Healthcare Workforce Background

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Introduction

Statewide shortages of health providers currently exist in several major health professions, such as nursing, primary care, and allied health. (Allied health professions are clinical healthcare professions distinct from medicine, dentistry, and nursing.) Furthermore, healthcare workforce needs are projected to increase dramatically due to population aging, growth, and diversity. Inability to meet health workforce needs will have serious adverse health access, quality, and cost consequences.

This background paper provides a description of the extent of the problem, describes the pathways to a career as a health professional and identifies barriers along this pathway, and summarizes legislative and administrative efforts to address the shortage.

See Attachment 1, "Top Healthcare Professions with Need of Workforce Development" for a list of the top healthcare professions with a shortage in California, a description of these healthcare career pipelines, and a discussion of the challenges along these pipelines.

Workforce Shortage

The health worker shortage is defined in many ways. For example:

- The state will face a shortage of up to 17,000 physicians by 2015.
- The Center for California Health Workforce Studies researchers indicate that the current registered nurse shortage is between 7,000 and 21,000. This shortage is expected to grow to 15,000 to 31,000 nurses in five years due to both the aging of the general population and the nursing workforce.
- California presently ranks 48th in the nation in the number of pharmacists per capita. It is projected that California will need a 26.1 percent growth in the number of pharmacists from 2006 to 2016.
- Fifty percent of the public health workforce and 70 percent of community clinic administrators will retire in the next five to ten years.
- Seventy-six percent of clinics report a staffing shortage of allied health workers.

In addition to the shortages of certain health professionals, California's health professions workforce does not reflect the state's demographic racial and ethnic composition and language proficiency, as described in Table 1. For example, Latinos compose over a third

of the state's population, yet they make up 5.7 percent of nurses, 5.2 percent of physicians, and 7.6 percent of psychologists in California.

Race, Etimetry				
	California	Nurses	Physicians	Dentists
	Population			
African	5.9%	3.2%	4.5%	<2%
American				
Asian/Pacific	12.2%	26.4%	22.5%	29.2%
Islander				
Latino	35.5%	5.7%	5.2%	<6%
Native	0.5%	<1%	<1%	<1%
American				
White	43.3%	64.3%	61.7%	61.4%

 Table 1: Current Composition of Selected Health Professions in California by

 Race/Ethnicity

Source: Healthcare Workforce Diversity Advisory Council, OSHPD

According to research conducted by the Public Health Institute and UC Berkeley's School of Public Health, California's emerging populations are under-represented in all health professions and in the health professions pipeline. In general, as the level of education increases and as admission spots become more competitive, racial and ethnic diversity diminishes.

Lack of diversity can lead to impacts on the quality of healthcare. A report by the Institute of Medicine links poorer health outcomes for minorities to the shortage of minority healthcare providers. One reason for this is that persons of color are less likely than whites to receive needed services, including clinically necessary procedures, due to cultural or linguistic barriers between the healthcare provider and the patient.

Furthermore, the Sullivan Commission finds that the lack of a diverse workforce results in a "loss of productivity, higher absenteeism, and greater employee healthcare costs…resulting in millions of dollars lost to companies as the result of chronic conditions left untreated."

Finally, a key component in the shortage of the healthcare workforce is the geographic distribution of this workforce. For example, 20 percent of California communities have a shortage of dentists. This barrier hinders access to healthcare and often contributes to racial, ethnic, and geographic disparities in health.

Barriers and Challenges to the Health Career Pipeline

The pipeline to a healthcare profession can begin with engagement of students at the K-12 level and can continue through all levels of higher education. Many of these professions additionally require board certification or licensing once educational requirements have been met. Each step along the pathway presents challenges and barriers to ensuring an adequate supply of the healthcare workforce. Additionally, the lack of coordination and gaps between these steps leads to missed opportunities to developing this workforce.

