

The Primary Care Crisis and Health Care Reform

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P *Primary care crisis* is a phrase we have heard many times. Often, it reflects not just a societal circumstance but the reality for health care professionals working first-hand with the medically underserved or vulnerable populations. These professionals are considered *safety net providers* because they deliver health care to uninsured patients, underinsured patients, and Medicaid patients. Safety net providers work in community health centers, federally qualified health centers, public hospitals, school-based clinics, teaching and community hospitals, and local public health clinics.¹ Without safety net providers and their supporting institutions, many communities would have little or no contact with the health care system.

Health care reform must ensure that our workforce is able to meet the demands of delivering primary care to patients. Program funding, financing mechanisms and incentives, and implementing infrastructure changes are all needed to ensure that clinicians are attracted to primary care, faculty are in place to educate health care professionals, and health care delivery is efficient and effective. Ameliorating the problems presently impeding primary care delivery involves more than just training additional doctors to become primary care physicians. At the core of the debate are several issues: (1) how to address the financial reimbursement inequities seen in primary care and specialty care; (2) how health care will be delivered; (3) which professionals will provide primary care, oral health care, and behavioral health care; and (4) how emerging technologies will be used. If these issues are not addressed, health reform agreed upon by politicians may not be adequate for the patients, the health care workforce, or health care institutions.

Primary Care Workforce

Primary care practitioners include physicians certified in family practice, internal medicine, and pediatrics; nurse practitioners certified in family, adult, pediatrics, gerontology, and women's health; physician assistants certified in primary care; dentists; mental health providers; and public health clinicians and professionals. We do not

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have enough health care professionals to bring comprehensive primary care services to medically underserved communities.

Developing a primary care workforce has been suggested as a solution to strengthen our safety net infrastructures, improve access and quality of health care, and reduce health care costs. An adequate primary care workforce would also ensure an emphasis on prevention and well-being, population health, and community health.

Physician workforce. There are approximately 817,500 physicians in the U.S. Of that number, primary care practitioners constitute one-third and non-primary care practitioners the remainder.² Other statistics underscore the concern this raises:

- In 2008 only 17% of medical students chose primary care as a career path. The breakdown was 5% going into internal medicine, 6% family medicine, and 6% pediatrics.³
- A 2008 study predicted that by 2025 there would be a shortage of 35,000–44,000 adult primary care physicians. Universal access would increase the present day shortage by 25%.⁴
- A 2009 National Association of Community Health Centers report showed that 60 million Americans lack adequate access to primary care because of physician shortages.⁵
- Each \$10,000 increase in medical school debt decreases the chance of a student entering a primary care field by 1%. Average private medical school debt is \$180,000.⁵
- Even if there were sufficient primary care physicians to meet the need, minority physicians would still be underrepresented. Potential large indebtedness may deter students from low-income families from going into primary care.³
- An increase of one primary care physician per 10,000 population in one state increased the quality rank by more than 10 places and decreased Medicare spending by \$684 per recipient.⁴
- The U.S. Health Resources and Services Administration (HRSA) reports that there are currently 6,080 Primary Care Health Professional Shortage Areas (HPSAs) with 65 million people living in them. In order to meet the demands, an estimated 16,585 professionals are needed.⁶
- HRSA notes that there are 4,091 Dental HPSAs with 49 million people living in them. Approximately 9,569 dentists are needed.⁶
- HRSA records 3,132 mental health HPSAs with 80 million people living in them and would require 5,392 practitioners.⁶

Nursing workforce. There are approximately 2.5 million registered nurses in the health care workforce. Registered nurses also include advance practice nurses such as nurse practitioners, clinical nurse specialists, certified nurse midwives, and certified registered nurse anesthetists.⁷ However, a nationwide nurse shortage currently exists and, by 2020, it has been estimated that there will be more than one million vacancies for registered nurses. Further, the current nursing shortage will also affect public health nurses who make up the largest segment of the public health workforce.⁸ Public health nurses focus on population health and meeting the needs of the communities they serve.

