

# TRAINING THE HEALTH WORKFORCE OF TOMORROW

ISSUE BRIEF NO. 12

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BASED

ON A

GRANTMAKERS

IN HEALTH

ISSUE DIALOGUE

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WASHINGTON, DC





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## Foreword

As part of its continuing mission to serve trustees and staff of health foundations and corporate giving programs, Grantmakers In Health (GIH) convened a small group of grantmakers and national experts concerned about health workforce issues. This roundtable – held on October 31, 2001, in Washington, DC – explored various issues related to the supply, composition, and competency of the health workforce, and the role that these factors play in maintaining and improving the health status of individual patients and broader populations. The session also highlighted the current activities of and future opportunities for foundations.

This Issue Brief synthesizes key points from the day’s discussion with a background paper prepared for roundtable participants. It includes quantitative and qualitative information on workforce issues and profiles public sector and grantmaker strategies for addressing workforce problems.

Special thanks are due to those who participated in the Issue Dialogue but especially to presenters and discussants: Susan Bunting, Ph.D., president of the Foundation for Seacoast Health; Vanessa Northington Gamble, M.D., vice president of the Division of Community and Minority Programs at the Associa-

tion of American Medical Colleges; Jerry Johnson, M.D., interim chair of the Division of Geriatric Medicine at the University of Pennsylvania; Christopher Langston, Ph.D., program officer at The John A. Hartford Foundation, Inc.; Jane Isaacs Lowe, Ph.D., senior program officer at The Robert Wood Johnson Foundation; Ed O’Neil, Ph.D., director of the Center for the Health Professions at the University of California at San Francisco; Sam Shekar, M.D., M.P.H., associate administrator at the federal Health Resources and Services Administration’s Bureau of Health Professions; and Julie Sochalski, Ph.D., FAAN, RN, assistant professor at the University of Pennsylvania School of Nursing.

Anne L. Schwartz, Ph.D., vice president of GIH, planned the program, wrote the initial background paper, and moderated the session. Larry Stepnick of The Severyn Group, Inc. synthesized the background paper with key points made at the meeting.

GIH also gratefully acknowledges the California HealthCare Foundation, The California Wellness Foundation, The Helene Fuld Health Trust, The John A. Hartford Foundation, Inc., and The Robert Wood Johnson Foundation for their support of this program.

# About GIH

Grantmakers In Health (GIH) is a nonprofit, educational organization dedicated to helping foundations and corporate giving programs improve the nation's health. Its mission is to foster communication and collaboration among grantmakers and others, and to help strengthen the grantmaking community's knowledge, skills, and effectiveness. Now celebrating its 20th year, GIH is known today as the professional home for health grantmakers, and a resource for grantmakers and others seeking expertise and information on the field of health philanthropy.

GIH generates and disseminates information about health issues and grantmaking strategies that work in health by offering issue-focused forums, workshops, and large annual meetings; publications; continuing education and training; technical assistance; consultation on programmatic and operational issues; and by conducting studies of health philanthropy. Additionally, the organization brokers professional relationships and connects health grantmakers with each other as well as with others whose work has important implications for health. It also develops targeted programs and activities, and provides customized services on request to individual funders. Core programs include:

- **Resource Center on Health Philanthropy.** The Resource Center monitors the activities

of health grantmakers and synthesizes lessons learned from their work. At its heart are staff with backgrounds in philanthropy and health whose expertise can help grantmakers get the information they need and an electronic database that assists them in this effort.

- **The Support Center for Health Foundations.** Established in 1997 to respond to the needs of the growing number of foundations formed from conversions of nonprofit hospitals and health plans, the Support Center now provides hands-on training, strategic guidance, and customized programs on foundation operations to organizations at any stage of development.
- **Building Bridges with Policymakers.** GIH helps grantmakers understand the importance of policy to their work and the roles they can play in informing and shaping public policy. It also works to enhance policymakers' understanding of health philanthropy and identifies opportunities for collaboration between philanthropy and government.

GIH is a 501(c)(3) organization, receiving core and program support from nearly 200 foundations and corporate giving programs each year.

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## Introduction

At the core of every health care system, institution, and patient encounter is a health professional. The effectiveness of those systems, institutions, and encounters in responding to patient needs depends upon many things – the availability of appropriate facilities, the adequacy of supplies, the state of clinical knowledge, and an individual’s ability to access services when needed. But any of these would be insufficient without appropriately trained professionals. Thus, the supply, composition, and competency of the health workforce are key ingredients in maintaining and improving the health status of individual patients and broader populations.

The desired number, mix, and capabilities of the nation’s health workforce have been debated for decades, resulting in literally thousands of pages of analysis, countless federal and state laws, and philanthropic initiatives by the dozen. The perennial nature of this activity reflects in part the complexities of addressing workforce needs in an environment where so many actors – health care institutions, educational institutions, consumers, and the professionals themselves – have so much at stake. It also reflects the reality that advances in scientific knowledge, changes in the delivery system, and shifts in population demographics have implications for the training of and roles played by the health workforce.

On October 31, 2001, Grantmakers In Health (GIH) convened an Issue Dialogue to discuss current opportunities for grantmakers to improve the fit between training and population health needs. The program focused on four challenges related to training the future health workforce: shifting the geographic distribution of the health workforce to ensure access

in underserved areas; improving representation among racial and ethnic minorities; addressing the current shortage of nurses, particularly in inpatient settings; and improving health professionals’ competency in addressing the complex health care needs of the elderly.

This Issue Brief brings together information from a background paper written in preparation for the Issue Dialogue with the presentations and discussion that took place at the meeting. It is organized around the four key challenges that were the focus of the meeting. Within each challenge area, the report provides background information on the issue; lays out the reasons for concern; presents relevant research findings; and describes efforts being undertaken by the government at both the federal and state level, as well as individual projects and broader-based initiatives of private philanthropy.

Because the U.S. health workforce is so large, currently numbering more than 11 million jobs, and encompasses so many diverse fields of endeavor, it would be difficult to do justice to the entire array of professionals and future health care needs in a single report. This report, therefore, focuses primarily on physicians and nurses. Earlier GIH work touched on workforce needs related to dentistry (*Filling the Gap: Strategies for Improving Oral Health*) and long-term care (*Long-Term Care Quality: Facing the Challenges of an Aging Population*). In addition, many important issues with implications for health professions training – such as improving the competency of physicians in behavioral health, fostering integration of medicine and public health, successfully incorporating informatics and other technological developments into clinical practice, and developing practices consistent with improved patient safety – are not discussed here.

## Improving Access in Underserved Areas

Despite rapid growth in the number of physicians practicing in the United States, many Americans who live in certain geographic areas face difficulties in accessing health care services.

### Documenting the Problem

The supply of U.S. physicians has grown rapidly for several decades. In 1996, there were 701,200 active physicians, more than double the number in 1970.<sup>1</sup> During this period, the number of physicians per 100,000 population increased from 155.6 to 260.0 (Bureau of Health Professions 2000b).

Growth in physician supply reflects, in part, a long-term and concerted federal policy effort to increase enrollment in health professions schools, assuming that as supply increased, market forces would result in the diffusion of physicians to underserved areas. The Health Professions Educational Assistance Act (HPEAA) of 1963 provided substantial direct federal assistance to medical education offering construction grants to health professions schools that agreed to increase enrollment, allocating specific dollar amounts per student (capitation grants) to the schools, and providing loans to students. Subsequent amendments to the HPEAA, including the 1968 Health Manpower Act, increased capitation grants and expanded loan and scholarship programs (Physician Payment Review Commission 1992).

Boosting overall supply, however, has not led to a more equitable distribution of professionals across geographic areas. The ratio of physician-to-population varies substantially across states. In New York, there are 122.5 primary care

physicians per 100,000 population, while in Idaho there are only 56.7 per 100,000 population. The geographic distribution of registered nurses (RNs) mirrors that of physicians. In March 2000, the New England region had the highest concentration of employed RNs at 1,075 employed nurses per 100,000 population. The lowest state ratio was Nevada with only 520 employed nurses per 100,000 population (Division of Nursing 2001).

As of July 2000, there were 2,706 geographic areas, population groups, and facilities that were designated by the federal government as primary medical care health professional shortage areas. An estimated 50 million people live in these underserved areas, one half in rural areas and the other half in inner cities; serving their needs would require 13,000 physicians. Some of these shortage areas are within larger geographic areas that seem to have an adequate supply of providers. For example, even in “physician-rich” Los Angeles and San Francisco, individuals in certain parts of the city – particularly low-income areas where most residents lack insurance – have difficulty accessing care (O’Neil 2001).

In contrast with physicians, advanced practice nurses (those with additional education and/or certification preparing them for specialized roles) tend to be more geographically dispersed. A recent California study found that significant proportions of nurse practitioners, physician assistants, and certified nurse midwives practice in areas that are designated by the federal government as underserved. In fact, when the definition of underserved areas was expanded beyond federally designated areas to include county hospitals and community health centers (sites serving large numbers of the uninsured and publicly insured), the study found that nearly two out of every five nurse practitioners

<sup>1</sup>This number includes 663,900 allopathic physicians and 37,300 osteopathic physicians.

practice in an underserved setting (Office of Statewide Health Planning Development/Center for California Health Workforce Studies 2000).

## Levers of Change

In their review of more than two decades of workforce initiatives funded by The Robert Wood Johnson Foundation, Isaacs and his colleagues (1997) commented, “So far, nobody has the key, if one exists, to overcoming the barriers that discourage health professionals from serving inner-city and rural communities.” Public and private sector funders have tested a variety of strategies and levers to improve the geographic distribution of health professionals as a way to improve access for the underserved. The federal government has relied primarily on categorical grant programs; states have also used targeted grant programs. A 1996 survey found that 41 states were seeking to recruit practitioners to shortage areas by offering loan repayment/forgiveness programs, direct financial incentives, resident support, and scholarships in return for service (Pathman et al. 2000). The states also regulate licensure, certification, and scope of practice, and provide substantial support for medical education (about \$3.25 billion in the 1998-1999 academic year)(Henderson 2001). They have used this leverage to promote policy goals, such as increasing the share of practitioners in primary care or those practicing in underserved areas.

