

# Health Care Workforce: Future Supply vs. Demand



ALLIANCE FOR  
HEALTH REFORM

April 2011

Physician and nursing shortages make headline news on a regular basis. Debates continue in policy circles among researchers, analysts and stakeholders on whether the shortages are due to insufficient numbers of providers, or maldistribution of those providers.

Experts also debate over whether the solutions are to build more schools and enlarge classes to graduate more physicians, expand the number of residency slots, find incentives to attract providers to health professional shortage areas, or change the way we deliver care.

In the fall of 2010, the Alliance for Health Reform, with support from the Robert Wood Johnson Foundation, held a series of Capitol Hill briefings on issues pertaining to the health care workforce. The first briefing in the series examined the physician workforce. It looked at supply and demand issues that may be changing as a result of health reform. Panelists were: Edward Salsberg, National Center for Workforce Analysis, HRSA; Thomas Ricketts, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill; and Jay Crosson of the Kaiser Permanente Institute for Health Policy. The second briefing focused on nurses, allied health professionals, direct care workers and the various provisions of the health reform law pertaining to them. Panelists were: Joel Teitelbaum, George Washington University; Bob Konrad, Cecil G. Sheps Center; Linda Burnes Bolton, Cedars-Sinai Medical Center and Catherine Dower, University of California, San Francisco.

## Fast Facts

- 40 percent of practicing physicians are older than 55; about one-third of the nursing workforce is over age 50.
- Economists say a third of physicians could retire in the next 10 years.
- More than half of nurses over 50 say they plan to retire in the next decade.
- Team-based care and an expanded role for advance practice nurses and physician assistants could mitigate the shortage of primary care providers.
- The Institute of Medicine recommended, in October 2010, that nurses be allowed to practice to the full extent of their education and training. Currently only eleven states allow nurse practitioners to practice independent of a physician.
- Student medical school debt averages \$145,000 for those graduating from public medical schools and \$180,000 for those graduating from private schools, causing many to choose higher paying specialty areas of practice over primary care.
- According to the Bureau of Labor Statistics, the economic downturn beginning in December 2007 has resulted in a loss of 8.4 million jobs. In this same period, health care employment grew by 732,000.

We begin to see the complexity of analyzing the problem and matching the solutions to the challenges if we also consider:

- Is there an adequate and efficient ratio of primary care providers to specialists?
- Are we training for the right skills?
- Are those with skills using them to their maximum potential?
- Where do nurses and licensed and unlicensed allied health professionals fit into the picture?

Some key factors affecting the adequacy of the health care workforce include growth in the insured population as a result of the health reform law, an aging U. S. population, an aging health care workforce, the

## diversity of the workforce and the state of the economy.

Another possibly important factor — the evolution of health care technology that enhances diagnosis and increases the breadth of treatable ailments — is beyond the scope of this issue brief.

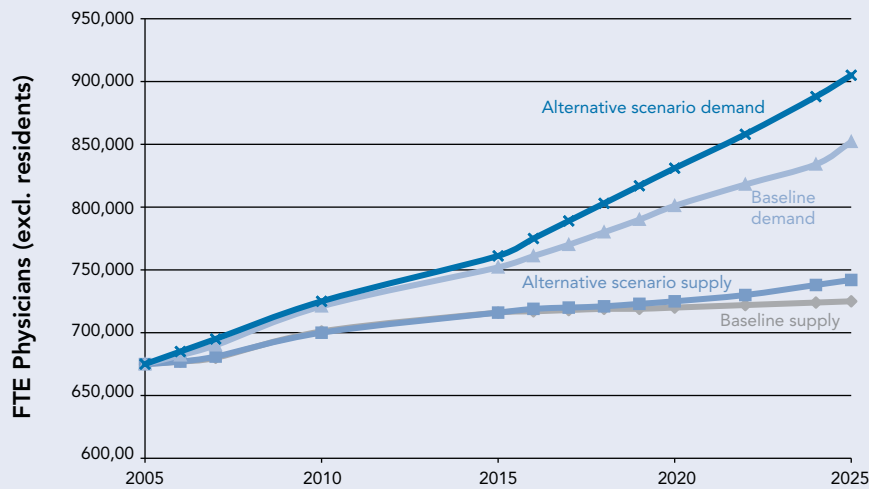
The health reform law enacted in March 2010 is scheduled to add 32 million previously uninsured persons to the rolls by 2019. (See more below.) This is one of the key factors expected to worsen the existing shortage of physicians for at least another decade. By 2025, the shortage could grow by as much as 25 percent, according to one analysis. (See chart, “Projected Physician Supply and Demand.”)

