OVERVIEW

Coverage expansions under the Patient Protection and Affordable Care Act of 2010 (ACA) have prompted worries about the adequacy of the future health care workforce. But generalizations about impending shortages fail to capture the complexities of workforce maldistribution, in which shortages and surpluses exist side by side from one geographic area to another and among specialties. The difficulties of workforce planning and policymaking are compounded by a wave of changes in the way health services are organized, delivered, and paid for. In the past, workforce planning has been based on historical doctor-to-population ratios. Increased use of health teams and substitution of nurse practitioners and physician assistants for physicians creates substantial uncertainty in current projections of future need. This Forum session explored new projection methodologies and the workforce implications of practice change in two innovative care organizations.

BACKGROUND

Large expansions of coverage expected under the ACA have spurred concerns about the composition and adequacy of the health care workforce. Anticipating the effects of the ACA, one estimate predicts that by the early 2020s, there will be 45,000 too few primary care physicians. However, the task of making accurate projections is both complex and challenging. Projections based on historical experience alone and focused narrowly on physicians are likely to prove misleading. Past experience provides useful
but at times conflicting information, and shortages and surpluses can exist side by side because of uneven workforce distribution across communities, states, and regions. The overall supply of active physicians relative to population in Massachusetts, for example, is more than twice the size of the relative supply in Texas, Arkansas, or Mississippi. In general, the gradient in physician supply runs from higher in northern and urban environments to lower in rural and southern states. While there are locales with clearly identified shortages, areas with fewer physicians per capita often appear to have no significant access problems.

While the past provides no definitive benchmark for evaluating future physician workforce needs, the task of making such projections is complicated by the potentially profound shifts in how care may be organized and delivered. There is increasing interest in expanding health system capacity, not just by adding more physicians, but by altering the mix and responsibilities of multiple types of clinicians. Nurse practitioners (NPs) and physician assistants (PAs) may substitute for physicians in many tasks. A 2004 study found that in three integrated health maintenance organizations that made extensive use of non-physician clinicians, the number of physicians per 100,000 enrollees ranged from 144 to 176, compared with a national average of 229. Taking account of their capabilities would affect projections of future needs for different professionals. Projected shortfalls could also be affected as the numbers of NPs and PAs have been increasing much more rapidly than the number of physicians.

And more than the simple substitution of one professional for another will affect the resources needed for care delivery. The shift to team-based care where professionals combine to serve a single patient may create synergies that increase capacity. Technology, both in terms of clinical innovation and managing the flow of information, will also play a role. The gradually increasing use of telemedicine is a potential counterweight to the maldistribution of specialists, as pioneering networks have used videoconferencing for distance consultations. Remote training and supervision could also amplify the productivity of provider organizations. A health system in Hawaii with comprehensive electronic health records, including a multipurpose patient portal, decreased office visits by 25 percent, with the help of increased email messaging and telephone visits. Simple measures like just-in-time scheduling may also increase productivity even in small practices.
Uncertainty about the precise level of future health care workforce needs may be an unfortunate reality. Yet the size and composition of the health care workforce is very sensitive to public policies as well as market forces, suggesting that improving the nation’s ability to project future workforce needs is critical for sound policymaking. Medicare, for example, is a major funder of physician residency programs, and states provide extensive support to medical and other professional schools. Given the length of time required to train physicians—seven years or more—and master’s level physician assistants and advance practice nurses—five years or more—tuning policies to steer between shortage and surplus requires advance planning.

At the federal level, the Health Research and Services Administration (HRSA) makes periodic workforce projections. It is currently working to improve its projections methodology, including incorporating non-physician clinicians and modeling alternative scenarios for potential delivery system reforms. This effort is handicapped by the uncertainty of future service delivery configurations and their potential impacts on the supply and demand of health personnel.

In this meeting, the Forum explored the challenge of making workforce projections to guide policy. Edward Salsberg, MPH, director of HRSA’s National Center for Workforce Analysis, described HRSA’s development of a workforce modeling capacity that recognizes the potential for significant shifts in the mix and numbers of professionals delivering care and for the pace of innovation and change. Demonstrating that transformation of care delivery is not a theoretical concept, Drs. Thomas Graf and Patrick Courneya from Geisinger Health System and HealthPartners Health Plan, respectively, discussed how their organizations already have years of experience with modifying the mix of professionals and technology to deliver care in ways that enhance both quality and efficiency.

**KEY QUESTIONS**

- What factors will contribute to shifts in the mix and numbers of clinical professionals needed to deliver health care in the future? What limits our ability to predict the magnitude of these shifts and provide more precise projections to guide policy?

- What types of substitutions among different types of professionals are already being tried for different primary care and specialty services? What effects have been observed in quality, patient satisfaction, and efficiency?
• How may technologies change service delivery by substituting for professionals’ time or enabling different types of professionals to take on new tasks?

ENDNOTES


5. Sanjeev Arora et al., “Partnering Urban Academic Medical Centers And Rural Primary Care Clinicians To Provide Complex Chronic Disease Care,” Health Affairs, 30, no. 6 (June 2011): pp. 1176-1184, available at http://content.healthaffairs.org/content/30/6/1176.full.
