# Urban Universities DEVELOPING A HEALTH WORKFORCE THAT MEETS COMMUNITY NEEDS







# THE COALITION OF URBAN SERVING UNIVERSITIES

The Coalition of Urban Serving Universities (USU) is a president-led organization committed to escalating urban university engagement to increase prosperity and opportunity in the nation's cities, and to tackling key urban challenges. The Coalition includes 42 public urban research universities representing all U.S. geographic regions. The USU agenda focuses on creating a competitive workforce, building strong communities, and improving the health of a diverse population. The Coalition of Urban Universities (USU) has partnered with the Association of Public and Land-grant Universities (A•P•L•U) to establish an Office of Urban Initiatives, housed at A•P•L•U, to jointly lead an urban agenda for the nation's public universities.

# THE ASSOCIATION OF PUBLIC AND LAND-GRANT UNIVERSITIES

The Association of Public and Land-grant Universities (A•P•L•U) is a research and advocacy organization of public research universities, land-grant institutions, and state university systems with member campuses in all 50 states, U.S. territories and the District of Columbia. A•P•L•U is the nation's oldest higher education association, with 218 members, including 76 land-grant institutions, and 18 historically black institutions. In addition, A•P•L•U represents the interests of the nation's 33 American-Indian land-grant colleges through the American Indian Higher Education Consortium. A•P•L•U is dedicated to advancing learning, discovery and engagement. The association provides a forum for the discussion and development of policies and programs affecting higher education and the public interest.

# Urban Universities

# DEVELOPING A HEALTH WORKFORCE THAT MEETS COMMUNITY NEEDS





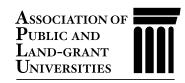




BY JENNIFER DANEK, M.D. AND EVELIN BORRAYO, PH.D.

NOVEMBER 2012





# **USU MEMBERS**

Arizona State University

**Boise State University** 

California State University, East Bay

California State University, Fresno State University

California State University, Fullerton

California State University, Long Beach

California State University, Northridge

Cleveland State University

Florida International University

Georgia State University

Indiana University-Purdue University Indianapolis

Morgan State University

Portland State University

San Francisco State University

San Jose State University

Temple University

Texas Tech University

The Ohio State University

The State University of New York System

Stony Brook University

SUNY College of Environmental Science and Forestry

SUNY Downstate Medical Center

SUNY Upstate Medical University

University of Akron

University of Albany

University at Buffalo

University of Central Florida

University of Cincinnati

University of Colorado-Denver

University of Houston

University of Illinois at Chicago

University of Louisville

University of Massachusetts Boston

University of Memphis

University of Minnesota

University of Missouri-Kansas City

University of New Mexico

University of North Carolina at Charlotte

University of Washington, Tacoma

University of Wisconsin-Milwaukee

Virginia Commonwealth University

Wayne State University

Wichita State University

# Table of Contents

Preface	V	
Acknowledgements	vi	
Introduction	1	
Demographic Shift: Improving the Health		
of Diverse, Urban Populations	2	
Transforming the Future Health Workforce:		
The Role of Urban Universities	6	
Research Results from a Study of Urban Universities	7	
Recommendations	18	
Endnotes	22	

# Preface

The Coalition of Urban Serving Universities (USU) is a president-led organization of public urban research universities committed to improving the economic prosperity and quality of life and place in cities and metropolitan regions. As part of their health initiative, members of the Coalition work together to increase the numbers, diversity, and cultural competence of the health workforce to improve health and reduce disparities in their communities.

This report is the product of the USU Urban Health Initiative. Principal authors of the report are Jennifer Danek, Director of USU Health, and Evelinn Borrayo, Executive Director of the Latino Research and Policy Center at University of Colorado Denver. Members of the Steering Committee include: Betty Drees, Dean of the School of Medicine, University of Missouri Kansas City; Greer Glazer, Dean of the College of Nursing, University of Cincinnati; Kevin Harris, Assistant Vice President for Health Sciences Academic and Diversity Affairs, Virginia Commonwealth University; Roderick Nairn, Provost, University of Colorado Denver; and John Finnegan, Dean of the School of Public Health, University of Minnesota.

As Chair of the Coalition and Co-Chairs of the Urban Health Initiative, we are proud to present this report to our USU colleagues and the broader university community. The USU Health Workforce Study is our first step to better understand the health workforce efforts of our members—how they are currently engaging, what is considered to be most effective, and where greater effort is needed.

While this report is directed to university presidents and health leaders, its insights will be useful for federal agencies and national associations working with our institutions toward the shared goal of preparing the future health workforce for cities.

Wim Wiewel President, Portland State University Chair, USU

Win Wievel

Mark P. Becker President, Georgia State University Presidential Co-Chair, USU Urban Health

Mul Bele

Michael Rao President, Virginia Commonwealth University Presidential Co-Chair, USU Urban Health

muhacekas

# Acknowledgements

USU would like to thank the many universities and individuals who contributed to this report. The USU Health Steering Committee was instrumental in the project's design and implementation. We extend our gratitude to current and past members: Betty Drees, Roderick Nairn, Sheryl Garland, Kevin Harris, Greer Glazer, Carole Anderson, Alan Noonan, and John Finnegan. A special thanks to Jennifer Danek for leading the project, and to Evelinn Borrayo and the research team at University of Colorado Denver, including Jenny Nguyen, Ava Drennen and Shi-Ming Shi, who helped developed the survey and analyzed the data.

This project benefited from the broad participation of USU member institutions, including administrators, deans, faculty, and staff who coordinated the collection of data and provided valuable input into the report's recommendations. We would like to recognize Shari Garmise, Vice President of USU/APLU Office of Urban Initiatives, for her extensive input and assistance and Larry Van Dyne for his editorial assistance.

We owe a special debt of gratitude to M. Roy Wilson, who got this work off the ground as the former Chair of the USU Health Initiative and Chancellor of University of Colorado Denver. His dedication to this project was critical to its success. We'd also like to recognize the current USU Health Co-Chairs, Mark Becker, President of Georgia State University, and Michael Rao, President of Virginia Commonwealth University for their leadership ensuring the project's successful completion. Finally, we acknowledge the coalition's leaders—the board, and the member presidents—who support these recommendations and whose steadfast commitment to an evidence-based agenda has kept the coalition focused on data and on advancing what works.