How many more physicians we may really need is still an unsettled



Robert Wood Johnson Foundation

### Projected Physician Supply and Demand: Baseline and Alternative Scenario\*, 2006–2025



\* Alternative scenario projected by AAMC uses a set of assumptions including increased utilization, changes in work schedules, expansion of GME capacity and productivity improvements.

Source: Association of American Medical Colleges, Center for Workforce Studies. October 2008. "The Complexities of Physician Supply and Demand: Projections Through 2025." (<http://www.tht.org/education/resources/AAMC.pdf>)

question. Some researchers speculate that increasing the supply of physicians may make our health care system worse, not better.

Another key factor is the aging of the population and the demands resulting from the complex chronic care needs of older persons. **The first of the boomers turned 65 in January 2011 and became eligible for Medicare. A total of 78 million boomers will reach that age by 2030.**

Providers who serve this population are already in short supply. Complaints have been heard for a while that new Medicare beneficiaries can't find a physician who accepts new Medicare patients. Six percent of Medicare beneficiaries reported that they looked for a new primary care provider in 2009. Of those 6 percent who reported seeking a new primary care physician, 22 percent reported their search to be a problem; 10 percent reported it a "small problem" and 12 percent

reported it a "big problem."

In recent years, the greatest growth in utilization of services has been among those 75 years of age and older. Geriatricians, primary care physicians for this segment of the population, number a mere 6,830 and are already spread thinly, one for every 1,900 seniors age 75 or older. According to an Institute of Medicine study, the U.S. would need 36,000 geriatricians by 2030 to meet the need.

The workforce itself is likewise aging and some say that one third of current physicians will retire over the next 10 years. Close to 40 percent of doctors are older than 55 years of age. And younger professionals have different practice patterns than their predecessors (e.g., men and women age 25–40 tend to work fewer hours than previous generations of health professionals).

About one-third of the nursing workforce is older than 50 and more than half have expressed an intention to retire in the next decade. The U.S. nursing shortage is projected to grow to 260,000 registered nurses by 2025.

Several factors are thought to contribute to the projected shortage in nursing. These include a diminishing pipeline of new students to nursing, a decline in RN earnings relative to other career options, an aging nursing workforce, and the aging population that will require more intense health care services. In addition, nurses report high levels of job dissatisfaction, which leads to high turnover and early retirement among RNs.

**The Patient Protection and Affordable Care Act (popularly, the ACA) of March 2010 aims to cover an additional 32 million American citizens and legal residents beginning in 2014.** It is expected that one-half of those newly insured will be added through expanded Medicaid programs.

The remaining half will obtain coverage through state health insurance exchanges. Some will gain coverage with the aid of government subsidies, others through incentives to small business employers to provide coverage to their employees. Young adults up to the age of 26 are already able to get coverage under their parents' policies. Other individuals are purchasing private insurance on their own for the first time — something many couldn't do in the current individual market if they had a preexisting condition.

**By whatever means, expanding coverage to 32 million people increases the demand on the current and future provider supply.**

The ACA has a number of provisions that address health care workforce issues. The three main goals of these provisions are to alleviate shortages, ease uneven geographic and specialty distribution, and address the lack of diversity in the health professions. Some provisions are specific to the physician workforce, others to nurses,

allied health professionals and licensed and unlicensed direct care workers. The provisions range from creating entities to collect and analyze data, to supporting education of health professionals and providing incentives that encourage the practice of primary care.

Health professional shortages are more acute in some fields of practice than in others. The ACA establishes grant programs aimed at education and training for primary care, direct care, oral health specialists, geriatric education centers, behavioral health, cultural competency, nursing, nurse practitioners, public health and under-represented minorities.

**Models of care that rely on primary care playing a greater role in chronic care management are beginning to show evidence of increasing quality of care and containing costs.** Evidence from abroad and from geographic variation here at home seems to indicate that the greater use of primary care is a factor in improving quality and reducing costs.

Some of these innovations are included in the reform law as pilot programs. Some rely on team-based care and an expanded role for advance practice nurses and physician assistants. Such models could result in the more efficient use of the health care workforce and extend the reach of primary care providers. There are a number of reasons why primary care tends to be the focus of attention when speaking of current and future shortages of health professionals. One is that fewer physicians choose to practice primary care than other specialties and subspecialties.