The demand for nurses is growing as the supply of nurses dwindles. There are fewer nurses in the workforce for several reasons: (1) short-sighted health policies put forth by managed care companies in the 1990s resulting in drastic staff reductions of nurses, (2) aging nurse population, and (3) nursing faculty shortage.⁹

Nursing schools have record enrollment rates but have had to turn away qualified students because they do not have enough nursing faculty. Recruiting faculty is difficult because nurses employed in clinical specialties and administration positions earn more, on average, than faculty. Further, the growing demand for nurse practitioners is expected to increase because of the projected physician shortage in primary care.¹⁰ Educating advanced practice nurses require that faculty be prepared on the master's or (preferably) doctoral level to meet the educational needs of nurses.

Mental health. As of 2002, there were half a million clinically trained mental health practitioners. Notably, the field lacks cultural and ethnic diversity amongst its practitioners. Also importantly, rural areas of the United States constitute over 85% of health professional shortage areas (HPSAs).¹¹ The shortage of behavioral health care professionals is most pronounced in pediatric and adolescent populations. Despite the fact that children in poverty have a greater likelihood of developing mental illness than others, they have little or no access to child psychiatrists. In order to address this shortage, experts advocate a special structure for targeting services for mental illness: improved preventative services for high-risk youth, increased access for symptomatic youth, short-term interventions in primary care settings, and mental health promotion in developmental settings.¹² In short, an increased emphasis of mental health in primary care settings could alleviate the burden of the behavioral workforce shortage .

Oral health. Nearly 1,500 U.S. communities are considered dental shortage areas. Nevada, the Great Plains, South Texas, North Maine, and other rural areas are considered extreme shortage areas.¹³ In order to address lack of dental care, innovative programs have been developed. Since 2005, primary care resident physicians in Maine are trained in basic dental skills. Moreover, medical residents also train at two rural dental clinics. Two-thirds of the medical residents who have completed the program now practice in the state's rural areas. In addition, the American Dental Association and the American Academy of Family Physicians have worked together to implement a program in at least four states to teach pediatricians to apply fluoride and look for signs of tooth decay.¹⁴

Pharmacy. Pharmacists represent the third largest group of health professionals. As of 2005, there were 210,300 pharmacists working in hospitals, retail pharmacies, and community pharmacies. This represents about 73 pharmacists per 100,000 people.⁵ The demand for pharmacists will continue to rise as the U.S. population ages and as it increasingly relies on prescription medications for managing chronic illnesses. Further, the pharmacist role has expanded beyond dispensing medication to working directly with clinicians to decide appropriate medication regimens and educating and counseling patients about their medications.²

Currently, a moderate pharmacist shortage exists. The vacancy rate in 2004 was approximately 5%, which represents roughly 10,400 pharmacists. Using pharmacy technicians and technology allowed pharmacists to spend less time dispensing medication and more time counseling patients and monitoring their medications. However, given

the changing demographics, increases in chronic illnesses, and increased use of medications, the projected demand for pharmacists is expected to grow by 1.4% per year and possibly as much as 2%. Anticipated pharmacist supply is 260,000, which will mean a 10% shortfall by 2020 if nothing changes; by 2030, pharmacy demand will be 357,000, while expected supply is 319,000 (a shortage of 38,000 pharmacists, or 11%).¹⁶

National Health Service Corps. The National Health Service Corps (NHSC), a government program, has successfully recruited and placed health professionals in many medically underserved areas. Since 1972, 28,000 primary care professionals funded by the NHSC worked in health professional shortage areas.¹⁷

Many primary care clinicians rely on the NHSC to defray their educational costs in return for practicing in communities lacking access to health care. The current Congress recognizes the importance of the NHSC and granted the program \$300 million in the American Recovery and Reinvestment Act (ARRA).¹⁸ This funding will support an additional 4,250 practitioners. Dr. Regina Benjamin, President Barack Obama's nominee for U.S. Surgeon General, was a NHSC scholar.¹⁹ Additionally, many NHSC alumni continue to practice in medically underserved communities or volunteer their services in these communities.