# Introduction

# IMPROVING HEALTH EQUITY THROUGH WORKFORCE INNOVATION

Health Care Reform has invigorated efforts to reconsider how our nation's health system should evolve to better meet the health needs of all. Broadening access to care through insurance coverage for millions of Americans is but one solution for a system encumbered by health workforce shortages, shifting population demographics in the United States, and persistent health inequities. Our ability to resolve health workforce gaps, in particular, will impact a multitude of other initiatives to reform the healthcare system and improve the public's health. Ensuring high-quality care and broader access hinges on our future talent—the clinicians, researchers, and health leaders who will serve in and shape the future health system.

Universities and their academic medical centers have an important role to play. These institutions often serve as "anchors" for local communities, possessing an unparalleled scale and breadth of resources in education, research, and patient care. This makes them well positioned to drive local innovations in health workforce development and to improve health and health equity in their communities.

This report provides an account of how urban universities are tackling this goal by enhancing and expanding a diverse, culturally sensitive, and well-prepared health workforce to improve health and reduce disparities in our nation's cities. The report contains recommendations on what universities need to further increase their capacity and effectiveness and to improve the knowledge base for university leaders and policymakers making critical investments in our future health workforce.

# Demographic Shift: Improving the Health of Diverse, Urban Populations

According to the 2010 National Healthcare Disparities Report, disparities in health status for minority and poor populations persist, and access to care is on the decline across urban and rural populations.<sup>2</sup> In U.S. cities, minorities are more likely than whites to report cost barriers to care, such as lack of health insurance. They are less likely to report they have a personal doctor and more likely to report fair to poor health.<sup>3</sup> The persistence of health disparities is particularly worrisome in light of changing demographics. By the year 2050, no one race will constitute a majority.<sup>4</sup> Moreover, population growth and cultural diversity is greatest in U.S. cities and surrounding areas, where nearly 80 percent of the population now lives.

# **INCREASING DIVERSITY IN HEALTH PROFESSIONS**

To ensure that the health care needs of diverse populations are met, it is crucial to prepare a diverse, culturally and linguistically competent health workforce. Numerous reports, including those by the Institute of Medicine and the Sullivan Commission in 2004, identify the lack of minorities in the health workforce as contributing to unequal access and quality of care. Policymakers and education leaders recognize the need for large-scale changes in health professions education and training, and over the past decade, they have sought to broaden the pipeline to health professions, increase awareness and accountability among universities, and improve education financing.

Yet progress in diversifying the health workforce has been slow. African-Americans, Hispanic-Americans, and Native Americans comprise more than one-third of the U.S. population. Yet, they account for only 9 percent of physicians, 7 percent of dentists, 10 percent of pharmacists, and 6 percent of registered nurses. Over the last decade, the proportion of minority graduates has increased in some fields, such as public health and nursing. Others, such as medicine, have seen virtually no change (see Figure 1).

### FIGURE 1. HEALTH WORKFORCE DIVERSITY

Percentage of Degrees Conferred to Underrepresented Minorities by Health Field (2000 to 2009)

	2000	2009	CHANGE IN PERCENTAGE
Medical Doctor (M.D.)	13.0%	12.0%	-1.0%
Dentistry	9.0%	11.3%	2.3%
Pharmacy	11.9%	10.7%	-1.2%
Nursing <sup>1</sup>	13.6%	15.1%	1.5%
Public Health <sup>1</sup>	16.5%	22.6%	6.1%

<sup>&</sup>lt;sup>1</sup> Includes bachelor's, master's, and doctoral degrees

Source: U.S. Department of Education, Integrated Postsecondary Education Data System (IPEDS), IPEDS Data Center, 2000, 2009. http://nces.ed.gov/ipeds/datacenter/.

Plans to increase coverage for the uninsured will intensify current gaps in our health workforce. Among the estimated 32 million uninsured individuals, nearly half are minorities, and the vast majority live in urban environments. <sup>10</sup> The entry of these individuals into the health system will require an expanded and equally diverse set of health professionals to care for them.

# EDUCATING MORE HEALTH PROFESSIONALS AND DEPLOYING THEM WHERE THEY ARE NEEDED

The national shortage of health workers is well-documented. Fully 20 percent of the U.S. population—66 million people—reside in communities where access to primary health care providers is limited. Forty five percent of these Health Profession Shortage Areas (HPSAs) are in metropolitan areas, including inner city neighborhoods that often lack other critical resources needed for good health, like safe areas to play or quality schools. 12

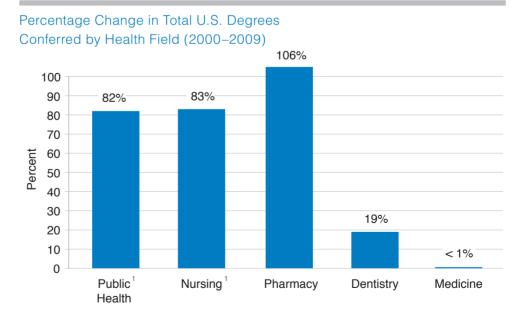
In addition to existing shortages, demand for health workers is expected to increase as an elderly population expands and current health professionals retire. In response, most of the major health professions associations have recommended an increase in education and training.

The Association of American of Medical Colleges (AAMC) predicts that 91,000 more physicians will be needed by 2020 and has recommended a 30 percent increase in medical school enrollment by 2015.<sup>13</sup>

- The American Association of Colleges of Nursing (AACN) projects that 260,000 more registered nurses will be needed by 2025<sup>14</sup> and calls for an increase in nurses with baccalaureate degrees by 80 percent and the doubling of nurses with doctorates.<sup>15</sup>
- The Association of Schools of Public Health (ASPH) estimates that 250,000 more public health workers will be needed by 2020 and recommends training three times the current number of graduates over the next 11 years.<sup>16</sup>

Expanding the numbers of health professionals alone won't solve the access problem. Greater attention is needed to coordinate the growth and deployment of the health workforce in order to ensure the right types of professionals are practicing in the communities where they are needed. From 2000 to 2009, the number of health graduates increased significantly, but the growth was uneven: pharmacy more than doubled, nursing and public health both increased by 80 percent, dentistry grew only by 18 percent, and medicine was stagnant (see Figure 2). Now that more medical schools are opening and existing schools are expanding, the supply of physicians is expected to increase for the first time in two decades. But unless more of these students choose primary care or start practicing in high-need communities regardless of specialty, access to the health system is likely to be worse in seven to ten years when these people join the workforce.