K-12

A number of privately and publicly funded efforts have been implemented to strengthen K-12's step in the healthcare career pipeline, including partnership academies and regional occupational centers. (These programs are discussed in more detail in the next section.) Various factors challenge the development of a healthcare workforce at the K-12 level, these include:

- *Inequitable Educational Opportunities.* Inequitable educational opportunities mean that youth of color are less academically prepared at all phases of the educational pipeline than their white peers.
- *Difficulty in Establishing Partnerships.* Difficulty in establishing consistent and statewide partnerships (with higher education institutions and businesses) because of a lack of statewide coordination and emphasis on these partnerships, differing institutional practices and policies, and inconsistent funding streams.
- *Inadequate Math and Science Foundation.* K-12 math and science curriculum often does not provide all students with an adequate foundation for the next phase in the healthcare pipeline.
- *Lack of Career Resources.* Many schools lack or face a shortage of career development programs and career counselors that help support career exploration and development.
- *Limited Instructional Time Availability.* Curriculum requirements often do not allow schools the option to augment their classes with programs that explore and teach career skills. (California has one of the nation's shortest minimum school day.)

Higher Education

According to the Department of Education, of the more than 300 careers within healthcare, approximately 41 percent require professional-level preparation, 33 percent require technical-level preparation, and 26 percent require assistant-level preparation.

Among all industries, healthcare is the number one sector requiring Associate degrees (AA) and certificates. The prevalence of certificate and AA requirements means the community colleges are critical in meeting healthcare workforce demands. The California State University (CSU) and the University of California (UC) provide educational preparation for professions requiring Bachelor's degrees or higher.

Among the factors limiting the supply of California's health workforce are:

• *Limited Educational Capacity.* Limited educational capacity in health education programs. These include the high costs of health education programs, a lack of

clinical placements, and faculty shortages. These constraints are not limited to the health programs themselves but include math, science and English classes, including basic skills education necessary for entry into and success in healthcare programs. The community college system is struggling to provide services across all these programs with limited funding, rapid student growth, and increasing student needs.

- *Inefficiencies in the Educational System.* Inefficiencies in the educational system include confusion over transfer requirements and a lack of system-wide agreement on program pre-requisites and curriculum.
- *High Attrition Rates.* High attrition rates in health education programs limit the supply of allied health professionals. Data on a recent cohort of California Community College nursing graduates indicate that 25 percent graduated behind schedule and 25 percent did not graduate at all. Additionally, a lottery or a "first come first serve" system is often used to allocate seats in impacted programs, without sufficient attention to the preparation of incoming students.
- *Lack of Financial Aid.* Lack of student supports from financial aid to counseling contributes to poor student outcomes. Many students need "wrap around" support services, such as tutoring, counseling, health insurance and childcare in order to succeed.

Professional Entry Requirements and Regulation

Entry requirements into healthcare professions range dramatically. The level of regulation of healthcare professionals is also diverse. Most healthcare providers are required to meet specified minimum education and training requirements and obtain state-issued certification or licensure before they may enter practice. A few, such as medical assistants, require no preparation or state registration at all.

The California Legislature has established minimum license requirements that protect the public from unqualified and potentially dangerous practitioners. Generally, professions that have greater potential to harm patients are required to meet more stringent standards, such as education, internships, licensing exams, continuing education and ongoing regulation by a state regulatory body.

The Department of Public Health (DPH) and multiple regulatory boards and bureaus housed within the Department of Consumer Affairs are responsible for regulating healthcare professionals. DPH generally regulates those professions for which it also has public health responsibilities. For example, DPH regulates x-ray technologists and also licenses the use of radioactive materials. See Table 2 below for examples of the professions each department regulates.

Table 2: State Departments That Regulate Health Professions

Department of Public Health	Boards and Bureaus at Department of	
	Consumer Affairs	
Imaging Technicians	Physicians and Surgeons	

 Certified Nurse Aide Hemodialysis Technician Home Health Aide Nuclear Medicine Technologist Nursing Home Administrator X-Ray Technologist Clinical Laboratory Professionals 	 Registered Nurses Social Workers Psychiatric Aides and Technician Marriage Family Therapists Dentists Occupational Therapists Pharmacists and Pharmacy Technicians Physical Therapists Respiratory Therapists Speech Pathologists
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Among the factors limiting the supply of the healthcare workforce are:

- *Scope of Practice.* For professions regulated by the state, scope of practice is restricted by law and closely guarded by the professions. When considering scope changes, the Legislature strives to strike a balance between public protection and ensuring a fair market place. Practitioners often assert that they are uniquely qualified to perform the range of tasks permitted by their license (to protect the patient's safety) and do not support delegating tasks to associates who may not be as highly trained. Changes to scope of practice can provide opportunities for additional resources for certain professions.
- Lack of Career Path in Some Healthcare Professions. There is a lack of natural career path between entry level and those that require an advance degree. Some healthcare professions have entry level positions (i.e., assistants and technicians). Generally, the requirements to become a technician or assistant consist of minimal education and/or work experience. On the other hand, the doctors, pharmacist, etc., who they are assisting are highly educated. The entry level positions rarely lead to the top of the career ladder. For example, pharmacy assistants and technicians require minimal training and education, but a pharmacist must achieve at least years of formal education.
- *License Mobility.* Healthcare practitioners who are licensed in states outside of California and want to move into the state may experience difficulty with obtaining licensure in California because this state's minimum education and examination requirements often differ from the requirements in other states. Regulators have struggled with this issue and created a variety of avenues for out-of-state licensees to enter practice in California. For example, several boards have adopted a licensure by credentialing process which waives entry-level exam requirements if the practitioner meets a minimum level of experience and has not had his/her license disciplined by a state licensing program. (The increased use of national licensing exams also facilitates inter-state mobility of healthcare professionals.)

• **Difficulties in Evaluating Foreign Educated Professionals.** Foreign education health practitioners also face challenges when entering the workforce in California because their education and experience are difficult to evaluate and confirm. The Medical Board has adopted an exam offered around the world and evaluates some foreign schools. These options are not available to most other regulatory bodies, so they often rely upon independent credentialing organizations to translate and evaluate applications and establish exam requirements for applicants who graduated from schools outside of the United States.

Efforts to Date

While there is much more to do in California to address the current crisis and prepare for the future, there are existing efforts to address shortage concerns. These efforts are discussed below. See Attachment 2 "Major State Healthcare Workforce Development Programs and Earmarks" for a summary of the funding of these programs.

Federal Economic Stimulus Package

The American Recovery and Reinvestment Act (Recovery Act) of 2009 provides \$3.95 billion for Workforce Investment Act (WIA) training and employment services. This includes formula grants to states for adult, dislocated worker, and youth services. The needs of workers will be met through dislocated worker national emergency grants, new competitive grants for worker training in high growth and emerging industry sectors with priority consideration to "green" jobs and healthcare, and increased funds for the YouthBuild program. The Federal Funds Information for States and Policy Reports estimates that California will receive about \$81 million for WIA adult activities, \$189 million for WIA youth activities, and \$225 million for dislocated worker activities.

Nursing Initiatives

Governor Davis. Responding to the nursing shortage in California, in January 2002, Governor Gray Davis announced the Nurse Workforce Initiative (NWI) and made available \$60 million. Funding for the initiative came from the federal WIA over a threeyear period. The initiative sought applicants to develop and implement proposals to recruit, train, and retain registered nurses (RNs) and licensed vocation nurses (LVNs) as a means to address the shortage of nurses and to support legislation on nurse-to-patient staffing ratios in hospitals subsequently implemented in January 2004. Among the findings contained in a 2004 evaluation of the NWI, conducted by the University of California at San Francisco and the University of California at Los Angeles, was the need to focus on "other" factors impacting the supply of nurses. These included the need for additional nursing faculty, competitive faculty salaries, and additional clinic placement sites.

Governor Schwarzenegger. In 2005, Governor Schwarzenegger launched the California Nurse Education Initiative through SB 1309 (Scott), Chapter 837, Statutes of 2006. The initiative included: expansion of educational capacity in California Community Colleges (CCC) through a five-year public/private investment of \$90 million; expansion of educational capacity in CSU Bachelor's and Master's nursing programs; creation of a nursing faculty loan assumption program to provide incentives for teaching; \$2.5 million for allied health programs at the K-12 level (which subsequently became the California Health Science Capacity Building Project—discussed later in this report); and opening of new UC nursing programs at the Bachelor's, Master's and Doctoral levels.

According to the California Board of Registered Nurses Annual School Survey, in 2004-05 and 2006-07 there were 23 nursing programs added and one re-opened program established in UC, CSU, community college or private colleges. The same survey shows that there have been over 3,700 new student enrollments, an improvement of 4.5 percent in the attrition rate, and 850 new faculty members. Challenges facing the 2006-07 academic year included over 15,000 qualified applicants unable to gain access to programs and a 5.9 percent faculty vacancy rate or 206 positions.

