Op-Ed

Will We Have Enough Physicians? One of Life's "Unanswerable" Questions

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ONE OF THE MOST CONTENTIOUS HEALTH CARE ISSUES OF THE past decade—aside from debating the merits of the Affordable Care Act (ACA)—is whether there is a looming shortage of physicians and, if so, what its magnitude will be.

What appears to be clear is that past studies and projections have produced highly variable and frequently contradictory responses and that past projections have sometimes not even been directionally correct. For example, in the 1970s there was concern that the United States was facing an imminent shortage of physicians. This led to a push to expand the number of both medical schools and students enrolled in existing schools, which resulted in a 66% increase in the number of medical students between 1970 and 1984. A decade later, the conventional wisdom was that the country was facing an oversupply of physicians as a result of the growth in managed care.¹

Once again, various projections are suggesting that a significant shortage of physicians is likely in our future, given the aging of the population and the expansion in coverage resulting from the ACA. However, the data underlying these projections and, more important, the assumptions underlying the predictions vary between being problematic and erroneous. Several researchers have cited the need for more timely and accurate data for physicians, nurses, and other health care workers.² But the more significant and more challenging issue is the underlying assumptions about physicians' future productivity. The most common type of projections use past physician-provider ratios, assuming that they are good predictors of the future need for physicians, either what it will be or what it should be.

This assumption of a fixed "production function"—the idea that there is only 1 way to produce a particular type and quality of health care service—rarely makes sense and helps explain why past projections have not proved useful. Furthermore, this assumption is especially irrelevant

now, given the changes in the delivery system currently under way as the government and private payers promote the use of more coordinated, affordable, and patient-centered care by changing how they reimburse physicians and other health care professionals; make better and more extensive data available to both professionals and patients; and raise patients' level of engagement.

Other studies document how much the expanded roles for advanced-practice nurses and other health care professionals, the expanded use of technologies such as electronic medical records and telemedicine, and the greater adoption of different delivery systems such as patient-centered medical homes, shared savings programs, and more formally integrated delivery systems could affect physicians' productivity and, therefore, projections of a sufficient number.

A 2013 study reviewed the literature estimating the effects of a full implementation of health IT.³ The adoption of health IT by only 30% of community-based physicians was estimated to reduce the demand for physicians by 4% to 9%. The use of health IT to support the delegation of tasks from specialist physicians to generalists could reduce the demand for specialists by 2% to 5% and also could enable 12% more care to be delivered remotely. If as much as 70% of the care provided in ambulatory settings were supported by health IT, it was estimated that the effects would double. Moreover, the effects of patient-centered medical homes and nurse-managed health centers are thought to have an even greater potential to reduce shortages of primary care physicians.⁴ The most important features of these innovations in delivering primary care are the use of team-based care and the adoption of technology.

In 2013, Bodenheimer and Smith used the phrase "demand-capacity mismatch" to define what has too frequently been labeled a physician workforce problem.⁵ They concluded that primary care practices could substantially increase their capacity to provide health care services by reallocating clinical responsibilities to nonphysician team members and to patients through a greater adoption of current technologies and the increased use of self-care. They also discussed the importance of payment reform, changes in the scope of practice laws, and increased innovations in technology, particularly in the area of self-care.

Achieving the legislative changes that would be required at both the national and state levels to increase primary care obviously would be challenging. If history is any guide, the existing power structures,

such as national and state medical and specialty societies, are likely to resist these changes. Their first line of defense probably will be that any changes in the mix of personnel providing services will endanger the quality of care received by patients, although these claims are rarely backed up by credible data. Therefore, those who believe the changes are necessary for the delivery of high-quality care must have empirical evidence to support their claims.

According to the American Association of Medical Colleges (AAMC), overall enrollment in US medical schools rose in the decade ending in 2012 by nearly 28% (from 80,180 to 102,498), with 4 new allopathic and 3 new osteopathic medical schools opening in 2013 alone. The number of residency positions also rose by 17.5% in the last decade, despite the cap on Medicare funding in 1996. In addition, there appear to be ample residency positions available to accommodate the expansion, despite claims to the contrary. In 2014, 7,000 more first-year residency positions were available than there were US applicants. What is equally clear is that increasing the numbers of physicians by itself is unlikely to resolve future workforce shortages, since there has not been a rise in the proportion of physicians choosing to practice primary care or locating in rural or underserved areas. Reaching these goals will require different policies.

References

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