What follows is a review of several major strategies pursued by federal and state governments and foundations for addressing the issue of access to care in underserved areas.

### Offer Financial Support in Exchange for Service

Created in 1970, the federal National Health Service Corps (NHSC) offers scholarships and loan repayment assistance to health professionals agreeing to serve in underserved communi-

ties for a defined period. At its peak in 1980, the NHSC funded more than 6,000 awards annually; at the end of fiscal year 1999, however, only about 2,500 physicians, dentists, nurse practitioners, and others were serving in the Corps (Physician Payment Review Commission 1992; Clemmit 2000).

Private funders have sponsored similar efforts. Each year since 1998, The Healthcare Foundation of New Jersey (HFNJ) has provided educational funds and support to 80 students in the Newark, New Jersey, area who are pursuing health careers and working to improve access to care in Newark. The HFNJ Service Scholarship Program provides tuition assistance, internships, and academic support to medical students who agree to work in Newark for at least one year following graduation. Seven educational institutions are partners in the program, having agreed to match foundation dollars and to support Service Scholars academically.

There has been a longstanding debate on whether financial support in exchange for service is a successful strategy. On one hand, the NHSC has addressed the persistent need for health care services in many areas, particularly in localities which are remote and those where other highly paid professionals choose not to live or work. Supporters of the program point to the need to greatly expand its funding (now about \$100 million annually) to extend service to additional areas. On the other hand, the existence of the Corps has not led to significant or permanent changes in the geographic distribution of health professionals. Most NHSC personnel leave shortage areas when their assignments conclude, reflecting the challenging circumstances of clinical practice in many of these communities (Clemmit 2000). In one study of professionals assigned to rural areas under the NHSC, four out of five physicians

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*What we know is that forced  
 marriages don't work....It's  
 hard to get kids who grew up  
 in Pacific Heights and go off  
 to medical school to relocate  
 in Bakersfield.*

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left rural practice altogether after completion of their assignments (Pathman et al. 1992).

The Josiah Macy, Jr. Foundation funded a study to explore the feasibility of changing the National Health Service Corps program to respond to some of these issues. The study was initiated out of concern that NHSC enrollment was dropping because the Corps does not allow for completion of graduate training or adequately address the issue of medical graduate indebtedness. Discussions concerning this project began in 1997; the feasibility study for a revised program has since been completed and pilot academic health center sites were selected from diverse geographic locations. The Association of Academic Health Centers was a collaborating partner in the project. The study team also sought input from the federal Council on Graduate Medical Education, the Institute of Medicine, representatives of academic nursing and medicine, and government agencies (Josiah Macy, Jr. Foundation 2000).

States are also reevaluating their scholarship and loan repayment programs, and a few are investing in data collection to better inform decisionmakers about program participants and retention in underserved areas. Strategies include refining selection criteria for scholarships and loans, placing more emphasis on developing community sponsorship in underserved areas, changing funding levels and payback conditions, and instituting stronger penalties for noncompliance (National Center for Health Workforce Information and Analysis 2001).

### **Recruit Residents of Underserved Communities to Serve Those Communities**

Many experts believe that programs such as the National Health Service Corps are stop-gap measures. Permanent staffing solutions for underserved areas require individuals who are willing to commit both personal and professional lives to these communities. Because growing up in an underserved area is a predictor of subsequent practice in such areas (Rabinowitz 1988), some initiatives have focused on recruiting such individuals to the health professions. Others have focused on expanding the scope of practice for midlevel practitioners (nurse practitioners, certified nurse midwives, and physician assistants) on the assumption that these professionals are less mobile than physicians, and therefore less likely to leave practice once established.<sup>2</sup>

The federal Health Resources and Services Administration's Area Health Education Center (AHEC) program seeks to increase the number of individuals from minority and underserved communities who enter health careers, and to respond to emerging needs and priorities within these communities. The ultimate goal is to promote health, prevent disease, and provide cost-efficient primary health care services in areas that traditionally have been underserved. AHEC cooperative agreements are awarded to public or private nonprofit accredited schools of allopathic or osteopathic medicine, incorporated consortia or the parent institutions of such schools, and accredited schools of nursing. Model state-supported AHEC agreements provide additional funding for some programs once core AHEC funding runs out. These funds help grantees to meet

<sup>2</sup>Nurse practitioners have independent practice authority in 21 states, potentially allowing them to act as substitutes for primary care physicians. Analysis of the practice and competency of nurse practitioners and physician assistants generally indicates that these professionals can perform many tasks and provide care (within their scope of practice) that is equivalent in quality to that provided by physicians (Grumbach and Coffman 1998).

their objectives through the following types of activities:

- linkages between health care delivery systems and education resources in underserved communities;
- collaborative community-based education and training opportunities for health professionals, students, and primary care residents;
- development of systems for learning and networks for information dissemination;
- support of multidisciplinary and interdisciplinary training in response to community needs; and
- technical assistance to educators and others.

In fiscal year 2000, HRSA funded 39 AHEC centers and 40 AHEC programs for a total of \$19.7 million.

Foundations are also active in recruiting residents of underserved areas. For example, the Association of Academic Health Centers serves as the national program office for The Robert Wood Johnson Foundation's Partnerships for Training (PFT) initiative. The PFT initiative assists communities in underserved rural and urban areas to "grow their own" health care providers in order to remedy persistent shortages of primary care providers. PFT consists of eight regional partnerships of nurse practitioner, certified nurse-midwifery, and physician assistant programs that are extending the geographic reach of their education programs through the use of distance technology and the establishment of satellite campuses. One PFT grantee – the Mountain and Plains Partnership based at the University of Colorado Area Health Education Center – is working to increase, by at least 110 providers, the number of primary care nurse practitioners, certified nurse midwives, and physician assistants practicing in the 38 most underserved rural and urban counties of Colorado (90 graduates) and Wyoming (20 graduates.) The project will be

an interdisciplinary, integrated educational program that is delivered to students electronically, using both computer-based and room-size, real-time interactive video conferencing. Students will receive clinical experiences in interdisciplinary settings in or close to their home communities.

Another example comes from the Foundation for Seacoast Health Scholarship Program, which offers annual scholarships from \$1,000 to \$10,000 to low-income highly qualified students who live in the foundation's primarily rural service area (a nine-community area along the Maine and New Hampshire coast) and who are interested in health careers. Recipients must plan to pursue a degree program in health-related fields of study at an accredited institution of learning. Since its inception, the scholarship program has provided nearly \$1.9 million in funds to 256 individuals, one-third for graduate-level training and two-thirds for undergraduate school. While remaining in the nine-community area is not an explicit requirement for receiving a scholarship, it is nonetheless an unstated goal. The program appears to be succeeding. A recent survey of scholarship recipients (which garnered a 30 percent response rate) suggests that 77 percent are still in health care, and 88 percent of these individuals still work somewhere in New England. Presumably a fair number of these individuals returned home to practice. Looking ahead, however, the Foundation for Seacoast Health plans to make changes to its program. It plans to narrow the field of applicants to encourage entry into high-demand fields such as nursing, pharmacy, dentistry, and laboratory technology. In addition, the program hopes to reach students earlier than high school, since views about potential careers in health fields may be limited.

Several recent projects funded by The California Endowment provide a twist on the home-

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*The reality is that service to the [underserved] population seems to be almost independent of the available supply of physicians. Far more important factors are cultural expectations, access to insurance, ability to pay. Those are the markers that produce access to care, not the geographic availability or proximity of any kind of health care professional.*

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grown approach, focusing on the previously untapped pool of well-trained immigrant health care providers in California whose expertise, language skills, and resources could be put to work in low-income community clinics that are chronically understaffed. A \$2 million grant to the San Francisco Bay Area Regional Health Occupations Resource Center is supporting Welcome Back, a counseling, education, and job placement service for immigrant health professionals, which will help them navigate the state's licensing system and obtain the necessary credentials required to work in the United States. Community Health Works, a 10-year-old educational partnership between the Department of Health Education at San Francisco State University and the Health Sciences Department of City College of San Francisco, will provide the infrastructure and resources necessary to launch the new program. Welcome Back will offer services at both institutions, and educational pathways to speed transfer and graduation between the community college and four-year university. Upon completion of their training, students will be required to volunteer to work 200 hours in medically underserved areas.

Another Endowment grant is supporting the creation of the International Health Care Workers Assistance Center for the Los Angeles and Southern California area. The center will assist immigrant and refugee physicians, nurses, radiology technicians, respiratory technicians, and other health professionals to obtain appropriate licenses and credentials to work in the U.S. health care system. Orientation and job placement services will also be provided. The center is expected to open in 2002.

### **Support Development of Financially Viable Practice Sites**

Long-term solutions to the access woes of underserved communities will likely require changes in expectations about the nature of

practice in these communities. The adequacy of payment, the availability of nonphysician staffing (both clinical and administrative), and relationships with other providers, such as clinics and hospitals, all affect the ability of health professionals to sustain successful practices.

Health funders have been working over many years to identify the right mix of supports. In 1991, The Robert Wood Johnson Foundation launched Practice Sights: State Primary Care Development Strategies to strengthen state efforts to recruit and retain primary care providers (both physicians and midlevel providers) and to develop and sustain practice sites in underserved areas. Authorized at up to \$16.5 million, the program provided planning grants to 15 states. Ten of these received three-year implementation grants; of these, four also received program-related investments allowing the creation of loan funds totaling nearly \$20 million for capital projects focused on increasing access to services. Strategies pursued by states included:

- creating recruitment centers to publicize jobs and match providers with sites,
- providing technical assistance to help sites become more financially viable,
- adopting financial incentives such as loan repayment for providers willing to practice in underserved areas,
- establishing locum tenens programs to provide temporary backup for providers desiring to attend conferences or take vacations, and
- expanding the scope of practice for midlevel providers.

Two major lessons emerged from the program. First, lack of insurance coverage hampered the expansion of sites for the underserved. Second, the national program office's technical assistance services allowed the initiative to reach more states than it could simply by providing planning and implementation grants (The Robert Wood Johnson Foundation 2001b).