# FIGURE 2. GROWTH IN HEALTH PROFESSIONS



1 Include Bachelors, Masters, and Doctorate degrees

Source: U.S. Department of Education, Integrated Postsecondary Education Data System (IPEDS), IPEDS Data Center, 2000, 2009. http://nces.ed.gov/ipeds/datacenter/.

The need to anticipate demand and plan across health fields was part of the rationale for creating a National Center for Health Workforce Analysis and the National Health Workforce Commission. <sup>18</sup> The latter entity was legislated by the Affordable Care Act, but is yet to be funded.

# PREPARING 21ST CENTURY HEALTH PROFESSIONALS

As cities grow in size and density, and as they become more culturally diverse, urban health systems will need to adapt. In 2010, the percentage of the foreignborn population reached 13 percent, and more than 47 million people now speak a language other than English at home. <sup>19</sup> In certain cities, such as Louisville, Jackson, and Indianapolis, the number of foreign-born persons doubled in the

past decade.<sup>20</sup> As health systems evolve to better deliver care for different urban-based populations, they will require a new brand of health workers and leaders—ones who are more collaborative and who have both technical competence and the ability to understand and address complex social issues.

Increasing attention is being placed on "cultural competence." Nearly all experts agree that improving cultural awareness and providing students with skills to work effectively with patients of different cultural backgrounds is crucial to maintaining individual and

In certain cities, such as Louisville, Jackson, and Indianapolis, the number of foreign-born persons doubled in the past decade.

community health. <sup>21</sup> Studies on cultural competence interventions are promising. <sup>22</sup> Expectations for cultural competence are now built into accreditation standards for health professions schools. At the same time, there's little agreement on what constitutes cultural competence, how to attract students who have or will be able to develop these skills, and how health professions schools develop or measure this in the students they train. As more health employers demand cultural competence, universities and health professions schools will need to figure this out.

# Transforming the Future Health Workforce: The Role of Urban Universities

Urban universities have a unique capacity and responsibility to respond to health workforce needs in their locales. Urban universities produce a large share of the nation's health professionals, educating 50 percent of physicians and dentists and 40 percent of nurses and public health professionals. <sup>23</sup> These universities are often a gateway to higher education for urban students and to advanced training in health professions.

Addressing the failing K–12 education pipeline, particularly for urban and minority students, must be a priority. Too many urban students—many from high-need or underserved communities—drop out before they can even consider a health career. A 2009 study by America's Promise Alliance confirmed the dramatic "high school graduation gap" between urban and suburban public school students in 50 major cities. Students who drop out of high school, in turn, are more likely to suffer from poor health themselves, as educational attainment and health disparities are closely linked.

Needed change within the health workforce can be attained if training institutions make it a core priority and commit the resources required to achieve it. One of the most important steps toward achieving diversity goals is the commitment from university leaders. They have the power to transform institutional policies and procedures and collaborate with other educational institutions to strengthen the pipeline from preschool to graduate school. By aligning admission practices with broader institutional goals, health professions leaders shape the incoming student body and affect the influx of professionals entering health professions. Universities also are primary innovators in health professions education and can leverage existing linkages with urban sites, clinics, and hospitals to increase cultural competence and train health professionals in those venues where they are needed to practice.

# Research Results from a Study of Urban Universities

The Coalition of Urban Serving Universities (USU) is a president-led organization of public urban research universities committed to improving the economic prosperity and quality of life and place in cities and metropolitan regions. As part of their health initiative, members of the Coalition work together to increase the numbers, diversity, and cultural competence of the health workforce to improve health and reduce disparities in their communities.

In the winter of 2011, the coalition collected data from member institutions and public sources to better understand existing efforts and the needs of urban universities in preparing an adequate, diverse, and fully prepared health workforce. The USU survey included both quantitative and qualitative data analysis related to the following areas: institutional priority and capacity, admissions practices, pipeline programs, and innovative education efforts. The survey response rate was greater than 80 percent, including 32 institutions and 85 of their health professions schools.

USU's study is a first step to better understand the workforce efforts of its members—how they are currently engaging, what is considered to be most effective, and where greater effort is needed. The survey provides baseline data and identifies areas for future research. While this report is directed to USU presidents and health leaders, its insights will be useful for federal agencies and national associations working with our institutions toward the shared goal of preparing the future health workforce for cities.

# I. LEADERSHIP: BUILDING CAPACITY TO MEASURE RESULTS

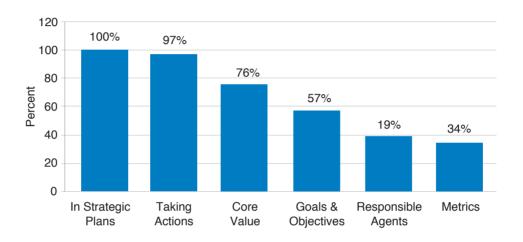
Preparing a more diverse and culturally competent health workforce is a stated goal in the strategic plans of nearly all institutions. Presidents and health professions deans consider it a "very high" priority. Institutional leaders are taking steps to enact change, and a multitude of educational innovations and partnerships target the issue.

Even with a stated high priority, many universities lack the capacity to execute and measure progress on their health workforce goals. Nearly all have efforts underway, but fewer institutions have mechanisms to track institutional progress or report on

outcomes to leaders. In the strategic plans of health professions schools, diversity and cultural competence is often identified as a "core value," but is not always accompanied by specific goals and objectives, responsible agents, or metrics (see Figure 3).

### FIGURE 3. SURVEY RESULTS: INSTITUTIONAL CAPACITY

# Preparing a More Diverse and Culturally Competent Health Workplace



Source: 2011 USU Member Survey, includes data from 32 universities and 85 of their health professions schools.

The results of the study make clear that top leadership commitment is crucial to meeting health workforce goals. University boards, presidents, and health professions deans set expectations, allocate resources, and hold themselves and others accountable. Several institutions cited a "clear message from leaders" as enabling more substantive planning and collaboration across the different health professions schools and units of the university. Such a process was noted at *University of Colorado Denver, Ohio State University, and Georgia State*, among others.

