACTION

The national shortage of primary care providers points to the fact that this is a difficult career, and one that remains undervalued. One step we need to take is to protect the time we have with patients. It is doubtful that seeing a greater number of sicker patients each day, in addition to the responsibilities of proactive population-based care (“panel management”), will attract younger generations of physicians to fill this void, no matter what technology we adopt.

Keys to facilitating this change include understanding the value of primary care physicians, decreasing the burden of documentation, facilitating team-care options to support them, and expanding diagnostic tools available to use within primary care. If we don't demand change, who will be there to take care of us when we grow old? ■

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REFERENCES

1. **American College of Physicians.** Internal Medicine In-Training Examination® 2018 Residents Survey: Report of Findings, unpublished data. [Summary and analysis of residents' answers to questions about training] Philadelphia: American College of Physicians; 2019.
2. **American College of Physicians.** Internal Medicine In-Training Examination® 1998 Residents Survey: Report of Findings, unpublished data. [Summary and analysis of residents' answers to questions about training] Philadelphia: American College of Physicians; 1999.
3. **Association of American Medical Colleges.** New findings confirm predictions on physician shortage. <https://news.aamc.org/press-releases/article/2019-workforce-projections-update/>. Accessed July 3, 2019.
4. **Merritt Hawkins Associates.** 2017 Survey of physician appointment wait times and Medicare and Medicaid acceptance rates. www.merrithawkins.com/news-and-insights/thought-leadership/survey-of-physician-appointment-wait-times/. Accessed July 3, 2019.
5. **Pravia CI, Diaz YM.** Primary care: practice meets technology. *Cleve Clin J Med* 2019; 86(8):525–528. doi:10.3949/ccjm.86a.18122
6. **Young RA, Burge SK, Kumar KA, Wilson JM, Ortiz DF.** A time-motion study of primary care physicians' work in the electronic health record era. *Fam Med* 2018; 50(2):91–99. doi:10.22454/FamMed.2018.184803
7. **Sinsky C, Colligan L, Li L, et al.** Allocation of physician time in ambulatory practice: a time and motion study in 4 specialties. *Ann Intern Med* 2016; 165(11):753–760. doi:10.7326/M16-0961
8. **O'Callaghan ME, Kichenadase G, Vatandoust S, Moretti K.** Informed decision making about prostate cancer screening. *Ann Intern Med* 2015; 162(6):457. doi:10.7326/L15-5063
9. **Batur P, Walsh J.** Annual mammography starting at age 40: More talk, less action? *Cleve Clin J Med* 2015; 82(5):272–275. doi:10.3949/ccjm.82a.14156
10. **Mehrotra A, Prochazka A.** Improving value in health care—against the annual physical. *N Engl J Med* 2015; 373(16):1485–1487. doi:10.1056/NEJMp1507485
11. **Krogsboll LT, Jorgensen KJ, Gotzsche PC.** General health checks in adults for reducing morbidity and mortality from disease. *Cochrane Database Syst Rev* 2019; 1:CD009009. doi:10.1002/14651858.CD009009.pub3
12. **Basu S, Berkowitz SA, Phillips RL, Bitton A, Landon BE, Phillips RS.** Association of primary care physician supply with population mortality in the United States, 2005–2015. *JAMA Intern Med* 2019; 179(4):506–514. doi:10.1001/jamainternmed.2018.7624
13. **American College of Physicians.** How is a shortage of primary care physicians affecting the quality and cost of medical care? https://www.acponline.org/acp_policy/policies/primary_care_shortage_affecting_hc_2008.pdf. Accessed July 3, 2019.
14. **Vespa, J, Armstrong D, Medina L** Demographic Turning Points for the United States: Population Projections for 2020 to 2060. https://www.census.gov/content/dam/Census/library/publications/2018/demo/P25_1144.pdf. Accessed July 3, 2019.
15. **Lin S, Mahoney M, Sinsky C.** Ten ways artificial intelligence will transform primary care. *J Gen Intern Med* 2019. doi:10.1007/s11606-019-05035-1. Epub ahead of print.
16. **Feero WG.** Is “precision medicine” ready to use in primary care practice? Yes: It offers patients more individualized ways of managing their health. *Am Fam Physician* 2017; 96(12):767–768. PMID:29431374
17. **Bornemann P, Jayasekera N, Bergman K, Ramos M, Gerhart J.** Point-of-care ultrasound: coming soon to primary care? *J Fam Pract* 2018; 67(2):70–80. PMID:29400896
18. **Doherty R; Medical Practice and Quality Committee of the American College of Physicians.** Assessing the patient care implications of “concierge” and other direct patient contracting practices: a policy position paper from the American College of Physicians. *Ann Intern Med* 2015; 163(12):949–952. doi:10.7326/M15-0366
19. **Centers for Medicare and Medicaid Services.** Delivering value-based transformation in primary care. <https://innovation.cms.gov/initiatives/primary-care-first-model-options>. Accessed July 3, 2019.
20. **Centers for Medicare and Medicaid Services.** Final Policy, Payment, and Quality Provisions Changes to the Medicare Physician Fee Schedule for Calendar Year 2019. www.cms.gov/newsroom/factsheets/final-policy-payment-and-quality-provisions-changes-medicare-physician-fee-schedule-calendar-year. Accessed July 3, 2019.
21. **Centers for Medicare and Medicaid Services.** E/M Service Documentation Provided By Students. www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/Downloads/MM10412.pdf. Accessed July 3, 2019.

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