### Multifaceted Strategies

Researchers at the University of California, San Francisco argue that multiple strategies are necessary to improve the supply of physicians in underserved areas. Extrapolating from California's experience to other sites, Grumbach and his colleagues (1999) recommend three core strategies:

- making practicing in shortage areas more attractive through scholarships and loan repayment programs and temporary placement efforts,
- providing educational opportunities in rural and inner-city areas during medical school and residency, and
- encouraging minorities from disadvantaged backgrounds to develop career interests in health care through extension of the federal Health Careers Opportunity program, and development of selective admissions policies.

The Southern Rural Access Program, a Robert Wood Johnson Foundation-supported effort, brings together several strategies for improving access in the nation's eight most rural and medically underserved states. Nearly \$14 million has been committed to support projects to increase the supply of primary care providers in underserved areas, strengthen the health care infrastructure, and build capacity at the state and community level in Alabama, Arkansas, Georgia, Louisiana, Mississippi, South Carolina, Texas, and West Virginia. The Claude Worthington Benedum Foundation is providing additional support for work in West Virginia. Key components of the program include:

- providing support for the rural pipeline through mechanisms such as mentoring, summer jobs, academic assistance, clinical rotations, loan forgiveness, long-distance learning support, leadership training, assis-

tance in establishing a clinical practice, or other innovations created by the partners in each state.

- developing effective recruitment and retention strategies similar to those initiated under the foundation's Practice Sights Program, including those requiring policy changes. Support is available to sites for options including fostering community investment during the recruitment process and creating links for hospital systems or rural health networks to participate in recruitment. Support may also promote primary care-friendly policy changes such as reforming payment policy under Medicaid and other state funded insurance plans and broadening the scope of practice for nurse practitioners, physician assistants, and nurse midwives.
- building rural health networks – formal organizational arrangements among various providers – that can help improve ability to enter into and administer risk contracts with payers, use population-based approaches to assess health care needs, involve local residents in decisionmaking processes, and retain health care services and dollars in local communities (Southern Rural Access Program 2001).

The W.K. Kellogg Foundation also combined multiple strategies into a single initiative, Community Partnerships with Health Professions Education, which it funded in 1996. Although focused primarily on increasing the proportion of health professions students choosing primary care careers, the initiative also put a strong emphasis on training physicians and nurses for work outside the hospital, in communities where the need was great. Strategies undertaken by seven consortia around the country included:

- expanding student experiences and contacts with primary care practice in the community,

- using community-institutional partnership boards to influence institutional policies and orient them toward service,
- developing faculty's skills for successful community practice, and
- supporting policy changes, including the redirection of public financing for graduate medical education, to support training in community-based sites.

This initiative, and a subsequent effort focused on graduate training in medicine and nursing, were effective in influencing career choices. In nursing, for example, 58 percent of participants chose community-based or rural practice, compared to less than 20 percent of those in traditional programs. The effort in West Virginia became part of an ongoing state initiative that has resulted in a substantial number of students undertaking rural rotations as part of their training, and an increased number of graduates of state training programs locating in rural areas (W.K. Kellogg Foundation undated).

## Promoting Diversity

Minorities remain underrepresented within the health workforce. Promoting greater diversity, moreover, poses a significant challenge.

### Documenting the Problem

The racial and ethnic mix of the U.S. population is rapidly changing. Currently, racial and ethnic minorities make up one-quarter of the nation's population; by 2010, they will comprise nearly one-third. In some states, such as California, Texas, and Florida, minorities already (or soon will) outnumber the white non-Hispanic population. But minorities account for less than 10 percent of the health workforce (Bureau of Health Professions 2000b).<sup>3</sup>

California is illustrative of the lack of diversity in the health workforce. According to data from the Center for the Health Professions at the University of California at San Francisco, minorities are nearly the majority in California. Non-Hispanic whites account for 50 percent of the population, with Hispanics representing 31 percent, followed by Asian or Pacific Islanders (12 percent) and African Americans (7 percent). Yet non-Hispanic whites account for nearly 80 percent of nurses and 70 percent of physicians. Hispanics are vastly underrepresented in both professions, comprising only 4 percent of nurses and physicians. African-American nurses and physicians are also in short supply, representing just 4 percent of nurses and 3 percent of physicians.

Although progress is being made to diversify the health professions, parity has not been reached. For example, minority enrollment in health professions education lags behind enroll-

<sup>3</sup>Discussions of diversity in the health workforce typically focus on underrepresented minorities defined as African Americans, Hispanics, and Native Americans. Asian Americans are actually overrepresented, comprising, for example, 17.6 percent of enrollment in allopathic medical schools in 1996-1997 although they account for only 3.7 percent of the U.S. population (Bureau of Health Professions 2000b).



ment in postsecondary education. In 1997, underrepresented minorities (African Americans, Hispanics, and Native Americans) accounted for 20 percent of students enrolled in institutions of higher education, but for just 15.6 percent of first year enrollees in allopathic medical schools (Bureau of Health Professions 2000b). And while the number of minority nurses has doubled since 1980, only 9.6 percent of all registered nurses are minorities (National Advisory Council on Nurse Education and Practice 2000). A recent study of nurse practitioners and certified nurse midwives in California found that racial and ethnic minorities were underrepresented in both fields (Office of Statewide Health Planning and

Development/Center for California Health Workforce Studies 2000). Moreover, despite concerted federal policy efforts to improve diversity, the 1996 elimination of affirmative action programs in public postsecondary and graduate schools in California, Louisiana, Mississippi, and Texas – as well as the widening math and science achievement gap between underrepresented minority students and others – create concern that stronger and more effective measures are needed (Smedley et al. 2001).

Increasing diversity among the nation's physicians and nurses matters for reasons of access, quality, and equity. First, minority populations are more likely to live in areas with chronic

## DEFINING MINORITY REPRESENTATION

For the past 30 years, most efforts to expand minority representation in the health workforce have focused on underrepresented minorities, defined by the Association of American Medical Colleges (AAMC) as including African Americans, Mexican Americans, mainland Puerto Ricans, and Native Americans (including American Indian, Native Hawaiians, and Alaska Natives).

Recently, however, demographic, political, and other factors have made it clear that this definition needs to be reconsidered. The population of Hispanic and Asian descent in the United States is now more diverse, and unrest and poor economic conditions overseas have brought immigrants and refugees to the United States from Europe, Africa, and other regions around the globe. In response, an AAMC advisory committee is reviewing the definition, and is expected to produce a final report to the AAMC executive council in June 2002.

One important consideration in defining an underrepresented minority is the demographic makeup of the local marketplace. While Asians and other ethnic groups may be well represented in the health professions nationwide, this is not always true at the community level. Some Asian neighborhoods have an abundance of Asians in the local health workforce; others do not. And the same can be said for communities that are home to a disproportionate number of individuals of other ethnicities, such as Rochester, MN (home to a rapidly growing Somali population), St. Louis, MO (which has a large population of Kosovar refugees), and Arizona (home to many individuals of Hmong descent).

Foundations can play a role in funding studies to evaluate the demographic trends within a community, and the demands placed upon the community's health workforce. Such studies can create more nuanced and focused efforts to improve minority representation. These could also be helpful in responding to legal challenges to programs that seek to promote racial and ethnic diversity within the health workforce.

## MINORITY REPRESENTATION ONLY PART OF STRATEGY TO BUILD CULTURAL COMPETENCE OF WORKFORCE

The changing demographics of American society and the need for health professionals capable of responding to diverse physiological needs and cultural values and beliefs are often cited as reasons for boosting minority representation. But Issue Dialogue participants cautioned that improved minority representation alone is an insufficient strategy for building cultural competence. Health care professionals and patients cannot be matched by race and ethnicity. As one Issue Dialogue participant commented, “The reality is that we aren’t going to have African-American nurses only delivering care to African-American patients, or only have white physicians delivering care to white patients. That’s not a multicultural world.”

Instead, “a set of congruent behaviors, attitudes, and policies must come together as a system to enable professionals to work effectively in crosscultural situations” (Cross et al. 1989). Health professions students should be trained to be comfortable providing services to patients who may be different than they are in terms of race, ethnicity, or culture.

There is a pressing need for more research to bolster arguments on the value of diversity and to evaluate the impact of strategies for strengthening cultural competence on both the technical quality of care, and patients’ satisfaction with care. Issue Dialogue participants noted this as a critical area for foundation funding.

shortages of health care providers. Although the notion of training minorities to treat minorities is problematic, there is a consistent body of research indicating that Hispanic and African-American physicians are more likely to provide services in underserved and minority communities, and are more likely to treat poor and sicker patients (Smedley et al. 2001). Moreover, research conducted by minorities in academia often focuses on health issues or diseases that have a disproportionate impact on racial and ethnic populations (The Robert Wood Johnson Foundation 2001a). Second, a more diverse workforce can be part of a broader strategy for ensuring that minority populations receive care in settings they trust and in ways that respect cultural values and beliefs. Although it is unclear whether cultural competence improves health outcomes, several studies have shown that, for some minority patients, having a minority physician results in better communication, greater satisfaction with care,

and greater use of preventive services (Smedley et al. 2001). Finally, fundamental values of fairness and equity demand that minorities be afforded equal access to economic and professional opportunities, and that the vehicles for doing so recognize personal aptitude for performance, not just on tests, but in clinical settings.

Numerous factors contribute to slow progress in improving the representation of minorities in the health professions. These include inadequate guidance and preprofessional education; financial constraints for individuals seeking advanced degrees; and institutional policies and environments such as inflexible admissions policies, lack of mentors, and lack of faculty. “Short-term recruitment and retention programs funded by the federal government and other organizations, while necessary and useful,” noted the National Advisory Council on Nurse Education and Practice in its 2000 report, “have not been sufficient to fundamen-

tally alter the historical pattern of minority underrepresentation in nursing education.” Another limiting factor is the length of the pipeline. Becoming a physician requires at least seven years of postgraduate education. This means that changes in elementary and secondary education, while needed, take years to pay off.

## Levers of Change

A variety of strategies exist for promoting greater diversity within the health workforce, including strengthening and expanding minority pipeline programs, supporting the professional development of those minorities already in the workforce, and promoting minority faculty development. This section reviews each of these strategies, highlighting both public sector and foundation efforts within each.