Students graduating with a medical degree often have large amounts of debt, an average of \$145,000 for those graduating from public medical schools and \$180,000 for those graduating from private schools. They look to the professions where they can more easily or more quickly recover the cost of their education and repay

their debt. **Primary care physicians are at the bottom of the physician income chart. Radiologists and orthopedic surgeons at the upper end of the scale might earn three times the income of a primary care physician.** (See chart “Total Annual Compensation for Select Private Practice Physicians.”)

Other factors include the students’ socio-economic background, whether they are from a rural or urban environment and where they trained. According to a 2009 study, being born in a rural area, interest in serving underserved or minority populations, and rural or inner-city training experiences significantly increase the likelihood of students choosing primary care, rural and underserved careers. So does attending a public medical school. The fact that 60 percent of medical students come from families in the top 20 percent of households by income may be a confounding factor here.

To lessen the impact of some of these forces and encourage more health professionals to choose primary care, the ACA provides financial incentives for providers to practice in primary care specialties. These include higher Medicare reimbursement rates to primary care providers and general surgeons and additional bonus payments for practicing in shortage areas.

Other provisions pertain to education and the incentives come in the form of loan repayments. For example, the ACA authorizes loan repayments for pediatric specialists and public health workers.

The National Health Service Corps (NHSC) expansion which began under the American Recovery and Reinvestment Act was further expanded in the ACA, which provided 1,099 new loan repayment awards in 2010 to physicians promising to practice in an underserved area. The Corps’ physicians who enter under this program receive up to \$170,000

in loan repayment for completing a five-year service commitment.

The program starts with an initial award of \$60,000 for two years of service. Total debt repayment is promised for six or more years of service. Many types of health care facilities are NHSC-approved sites. About half of Corps members serve in federally-supported health centers. Other approved sites are rural and Indian Health Service clinics, public health department clinics, hospital-affiliated primary care practices, managed care networks, prisons, and U.S. Immigration and Customs Enforcement sites.

Still other provisions of the ACA pertain to Graduate Medical Education (GME) or residency training programs. For example, revisions to GME would redistribute unused residency positions to create more primary care slots. A new program allows HHS to fund teaching health centers to expand and establish residency training programs in non-traditional settings (i.e., outpatient settings rather than hospitals).

In 2010, more than \$250 million of the new Public Health and Preven-

Total Annual Compensation  
for Select Private Practice  
Physicians 2009

PRACTICE AREA	2009*
	Median (\$)
Orthopedics	473,770
Radiology	468,594
Dermatology	385,088
Pediatrics	192,000
Family Medicine (w/o OB)	183,999
Geriatrics	179,950

\*Medical Group Management Association. Physician Compensation and Production Survey, 2010 Report Based on 2009 Data.

Source: American Geriatrics Society, Geriatrics Workforce Policy Studies Center. Adapted from Table 1.7. [http://www.adgapstudy.uc.edu/figs\\_practice.cfm](http://www.adgapstudy.uc.edu/figs_practice.cfm)

tion Fund was allocated to address the supply of primary care providers as authorized in several ACA provisions.

Better information is needed to assess current and future workforce needs and to guide the workforce marketplace. The ACA establishes a national center for health workforce analysis to develop performance measures, collect data, and create a data reporting system.

It also establishes a national health care workforce commission to encourage innovation, identify barriers to improved coordination, and make recommendations to Congress and the Administration about how to solve workforce shortages and other identified workforce problems while improving care delivery. The members of the commission have been named but funds have not been appropriated for their activities. Among the 15 commission members are five physicians, two nurses and one dentist. The remaining members are researchers, analysts and other stakeholders.

**While most of the headlines focus on physician and registered nurse shortages, another significant shortage — that of direct care workers — has received far less attention.**

These workers include medical assistants, nursing assistants or nursing aides, home health aides and personal and home care aides — numbering 3 million workers in 2008.

They constitute one of the largest and fastest growing parts of the country's workforce. They are part of the reason why health care is one of the few sectors that has been growing jobs in this economy while employment in other sectors has been stagnant or shrinking. The growth rate for direct care workers exceeds that of other types of personnel in the health care sector and is expected to increase by almost 35 percent by 2018. It is projected that the nation will require 10–12 million new and replacement direct care workers in 10 years, as the total number of such workers needed

grows by some 1.1 million. (See chart, “Direct Care Workforce.”)