Discussion

Part of the solution to the primary care crisis lies in having sufficient numbers of primary care clinicians. Physicians have traditionally provided the bulk of patient care. However, non-physician clinicians, including nurse practitioners (NPs) and physician assistants (PAs) are playing an increasingly large role in providing patient care. In 2005, approximately 115,000 NPs were in clinical practice, a number similar to the number of family practice physicians. By 2015, the expected number of NPs will be about 170,000.²⁰ These facts, together with the central fact that most NPs are trained in primary care, strongly suggest that NPs are an important resource for future primary care health services. As noted earlier, less than 50% of graduating physicians choose generalist fields and even fewer choose family practice.²¹ In contrast, the majority of nurse practitioners are trained in primary care tracks (family, adult, pediatrics) and many of the specialty tracks (women's health, school health, midwifery) also provide primary care. Of the NPs who practice in rural areas of New York State, 67% are providing primary health care to individuals residing in those areas.²²

To ensure there is an adequate supply of nurses, several policy initiatives have been recommended. Increasing federal funding for nursing education will allow nursing schools to meet current and future demand. Attracting nursing faculty requires educational loans and loan repayment programs for those who choose academia. Attracting NPs to work in medically underserved areas will require incentives to bring them to these areas. Long-term investments in nursing is needed to fund the education of registered nurses, NPs, nursing faculty, and nurse researchers.²³

The NHSC stresses primary care therefore should also play an important role in strengthening health professional workforce that can deliver primary care. A sound and well-functioning health care system delivers care that is accessible, high quality, and cost effective. Moreover, mental and oral health must also be addressed in primary

care health settings. A primary care workforce that includes mental and oral health care will improve the health of populations, communities, and individuals.

Health reform is providing the opportunity to look at the big picture of how health care is structured in the United States. It is crucial that we use this opportunity to make policy changes that address the primary care crisis. As Richard Baron remarked, “The greatest difference between specialty practice and primary care practice in the United States today is the capacity to do a good job.”²⁴

A patient-centered medical home meets the needs of our patients. Providing high-quality care requires that primary care providers work in a health care delivery system that can successfully address the myriad of complex health issues facing their patients. A patient-centered medical home provides a structure that enables clinicians to work with their patients. In this model, each patient has a personal clinician working with a team of individuals to make sure the needs of the patient are met. The team is trans-disciplinary because solutions to complex health issues require practitioners from an array of disciplines (medicine, nursing, social work, dentistry, psychology, and others) working together. Health care must also be integrated and coordinated across the entire health care system and include the patient’s family and community. The patient-centered model also uses evidence-based research, continuous quality improvement (CQI) principles, and electronic health records to reduce medical errors. Access, a core principle in health policy, requires open-access scheduling, expanded hours, and increased options for communication between clinician and patient (e.g., e-mail).

Patient-centered medical homes are built with the recognition that the institution must be reimbursed for the resources to provide primary care services. In the current U.S. health care system, specialists bill patients or insurers for procedures, and are reimbursed at a higher rate than clinicians who spend time with patients. For example, a gastroenterologist is reimbursed very well for a colonoscopy, but the primary care clinician receives little reimbursement to explain to patients why this procedure is needed. The fee structure for primary care must cover the infrastructure costs that are core to the provision of primary care. Health educators, nutritionists, case managers, and community health workers must also be part of the health care team and reimbursement schedules. Additionally the time taken to coordinate and advocate for patients’ needs (as well as complete endless voluminous paperwork that is part of our current inefficient system) has a cost associated with it and must be taken into account.

The need for more primary care clinicians can be addressed through loan forgiveness programs, increasing funding to NHSC, utilizing nurse practitioners and physician assistants, and ensuring that there are adequate numbers of teaching faculty for our nursing programs. In solving the primary care crisis, of course we must not ignore the cost of our health care system. Our health care costs represent 17% of our gross national product. We must think about how we pay and who pays for health care services. Delivering quality primary care may drive up costs in the short term. We must recognize that some of this crisis is driven by the simple need of wanting to deliver quality care. Overcoming the primary care crisis must involve providing the infrastructure that will attract people interested in a career in medicine, pharmacy nursing, oral health, and mental health.