Many institutions are expanding senior leadership positions for diversity. Several, including *Portland State University* and the *State University of New York (SUNY) Albany*, have appointed chief diversity officers. *Indiana University-Purdue University Indianapolis (IUPUI)* credits three new leadership positions as advancing its efforts: an Assistant Chancellor for Diversity, Equity, and Inclusion and two full-time associate deans of diversity affairs in medicine and dentistry. *The University of Houston System* hired an associate vice president to oversee the Urban Health Initiative, a signature effort to prepare more of its diverse student body to become future health professionals in Houston communities.

Unfortunately, the data collected and used to measure progress on health workforce goals is largely inadequate. The lack of evidence and a "data feedback loop" to inform efforts and investments is a barrier for leaders. Box 1 presents the survey findings on the use of data.

# **BOX 1. USE OF DATA**

# Student Tracking and Program Evaluation

- Nearly all health professions schools collect data on underrepresented students who apply and enroll, using the data to inform policies on diversity.
- Sixty-four percent of these schools report tracking graduates to determine
  if they practice in underserved communities, though data is often difficult to
  obtain.
- Universities frequently evaluate pipeline programs, but few have the capability to track long-term outcomes of participating students.
- Challenges to improving data collection and analysis include a lack of infrastructure, cost, and definitional issues (e.g., defining such terms as underrepresented, economically disadvantaged, and diversity).

Efforts to strengthen data systems often stem from leadership priority and desire for greater accountability. As part of a highly visible Graduation Initiative, the California State University (CSU) System improved its tracking of student outcomes and reporting across 23 campuses. Campus leaders frequently cited the system-wide initiative as helping to align and better organize their work. The recent strategic plan for the SUNY System makes a commitment to develop "the right health professionals for the right places," and will be tracking its metrics in an annual report card to the public. Another example is the University of New Mexico's Vision 2020, the first academic health center strategic plan that focuses on improving the health and health equity of a state's population as a measure of the institution's success. All of the colleges, schools, departments, and programs at UNM Health Sciences Campus have incorporated into their annual performance plans how their education, service, and research enterprises will measurably improve the health of New Mexico's population.

Sustained institutional funding is frequently cited as important. Virginia Commonwealth University allocates permanent funding to support core infrastructure for pipeline programs within the Division for Health Sciences Diversity. Others point to the impact on diversity of declining resources. As one institution explained, "We created a dean-level position to promote, monitor, and

measure progress on diversity. However, due to the budget crisis, the position was temporarily eliminated."

# II. REACHING MORE STUDENTS: THE TALENT PIPELINE

There's good evidence that pipeline programs work. Evaluation studies on pipeline interventions demonstrate a range of positive outcomes, including improved

# BOX 2. HOW URBAN UNIVERSITIES ARE EXPANDING THE TALENT PIPELINE

# K-12 AND UNDERGRADUATE PROGRAMS

The University of Missouri, Kansas City offers the Summer Scholars Program, an academic enrichment program for underrepresented minority undergraduate students who have interest in and aptitude for health careers. Of the 1,265 participants to date, 69 percent have enrolled in a health careers degree program, including 25 percent in medical school.

### **POST-BACCALAUREATE PROGRAMS**

The *Ohio State University's* **MEDPATH** is a one-year post-baccalaureate academic enrichment program. Participants receive conditional acceptance into the College of Medicine and matriculate once they complete the program. The program doubled the number of underrepresented minority medical students in the School of Medicine. In addition, 68 percent of MEDPATH graduates provide substantial care to underserved populations, compared to 33 percent of non-MEDPATH graduates from Ohio State.\*

### SYSTEMIC EFFORTS

University of Illinois at Chicago **Urban Health Program** is a preschool through graduate level program that recruits and supports students from underserved communities interested in pursuing health careers. The program is integrated across the six health sciences colleges and includes both undergraduate and preundergraduate initiatives. In 34 years, the university has graduated more than 6,000 African American, Latino, and Native American health care providers and health-related researchers.

Virginia Commonwealth University recently has consolidated its 21 health sciences and research pipeline programs into a comprehensive model to increase access and success in health careers for diverse students. Centralizing the programs enables the university to consolidate resources, improve linkages with the community, create a connected experience for students, and track common data and outcomes.

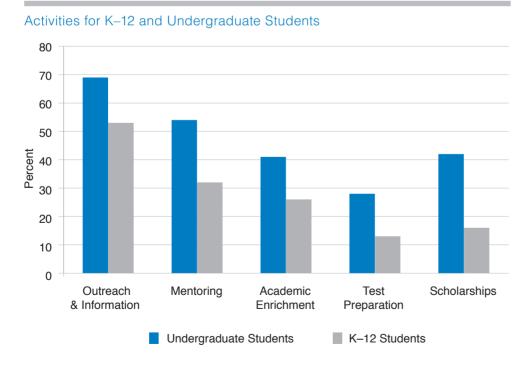
\* L. McDougle, D.P. Way and Y.L. Rucker. "Survey of Care for the Underserved: A Control Group Study of Practicing Physicians who were Graduates of The Ohio State University College of Medicine premedical Post Baccalaureate Training Program." *Academic Medicine*. 85 (1) (2010): 36–40.

academic success and increased enrollment in health professions schools.<sup>30</sup> USU leaders also cite pipeline programs as one of their most effective strategies for increasing and diversifying the workforce. About half of USU member institutions cite programs that are innovative or have documented success (See Box 2).

Universities make significant investments in their pipeline programs. At most institutions, the principal source of funding comes from the university and health professions school. At the same time, nearly all count on some federal support, particularly for K–12 activities. The federal Health Resources and Services Administration's Title VII programs, particularly the Area Health Education Centers, the Centers of Excellence and Health Career Opportunity Programs, are particularly instrumental to sustaining university health workforce diversity efforts. On more than one occasion, programs got off the ground through these federal programs, and then were continued by the institutions themselves.

The types of pipeline interventions being deployed by urban universities vary tremendously. The breadth and diversity of programs, as well as the overlap with science, technology, engineering, and mathematics (STEM) programs and general student services, make it difficult to characterize a standard "health careers pipeline program" or to determine what types of activities are needed to yield positive outcomes. Figure 4 summarizes the frequency of activities offered by

### FIGURE 4. SURVEY RESULTS: EXPANDING THE TALENT PIPELINE



Source: 2011 USU Member Survey, includes data from 32 universities and 85 of their health professions schools.

urban universities. Outreach, such as health career fairs and websites, are most frequent while academic and financial support are less common.