Additionally, there were various augmentations in 2006 to higher education to expand nursing capacity which have generally continued through 2007-08.

Nursing Legislation. In addition to SB 1309, AB 1559 (Berryhill) Chapter 172, Statutes of 2007, requires CCC districts to adopt and implement merit-based admissions policies for AA nursing programs if there are more applicants seeking enrollment than can reasonably be accommodated.

SB 139 (Scott) Chapter 522, Statutes of 2007, makes various reforms to address the nurse shortage including prohibiting CSU and CCC registered nurse programs from requiring students with Bachelor degrees to retake pre-requisite coursework and authorizing CCC to use multi-criteria screening methods if applicants for an RN program exceed capacity.

Other State and Local Programs

Department of Education (K-12). The Department of Education's Health Careers Education (HCE) program serves students at both the high school and adult levels through an integration of core academics and health career context, incorporating instruction in all aspects of the industry and by providing a curriculum and a program reflecting workplace needs. HCE is provided and funded largely through three programs (discussed below) as well as with federal monies from the Carl D. Perkins Career and Technical Education Improvement Act:

- The California Health Science Capacity Building Project provides incentive grants to prepare qualified workers to meet the critical worker shortages in the healthcare industry by preparing students for jobs or for postsecondary options. Participating students (beginning in grade seven) explore a variety of careers in healthcare and develop knowledge and skills that will prepare them for the transition to postsecondary education and specific careers in healthcare. The grants will continue until 2012.
- **Regional Occupational Centers and Programs (ROCPs)** provide high school students 16 years of age or older and adult students with career and technical education so students are able to enter the workforce with the skills and competencies

needed to be successful, pursue advanced training in postsecondary educational institutions, and upgrade existing skills and knowledge.

There are currently 74 (ROCPs) enrolling approximately 460,000 students each year. While 650 sections are related to the healthcare industry, ROCPs exist in every industry sector. Students receive training in regular classrooms as well as in actual business and industry facilities. For example, a healthcare ROCP might provide training to become a Certified Nurse Assistant/Home Health Care Aide.

ROCPs work in partnership with local business and industry to design and provide programs for industry-based, transferable and portable certification programs based upon job market demand. In 2007-08, ROCPs received about \$460 million General Fund. In 2008-09 and 2009-10 funding for ROCPs are subject to reductions and may be allocated for other educational purposes.

- **The Partnership Academy** model is a three-year program, grades ten through twelve structured as a school-within-a-school. Key components include:
 - Curriculum focused on a career-theme and coordinated with related academic courses.
 - Voluntary student selection process that identifies interested ninth graders (some schools and districts actually include ninth graders in their academies but fund that year with alternative funds).
 - Activities with private sector involvement to encourage academic and occupational preparation, such as an integrated and project-based curriculum, a mentor program, classroom speakers, field trips, and exploration of postsecondary and career options.
 - Workplace learning opportunities such as job shadowing, student internships and work experience.

The career-technical focus for an academy is determined by an analysis of the local labor market with a focus on fields that are growing and strong, that offer jobs with "career ladders" and that have companies willing to support the program. The program is kept broad, focusing on industries rather than on specific jobs.

Each academy has a partnership with employers and in grade 11, students are matched with mentors. After grade 11, students are placed in internship positions for which they apply. There are currently 61 health careers academies. Each academy enrolls an average of 150 students for an estimated total of 9150 students. Partnership academies require a three-way match for funding from the participating school district, the private sector and the state.

Office of Statewide Health Planning and Development (OSHPD). OSHPD's Healthcare Workforce Development Division (HWDD) supports healthcare accessibility through the

promotion of a diverse and competent workforce while providing analysis of California's healthcare infrastructure and coordinating workforce issues. HWDD programs are:

- Song Brown Health Care Workforce Training Act provides financial assistance for Family Practice Physicians, Family Nurse Practitioners, Physician Assistants and Registered Nurses training programs.
- National Health Services Corps / State Loan Repayment Program (SLRP) assists with the repayment of educational loans for select primary healthcare providers who agree to practice in Health Professional Shortage Areas for a minimum of two years. SLRP is funded through a federal grant which averages about \$1 million per year.
- Health Workforce Pilot Project Program tests and evaluates new or expanded demonstration projects to help inform the Legislature when considering changes to existing licensing legislation in the Business and Professions code.

