



Health Care Workforce

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Why should public policymakers be concerned about the health care workforce?

Because 47 million Americans lack health insurance, the current debate on access to health insurance is vital. Obtaining coverage is worth little, however, if members of the health care workforce are not available to deliver needed services.

In many parts of the country—especially rural areas and low-income urban neighborhoods—the number of health care professionals, including those who provide primary care, is insufficient. In addition, some specialties are in short supply across the country, among them pediatric dentists and child psychiatrists.

Policymakers are charged with attempting to restrain rising health care costs while also helping to ensure that the health care workforce is appropriately distributed and delivering high-quality care. Meeting these goals involves enormously complex issues, ranging from developing and maintaining medical schools and residency programs to providing incentives to practice in underserved areas and regulating scopes of practice.

The health care workforce also receives attention simply because it is a significant part of the nation's economy. According to the Bureau of Labor Statistics, health care provides about 13.4 million jobs, and about 19 percent of all the wage and salary jobs that will be created between 2004 and 2014 will be in health services. Of the 30 occupations that are projected to grow the fastest during that period, eight will be concentrated in health services. Those numbers are expected to swell. The elderly population will grow faster than the total population between 2000 and 2010, increasing the demand for health services. Advances in medical technology will continue to improve the survival rate of severely ill and injured patients, who then may need extensive therapy and ongoing support.



In 2000, physicians spent an estimated 32 percent of patient care hours providing services to the age 65 and older population. If current consumption patterns continue, this percentage could increase to 39 percent by 2020.


The aging of the health workforce raises concern that many health professionals will retire about the same time that demand for their services is increasing. Furthermore, the declining proportion of the population between the ages of 18 and 30 raises the issue of whether there will be enough younger people to provide home health, nursing and personal care. 

Table 1. Employment of wage and salary workers in health care by occupation, 2006 and projected change, 2006-2016. (Employment in thousands)

Occupation	Employment, 2006		Percent change, 2006-16
	Number	Percent	
All occupations	13,621	100.0	21.7
Management, business, and financial occupations	579	4.2	18.2
Professional and related occupations	5,955	43.7	21.3
Dentists	96	0.7	7.5
Physicians and surgeons	468	3.4	17.1
Registered nurses	2,072	15.2	25.2
Dental hygienists	163	1.2	30.4
Emergency medical technicians and paramedics	130	1.0	22.3
Licensed practical and licensed vocational nurses	605	4.4	13.4
Service occupations	4,334	31.8	27.1
Office and administrative support occupations	2,446	18.0	14.4

Note: Professional and related occupations column does not add to total due to omission of some occupations.

Source: Bureau of Labor Statistics, U.S. Department of Labor, 2007.

Is there a shortage and/or maldistribution of health care professionals?

The supply of various types of health care professionals in most states is either inadequate or unevenly distributed. This shortage or maldistribution is especially acute in low-income areas, where residents are more likely than those who live in wealthier areas to be uninsured or to be enrolled in publicly subsidized health programs.

Health care professionals tend to be in short supply and/or maldistributed by specialty, geography and gender.

Specialty

Particular health professions may suffer from a shortage of certain specialties. In the case of physicians, a surplus was expected for years. Now, many agree that there currently is or soon will be a shortage, especially of primary care generalists. In dentistry, there is growing concern about the apparent nationwide shortage of pediatric dentists. There has long been a shortage of child psychiatrists, as well.

In the nursing profession, members are in particularly short supply. The Health Resources and Services Administration has projected that, absent aggressive intervention, in 2020 the shortage will grow to more than 1 million RNs (representing a shortage of 36 percent). Aging of the nursing workforce is expected to increase the severity of the shortage, including faculty members who are crucial to prepare new nurses. Approximately one-third of the nursing workforce is age 50 or older, and the average age of full-time nursing faculty is 49 years.

Geography

Many rural and low-income urban areas lack physical access to health professionals (e.g., long distances between home and the nearest health care provider, poorly maintained roads and lack of public transit). Although about 20 percent of the population live in rural areas, for example, less than 11 percent of the nation's physicians practice in nonmetropolitan areas. In most medically underserved areas, a shortage exists of physicians, dentists and other health care professionals, including nurse practitioners and physician assistants. About 20 percent of the U.S. population reside in federally designated "health professional shortage areas." More than 6,900 physicians are needed in these areas to remove the designations for primary care.