### Strengthen and Expand Pipeline Programs

There are two different (but not mutually exclusive) goals for pipeline programs: helping students become interested in health care careers at the K-12 level and strengthening academic preparedness for professional education. Starting early is critical as minority students who have academic trouble in high school are often permanently lost to the health professions pipeline (Smedley et al. 2001). Given the size of the current pool, and given that other fields such as science and engineering draw from it as well, increasing the size of the pool is critical to ensuring a sufficient number of minority physicians in both education and practice.

The federal government operates parallel efforts to achieve these goals. The Bureau of Health Professions’ Health Careers Opportunity Program works to boost math and science skills of promising students from kindergarten through the graduate level. A newer effort, Kids into Health Careers, works to supplement other initiatives aimed at increasing the pool of qualified applicants to health professional training pro-

grams who are economically or educationally disadvantaged or from underrepresented minority populations. Targeted to elementary and secondary students, their parents, teachers, counselors, and school administrators, the program is intended to:

- inform students and parents about different health careers;
- create optimism about the value, rewards, and accessibility of training;
- provide information about availability of financial aid; and
- increase awareness about need for underrepresented minorities (Bureau of Health Professions 2000a).

Issue Dialogue participants talked about the difficulty of recruiting minority youth to health careers, given that many live in underserved communities where they get little experience accessing health services. As one Issue Dialogue participant noted, “How do you know if you want to be a doctor or a nurse or an allied health professional if you really don’t know what the health system is about?”

Private foundations are supporting pipeline programs. The California Wellness Foundation, for example, provided \$100,000 to support the Stanford Medical Youth Science Program (SMYSP), an intensive residential program, directed by Stanford undergraduates, attended by 23 to 24 high school students each year. During a five-week period, participants take classes in human anatomy, organic chemistry, microbiology, physiology, public health, and preventive medicine. Two days a week, students work side-by-side with health care professionals as interns. SMYSP also offers extensive follow-up services and maintains an active alumni network. Among its 285 graduates, 99 percent have enrolled in various colleges, including many top universities in the nation.

.....  
*If you don't see it,  
 you don't dream it.*

VANESSA NORTINGTON  
 GAMBLE,  
 ASSOCIATION OF  
 AMERICAN MEDICAL  
 COLLEGES,  
 OCTOBER 2001  
 .....

The Columbus Medical Association Foundation has funded the work of the Blue Chip Training Academy, which provides at-risk African-American teens with role models from the medical profession to encourage interest in medical careers. The Paso del Norte Health Foundation in El Paso, Texas, is working to establish partnerships to promote health careers for regional students while providing health education interventions. Youth develop leadership skills by conducting primary prevention activities such as education about chronic disease, nutrition, and physical activity, while in service to the community.

As of 1997, The Robert Wood Johnson Foundation had allocated more than \$100 million to programs focused on minority health professionals. In 1985, the foundation combined several enrichment programs for students into the Minority Medical Education Program. Operated by the AAMC, the program offers a free six-week summer course of intensive and personalized medical school preparation for college students at 12 medical school sites around the country; 100 to 120 students complete the course at each site every year. Although there are some differences across sites, core elements include: academic enrichment in key premedical courses such as chemistry, biological sciences, physics, and mathematics; coursework in skills such as problem solving and critical reading and writing; test-taking techniques and preparation for the Medical College Admission Test (MCAT); and clinical experiences in a variety of inpatient and outpatient settings (Minority Medical Education Program 2001). Beyond the classroom experience, a key element of the program is that students get to see other students and faculty members who “look like them.” As a result, they gain confidence that they too can be successful in the health care field. An evaluation of the program found that it enhanced the probability of medical

school acceptance for students with high and low grades and test scores (Cantor et al. 1998).

The Health Professions Partnership Initiative – cosponsored by the W.K. Kellogg Foundation and The Robert Wood Johnson Foundation and administered by AAMC – is a pipeline project that challenges educators in medical, nursing, and other health professions schools to join together and then partner with local school systems and colleges. The goal of the initiative is to enhance the academic preparation of minority students and nurture their interest in health careers, thereby increasing minority participation in all health professions, including medicine. The program works with middle school and high school students in 26 sites around the country, with an emphasis on Hispanic and African-American students with an interest in health careers.

The third round of funding for this initiative began in 1999, with up to 10 grants available for a maximum of \$350,000 each. Five are for partnerships led by schools of public health; five are for partnerships led by any other health professions schools. Partnerships may undertake activities to improve academic performance and ensure students' progress through the health professions pipeline, including: establishing formal partnership councils; developing and implementing joint plans for curricula and educational strategies; establishing or enhancing existing programs in middle or high schools; developing performance benchmarks that facilitate progression of minority students from one partnership institution to the next; actively involving families of students, especially those in middle or high school; strengthening the math and science skills of teachers; administering after-school and summer enrichment programs; improving student understanding of health career opportunities; and developing internships for high school and college students.

## EXPANDING THE PIPELINE: LESSONS LEARNED

Participants at the Issue Dialogue offered a number of lessons they have learned about programs that attempt to bolster the pipeline of minorities interested in careers in health care:

- **Personal interaction works much better than written information.** For example, the Foundation for Seacoast Health set aside funds to promote careers in nursing among high school students. The campaign began with letters sent to guidance counselors, physicians, and hospital representatives. The program had little impact. A better approach is use of one-on-one meetings with students, along with mentoring programs in which interested high school students “shadow” physicians or other health professionals.
- **Guidance counselors in both high school and college may not be the best advocates for the health professions.** Many counselors do not portray the field in a positive light. In addition, counselors tend to discourage students who are not among the top one-third of their class academically from moving into the field. As one expert noted, “we write off kids before we should.”
- **Early intervention is key. High school should not be the first time a student is approached about a career in health.** Rather, students must be groomed for a career in health, ideally through a mentor. Interventions can occur not just in school, but also through other important social and emotional connections (e.g., church, youth groups) that an individual might have in a community. It is also important to use a variety of vehicles for exposing children to health professions, including field trips.
- **Success is not necessarily defined as having an impact on a large number of people in a short period of time.** Building a pipeline takes a long time and is often best accomplished by focusing resources on a small group of individuals.
- **There is a need for continual intervention, and for tracking students as they progress from middle school to high school to college.** At present, programs that focus on these different age groups are not well coordinated; individuals fall through the cracks because they are not tracked as they move from school to school. In addition, parents and students also are not given information about how students can move from one program to another.
- **Broad-based, comprehensive partnerships between local health care institutions, local schools and school systems, vocational schools, parents, and other community organizations are critical.** Health care institutions must be “humble partners” in these efforts, allowing both sides to feel ownership over the program. Successful partnerships take both time and money to build; foundations can play a crucial role in funding them. Building these relationships can be difficult. When grant money goes to the health care institution, school personnel may not feel that they are equal partners. In other instances, foundations focused primarily on health might need to consider partnering with those focused primarily on education to jointly promote programs targeted at local schools.
- **The relative lack of minorities in the health care field is in part a function of the poor quality of the public schools serving those students.** Some experts see public schools as the biggest barrier to success, with the teaching of basic math and sciences being especially problematic. And while the problem is primarily in the inner cities, schools in “first-ring” suburbs are also doing a disservice to minorities who are underrepresented in advanced placement classes. As a result, leaders of health foundations need to consider getting involved with others in philanthropy to address the issue of poor quality education.
- **Minority students need to see “someone like them” if they are to become interested in the field.** It is critical to recruit minorities already in the field to serve as mentors to these students.

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*If we're serious about getting  
the Latina single mother  
who's already employed in the  
hospital into a nursing  
training program, we should  
not put enormous barriers in  
her way.*

EDWARD O'NEIL,  
CENTER FOR THE  
HEALTH PROFESSIONS,  
UNIVERSITY OF  
CALIFORNIA AT  
SAN FRANCISCO,  
OCTOBER 2001

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### **Provide Financial Incentives for Minority Students and Institutions Committed to Minorities**

The federal Bureau of Health Professions provides financial support for minority and disadvantaged students under Title VII of the Public Health Service Act through low-cost loans and scholarships. The largest financial aid program directed at health professions students is the Health Education Assistance Loan (HEAL) program, which allows students to borrow funds from commercial lenders while the federal government insures the loan's principal and interest. Borrowers pay a premium to the Student Loan Insurance Fund to support default and disability payments. In addition, funding is provided to support historically black, tribal, and Asian or Pacific Islander colleges and universities and Hispanic-serving institutions. A separate nurse workforce diversity grants program funds student scholarships and stipends, preentry preparation, and retention activities.

Both The California Endowment and The California Wellness Foundation have provided substantial support to the Health Professions Education Foundation (HPEF) to support scholarships and loan repayment grants to minority and low-income health professions students willing to practice in underserved areas. California Wellness support focused on strengthening HPEF's internal capacity related to marketing, outreach, board development, and evaluation mechanisms.

Examples of other foundation-funded efforts include The HealthCare Foundation for Orange County's award to the University of California at Irvine to increase the ethnic diversity of students in the family nurse practitioner program, and a major grant by The Healthcare Foundation of New Jersey to the Youth Development Clinic of Newark to support internships for minority graduate students at the clinic.

### **Support Professional Development of Those Already in the Health Workforce**

The term "pipeline" suggests a single entry point for prospective health professionals to enter training with a terminal point at which they are discharged into practice. In fact, the pipeline for physicians and nurses can be conceived of as having multiple entry points. Allied health and auxiliary workers, for example, are a potential pool for registered nurses (California HealthCare Foundation 2001). The HealthCare Foundation for Orange County made its largest grant ever (\$595,623) for an effort to tap into this pool as a means of improving the ethnic diversity of the health workforce in its community. The grant was a response to the finding of the Orange County Health Needs Assessment (and other studies) that cultural and linguistic factors present a barrier to care for low-income families. Under the grant, the Anaheim Memorial/St. Joseph Hospital project is teaming with the Regional Health Occupations Resources Center, as well as colleges across the country, in an innovative effort to place existing entry-level minority health workers in local training programs, to upgrade their skills and prepare them for positions such as hemodialysis technicians, sonographers, and emergency nurses. Participating hospitals are committed to offering the workers release time from their current duties and mentoring in their new posts.