The ACA recognizes the value of direct care workers to health care delivery and contains a number of initiatives that address current issues and future challenges. Provisions include grants and incentives to enhance training, recruitment and retention of direct care staff. Grants to Geriatric Education Centers for faculty fellowships require that the centers offer courses on geriatrics, chronic care management and long-term care. They also require that activities include family caregiver training.

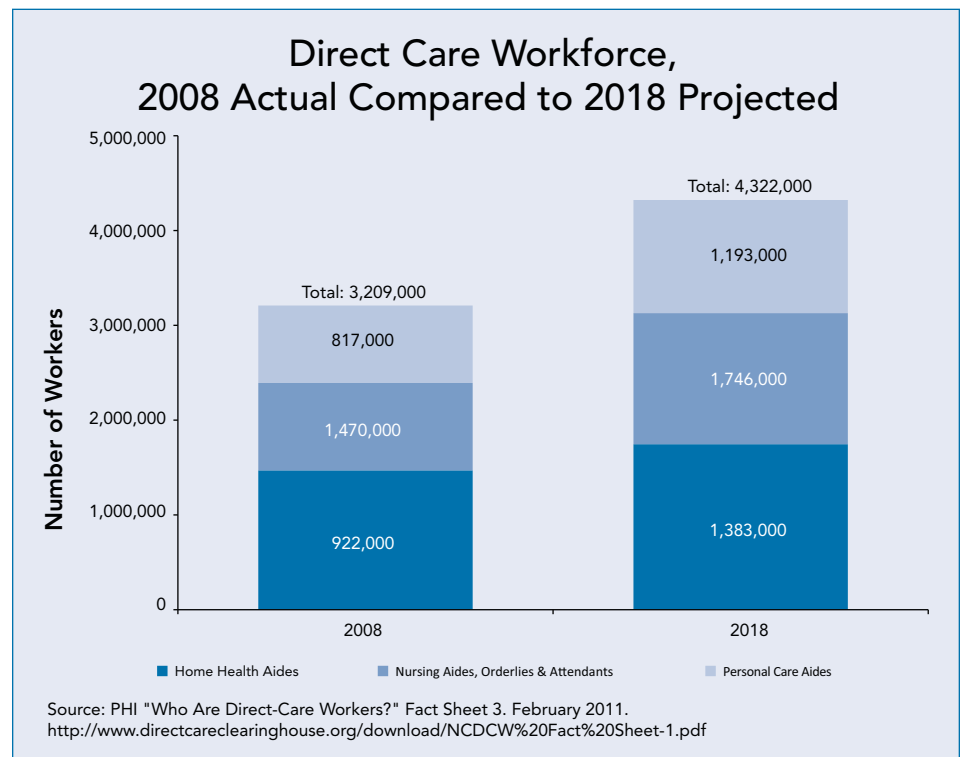
An important companion provision is for state health care workforce development grants. Training and licensing of direct care workers vary greatly from state to state. The ACA establishes a demonstration program that would award grants to six states to develop core competencies, pilot training curricula, and develop certification programs for personal and home care aides. The law appropriates a total of \$85 million for five years to this demonstration grant program. (See more on the role of the states below).

The law also establishes a Personal

Care Attendants Workforce Advisory Panel. The function of the panel is to advise the U.S. secretary of health and human services and Congress on the number of personal care attendant workers, their salaries, wages and benefits and the adequacy of access to their services. The work of the panel will be subject to the constraints of the appropriations process.

**Many provisions in the ACA pertain to health workforce education and training at all levels, assessing needs, and the delivery of care. But the states will have a major role in how it plays out.**

Many medical and nursing schools and other educational institutions training health care workers are financially supported by their states and the states have much to say about the number of slots in these schools and the number of degrees awarded. States are the government entities under which licenses to practice are granted. State practice acts set boundaries on what a health professional can or cannot do, defining the activities that a



qualified professional can perform.

In essence, physicians are not limited in their scope of practice. Though they are also licensed by their state, scope of practice laws for physicians are consistent throughout the country. They can practice medicine and perform surgery limited only by the standards set by their professional associations or certifying boards, institutional policies and the standard of practice in the geographic area in which they perform.