Gender

In recent years, states have seen a "feminization" of the health workforce. More women have entered the medical, dental and allied health professions, and nursing remains largely a female-dominated discipline. The journal *Academic Medicine* notes that the number of female medical students has increased from 7.7 percent in 1964 to 48.5 percent in 2005. Women have different patterns of practice than their male counterparts, however, which affects workforce supply. ¹⁰

How does the make-up and/or distribution of the healthcare workforce affect who gets care?

Minority Americans—including African Americans, mainland Puerto Ricans, Mexican Americans, American Indians and Alaska Natives—in the aggregate experience greater health disparities than other U.S. population groups. This may be due, in part, to the fact that these groups tend to have less access to prevention and health care services and to the health care professionals who deliver them.


Some lawmakers advocate recruiting more minorities to the ranks of dentists, physicians, and other professions. Doing so not only would better enable minorities to attain health services, but also would allow these professionals to deliver more culturally competent care. According to the National Institutes of Health, data on black physicians support the contention that "...increasing the representation of racial/ethnic populations as doctors will provide increased access to health care..." for minority populations. Minority physicians are more likely than white, non-Hispanic physicians to practice in underserved areas and are more likely to care for minority, poor, underinsured and uninsured people.

Although progress has been made, a significant discrepancy still exists between the race and ethnicity of the population and that of health professionals. Today, African Americans, Hispanics and Native Americans represent approximately 25 percent of the population, but only 6 percent of practicing doctors. Although the number of minority students who are entering medical schools is increasing, only 12 percent of students who graduate from U.S. medical schools are African American, Hispanic or Native American. States have a significant role in operating health professions education programs, which includes the ability to provide incentives to enroll more diverse students.

Table 2. Total Physicians By Race/Ethnicity, 2005 (total physicians = 902,053)

Race/Ethnicity	Number	Percentage
White	419,110	46
Black	20,667	2.3
Hispanic	27,929	3.1
Asian	73,054	8.1
American Native/Alaska Native	509	.06
Other	20,013	2.2
Unknown	340,771	38

Note: At year-end 2005, the AMA had race/ethnicity data on nearly three-fourths of all U.S. physicians. Source: American Medical Association. *Physician Characteristics and Distribution in the U.S., 2007 Edition*, Aug 7, 2007.

The Kaiser Family Foundation’s website also includes [information about medical school graduates by race/ethnicity by state](#). 

What issues do states face in regulating health care professionals?


As the use of technology evolves within the rapidly changing health care delivery system and as states seek to increase access to services for the uninsured, various health professions are being redefined and many educators and practitioners are reconsidering the credentials needed to practice within a particular profession.

The following trends are leading state regulators to focus their attention on the licensure of health professions.

- To meet health service demands, major growth is occurring in the number of non physician professions and “turf battles” are putting enormous pressures on state policymakers. For example, several states are witnessing heated debates between ophthalmologists and optometrists over who has the right to practice laser surgery, between physicians and psychologists over prescribing rights, and between general dentists and dental hygienists over the authority to deliver independent services. Those who support expanding the duties of certain health professions argue that doing so will help people in underserved areas gain access to services, while those who oppose expansion say it could adversely affect the quality of care.
- Managed care and increased market competition also are placing new pressures on health care organizations to expand the duties of many health workers. To reduce costs, for example, most hospitals would like to have the flexibility and authority to interchangeably use certain allied



health professionals such as lab and x-ray technicians.

- New attention to the problem of medical errors problem and other consumer concerns are prompting government officials to find new ways to regulate and discipline health care professionals, ensure continuing competence of these professionals, and make more information available to the public. In 2002, for example, Pennsylvania passed a law ([Act 13](#)—the Medical Care Availability and Reduction of Care Act) that created the Patient Safety Authority, an independent state agency tasked with reducing and eliminating medical errors by promoting patient safety in hospitals and other facilities. The authority implemented the mandatory statewide Pennsylvania Patient Safety Reporting System ([PA-PSRS](#)). The system required more than 400 health care facilities to submit confidential reports in 2004, making Pennsylvania the first state in the nation to require reporting of both actual events and "near misses." 


How do states support the building of a health care workforce?

One of the largest ways states support health professionals is by providing general revenue appropriations for medical, dental, nursing and allied health education, including behavioral health professionals, pharmacists and others. These revenues historically have been directed mainly to undergraduate training. In 2004-2005, medical school revenues from state and local government general funds totaled more than \$4 billion.