A corollary effort has been undertaken by The Commonwealth Fund to develop minority experts in public health and health policy by tapping into the pool of minority physicians. The Commonwealth Fund/Harvard University Fellowship in Minority Health Policy awards five fellowships annually which lead to a master's degree in public health plus exposure to and understanding of important health issues facing minority and disadvantaged physicians. The Fund has also provided support to the School of Public Health at the University of



North Carolina at Chapel Hill (UNC) to develop an initiative within its master's program in public health to attract minority physicians and medical students to the health policy and public health fields. The school also intends to provide all of its students with the means to address racial and ethnic disparities in health. This two-year project will help the school build capacity to reach these goals. Activities will include recruitment of a new faculty member with expertise in minority health issues, design of curriculum, and development of collaborations with historically black colleges and universities to encourage faculty and students to participate in the program.

### **Promote Faculty Development**

Institutional commitment to diversity is an important ingredient in strategies to recruit and retain minority students. One element of such commitment is providing support for minority faculty, as these faculty have an important influence on both the number and quality of minority students. Currently, however, only 4.8 percent of full-time medical faculty members are minorities. A number of observers have commented on the need to provide mentoring opportunities and personal networks of colleagues to support advancement within tradition-bound institutions. Moreover, if alternative pathways to leadership are created (other than climbing the ranks in a prestigious department, then becoming chair, and ultimately dean), it is critical to ensure that these paths are not viewed as the “unqualified” route to success (Rubin 1994).

The federal Bureau of Health Professions' Minority Faculty Fellowship Program assists health professions training programs to increase the number of underrepresented racial and ethnic minorities serving on their faculties. Program funds are used to support skill development for tenured faculty positions, such as training in pedagogy, program administration,

design and conduct of research, grant writing, and the preparation of articles suitable for peer-reviewed journals.

The Robert Wood Johnson Foundation's Minority Medical Faculty Development Program, begun in 1983, seeks to increase the number of minority faculty with senior rank in academic medicine who will encourage and foster development of succeeding classes of minority physicians. The program offers four-year, postdoctoral research fellowships to minority physicians who have demonstrated superior academic and clinical skills and who are committed to careers in medicine (Minority Medical Faculty Development Program 2001). As of 2000, the foundation had awarded 186 fellowships with a total investment of \$62.5 million. A 1995 evaluation found that the program has had and continues to have a “seminal role” in developing the careers of talented minority medical school faculty members. Based on these results, the foundation renewed the program in 1996 and designated it as a core program, a signal of institutional commitment for the foreseeable future (The Robert Wood Johnson Foundation 2001a).

### **Multifaceted Strategies**

Several funders are combining strategies to maximize their effectiveness in improving diversity. The federal Centers of Excellence program provides grants to assist health professions schools in allopathic and osteopathic medicine, dentistry, pharmacy, and graduate programs in behavioral or mental health to address any of multiple factors affecting development of a larger minority health workforce. Funds may be used to develop a competitive applicant pool; improve academic performance; recruit and retain minority faculty; improve information resources, clinical education, and curricula; and train students at community-based health facilities that care for minority patients.

In June 2001, The California Wellness Foundation announced that diversity in the health professions will be one of eight priority areas for the foundation's work over the next several years. The foundation will support multiple strategies to increase diversity in the health professions in California, providing funding for pipeline programs, scholarships, mentoring programs, internships, and fellowships that support and advance career opportunities for people of color in the health professions, including allied health and public health professions. Funding will also be available to organizations that support people of color in the health professions through strategic partnerships, leadership development, continuing education, and networking activities, as well as organizations that educate policymakers about public and institutional policies that promote diversity in the health professions.

The Josiah Macy, Jr. Foundation supports a variety of programs designed to enhance the representation of minorities in the health professions. Recent projects funded by the foundation include:

- a three-year grant of \$918,000 to The Associated Medical Schools of New York. The organization, in cooperation with eight of the state's medical schools, established a postbaccalaureate program to improve the qualifications of minority students who narrowly missed acceptance to a specific medical school. After a thorough assessment to identify areas that require strengthening, students spend a year improving those skills. They then take and successfully complete additional premedical school courses as further preparation before they are admitted, by prior agreement, to a specific medical school. Having exhausted federal funds from the Health Careers Opportunity Program, participating schools are presently operating a scaled-back program. Funding from Macy will permit

the program to continue while a more formal evaluation is conducted.

- a grant of \$518,000 over three years to Beth Israel Medical Center to support training fellowships in neurology for minority physicians. Native New Yorkers will be given preference for training fellowships, since a stated goal of the program is to increase specialty care in targeted minority communities within New York City. The program also aims to increase minority participation in stroke prevention and effective treatment programs for stroke, a major cause of disability in African-American, Asian-American, and Latino populations.
- more than \$1 million over three years to The Sophie Davis School of Biomedical Education of the City University of New York (CUNY) which offers a five-year integrated baccalaureate and preclinical medical program. The school has one of the highest proportions of minority medical student enrollment in the nation. To expand its dual commitment to both minority students and underserved communities, the Sophie Davis School is developing affiliations between CUNY and eight health centers in New York's underserved communities. It is also working with selected health center adjunct clinical faculty members to develop an Introduction to Primary Care curriculum, which will form an 11-week block during the fourth year of the CUNY medical sequence (basically equivalent to the first year of medical school). After the program at Sophie Davis, graduates complete their clinical training at eight cooperating New York medical schools. All students completing residency training commit to providing primary care for at least two years in one of New York's underserved communities.

Finally, the W.K. Kellogg Foundation is currently conducting exploratory work to find out whether community organizing strategies could



be successful in increasing racial and ethnic diversity in the physician workforce. The foundation commissioned a study by Community Catalyst – a national advocacy organization that has worked to engage consumers in efforts to improve access to health care – to assess the potential of new legal enforcement, policy changes, and community involvement initiatives. The organization has also convened several meetings to discuss these issues. Of particular interest is how the reliance of medical schools and teaching hospitals on public financial support (in the form of tax exemptions, subsidies, and direct appropriations) creates broad community benefit obligations, and how a broad-based campaign might be structured to use this as leverage to change medical institutions and their relationships with communities (Community Catalyst 2001).

## Addressing the New Nursing Shortage

The United States has faced several nursing shortages over the past 50 years; in most cases, these were resolved through measures such as wage increases and importation of nurses from overseas. Recently, however, it has become clear that a new type of nursing shortage has arisen, one that may not be so easy to solve.

### Documenting the Problem

In many communities, the nursing shortage has already arrived. Within the last year, for example, a representative of the Foundation for Seacoast Health indicated that Maine hospitals reported a 40 percent increase in nursing vacancies. And the problems facing Maine and other states will only get worse in the years ahead. The Center for the Health Professions has conducted analysis for the state of California which predicts a shortage of 40,000 registered nurses in the state by the year 2020. These figures only account for population growth; they do not consider the impact of an aging population and mandatory staffing ratios that went into effect in California in January 2002. Factoring in these issues leads to an estimated shortfall of 80,000 nurses by 2020. In other words, supply will fall short of demand by almost one-third.

Reports such as these have led to a flurry of activity around the country over the past few years. Task forces have been convened, hearings held, and reports issued. As noted above, in 1999, the California General Assembly passed legislation mandating minimum staffing ratios for RNs and licensed vocational nurses at acute care hospitals, beginning January 2002. Legislation enacted in Oregon in 2000 requires hospitals to develop and implement nurse

staffing plans and establish internal review processes or face penalties. Twelve additional states were also considering proposals to either require adherence to staffing plans or prescribe specific staffing ratios (2001 Nurse Staffing Systems and Ratios 2001). Both the U.S. Senate and U.S. House of Representatives approved bills at the close of 2001 to increase federal resources committed to nursing scholarships, public service announcements promoting the nursing profession, and faculty recruitment. Although the shortage is not affecting all communities, the popular wisdom suggests that the overall national supply will only be sufficient relative to demand in the short term (Salmon 2000). Fagin (2001) argues that a national shortage will be in evidence by 2010.

The cause for alarm is real. Recent research has shown strong and consistent association between staffing (number of hours and mix of personnel) and outcomes in patients for conditions such as urinary tract infections, pneumonia, upper gastrointestinal bleeding, and shock/cardiac arrest (Needleman et al. 2001). Although the literature is mixed as to the most appropriate staffing ratios, it is clear that having too few nurses or the wrong skill mix may harm patient access, costs, and quality.

Nursing shortages have been cyclical since the 1950s. In the past, these have been addressed by paying nurses higher wages and boosting nursing school enrollment (Fagin 2001). But observers of nursing suggest that this shortage is different, and cannot be resolved quickly. Factors indicating the shortage will be chronic include:

- an aging workforce. The average registered nurse is 45.2 years old. This will steadily increase until 2020 when more than 40 percent of RNs will be over age 50 (Buerhaus 2000). Only 18.3 percent of RNs are under

the age of 35, compared to 40.5 percent 20 years ago (Division of Nursing 2000).

- greater job opportunities for women, which has shrunk the traditional pool of potential nurses. While the share of nurses who are male is increasing, men still account for less than 6 percent of registered nurses.
- difficult working environments, which create more pressure and work for hospital nurses, as pressure to contain health care costs has reduced length of stay and limited admission to those most in need.
- reported shortages of qualified faculty.

### Levers of Change

Federal and state government, along with private foundations, have developed a number of strategies for dealing with the looming shortage in nursing. These range from sponsoring analysis of the problem at a local level to ambitious attempts to change nursing education and practice. What follows is a review of each of these strategies.

#### Conduct Analysis to Document the Need on the Local Level

While federal and state governments collect and analyze data on various health professions, there is a need for further delineation of workforce characteristics and roles, especially at the state and local level. Foundations, moreover, can help with this task. Recently, the Northwest Health Foundation – a Portland, Oregon-based foundation formed in late 1997 from the net proceeds of the sale of PACC Health Plans and PACC HMO – commissioned a report on Oregon's nursing shortage both to inform the foundation's own grant-making and to foster discussion and consensus building about the problem and potential solutions. The report provided evidence on the nature of the shortage in the state, and made both short-term and long-term recommendations for changes in education, practice, and

policy. It also made the case for developing stronger capacity to collect and analyze data about the nurse workforce over time (Northwest Health Foundation 2001).