Short-term pipeline interventions, such as pre-matriculation and post-baccalaureate programs, are common among urban universities. These programs have substantial and growing evidence to support their effectiveness. Studies show they increase academic readiness and enrollment of underrepresented minorities in health professions schools.<sup>31</sup> Participants in these programs are also more likely to plan on working with underserved populations upon graduation.<sup>32</sup>

Among urban universities, the use of pre-matriculation and post-baccalaureate programs varies by health profession. Post-baccalaureate programs are offered at 85 percent of medical schools surveyed, compared to 27 percent of public health schools, 25 percent of dental schools, 19 percent of nursing schools, and none of the pharmacy schools. The data are similar for pre-matriculation programs.

While most pipeline activities focus on undergraduates, about half of health professions schools offer pipeline programs for K–12 students. Several institutions have developed more in-depth partnerships with specialized urban high schools

### **BOX 3. REGIONAL PIPELINE PARTNERSHIPS**

University of New Mexico and New Mexico State University recently have formed a cooperative pharmacy program to increase educational opportunities and the supply of pharmacists to areas of high need. High school students from underserved counties are accepted into the program, complete two years of undergraduate work at New Mexico State, and then matriculate to the University of New Mexico's School of Pharmacy. Graduates have incentives to return to these communities to practice.

The *University of Houston* participates in a pre-health professions agreement with *Baylor College of Medicine* called the **Health Professions Academy**. The program targets students from DeBakey High School, a highly diverse school in Houston focused on health professions. Students receive tuition assistance and academic supports all the way to medical school. Since its founding in 1996, 147 Debakey students have entered the program, and 75 of 76 University of Houston program graduates (99 percent) have matriculated into medical school.

Cleveland State University has launched a new partnership with Northeast Ohio Medical University. The aim is to prepare diverse primary care doctors for urban underserved communities. Several "pathways" to the medical degree are available to Cleveland State students, including direct entry, a post-baccalaureate to M.D. program, and a baccalaureate to M.D. pipeline.

focused on health careers. *IUPUI* works with Crispus Attacks Medical Magnet School; San Francisco State University has the Metro Health Academy; University of Houston works with Debakey High School for Health Professions; and the University of Illinois at Chicago has a partnership with UIC College Prep, a charter high school whose curriculum is co-developed by faculty in the university's six health sciences colleges.

Aside from discrete pipeline programs, urban universities are developing more systematic approaches to improve educational transitions to health careers. Examples include combined or accelerated degree programs, regional cooperative partnerships among educational institutions targeting high-need communities, new undergraduate majors, and improved articulation agreements with community colleges (see Box 3).

Bridging programs are particularly common among schools of nursing. These programs encourage nursing students to advance to higher levels of education. San Jose State University (SJSU) formed a partnership with the Evergreen Valley Community College to enable second-year associate degree nursing students to cross-enroll at SJSU, taking one higher level course each semester. The pilot partnership streamlines the educational transition and allows students to complete their bachelor's degree in nursing within 12 months of full-time enrollment.

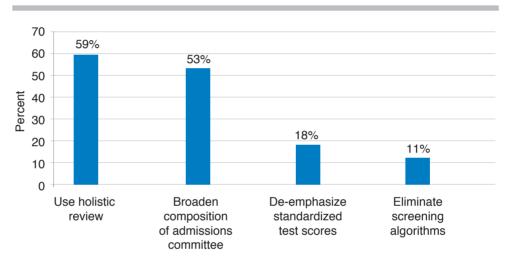
SUNY Downstate has developed a 15-month accelerated nursing program serving Brooklyn, Queens, and Staten Island in New York City. Other bridging programs address the shortage of nursing faculty or the lack of diversity among nursing leaders. Both Arizona State University and University of Minnesota have successful M.S. to Ph.D. nursing programs for Native Americans.

Only one third of urban universities cite institutional partnerships with minority-serving institutions. Many of these partnerships target biomedical research careers, and are supported in part by NIH. Such programs are in place at *CSU-Los Angeles, IUPUI*, and *University of Minnesota*.

# III. RECRUITMENT AND ADMISSIONS

Nearly all health professions schools consider diversity goals in admitting students, but promising admission practices are not being used to the extent suggested in the literature.<sup>33</sup> The most common admission strategies include using "holistic review" or broadening the composition of the admission committee to reflect greater diversity and perspectives. De-emphasis on test scores or elimination of screening algorithms are used less frequently, although some have advocated that approach, particularly where testing has low correlation with long-term academic performance (see Figure 5).

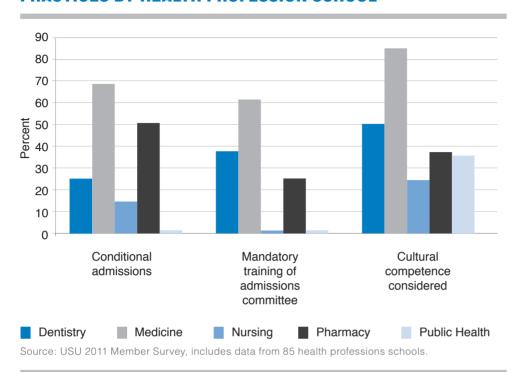
FIGURE 5. SURVEY RESULTS: CURRENT ADMISSIONS PRACTICES



Source: USU 2011 Member Survey, includes data from 85 health professions schools.

There are some differences in admission practices among the health professions. Extending conditional or guaranteed admissions is more frequent among schools of medicine and pharmacy then among schools of public health, nursing, or dentistry. The majority of medical schools surveyed require mandatory training for the admissions committee, a practice that is infrequent among other health professions schools. Consideration of cultural competence within the admissions process also is more frequent among medical schools (See Figure 6).