State Medicaid programs are not obligated to pay for graduate medical education (GME), but since the inception of Medicaid in 1965, some states also have used Medicaid revenues to pay for a portion of GME. State support for GME may include some or all of the following:

- Operating subsidies to teaching hospitals and clinics;
- Direct support of clinical education programs such as residencies, internships and preceptorships; and
- Medicaid reimbursement to hospitals for certain teaching costs.

Most states also appropriate funds for family medicine and primary care residencies. Legislators in many states say support for residency training is one solution to the health care access problems many rural residents and indigent populations face. Recent studies also have found that state support is important to many nurse practitioner and physician assistant training programs.

Beginning in the 1980s, many states began to require that recipients of health professions scholarship and loan programs (in nursing, dentistry and some allied health fields) repay that assistance by practicing in a medically underserved area of the state for a set period of time. Over time, many of these programs have been refined to increase the likelihood that some scholarship and loan recipients might remain in underserved communities after they complete this obligation. However, it is not clear how effective these initiatives have been in improving recruitment and retention of health professionals in these settings. These programs resemble the National Health Service Corps (see [How does the federal government support the supply of health care professionals](#)). 

How does the federal government support the supply of health care professionals?

The federal government supports health professions education through a variety of sources. The largest source of funding is Medicare, which subsidizes residency training for physicians in teaching hospitals. A much smaller amount of Medicare funding is available for graduate education in dentistry, podiatry, nursing and certain allied health professions, such as occupational therapy, pharmacy, physical therapy and x-ray technology.

Although much smaller in terms of total expenditures, targeted grant programs administered by the Bureau of Health Professions (BHP) and the Centers for Disease Control and Prevention (CDC) also are critical funding sources. The BHP administers various grant programs authorized under titles VII and VIII of the Public Health Service Act. Although much smaller than Medicare, these programs are important because most are promote community-based and interdisciplinary education. Programs funded by the CDC focus on educating health professionals about public health.

The federal government also encourages placement of health professionals in health professional shortage areas through the National Health Service Corps (NHSC). Congress created the NHSC in the 1970s to address the most critical primary care needs of rural communities. (Policymakers soon realized that the needs of urban neighborhoods were equally important.)

The NHSC increases access to primary care services and reduces health disparities by requiring health professionals who receive federal scholarships and loans to repay that assistance by practicing in a federally designated health professional shortage area. Although the NHSC has made a concerted effort to reduce health professions shortages, the numbers of NHSC clinicians placed in medically underserved communities fall far short of overall identified need. ¹⁰

How can new technologies change the ways health care professionals deliver care?

The development of new technologies offers health care professionals important tools to improve patient safety and the quality of health care delivery, but it also creates new challenges for policymakers.

For example, using video technology to provide care remotely has many positive implications. It can increase patient access to certain specialties and enable health professionals to monitor chronic illnesses without going to the patient's home or requiring the patient to travel possibly long distances for care.

Telemedicine also raises questions about cross-state border care, however, in terms of licensure, reimbursement and medical malpractice issues. For example, providers who need to cross state lines to cover a rural area in a neighboring state rarely can do so. Allowing cross-state practice would help further technology's reach.

The lack of local infrastructure—which requires additional resources and staff—also remains an issue. Individual states have begun to ensure broadband networks and, as a result, there is a lack of uniformity. ¹¹

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Other Sources

National Center for Health Workforce Information and Analysis Bureau of Health Professions Health Resources and Services Administration
<http://bhpr.hrsa.gov/healthworkforce/>

The Center for the Health Professions
<http://www.futurehealth.ucsf.edu/>

Center for Health Workforce Studies
<http://chws.albany.edu/>

American Nursing Association
<http://nursingworld.org/>

American Association of Colleges of Nursing
<http://www.aacn.nche.edu/>

National Council of State Boards of Nursing
<https://www.ncsbn.org/>

National League for Nursing
<http://www.nln.org/>

American Academy of Nurse Practitioners
<http://www.aanp.org/default.asp>

American Medical Association
<http://ama-assn.org/>

Association of American Medical Colleges
<http://www.aamc.org/>

Association of Academic Health Centers
<http://www.aahcdc.org/>

American Dental Association
<http://www.ada.org/>

American Dental Hygienists Association
<http://www.adha.org/>

Midwives Alliance of North America
<http://www.mana.org/>

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