The California Endowment and California HealthCare Foundation have jointly funded the California Workforce Initiative, housed at the Center for the Health Professions at the University of California, San Francisco. The initiative collects, analyzes, and disseminates information related to the changing nature of the workforce, and will use this knowledge to build innovative change processes, promote skill development in managed systems of care, develop and advance policy reforms, train and develop institutional leaders, and disseminate workforce information, strategies, and optimal practices (California Workforce Initiative 2000). *Nursing in California: A Workforce Crisis*, a January 2001 publication of the initiative, documented trends and issues related to nursing in California and made recommendations for changes in education and the work environment.

### **Improve Information about Nursing Careers**

Nursing suffers from an image problem. Interviews with students in elementary, middle, and high schools suggest that they cannot visualize what it means to be a nurse. To the extent that they have perceptions about nursing, they believe that it is a “girl’s job” with no opportunity for advancement. If they are interested in health care at all, most students still want to be a doctor, not a nurse. Descriptions of the field of nursing that are found on often-visited Web sites (such as those sponsored by the federal Bureau of Labor Statistics and the American Hospital Association) portray nursing as a less-than-inviting career.

Several foundations have sponsored programs designed to improve the quality of the information available about nursing careers. For exam-

ple, The Helene Fuld Health Trust, the nation’s largest private foundation devoted exclusively to nursing students and nursing education, focuses its work on educational mobility, curriculum, faculty development in community-based care, and leadership development. In 2000 and 2001, the Trust awarded several grants to address the nursing shortage. These included:

- a \$200,000 award to Sigma Theta Tau International, on behalf of the Nurses for a Healthier Tomorrow coalition, to coordinate a national advertising campaign designed to recruit new nurses and encourage existing ones to remain in the profession. The campaign includes print ads, television spots, and a presence on the Nurses for a Healthier Tomorrow Web site, [www.nursesource.org](http://www.nursesource.org), to assist prospective students in accessing information on nursing education and possible career paths.
- support to the Connecticut League for Nursing, in partnership with the Connecticut Nurses’ Association, to establish the Nursing Career Center of Connecticut, and to the Hospital Research and Education Foundation of Rhode Island to develop the Nursing Career Information Center of Rhode Island. These centers concentrate on student recruitment, career satisfaction, and career advancement of professional nursing.
- a \$100,395 grant to support the activities of the South Florida Nursing Shortage Consortium. This collaboration of nursing schools, employers, and community groups is working to attract high school students into nursing careers.
- a \$150,000 grant to support the replication of the Nursing 2000 model, a regional collaboration based in Indiana that has developed innovative strategies for recruiting nursing students and promoting nursing as a career. Activities will focus on recruitment of nursing students through educational activities and

seminars, nurse shadowing programs, presentations, career counseling, video production, and the Internet (The Helene Fuld Health Trust 2001).

Another example comes from HealthONE Alliance which provided seed money to create a Colorado center of excellence for nursing in August 2001. The grant follows a one-year examination of the state's nursing crisis by a collaborative group of health care stakeholders to explore innovative solutions to the nursing shortage. The focus of the center will be to assist in ensuring the supply and competency of nurse professionals in the state. It will be the central clearinghouse for workforce data, best practices, and career development information. The center will provide a career development model for Colorado, an advocacy program, and services that are designed to enhance clinical competence, reduce duplication of services, and ultimately increase the number and quality of nurses in the workforce.

### **Change the Educational Structure**

The educational path to a job as a registered nurse can take several routes including a diploma, an associate degree, a bachelor's degree, and even a master's degree. As part of a strategy to improve the professionalism of the field, nurse educators have placed the highest priority on boosting enrollment in baccalaureate programs. In 2000, 29.3 percent of licensed RNs reported completing their initial

preparation in a baccalaureate program compared to just 17.3 percent two decades earlier. During this same time period, the share of those with associate degrees doubled while the share of those with diplomas fell by half (Division of Nursing 2001).

The federal government has emphasized a strategy aimed at boosting the number of nurses with more advanced degrees in nursing. To that end, in September 2001, the Health Resources and Services Administration awarded 94 grants totaling more than \$20.1 million to 82 colleges, universities, and other organizations to increase the number of nurses with bachelor's and advanced degrees; help diversify the nurse workforce; and prepare more nurses to serve in public health leadership roles (U.S. Department of Health and Human Services 2001a).

Emphasis on baccalaureate training has several potential downsides, however. These programs do not produce the largest number of graduates in the shortest periods of time; they are difficult to access for older and minority students who cannot afford tuition; they would benefit from flexible scheduling and streamlined curricula; and they do not take advantage of the licensed vocational nurse pool as a feeder for future RNs. Moreover, many of these programs already operate at capacity. In California, qualified applicants have been turned away from some basic RN education programs at state and

## A SIMPLE RETENTION STRATEGY

Many nursing schools have trouble keeping students enrolled. Sometimes it pays to examine the root causes of disenrollment. For example, one California nursing school that was losing 50 percent of its students before graduation found that a lack of English skills was a major reason that students dropped out. After hiring an English tutor, retention rates jumped to 95 percent.

By being flexible in their funding, foundations may be able to sponsor tutoring and other types of programs, and thus play an effective role in boosting retention rates within nursing schools.

community colleges. In 1997, 44 percent of academically eligible applicants to programs at California State University were denied admission due to lack of space (California Health-Care Foundation 2001).

The Northwest Health Foundation's report on the nursing shortage in Oregon suggested some strategies that the foundation could pursue in working with schools of nursing at state universities and local community colleges. Projects funded in 2001 will upgrade distance learning technology, reexamine and strengthen curricula in community-based nursing, and enhance continuing as well as advanced education for Oregon nurses.

As part of its efforts to address the nursing shortage, The Helene Fuld Health Trust has funded Clemson University, working in partnership with local community colleges and local hospitals, to develop the infrastructure to help coordinate services for nursing students across partnering institutions. It includes the creation of a concurrent enrollment option that allows scheduling of courses to accommodate working students and consistent advice regarding course transfers.

The Macy Foundation has funded work addressing the so-called graying of nursing faculties. Educators at the University of Michigan will develop a new academic nursing fast track, analogous to medicine's M.D./Ph.D. programs. The initial pilot project will identify promising nursing undergraduates, then provide career counseling and incentives to encourage them to progress directly from a baccalaureate or master's program to a five-year program that would lead to a doctorate in nursing. While moving directly from undergraduate to Ph.D. work is not an absolute requirement, applicants are expected to have completed their RN training in less than three years before being considered for the fast track program. The Macy grant

will provide for three cohorts of five students for a period of five years, while the nursing school will assume full responsibility for the final two years of the proposed seven-year program.

### **Change Nursing Practice**

A recent study of 43,000 nurses practicing in 700 hospitals in five countries suggests the need for stronger medicine than wage increases, signing bonuses, and image campaigns. Aiken and colleagues at the University of Pennsylvania (2001) point to fundamental problems in the design of work which are widespread in hospitals in Europe and North America. The survey found that job satisfaction starts out high in young nurses, but then quickly drops off with age and never recovers. Satisfaction tends to be tied to an individual's position rather than to the taking care of patients. Staff nurses, who have little control over their job and work in a setting that does not take advantage of their skills, tend to be the least satisfied, even if they have a master's degree. Substantial proportions report spending time on nonnursing tasks such as delivering and retrieving food trays; transporting patients; and ordering, coordinating, or performing ancillary tasks while leaving many nursing tasks undone including developing or updating care plans, comforting and talking with patients, and teaching patients and families. In short, the survey paints a portrait of nurses frustrated and burned out by an inadequate number of colleagues, rising patient loads, declining quality of patient care, and even verbal abuse, with one out of every three young (under the age of 30) American nurses surveyed planning to leave their jobs within the next year.

In this climate, the solutions used by some hospital managers, such as mandatory overtime and short staffing, only exacerbate a bad situation. Imposition of staffing ratios may also be counterproductive because they rob institutions

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*The best marketing and scholarship programs in the world will not make up for a lack of career opportunities.*

JULIE SOCHALSKI,  
UNIVERSITY OF  
PENNSYLVANIA,  
OCTOBER 2001

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## IMPORTING NURSES A SHORT-TERM SOLUTION

Some institutions have addressed the shortage by looking overseas or across state borders for nurses to fill their ranks. While this strategy might help in the short term, it does little to address shortages over the long term. In many instances, nurses brought from overseas at great expense (e.g., one New Hampshire institution spent \$9,000 for each nurse it recruited from the Philippines) end up working for only a few years after experiencing the same workplace conditions as native-born nurses.

Issue Dialogue participants noted the need to look within the community for underemployed populations capable of becoming nurses, given proper academic, financial, and social supports. The discussion also focused on changing practice and institutional models. “Even if we were wildly successful in California in recruiting every nurse out of Nevada for the next 20 years, there would not be enough nurses to provide care in the way that we currently assemble hospital services,” noted one observer.

of flexibility that could be used to enhance both job satisfaction and productivity.

What will work in this climate, however, are improvements in working conditions and the creation of career ladders. For example, the University of Pennsylvania survey, which queried nurses in five countries, found that a nurse’s ability to deliver good quality care drives retention rates. In an effort to bolster working conditions for nurses, a study of California’s nursing crisis funded by The California Endowment and California HealthCare Foundation makes several suggestions for improving the work environment and redefining nursing practice that could be the focus of foundations. These include:

- strengthening trust between labor and management,
- investing in retention by providing greater rewards for experienced registered nurses including financial incentives to complete further education and adequate sick leave, and
- placing greater emphasis on career development and nurse participation in management of organizations (Coffman et al. 2001).

The key, moreover, is to think about programs from the perspective of the individual practitioners. Often higher wages are not the answer, but rather programs that help work fit into a person’s everyday reality, such as a flexible work schedule, release time for education, or provision of child care. These types of efforts demonstrate to nurses and other health professionals that the institution’s leadership is committed to resolving workforce issues.