# FIGURE 6. SURVEY RESULTS: VARIATION IN ADMISSION PRACTICES BY HEALTH PROFESSION SCHOOL



Slightly more than half of health professions schools report evaluating their admissions strategies and outcomes. Several schools pointed to innovative approaches that improved their ability to attract and matriculate a more diverse class. University of Minnesota's School of Public Health cites its "core concepts" certificate as a way to both train more people in public health and enable students who didn't initially gain acceptance to demonstrate academic competence while making progress toward the master's degree. Many institutions identified recruitment strategies as increasing their effectiveness (e.g. outreach to diverse campus and national groups, online efforts, and hiring multicultural recruiters). For one institution, the decisive factor in attracting the students it seeks was offering more scholarships.

### IV. INNOVATIONS IN HEALTH PROFESSIONS EDUCATION

Training in underserved communities is an important strategy for increasing the cultural competence of health graduates. Nearly 80 percent of urban health professions schools have community partnerships to increase student exposure to, and understanding of, culturally diverse populations. Schools also are adapting their formal education, with 75 percent of health professions schools reporting they have integrated cultural competency into their curriculum.

### **BOX 4. SPOTLIGHT ON INNOVATION AND SUCCESS**

**Health Professions Education at Florida International University** 

## **NEW AMERICANS IN NURSING**

Through a regional collaboration of area hospitals, FIU has created the first Foreign Doctor to Nurses program in the nation. **New Americans in Nursing** is an accelerated Bachelor of Science program with specialized courses to transition foreign-born doctors to become practicing nurses. The idea was suggested to the former dean, Divina Grossman, by a group of Cuban doctors in Miami who were working outside their field—as cab drivers, at produce stands, or as security guards.

The impact, published in a 2008 article in the *Journal of Nursing Education*, is unassailable.\* The program taps an unmet need (the initial class had over 450 applicants), increases the supply of nurses, and on measures of nursing quality and employer satisfaction, graduates outperform expectations. Since its first class in 2002, more than 500 graduates have entered the nursing workforce. The school is partnering with the Hospital Corporation of America to expand the program remotely to Tampa.

# **NEIGHBORHOOD HELP PROGRAM**

FIU's medical school, which opened in 2009, is similarly committed to improving community health. The school's curriculum is designed around the **Green Family Foundation Neighborhood HELP™ program**, an interdisciplinary approach where teams of students from medicine, nursing, social work, and law work in Miami's poorest and most diverse communities. The students, now exceeding 400, visit with families in their homes over four years. They identify concerns and work with family members to improve them. In addition to training culturally competent physicians, Neighborhood HELP intends to impact health disparities directly. Initial data shows participating families already have lower emergency room utilization rates, and additional measures of health outcomes will be collected over time.

\* D. Grossman and M.L. Jorda. "Transitioning Foreign-educated Physicians to Nurses: The New American in Nursing Accelerated Program." *Journal of Nursing Education* 47 (12) (2008): 544–51

17

Only about one quarter of schools, however, have either done a formal needs assessment of cultural competency within curricular offerings and training or assessed cultural competency in students. The lack of student assessment largely reflects the newness of the field, varying definitions of what constitutes cultural competence, and questions of how cultural competence can be measured.

Many institutions are expanding clinical sites or community-based education to train students in venues where they are needed. Students from health-related schools at the University of Akron are assigned as part of their clinical experience to work in the College of Health Professions' Nurse Managed Center for Community Health, which has six clinics serving vulnerable and uninsured individuals in Akron. This includes a women's and children's homeless shelter, a men's homeless shelter, a federally funded housing complex, and a clinic serving individuals with severe and persistent mental illness. Florida International University has several innovative programs to improve the workforce for South Florida's diverse and underserved communities (see Box 4).

# Recommendations

# I. HIGH-LEVEL COMMITMENT

Campus-wide planning to meet goals for increasing the size and quality of the healthcare workforce should encompass both the initiatives of universities and their health professions schools. Only some of the efforts of universities to target workforce improvements are coordinated currently, and this can lead to duplication and difficulties assessing critical gaps. Lack of coordination also hampers the ability of university leaders and health professions deans to collect reliable and compatible data across all their health professions schools and programs, which makes it difficult to track progress on diversity, cultural competence, and other goals.

Here's what top leaders can do:

- Make their commitment visible. Where this has occurred, universities and health
  leaders are better able to coordinate efforts, measure effectiveness, and partner
  with their communities. The University of New Mexico's Vision 2020 is a good
  example of how a visible commitment to improve health equity at the highest
  level can galvanize both a campus and community to work together.
- Ensure that what is valued is measured, monitored, and reported. Though improved health and reduced health disparities in communities is difficult to measure, other workforce outcomes—access to health professions, student diversity, the location and practices of graduates—are more easily quantified. Universities should establish big-picture health workforce goals and be diligent about tracking and reporting their outcomes.
- Design health workforce programs based on local needs and outcomes. University leaders should ensure that decision-making—particularly expansion or development of new health professions schools—is responsive to local need. In turn, universities need national and state-level agencies and planners to provide more reliable and appropriate health workforce data. This helps leaders to better anticipate demand and plan across health fields.
- Engage leaders across health professions. Some of the most effective programs, such as the University of Illinois Chicago Urban Health Program, are integrated across the university and health professions and benefit from shared leadership commitment and "ownership." University presidents and health leaders should create mechanisms that break down silos among the health professions and ensure greater collaboration.

- Refine metrics by which institutions can assess progress and drive further
  health workforce improvements. Universities should identify a set of measures
  where data are already available and work with others to improve data and
  information systems that enable even better measures.
- Inventory programs that impact the health workforce to better assess and coordinate existing services and identify gaps.
- Improve and harmonize data relevant to health workforce goals. Universities should
  establish definitions for relevant terms (e.g. disadvantaged students) and
  identify common data to be collected across university programs and health
  professions schools.

# **II. THE TALENT PIPELINE**

Crucial to the effort to recruit, train, and graduate more students in the health professions is improving the flow of students into health profession schools by encouraging and preparing them from a young age.