Examples of Health Workforce Pilot Projects are as follows: <u>Dental Auxiliaries</u>: Dental Hygiene Access To Care, which amended the Business and Professions Code Section 1725, 1741,1750,1751, 1764 and added Sections 1765,1768, and 1770 to extend the scope of practice for dental hygienist to practice independently.

<u>Registered Nurses</u>: Access Through Primary Care Project - Demonstrating the Role of Advanced Practice Clinicians In Expanding Early Pregnancy Care.

- When fully implemented, the **California Pharmacist Scholarship and Loan Repayment Program** will provide scholarships to pay for the educational expenses of pharmacists and to repay qualifying educational loans of pharmacists who agree to serve in underserved areas. The Program is funded by a \$25 voluntary contribution that pharmacists can make at the time of license renewal. As of December 23, 2008, the available funding due to voluntary contributions from licensed California pharmacists is \$65,589.
- The Health Professions Education Foundation targets medically underserved areas of California through increasing the number of providers who practice in these areas. The Foundation offers scholarships and loan repayments to students and health professionals who agree to provide direct patient care in a medically underserved area of California for a period of one to three years. The Foundation offers the following programs:
 - o Registered Nursing Scholarship and Loan Repayment Program;
 - Health Professions Scholarship and Loan Repayment Program;
 - Allied Healthcare Scholarship;
 - o Steven M. Thompson Physician Corps Loan Repayment Program;
 - o Vocational Nurse Scholarship and Loan Repayment Program; and,
 - Licensed Mental Health Service Provider Loan Repayment Program (In Development).

• The California Healthcare Workforce Clearinghouse Program serves as the state's central source of healthcare workforce and educational data. The program was established by SB 139 (Scott), Chapter 522, Statutes of 2007, and is currently in development. The Clearinghouse will serve as the central source for collection, analysis, and distribution of information on the healthcare workforce employment and educational data trends for the state. OSHPD will retrieve data from the Employment Development Department's Labor Market Information Division, state health licensing boards, and state higher education entities.

Department of Public Health. DPH provides local assistance grants in order to support education and training for qualified professionals to become eligible to assume state and local state public health laboratory directors through the LabAspire program.

California Workforce Investment Board (WIB). The WIB assists the Governor in setting and guiding policy in the area of workforce development. Since the implementation of the federal WIA, the Governor has used discretionary funds (15% of the federal WIA allocation) for statewide activities to provide incentives for system-building, with a focus on the Governor's and national priorities. The WIB and each sitting Governor have fashioned initiatives such as the Caregiver Training Initiative, that encourage new local and regional partnerships to address a statewide shortage of healthcare workers, and at least two Nurse Workforce Initiatives, which includes the Nurse Education Initiative described above, that rely on regional partnerships to address statewide shortages of professional nurses.

Employment Training Panel. The Employment Training Panel (ETP) is a business and labor supported state agency that assists employers in strengthening their competitive edge by providing funds to off-set the costs of job skills training (generally for incumbent workers) necessary to maintain high-performance workplaces. The program is funded by the Employment Training Tax paid by most California employers. In 2007-08, ETP provided training to nearly 5,500 nurses, including upgrades to train certified nursing assistants to become licensed nurses, and for capacity building to provide employed nurses with increased specialized skills. It also provided training for allied healthcare professionals, including medical assistants and laboratory technicians.

The California Student Aid Commission. The California Student Aid Commission (CSAC) provides financial aid to students through a variety of grant and loan programs. The State Nursing Assumption Program of Loans for Education for Nursing Faculty (SNAPLE NF) encourages students to complete a baccalaureate or graduate degree and teach in a nursing program at an accredited college or university in California. The program pays up to \$25,000 in financial assistance.