### Plan for the Future

The Robert Wood Johnson Foundation is helping states and regions build systems to develop their nursing workforce through Colleagues In Caring, a national grant program administered by the American Association of Colleges of Nursing. The program’s regional focus reflects the assumption that most of the factors underlying nursing care requirements, including the employment market and population need for health services, are local and regional in nature.

Colleagues In Caring sites convene regional stakeholders to create and sustain a concerted workforce development system within their region. These collaboratives include: all levels

of nursing schools; all types of employers of nurses; appropriate professional associations, accrediting agencies, and state and regional education departments; policy bodies relevant to nursing workforce development; consumers, payers, and businesses.

In Phase I of the project (1996-1999), 20 collaboratives were created. They collected and analyzed supply and demand data, developed models to predict workforce requirements, defined differentiated skills and abilities, explored the use of differentiated practice, and investigated educational mobility options and plans. In Phase II (which will continue through May 2002), sites are working to institutionalize efforts to act as permanent systems of planning (American Association of Colleges of Nursing 2001).

## Improving Competency in Geriatrics

The aging of the population also creates challenges for the future health workforce, members of which remain largely unprepared to deal with the unique physical and emotional needs of the elderly.

### Documenting the Problem

By 2030, one out of every five Americans will be over the age of 65. The approaching retirement of the baby-boom generation is not the only factor at work; with life span increasing, the oldest old (those over the age of 80) are the fastest growing segment of the population (Friedland and Summer 1999). People are living longer, and living longer with chronic disabling conditions; the average 75-year-old, for example, has two to three chronic medical conditions (Burton 2001). As a result, it is critical for health professionals to focus not just on treatment and cure of specific diseases, but rather to look at the whole person and to focus on health outcomes, health status, and quality of life.

In addition, the elderly are more heterogeneous than the young in terms of cultural and historical experiences, and in their physiological and pathological histories. The elderly who are racial and ethnic minorities tend to be less acculturated and less assimilated than are younger individuals; they also tend to turn to alternative providers more quickly than do other patients.

The statistics suggest that the health workforce is not fully prepared to address these needs as



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*There should be focused training in some areas in which there's just a dearth of skills and knowledge – home care, nursing facilities care, and community-based care.*

JERRY JOHNSON,  
UNIVERSITY OF  
PENNSYLVANIA,  
OCTOBER 2001.

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few physicians and nurses receive special training in geriatric medicine. Consider that:

- currently only about 9,000 of the nation's nearly 700,000 physicians identify themselves as geriatricians;
- only three U.S. medical schools have a department of geriatrics (American Geriatrics Society 2001);
- despite the need for approximately 3,000 faculty to prepare future physicians for practice in geriatrics, only 600 faculty members report geriatrics as their specialty; and
- less than 1 percent of registered nurses are certified in geriatrics (Butler 2001).

Moreover, it is not at all clear that physicians (especially primary care physicians) who have not received intensive training in geriatrics will be able to step in to fill the void. Although internal medicine training programs require that residents have some formal instruction along with regular, supervised clinical experience in geriatric medicine, the criteria are broad and the commitment not specified. Recent research, funded by The Commonwealth Fund, found that more than 1 in 10 medical residents feel unprepared to handle certain treatments and procedures within their field of specialty. Care for nursing home patients was one of these areas (Blumenthal et al. 2001).

What these statistics suggest is that most physicians lack necessary skills and knowledge related to caring for the elderly. They do not understand diseases specific to the elderly, or those diseases that, when present in the elderly, must be managed in a different way. Physicians may also lack the expertise necessary to diagnose conditions such as depression. Finally, many physicians, who spend most of their time in hospitals and outpatient settings, do not know much about other aspects of the health

care system, such as nursing homes and assisted living facilities, that play a crucial role in caring for the elderly.

Given this lack of preparedness among physicians, care for the elderly (even though they have insurance coverage under Medicare) is not what it should be. Elderly individuals who need flu shots frequently do not get them, while those with diabetes or hypertension often fail to receive the care they need to keep their conditions under control. Seniors experience a disproportionate share of acute episodes that require hospital care; the elderly represent 12 percent of the population, but account for 25 percent of ambulatory visits and 50 percent of bed days (Langston 2001).

## Levers of Change

What follows is a summary of government and foundation activities that center around two key strategies for improving competency in the care of geriatrics – education to improve skills and knowledge related to caring for the elderly, and the promotion of effective, multidisciplinary teams to care for the elderly.

### Educational Initiatives to Boost Competency in Geriatrics

In 1994, the National Academy of Sciences issued a report, *Training Physicians to Care for Older Americans: Progress, Obstacles, and Future Directions*, describing a number of strategies for both strengthening the geriatric medicine movement, and emphasizing the importance of geriatrics training at different levels of education. Strategies suggested as promising included:

- funding curriculum development and implementation grants in both the basic sciences and clinical components of medical education;



- increasing geriatric expertise in nonprimary care specialties by developing curriculum, investing in leadership, working with credentialing bodies to ensure inclusion of geriatrics materials, supporting research on aging topics, and encouraging joint educational activities between geriatrics and nonprimary care disciplines;
- creating centers of academic excellence;
- supporting combined fellowship training;
- retraining specialists for leadership in aging; and
- strengthening faculty development and retention programs (National Academy of Sciences 1994).

The federal Bureau of Health Professions has funded a number of modest grant programs to improve the availability and quality of geriatrics training along these lines. These include the following:

- geriatric education center grants available to health professions schools, programs that train physician assistants, and schools of allied health. In fiscal year 2000, \$7.4 million in funding was awarded to 34 institutions for efforts to improve the training of health professionals in geriatrics; provide geriatric residencies, traineeships and fellowships; develop and disseminate curricula; train and retrain faculty to provide instruction in geriatrics; support continuing education for health professionals who provide geriatric care; and provide clinical geriatrics training in nursing homes, chronic and acute care hospitals, ambulatory care centers, and senior centers.
- faculty training projects in geriatric medicine, dentistry and behavioral/mental health. In fiscal year 2000, \$1.6 million in grants were awarded to medical schools, teaching hospitals, and graduate medical education programs to support fellowships and other training efforts that assist health professionals who plan to teach geriatrics.

- geriatric academic career awards to support career development of geriatricians in junior faculty positions who are committed to academic careers teaching clinical geriatrics. In fiscal year 2000, 15 individuals received \$50,000 awards; no awards were made in fiscal year 2001, however.
- geriatric nursing knowledge and experiences in long-term care facilities. This grant program provides seed money to strengthen geriatric nursing didactic content and clinical components of baccalaureate nursing programs partnering with long-term care facilities. Funded activities may expose senior nursing students to increased course content in geriatric nursing and concepts of age-sensitive care, support applied learning with geriatric patients with chronic conditions, and train nurses to accurately complete appropriate assessments.

Along with the efforts of the federal government, a handful of private health funders are supporting efforts to improve the preparedness of health professionals to serve an aging population. For example, The Donald W. Reynolds Foundation has funded an Aging and Quality of Life Initiative, in response to a pressing need to educate and train a whole new generation of physicians, nurses, therapists, and other health-related professionals to serve our aging population. Projects funded under this initiative include:

- establishment of the Donald W. Reynolds Department of Geriatrics at the University of Arkansas for Medical Sciences with a grant of \$10.5 million to be distributed over a five-year period. A four-week mandatory rotation in geriatrics for junior medical students was implemented in 1998. In addition, the foundation has supported construction of the Donald W. Reynolds Center on Aging at the university, providing space for teaching and training student geriatricians, as well as

opportunities for clinical research and rehabilitative treatment of patients.

- grants to support geriatrics training, totaling \$19.8 million to 10 additional academic medical centers: Cornell University, the Medical College of Wisconsin, University of Hawaii, University of Iowa, University of Michigan, University of Rochester, University of South Carolina, Virginia Commonwealth University, and Yale University.
- a \$250,000 grant, matched by the Oklahoma legislature, to establish a professorship in geriatrics at the Oklahoma College of Medicine.

In addition, in 2000, the foundation provided more than \$700,000 to the Association of Directors of Geriatric Academic Programs to develop a national database to document current activities concerning geriatric education, training, research, and practice, and to track progress over time. The database is being developed by researchers at the University of Cincinnati Medical Center, with oversight from a national committee with representation from the AAMC, the American Medical Association, the National Institute on Aging, and others.

The John A. Hartford Foundation, Inc. has a large portfolio of projects focused on improving health professionals' competency in meeting the needs of an aging population. The foundation has spent \$160 million over the last 10 years on academic geriatric training issues. Its work focuses in four areas: medicine, nursing, social work, and interdisciplinary training (discussed in the next section). Its primary strategy is to try to improve physicians' and nurses' ability to care for the elderly by investing in academic training, particularly the faculty of medical and nursing schools. Specific projects funded include:

- funding to AAMC to integrate instruction in geriatrics and geriatric medicine into undergraduate medical education at 20 medical schools.
- funding to the American Geriatrics Society to increase geriatrics expertise in 10 surgical and medical specialties.
- a major grant of \$1,786,556 to the Association of Directors of Geriatric Academic Programs to enhance the capacity of academic health centers to improve the geriatrics training of the next generation of physicians by

## LESSONS IN WORKING WITH AND THROUGH ACADEMIA

Twenty years of experience in the field of aging has provided some lessons learned for representatives of The John A. Hartford Foundation:

- **Never underestimate the willingness of the medical education system to resist change.** Despite a change in accreditation rules that increased required geriatric training among residents to four weeks (and a Hartford Foundation program to support such training), most medical schools did not change their training significantly. Over time, programs reverted back to a few days of geriatric training. That said, some progress has been made; for instance, the concept of measuring functioning based on ability to complete activities of daily living (ADLs) is now commonly taught in medical schools.
- **Bright, successful faculty members who serve as role models prove to be the best agents for change.** Some physicians who were drawn into geriatric care by academic role models are now returning as faculty members who serve as role models for future would-be geriatricians.

increasing the leadership skills of recently appointed academic geriatric program directors. At the end of the five-year grant, 30 Hartford Leadership Scholars will have improved their ability to develop and lead strong research, education, and clinical care programs. The Hartford Leadership Scholars will attend established leadership development programs, work with local and national mentors, and participate in an annual geriatric leadership retreat.