## Urban universities should:

- Identify high-impact interventions. Evidence for pipeline programs is generally strong, but less is known about the relative value of specific interventions.
   Universities should work with federal agencies—including the National Institutes of Health, the Health Resources and Services Administration, and the National Science Foundation—to refine and disseminate knowledge that helps leaders to improve programs and direct resources appropriately.
- Build on what works. Universities should be rigorous in deploying evidence-based strategies for improving the pipeline to health professions. Interventions that are proven effective—for example, post-baccalaureate programs in medicine—should be scaled-up or piloted in other fields where there is similar need.
- Collaborate regionally. Some of the more innovative and promising health
  workforce models are regional collaborations—with other universities,
  K-12 systems, community colleges, local government, hospitals, and other
  employers.
- Partner with minority-serving institutions. Universities should consider specific strategies to link students at minority-serving institutions with advanced health professions education and training. While some are already engaged in such partnerships, much more can and should be done.
- *Develop mechanisms to track pipeline participants longitudinally*, and identify common measures to evaluate pipeline programs.

# **III. RECRUITMENT AND ADMISSIONS**

Institutions currently consider diversity and cultural competence in their recruitment and admission strategies, but practices differ across health professions schools and are not consistently evaluated.

### Urban universities should:

- Align admissions practices with institutional goals. Health professions leaders should collaborate to provide consistency in support of an overarching vision, to learn from each other's practices, and to optimize efforts across the board.
- Consider adopting promising practices in admissions to promote diversity, including
  holistic review, broadening the composition of admissions committees, and
  requiring mandatory training of committee members.
- *Evaluate health professions admission strategies and outcomes* to make certain they are effective and aligned with goals.

# IV. CULTURAL COMPETENCY

Universities are developing a number of innovations to attract and prepare individuals with the background, qualities, and skills to improve health and eliminate disparities. Nearly all are integrating cultural competence into their programs, but they lack consistent definitions and ways to measure this trait or the skill-sets associated with it.

# Universities should:

- Establish expectations for cultural competence that encompass campus climate, institutional practices and policies, and education programs. To do so, universities will need to define cultural competence appropriate to their mission and to identify the results they seek.
- *Identify learning outcomes for students* and develop ways to measure the transfer of knowledge that enables graduates to effectively care for diverse populations.
- Educate more students from—and in—the communities where they are needed.

  Evidence that health professionals will more likely serve the communities they come from or the places where they train supports a place-based approach to workforce development. A number of places where this is occurring, such as the partnership between Cleveland State University and Northeast Ohio Medical University, should be closely followed and their outcomes evaluated.
- Work with local healthcare employers to improve the supply of culturally competent graduates. The FIU "foreign doctors to nurses" program is a great example of a local partnership that improved university offerings, while

meeting the needs of local employers and communities for health workers that understand and can effectively serve South Florida's diverse communities.

# V. GATHERING EVIDENCE

Urban universities are creating and implementing solutions to develop a health workforce that ameliorates health disparities. They have leveraged diverse funding—including their own—to sustain these efforts. In an environment of increasingly tight budgets and accountability, better data is needed by both institutions and policymakers to direct resources and investments to what works.

Members of the Coalition of Urban Serving Universities are well-positioned to make headway in this area. They should:

- Encourage well-designed evaluation studies to inform health workforce efforts.
   Federal partners should work with universities to fund high-quality research on health workforce interventions and disseminate the results. Institutions, for their part, should publish more of their data so it can inform the field.
- Partner with state workforce planners and others to ensure that a regular, comprehensive analysis of local health workforce needs is available to guide and evaluate university efforts.
- Improve university data and information systems. Data collected and used to
  measure progress on health workforce goals are largely inadequate. This lack of
  evidence and a "data feedback loop" are barriers for leaders. Strengthening the
  data infrastructure and processes to provide leaders with this capability should
  be a top priority.
- Develop "learning communities." Efforts to improve data systems or to define
  common metrics would benefit from a broader cooperative effort among
  universities and health professions schools. Similarly, universities and
  policymakers should work together to identify and target crucial areas where
  evidence is lacking and can be improved.

If urban universities and their national partners work together we can make greater progress in developing a health workforce that meets community needs. It's imperative that our shared efforts evolve—that innovation becomes knowledge and that this knowledge is translated into better and more strategic programs. In the words of one university president: "Our aim is to do what's important, better."

# **ENDNOTES**

- Coalition of Urban Serving Universities, *Urban Universities: Anchors Generating Prosperity for America's Cities* (2010) Retrieved from http://www.usucoalition.org/downloads/part6/USU\_White\_Paper\_Report\_2010.pdf
- U.S. Department of Health and Human Services Agency for Healthcare Research and Quality, *National Healthcare Disparities Report*: 2010 (AHRQ Publication No. 11-0005), (2011). Retrieved from http://www.ahrq.gov/qual/nhdr10/nhdr10.pdf
- 3 K.J. Bennett, B. Olatosi, and J.C. Probst, *Health Disparities: A Rural-Urban Chartbook*. (South Carolina Rural Health Research Center. 2008). Retrieved from http://rhr.sph. sc.edu/report/(7-3) percent20Health percent20Disparities percent20A percent20Rural percent20Urban percent20Chartbook percent20- percent20Distribution percent20Copy.pdf
- 4 U.S. Census Bureau, *An Older and More Diverse Nation by Midcentury* (2008). Retrieved from http://www.census.gov/Press-Release/www/releases/archives/population/012496.html
- 5 U.S. Census Bureau, *Statistical Abstract of the United States*, *Population* (2011). Retrieved from http://www.census.gov/prod/2011pubs/11statab/pop.pdf
- K. Grumbach and M. Rosalina, "Disparities in Human Resources: Addressing the Lack of Diversity in the Health Professions," *Health Affairs* 27(2) (2008):413-422; and T. Goode et al., *The Evidence Base for Cultural and Linguistic Competency in Health Care.* (Washington, DC: National Center for Cultural Competence, Georgetown University, 2006) available at http://www.cmwf.org/usr\_doc/Goode\_evidencebasecultlinguisticcomp\_962.pdf
- 7 B. Smedley, A. Butler, and A. Bristow, eds. *In the Nation's Compelling Interest: Ensuring Diversity in the Nation's Health Care Workforce* (Washington, DC: National Academies Press, 2004).
- 8 Sullivan Commission, Missing Persons: Minorities in the Health Professions. A Report of the Sullivan Commission on Diversity in the Healthcare Workforce (Durham, NC: Sullivan Commission, 2004).
- 9 L. Sullivan and I. Suez Mittman, "The State of Diversity in the Health Professions a Century After Flexner." *Academic Medicine* 85(2) (February 2010). Retrieved from http://journals.lww.com/academicmedicine/Fulltext/2010/02000/The\_State\_of\_Diversity\_in\_the\_Health\_Professions\_a.21.aspx#P32
- 10 U.S. Department of Health and Human Services, "Improving Data Collection to Reduce Health Disparities," (January 23, 2012). Retrieved from http://www.healthcare.gov/news/factsheets/2011/06/disparities06292011a.html; U.S. Census Bureau (2011).
- D.J. Derksen and E. Whelan, Closing the Health Care Workforce Gap: Reforming Federal Health Care Workforce Policies to Meet the Needs in the 21st Century. (Washington, D.C.: The Center for American Progress. 2009) Retrieved from http://www.americanprogress.org/issues/2010/01/pdf/health\_care\_workforce.pdf; and U.S. Department of Health & Human Services, Shortage Designation: Health Professional Shortage Areas, Medically Underserved Areas/Populations. (2011). Retrieved from http://bhpr.hrsa.gov/shortage/
- 12 U.S. Department of Health and Human Services. *Designated Health Professional Shortage Areas Statistics*. (June 14, 2012). Retrieved from http://ersrs.hrsa.gov/ReportServer?/HGDW\_Reports/BCD\_HPSA/BCD\_HPSA\_SCR50\_Smry&rs:Format=HTML3.2