This is less true for other health professions. For example, the tasks nurses and physician assistants are allowed to perform independently vary from state to state. In some states, advance practice nurses can see patients and prescribe medications with less supervision by physicians than in other states, or with no supervision at all.

In such states, it is not unusual to see a nurse practitioner running a primary care practice or clinic in a rural area where there is a physician shortage. A physician may be on call as backup for the nurse when necessary, or the physician may visit the practice weekly to see special cases. The ACA creates a \$50 million grant program to support such nurse-managed clinics.

**Evidence cited by many experts suggests that quality and safety are not compromised and access is improved when nurses are able to exercise the practice of their skills to their full potential.** However, most states require physician supervision of nurses.

Currently only 11 states allow nurse practitioners to practice independent of a physician. An October 2010 report by the Institute of Medicine recommended that nurses be allowed to practice to the full extent of their education and training. It suggested that the federal government might promote reform of states' scope of practice laws by sharing and providing incentives for the adoption of best practices.

Several states have faced lawsuits over the last decade from professional groups seeking to change their state's practice acts. Examples include nurse anesthetists in California and Colorado, nurse practitioners in Florida and direct-entry midwives in Illinois. These noteworthy examples notwithstanding, generally professional groups seek to change practice acts through legislation, not through lawsuits.

Another element in the federal-state health reform partnership and also part of the investment strategy in primary care is a provision in the ACA that encourages states to plan for and address health professional workforce needs. In June 2010, HHS Secretary Kathleen Sebelius made \$5 million available for states to plan and implement innovative strategies to expand their primary care workforce by 10 to 25 percent over 10 years to meet the increased demand for primary care services.

**Some analysts question whether physicians being trained today are learning the right skill set.** Are they being trained to practice evidence-based medicine, team-based care, care coordination and shared decision making?

The June 2010 report of the Medicare Payment Advisory Commission (MedPAC) asserts that a reformed delivery system will "require health care professionals trained to provide coordinated care across institutional boundaries and trained in the skills required to promote patient safety and quality."

It raises the question of whether GME training is taking place in the right setting and is imparting the necessary skills. It suggests that currently there is an overemphasis on hospital based training or inpatient care. An essential part of training, the report asserts, should involve time and experience in other settings such as physician practices, nursing facilities and nonhospital clinics to prepare providers for the tasks they will face in caring for chronic conditions and keeping people out of hospitals.

The U.S. is a racially and ethnically diverse nation and is projected to become even more so in the future.

**Though there has been an increase in diversity in U.S. medical schools overall, including some significant gains in 2010, many ethnic groups remain underrepresented relative to their numbers in the U.S. population.**

This is particularly true of Blacks, Latinos, and Native American groups. The issue is of importance with regard to access to care and quality of care. For example, speakers of other languages may be at a disadvantage if they don't understand the information given them by their provider.

People who are ill might delay seeking care if they fear they will not be treated by someone who understands their culture or language. This is true at all levels of care — primary care, specialty care, long-term care, home health care — and in all settings — medical office, hospital, nursing home, or home and community based care.

The policy solutions are not simple and require action on multiple fronts. Recruiting for health careers begins at early education levels and entails exposing children at all ages to education and career options that might not be in their immediate frames of reference.

**The health industry has been growing jobs steadily for some time, even during recent bad economic times.**

According to the Bureau of Labor Statistics, the economic downturn beginning in December 2007 has resulted in a loss of 8.4 million jobs. In this same period, health care employment grew by 732,000.

The largest segments of the health care workforce are found in hospitals (40 percent), nursing and residential care facilities (21 percent), and physician offices (16 percent). This speaks to the importance of local hospitals and other medical facilities to the

economy of a community and to the political importance of health care overall, even in the face of efforts to “bend the health care cost curve.”

There is little doubt that the health care workforce affects us all. There is also little doubt that it is hard to make policy decisions based on unknowns and projections that vary greatly from one report to another.

This is especially so while health care delivery itself may be undergoing a dramatic transformation. **Ed Salsberg, director of the new National Center for Health Workforce Analysis, observed that “increasing the supply alone will not be sufficient to assure access. Redesigning the delivery system to make more effective use of our health workforce is critical.”** However, we can try to interpret what the projections of workforce shortages really tell us; and we can attempt to identify the policy questions that we face now and will face in the near future.