- the Paul B. Beeson Faculty Scholars program, focused on attracting physician-scientists to careers in research on aging and investigation of geriatric clinical care.
- funding to strengthen geriatric nursing including the creation of five centers of geriatric nursing excellence; scholarships for doctoral candidates, junior faculty, and nurses choosing to pursue joint business and nursing degrees; and a coordinating center at the American Academy of Nursing.
- efforts to strengthen geriatric social work including support for doctoral fellows, a faculty scholars program, and development of aging-rich field training for master's level students (The John A. Hartford Foundation Inc. 2000).

A third example comes from The Helene Fuld Health Trust, which provided a grant to Duke University to develop, implement, and evaluate a new educational model for teaching nursing students evidence-based approaches to long-term gerontological care. In addition, Jewish Healthcare Foundation has provided funding to support the Benedum Geriatric Center at the University of Pittsburgh in expanding physician training to include home care for geriatric patients.

### **Promoting Effective, Interdisciplinary Teams to Serve the Elderly**

A second strategy for improving the competence of geriatric care is the promotion of effec-

tive, interdisciplinary geriatric teams. Successful geriatric practice is by definition team-oriented. Because older patients with complex chronic conditions interact with various health professionals, there is a need to coordinate medical and psychosocial services and to create mechanisms for team members to track patients' progress. These professionals must work effectively together in a number of health care settings, including not only the hospital, but also nursing homes, other long-term care facilities, and patients' homes. While teams have been talked about for years, they often do not function well. At present, the professions are stuck in silos that prevent effective team communication and action.

Issue Dialogue participants pointed out that there are models for effective interdisciplinary geriatric care, such as the Program of All-Inclusive Care for the Elderly (PACE), an approach pioneered by On Lok Senior Services in San Francisco's Chinatown. Providers in PACE sites serve frail, elderly individuals who are over the age of 55 and certified by their state's Medicaid agency as being in need of nursing home care. They receive a capitated payment from Medicare and Medicaid to provide a comprehensive range of acute and long-term care services (including all Medicare and Medicaid benefits) that are delivered across a wide variety of settings. By giving one entity financial responsibility for virtually all aspects of a senior's care, this approach promotes highly coordinated care through the use of interdisciplinary teams of physicians, nurses, social workers, physical/occupational/rehabilitation therapists, dietitians, transportation workers, and home care providers. This team serves as the core of the PACE model, which relies on beneficiary and caregiver input to develop treatment plans and to make service allocation decisions. Nationally, there are presently 25 PACE sites in 13 states, as well as 8 sites (in 5 other states) that came into being before PACE and

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*The priorities of most academic institutions still place service provision (and the revenues such services generate) and research (with its large grants and large profit margins) above education ... medical education relies on the money that falls between the couch cushions.*

CHRISTOPHER LANGSTON,  
THE JOHN A. HARTFORD  
FOUNDATION, INC.,  
OCTOBER 2001

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operate under Medicaid waivers. The Balanced Budget Act of 1997 established PACE as a permanent provider under Medicare, and increased the number of sites allowed.

Foundations are also playing a role in promoting the use of interdisciplinary teams to care for seniors. As a part of its program to improve competency in caring for the elderly, The John A. Hartford Foundation launched its Generalist Physician Initiative in the early 1990s. The goal of the program is to improve treatment of the elderly by integrating nurses, social workers, and other health professionals into primary care medical practices. A key lesson from this effort was that health care professionals lacked the skills (even when they possessed the will) to work in teams to provide coordinated care over time and across settings.

In 1995, the foundation established a five-year, \$12.9 million initiative, the Geriatric Interdisciplinary Team Training Program (GITT). Eight sites were funded to find ways to provide health professionals with the knowledge and skills needed to work effectively in teams. The foundation also supported a resource center at

New York University to share information and strategies across sites and to the broader health care community, and tasked researchers at the University of California, San Francisco to evaluate the program.

Initially targeted at advanced practice nurses, master's level social workers, and medical residents in primary care fields, GITT eventually involved 2,000 practicing professionals and students in 13 disciplines, including various allied health fields, dentistry, management, and pharmacy, among others. Three model approaches to teaching geriatric interdisciplinary team care emerged (an academic model, a clinical model, and a mixed model) and significant permanent changes within academic curricula and clinical sites took place in most GITT programs. Documented achievements include:

- demonstrating the feasibility of introducing or increasing interdisciplinary team training;
- creating a set of training models for both students and professionals in different disciplines;
- creating a turnkey manual and implementation materials;

## WHAT ELSE COULD BE DONE TO IMPROVE CARE FOR THE ELDERLY?

Issue Dialogue participants identified several opportunities for foundations to sponsor focused programs to improve the competency of health professionals in geriatrics:

- promote expansion of knowledge in specific areas where skills remain inadequate, such as home care, nursing home care, and community-based models of care. First- and second-year medical students could play a role in getting involved with elders in the community. Such exposure helps to change attitudes and improve skill levels;
- fund a second year of training for students who go through the Department of Veterans Affairs geriatric fellowship program;
- fund crossdisciplinary education and training for geriatric teams; and
- create incentives and rewards for medical school leadership to increase the required curricula in geriatrics.

- developing qualitative measures for capturing changes in attitudes, knowledge, and skills;
- educating a cadre of experts; and
- raising awareness of regulatory barriers within the professions that make team training difficult and encouraging new thinking about how to remove these barriers.

In 2000, the foundation launched a new initiative, Geriatric Interdisciplinary Teams in Practice, to continue the GITT mission but with a focus on testing the cost effectiveness of team approaches to foster payer and provider interest in these models. The new effort, therefore, is concerned primarily with service delivery, rather than education. The first three grants awarded under the initiative were to:

- implement and evaluate “virtual” patient teams that coordinate and collaborate electronically;
- compare and contrast health and organizational outcomes of patients receiving an interdisciplinary team approach with those of other patients; and
- implement and evaluate a model of patient-centered team care focused on reducing problems associated with posthospital transfers to other delivery sites (The John A. Hartford Foundation, Inc. 2000).

## Future Opportunities for Funders

Private foundations have a long track record when it comes to funding health professions education and other efforts to shape the health workforce. One of the first grants made by the Rockefeller Foundation in 1913 was to The Johns Hopkins University to extend its model system of medical education to clinical departments of medicine, surgery, and pediatrics (Rockefeller Foundation 2001). The Flexner Report, the influential study that transformed medical education in the early 20th century, was commissioned by the Carnegie Foundation. The 1922 Goldmark Report, which recommended moving nursing education out of the hospital and into the university, was also funded by Rockefeller.

But Rockefeller and Carnegie have moved on to other agendas. The Pew Charitable Trusts, which made health workforce reform a priority issue on its agenda more recently, also concluded its funding of health professions education when the Pew Health Professions Commission finished its work in 1999. Fortunately, many long-established national foundations, including The Commonwealth Fund, the W.K. Kellogg Foundation, and The Robert Wood Johnson Foundation, continue to support focused work on health professions education. The Josiah Macy, Jr. Foundation, also a national funder, makes improvement of “health professional education that will enhance the health of the public” its core mission. The Helene Fuld Health Trust, another national funder, is the only private philanthropy exclusively committed to nursing education.

A diverse group of foundations focused on effecting change at the state and local level are

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*I hope that foundations don't feel that reinventing the wheel and coming up with something new and innovative has to be the task. It may be okay, under conditions in which some people don't have wheels, in fact to give them those .... we don't have to be new and different because some of tasks identified long ago still have not been fulfilled.*

JERRY JOHNSON,  
UNIVERSITY OF  
PENNSYLVANIA,  
OCTOBER 2001

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*Persistence is required in the face of these tremendous challenges ... in order to move large institutions with entrenched cultures, part of the trick is to be there and be heard.*

ANNE SCHWARTZ,  
GRANTMAKERS IN HEALTH,  
OCTOBER 2001

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also making substantial investments in the health workforce. Many of these support direct financial assistance to health professions students in their communities. Others are pursuing more targeted objectives. The focus on diversity by the major California foundations reflects the urgent need for providers willing and competent to meet the health care needs of the state's diverse racial and ethnic communities.

With respect to the health workforce, the glass may be half empty or half full. Much is known about what works. And much is also known about strategies that are effective within limits but insufficient in and of themselves. Foundations can be a catalyzing force within communities to look beyond the bounds of the health sector and force examination of broader issues, including educational equity and community development. They can work with local educational institutions, health systems, and communities to assess needs and take proven strategies to scale. They can contribute to changes in preparedness of the workforce to meet population health needs at the systems level or make important investments in individuals, one at a time.

### **Specific Roles to Play, Activities to Sponsor**

During the course of the Issue Dialogue, participants highlighted a number of specific roles and activities for foundations. These include:

- sponsoring data collection and analysis of workforce issues at the local level, and then calling attention to emerging local issues by getting respected leaders of the health care community involved;
- convening diverse stakeholders to document and address priorities at the local level;
- developing partnerships with nontraditional partners, such as local schools, and facilitating

collaboration between local educators, health educators, and the health delivery system;

- supporting demonstrations of innovation that emerge from such partnerships;
- funding pipeline programs, including use of mentors and “shadowing” of professionals by students, both of which serve to expose students to the profession at a young age;
- helping to make the case for diversity;
- encouraging the development of interdisciplinary teams and the elimination of insular professional practice; and
- promoting an improved work environment for nurses, including the development of training opportunities, career ladders, and other programs that will result in a more rewarding and supportive atmosphere in which to work.

### **Lessons Learned**

Participants also highlighted a number of lessons learned for foundations as they go about this work in the future, including the importance of:

- investing in leadership development at all levels and across professions and institutions;
- providing resources at a local level in an effort to deal with a community's specific concerns;
- being flexible and willing to work with other organizations (including some that may be unfamiliar); and
- remaining committed to programs over the long term. With so many challenges in the field today, there are plenty of reasons to stick with this issue over time.



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