- 13 Association of American of Medical Colleges, *Physician Shortages to Worsen Without Increases in Residency Training* (2011). Retrieved from: https://www.aamc.org/newsroom/newsreleases/2010/150570/100930.html; and M.J. Dill and E.S. Salsberg. *The Complexities of Physician Supply and Demand: Projections through 2025* (Washington, DC: National Association of Social Workers Center for Workforce Studies, 2008) Retrieved from http://www.tht.org/education/resources/AAMC.pdf
- 14 American Association of Colleges of Nursing, *Nursing Shortage Fact Sheet* (2011) Retrieved from http://www.aacn.nche.edu/media/pdf/NrsgShortageFS.pdf
- 15 Institute of Medicine, *The Future of Nursing: Leading Change, Advancing Health* (2011). Retrieved from: http://www.thefutureofnursing.org/sites/default/files/Future percent20of percent20Nursing percent20Report\_0.pdf
- 16 Association of Schools of Public Health, *Confronting the Public Health Workforce Crisis* (2011) Retrieved from http://www.asph.org/document.cfm?page=1038
- 17 U.S. Department of Education (2000, 2009).
- 18 Health Reform GPS. *National Workforce Development Policy*. (2010) Retrieved from http://healthreformgps.org/resources/national-workforce-policy-development/
- 19 Grantmakers in Health, *In the Right Words: Addressing Language and Culture in Providing Health Care.* (2003) Retrieved from http://www.gih.org/usr\_doc/in\_the\_right\_words\_issue\_brief.pdf
- 20 J. H. Wilson and A. Singer, *Immigrants in 2010 Metropolitan America: A Decade of Change*. (Washington, DC: Metropolitan Policy Program at Brookings, 2011). Retrieved from http://www.brookings.edu/~/media/research/files/papers/2011/10/13%20 immigration%20wilson%20singer/1013\_immigration\_wilson\_singer.pdf
- 21 J. Betancourt, A. Green, et al. Defining Cultural Competence: A Practical Framework for Addressing Racial/Ethnic Disparities in Health and Health Care. *Public Health Reports*, 118 (2003).
- 22 T. Goode, et al. *The Evidence Base for Cultural and Linguistic Competency in Health Care.* (Washington, D.C.: National Center for Cultural Competence, Georgetown University, 2006). Retrieved from http://www.cmwf.org/usr\_doc/Goode\_evidencebasecultlinguisticcomp\_962.pdf
- 23 Coalition of Urban Serving Universities. American Urban Research Universities. (Washington, DC: USU, 2009).
- 24 K. Grumbach and M. Rosalina, "Disparities in Human Resources: Addressing the Lack of Diversity in the Health Professions," *Health Affairs* 27(2) (2008):413-422.
- 25 EPE Research Center, Cities in Crisis 2009: Closing the Graduation Gap: Educational and Economic Conditions in America's Largest Cities. (Washington, DC: America's Promise Alliance, 2009). Retrieved from http://www.americaspromise.org/Our-Work/Dropout-Prevention/Cities-in-Crisis.aspx
- 26 N. Freudenberg and J.Ruglis, "Reframing School Dropout as a Public Health Issue," *Preventing Chronic Disease*, 4(4) (2007). Retrieved from http://www.cdc.gov/pcd/issues/2007/oct/07\_0063.htm
- 27 Smedley et al. (2004); Sullivan Commission (2004)
- 28 M.R. Wilson, "Administration and Leadership of the Health Professions Partnership Initiative: A Medical School Administrator's Perspective" Academic Medicine, 81(6) (2006): 555-557; and C.L. Gilliss, D.L. Powell, and B. Carter, "Recruiting and Retaining a Diverse Workforce in Nursing: From Evidence to Best Practices," Policy Politics Nursing Practice, 11 (2010):294–30.
- 29 Smedley et al. (2004); Sullivan Commission (2004).

24

- 30 U.S. Department of Health and Human Services, Health Resources and Service Administration, Bureau of Health Professions, et al., *Pipeline Programs to Improve Racial and Ethnic Diversity in the Health Professions: An Inventory of Federal Programs, Assessment of Evaluation Approaches, and Critical Review of the Research Literature.* (2009) Retrieved from: http://bhpr.hrsa.gov/healthworkforce/reports/RecruitReport.pdf
- 31 K. Grumbach and E. Chen. "Effectiveness of University of California Post-baccalaureate Premedical Programs in Increasing Medical School Matriculation for Minority and Disadvantaged Students." *Journal of the American Medical Association*, 296 (9) (2006): 1079-85; and D.A. Andriole and D.B. Jeffe. "Characteristics of Medical School Matriculants who Participated in Post-baccalaureate Premedical Programs." *Academic Medicine*. 86 (2) (2011): 201–10.
- 32 K. Lupton, C. Vercammen-Grandjean, E. Wilson, and K. Grumbach. "Specialty Choice and Practice Location of Physician Alumni of the University of California." Academic Medicine. 87(1)(2012): 115–20.
- 33 Sullivan Commission (2004).