The State Nursing Assumption Program of Loans for Education for Nurses in State Facilities (SNAPLE NSF) encourages registered nurses and students who will become registered nurses to seek employment in state-operated 24-hour facilities with a registered nurse vacancy rate of greater than 10 percent. **Regulatory Boards at the Department of Consumer Affairs.** The regulatory boards within DCA have taken a wide variety of action in response to the state's workforce needs in healthcare. Below are some notable efforts:

- Board of Respiratory Care is preparing to conduct a public outreach campaign to recruit more respiratory therapists. The board plans to target high schools and junior colleges.
- Board of Behavioral Sciences has established a "Career Connect" webpage. The page is under development, but the board plans to include licensing Questions and Answers, links to financial aid/loan repayment programs, and websites that list mental health employment opportunities in California state government.
- Dental Board of California is implementing a mandatory dental healthcare workforce survey that will document the cultural background and language proficiency of its licensees. The Board is also in the process of adopting a streamlined and integrated education and licensure process that will incorporate license exam into the education program. This will theoretically reduce the time it takes to get graduates from dental school into the communities and practicing dentistry.
- Speech Language Pathology and Audiology Board made changes to its entry-level licensing provisions for the speech-language pathology assistant category (which is a licensed support personnel category, either Associate of Arts/Associate of Science degree or Bachelor of Science degree) in order to create more pathways to licensure.

Recent Legislation

AB 638 (Bass), Chapter 628, Statutes of 2008, establishes the California Physician Assistant Loan Assumption Program, to assume the qualifying educational loans of physician assistants who agree to practice in designated medically underserved areas.

AB 2375 (Hernandez) of 2008 would have required OSHPD to establish the Health Professions Workforce Task Force to assist in the development of a health professions workforce master plan for the state. This bill was held in Senate Rules.

AB 2543 (Berg) of 2008 would have enacted the Geriatric and Gerontology Workforce Expansion Act to provide grants for loan repayment assistance to licensed and associate clinical social workers, marriage and family therapists, and registered marriage and family interns who provide geriatric services. This bill was vetoed by the Governor.

AB 1559 (Berryhill) Chapter 172, Statutes of 2007, requires CCC districts to adopt and implement merit-based admissions policies for AA nursing programs if there are more applicants seeking enrollment than can reasonably be accommodated.

SB 139 (Scott) Chapter 522, Statutes of 2007, makes various reforms to address the nurse shortage including prohibiting CSU and CCC registered nurse programs from requiring

students with bachelor degrees to retake pre-requisite coursework and authorizing CCC to use multi-criteria screening methods if applicants for an RN program exceed capacity. Also establishes the California Healthcare Workforce Clearinghouse Program that will serve as the central source for collection, analysis, and distribution of information on the healthcare workforce employment and educational data trends for the state.

SB 615 (Oropeza) of 2007 attempted to establish the California Pharmacy Technician Scholarship and Loan Repayment Program to provide scholarships to pharmacy technician students, and educational loan repayments for pharmacy technicians, who provide services in medically underserved areas. The bill was vetoed by the Governor.

AB 269 (Eng) Chapter 262, Statutes of 2007, creates new reporting requirements for dentists and dental auxiliaries upon their application for initial licensure and renewal. Also requires the Dental Board of California and the Committee on Dental Auxiliaries to collect and aggregate information received from dentists and dental auxiliaries relating to cultural background and foreign language proficiency.

SB 764 (Migden) of 2007 would have required the California Medical Board and the Osteopathic Medical Board of California to provide physician information to OSHPD and requires OSHPD to prepare a report with the projections concerning primary care physicians for the Legislature and the Department of Health Care Services. This bill was vetoed by the Governor.

AB 2283 (Oropeza), Chapter 612, Statues of 2006, requires the Medical Board to annually aggregate existing data reported to it by physicians on their cultural background and foreign language proficiency and report this information on its Web site.

California Foundation Efforts

Many organizations are addressing the shortage of certain healthcare professions and the lack of diversity in the healthcare workforce. Some of these include:

- The California Endowment established the Work Force Diversity grants program to increase the diversity and improve the distribution of California's health workforce by supporting approaches that expand the number of underrepresented minorities in the medical, oral health and nursing professions who practice in underserved areas.
- The California Wellness Foundation (TCWF) launched the Diversity in Health Professions grants program to fund organizations that provide: pipeline programs; scholarships; outreach and retention programs; internships and fellowships; and loan repayment programs for ethnic minorities that are underrepresented in the health professions. Careers in medicine, nursing, public health and other allied health professions are included. Organizations that support leadership development for people of color in the health professions are also eligible for funding. In addition, TCWF funds organizations that educate policymakers and advocate for public and institutional policies that promote diversity in the health professions.