Are the physician shortages absolute or distributional? What choices are medical students, nursing students,

and others making with regard to area of practice and why? Which health professional categories are growing jobs? What role will nurses play in the redesign of health care delivery?

How can we make primary care more attractive as a career and how can we attract more providers to underserved areas? Does increasing the supply through additional medical schools, nursing schools and other training programs get at the shortage in adult primary care?

On the national versus state front, there are additional policy issues that require a closer look, issues not touched on here. For example, in the era of technology and the advances being made in telemedicine, what happens when providers practice across state lines? Will their state licenses allow them privileges to practice in other states and will they be reimbursed for their services? Is there a

need for national standards so that state licensing and scope of practice laws do not impair access?

Policymakers, stakeholders and the American public can look forward to developments on several fronts:

- Data forthcoming from the National Center for Health Workforce Analysis providing some answers on workforce needs;
- Recommendations on policy issues from the new National Health Care Workforce Commission to the Secretary and Congress; and
- Physicians, nurses and all members of team-based care working together to design and implement a more efficient, high quality, patient centered medical system.

*For the sources used in writing this issue brief, email [info@allhealth.org](mailto:info@allhealth.org) or call 202/789-2300.*

## Acknowledgements

This publication was made possible by a grant from the Robert Wood Johnson Foundation. The Alliance is grateful for that support.

The Alliance also thanks Deanna Okrent, the author of this paper.

The Alliance is a nonpartisan, not-for-profit group committed to the education of journalists, elected officials and other shapers of public opinion, helping them understand the roots of the nation's health care problems and the trade-offs posed by various proposals for change.

Design by Yael Konowe of Yael Design, Reston, Va.

Printed on recycled paper, © 2011.



**Alliance for Health Reform**  
1444 I Street, NW, Ste 910  
Washington, D.C. 20005  
Phone 202/789-2300  
Fax 202/789-2233  
[www.allhealth.org](http://www.allhealth.org)

## Selected Experts

■ <b>Linda Burnes Bolton</b> , Cedars Sinai Medical Center	310-423-5191
■ <b>Peter Buerhaus</b> , Vanderbilt University	615-322-4400
■ <b>Jay Crosson</b> , Kaiser Permanente Health Policy Institute	510-393-9430
■ <b>Catherine Dower</b> , University of California San Francisco	415-476-1894
■ <b>Susan Hassmiller</b> , Robert Wood Johnson Foundation	609-627-7585
■ <b>Darrell Kirch</b> , Association of American Medical Colleges	202-828-0400
■ <b>Robert L. Phillips, Jr.</b> , The Robert Graham Center	202-331-3360
■ <b>James Potter</b> , American Academy of Physician Assistants	703-836-2272
■ <b>Tom Ricketts</b> , Cecil G. Sheps Center	919-966-5541
■ <b>Ed Salsberg</b> , HRSA	301-443-9355
■ <b>Dorie Seavey</b> , PHI (Paraprofessional Healthcare Institute)	617-630-1694
■ <b>Joel Teitelbaum</b> , George Washington University	202-994-4423

## Selected Websites

■ <b>Alliance for Health Reform</b>	<a href="http://www.allhealth.org">www.allhealth.org</a>
■ <b>Association of American Medical Colleges</b>	<a href="http://www.aamc.org">www.aamc.org</a>
■ <b>Cecil G. Sheps Center for Health Services Research</b>	<a href="http://www.shepscenter.unc.edu">www.shepscenter.unc.edu</a>
■ <b>HealthReformGPS</b>	<a href="http://www.healthreformgps.org">www.healthreformgps.org</a>
■ <b>HRSA Bureau of Health Professions</b>	<a href="http://bhpr.hrsa.gov">bhpr.hrsa.gov</a>
■ <b>Institute of Medicine</b>	<a href="http://www.iom.edu">www.iom.edu</a>
■ <b>MedPAC</b>	<a href="http://www.medpac.gov">www.medpac.gov</a>
■ <b>PHI (Paraprofessional Healthcare Institute)</b>	<a href="http://www.PHInational.org">www.PHInational.org</a>
■ <b>Robert Graham Center</b>	<a href="http://www.graham-center.org">www.graham-center.org</a>
■ <b>Robert Wood Johnson Foundation</b>	<a href="http://www.rwjf.org">www.rwjf.org</a>

For additional experts and websites on this and other subjects, go to [www.allhealth.org](http://www.allhealth.org)