All residents are on a PEP from day one. Our intention was to de-stigmatize being "on a plan," because the reality is we are training physicians to be lifelong learners, who are continuously reflecting and identifying opportunities for growth. This is an essential skill, not something to be feared.

Inspired by Hahn et al,[5] we created a PEP that prompts residents to reflect on their personal goals in and after residency, opportunities for growth, and SMART goals to achieve success. The program may suggest goals as well if faculty identify an opportunity for growth, which has allowed us to delay, or even avoid, a remediation plan altogether.

Central to our success was resident buy-in. We formally launched the PEP by meeting with the residents, sharing our motivation and vision, and soliciting feedback. One of the residents named the document, so meetings with advisors could be "PEP talks."

*Steven R. Brown, MD, FAAFP,Phoenix, AZ; Rachel Friedman, MD, Shannon McDermott, PhD, Santa Rosa, CA; Michelle Olivieri, BBA, Lawrence, Massachusetts; Annie O. Derthick, PhD, Bethany Picker, MD, Lewiston, Maine*

## References


1. Newton WP, Magill M, Biggs W, et al. Re-Envisioning family medicine residencies: the end in mind. *J Am Board Fam Med*. 2021;34(1): 246-248.
2. Carek PJ, Anim T, Conry C, et al. Residency training in family medicine: a history of innovation and program support. *Fam Med*. 2017; 49(4):275-281.
3. Fernald D, Hester CM, Brown SR. Why family medicine program directors leave their position. *Fam Med*. 2021;53(5):347-354.
4. Liaw W. Feed a discipline (with research questions): become shark bait. STFM blog. March 24, 2017. Accessed May 5, 2021. https://blog.stfm.org/2017/03/24/feed-a-discipline-with-research-questions-become-shark-bait/
5. Hahn TW, Carlson J, Huffer P. Goal-oriented assessment of learning (GOAL): An individualized learning plan for residents. STFM Messenger. September 2017. Accessed Apr 22, 2021. https://www.stfm.org/publicationsresearch/publications/educationcolumns/2017/september

*Ann Fam Med* 2021;19:376-377. https://doi.org/10.1370/afm.2724.

## NASEM REPORT HERALDS PRIMARY CARE EVOLUTION, URGES ACTION

A comprehensive report published in May by the National Academies of Sciences, Engineering and Medicine strengthens the case for primary care as the foundation of the US health care system. It also makes policy recommendations that reinforce several of the AAFP's long-standing advocacy positions.

"Primary care is the only health care component where an increased supply is associated with better population health and more equitable outcomes," concludes the 448-page *Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care,* which reflects some 18 months of research. The report is available at https://www.nap.edu/catalog/25983/implementing-high-quality-primary-care-rebuilding-the-foundation-of-health.

The Academy was among the 17 co-sponsors of the study and will participate in stakeholder and lawmaker briefings accompanying its publication.

As a snapshot of how the authors define "better" and "more equitable" in the context of primary care, Americans, per capita, spend more than twice what citizens in Australia, France, Canada, New Zealand, and the United Kingdom pay for health care but experience worse health outcomes than people in those countries, the report notes. These nations, like the United States, are part of the Organization for Economic Cooperation and Development, whose members devote an average of 14% of all health care spending to primary care. In the United States, primary care visits account for 35% of health care visits yet make up only about 5% of health care expenditures.

The report echoes and extends a 1996 Institute of Medicine report, starting with an updated definition of high-quality primary care as the "provision of whole-person, integrated, accessible and equitable health care by interprofessional teams who are accountable for addressing the majority of an individual's health and wellness needs across settings and through sustained relationships with patients, families and communities."

That earlier document, "Primary Care: America's Health in a New Era," (which the Academy also co-sponsored), made a similar call to prioritize primary care. But it was less definite in establishing accountability methods for its proposals, which went largely

unheeded by legislators and policymakers. In the generation since, several of the issues it identified — including the limitations of fee-for-service medicine and the need to buttress the primary care workforce — have grown more acute.

NASEM's study acknowledges that urgency with a 5-pronged implementation plan to make high-quality primary care available and accessible nationwide. Specifically, it calls for policies that

• Pay for primary care teams to care for people, not doctors to deliver services
• Ensure that high-quality primary care is available to every individual and family in every community
• Train primary care teams where people live and work
• Design information technology that serves the patient, the family, and the interprofessional care team
• Ensure that high-quality primary care is implemented in the United States

The report's findings and recommendations support the Academy's position that the country's fee-for-service health care design promotes misaligned incentives and prizes "sick care" at the expense of population wellness. This dangerous gap was exposed and exacerbated by the COVID-19 pandemic.

AAFP EVP and CEO Shawn Martin said in a statement that coincided with publication of the report, "We look forward to working with policymakers, payers and our other partners in primary care to make the study recommendations a reality—the health of our nation depends on it."

Academy President Ada Stewart, MD, of Columbia, South Carolina, added: "The NASEM report clearly spells out the case for increased investment in our primary care system and ensuring everyone in our country has access to high-quality primary care, something the AAFP has long advocated for. The COVID-19 pandemic further exposed flaws in our current health care system, including those related to many years of underinvestment in primary care."

*AAFP News*

**From the American Board of Family Medicine**

*Ann Fam Med* 2021;19:377-379. https://doi.org/10.1370/afm.2726.

## THE EVOLUTION OF KNOWLEDGE ASSESSMENT: ABFM'S STRATEGY GOING FORWARD

Knowledge is a foundation of the public trust in physicians. Knowledge drives diagnosis, treatment, and the shared decision making central to health care. Assessment of medical knowledge has thus been a cornerstone of Board Certification since 1914, when the American Board of Ophthalmology developed the first Board examination. As ABFM rethinks its certification portfolio, it is appropriate to revisit the scientific rationale for assessment of knowledge. What follows frames the key questions and evidence that drive ABFM policy and describes next steps.

### Do Physicians Know What They Know?

It is common for physicians to be confident about what they know. Unfortunately, however, the accuracy of self-assessment of knowledge is uneven and often poor. In the 1990s, Kruger and Dunning conducted a series of experiments with undergraduate students examining their ability to self-assess against objective criteria "in [1 of 4] domain[s] in which knowledge, wisdom, or savvy was crucial: humor, logical reasoning, and English grammar."[1] In each test, there was a relatively narrow range of self-perceived ability, but a much wider range was seen in actual test scores. In each case, the highest objective performers somewhat underestimated their ability and performance. Importantly, however, the lowest performers substantially overestimated their abilities. Subsequently, there has been substantial literature documenting that the Dunning-Kruger effect is pervasive across different professions,[2] including medicine.[3]

Further complicating self-assessment of clinical knowledge is the challenge of keeping up to date. Modern health care is dynamic, with ongoing and important changes in practice standards. There is good evidence that more experienced physicians may be less likely to apply up to date practice guidelines.[4] This is particularly challenging in a generalist specialty like family medicine. In recent years, for example, consider recent changes in evidence and practice in areas including COVID diagnosis and management, a new generation of effective agents for diabetes, point-of-care