Notes

1. Institute of Medicine. America's health care safety net: intact but endangered. Washington, DC: The National Academy Press, 2000.
2. Bodenheimer TS, Grumbach K. Understanding health policy: a clinical approach (5th ed.). New York: McGraw-Hill Companies, Inc., 2009.
3. Steinbrook R. Easing the shortage in adult primary care—is it all about money? *N Engl J Med*. 2009 Jun 25;360(26):2696–9.
4. Zerehi MR. How is a shortage of in adult primary care physicians affecting the quality and cost of medical care? Philadelphia, PA: American College of Physicians, 2008.
5. National Association of Community Health Centers. Primary Care access: an essential building block of health care reform. Bethesda, MD: National Association of Community Health Centers, 2009.
6. U.S. Department of Health and Human Services, Health Resources and Service Administration shortage designation: HPSAs, MUAs & MUPs. Washington, DC: U.S. Department of Health and Human Services. Health Resources and Service Administration, 2009. Available at: <http://bhpr.hrsa.gov/shortage/>.
7. Bureau of Labor Statistics. Occupational employment and wages, May 2008: 29-1111 Registered Nurses. Washington, DC: U.S. Department of Labor, 2009. Available at: <http://www.bls.gov/oes/2008/may/oes291111.htm#ind>.
8. Institute of Medicine. The future of the public's health for the 21st century. Washington, DC: The National Academy Press, 2002.
9. Allan JD, Aldebron J. A systematic assessment of strategies to address the nursing faculty shortage, *U.S. Nurs Outlook*. 2008 Nov–Dec;56(6):286–97.
10. Aiken LH, Cheung RB, Olds DM. Education policy initiatives to address the nurse shortage in the United States. *Health Aff (Millwood)*. 2009 Jul–Aug;28(4):w646–56. Epub 2009 Jun 12.
11. Substance Abuse and Mental Health Services Administration. Health, United States, 2007. Hyattsville, MD: CDC, 2007.
12. Thomas CR, Holzer CE 3rd. The continuing shortage of child and adolescent psychiatrists. *J Am Acad Child Adolesc Psychiatry*. 2006 Sep;45(9):1023–31.
13. Kaiser Family Foundation. Nation facing shortage of dentists. Washington, DC: Kaiser Family Foundation, 2003. Available at: http://www.kaisernetwork.org/daily_reports/rep_index.cfm?DR_ID=19943.
14. Zezima K. Short of dentists, Maine adds teeth to doctors' training. *The New York Times*, 2009 March 3; A12.
15. Cooksey JA, Knapp KK, Walton SM, et al. Challenges to the pharmacist profession from escalating pharmaceutical demand. *Health Aff (Millwood)*. 2002 Sep–Oct; 21(5):182–8.
16. U.S. Department of Health and Human Services, Health Resources and Services Administration. The adequacy of pharmacist supply: 2004 to 2030. Washington, DC: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2008.
17. Saxton JF, Johns MM. Grow the US National Health Service Corps. *JAMA*. 2009 May 13;301(18):1925–6.
18. Baptista NV. ARRA increases NHSC awards, decreases HPSA score. Washington, DC: Alliance for Academic Internal Medicine, 2009. Available at: <http://www.im.org/PolicyAndAdvocacy/PolicyIssues/Workforce/Pages/ARRAIncreasesNHSCAwards,DecreasesHPSAScore.aspx>.

19. CNNhealth.com. Dr. Regina Benjamin is Surgeon General choice. Washington, DC: CNN, 2009 Jul 13. Available at: [http://www.cnn.com/2009/HEALTH/07/13/surgeon .general/](http://www.cnn.com/2009/HEALTH/07/13/surgeon_general/).
20. Cooper RA. Health care workforce for the twenty-first century: the impact of non-physician clinicians. *Annu Rev Med.* 2001;52:51–61.
21. Greenberg JO, Greenberg H. More physicians are not the answer. *Am J Cardiol.* 2007 May 15;99(10):1476–8. Epub 2007 Apr 5.
22. New York Center for Health Workforce Studies. Nurse practitioners in New York state: a profile of the profession in 2000. Rensselaer, NY: New York Center for Health Workforce Studies, 2004.
23. Gillibrand K. Gillibrand unveils plans to train more nursing instructors, create more educational opportunities at nursing institutions, incentivize new nurses to work in underserved areas. Washington, DC: Office of Kirsten Gillibrand, United States senator for New York, 2009 Jun10. Available at: <http://gillibrand.senate.gov/newsroom/press/release>.
24. Baron RJ. The chasm between intention and achievement in primary care. *JAMA.* 2009 May 13;301(18):1922–4.