

by Janice Genevro, Diane Rittenhouse, and Alexandra Ament

# Expanding Postbaccalaureate Programs to Address California's Health Workforce Crisis

California is facing a health workforce crisis. There are not enough health workers to meet the needs of the state's increasingly diverse, growing, and aging population. This Health Workforce Strategies for California series highlights current critical health workforce interventions and builds on the findings of the California Future Health Workforce Commission.

here are not enough health workers to meet the needs of California's large, diverse, and aging population, and the situation is worsening. The shortages exist across professions and geographies, with sizeable urban and rural populations going underserved. In addition, although the state population is becoming increasingly diverse, current health professionals don't reflect these demographic shifts. California's postbaccalaureate programs can help train health professionals who better reflect the demographics of California's population and who are prepared to meet the needs of all Californians.

## Pre-Health Postbaccalaureate Programs

Pre-health postbaccalaureate programs (PBPs) are designed to prepare college graduates to be more competitive applicants to health professional schools. Some programs focus on enhancing the academic preparation and experience of participants, many of whom previously applied unsuccessfully to medical or dental school. Other programs are designed specifically for applicants interested in changing careers. This brief focuses on academic enrichment PBPs for students from communities underrepresented in the health care professions. These programs typically take students one year to complete and often include science coursework in addition to student supports such as learning skills development, academic and career advising, and test preparation courses.

PBPs are effective at increasing the rates at which students from underrepresented communities are admitted to and graduate from medical school.<sup>1</sup>

In addition, participants in PBPs are more likely to provide care in underserved areas. Because PBPs are one-year interventions designed for students who already have a commitment to a career in the health professions, PBPs can play an important role in addressing California's health workforce crisis by increasing the diversity of the health professional workforce and improving access to care in underserved regions of the state in a relatively short period of time.

"In 2017 a total of 1,187 underrepresented minority Californians applied for medical school admission, and 694 were not accepted into any medical school to which they applied. Postbaccalaureate reapplicant premed programs offer an alternative opportunity to prepare for and be accepted to medical school. They support students who might otherwise be qualified to overcome barriers to acceptance, such as those with low prerequisite science GPAs and standardized test scores."

Source: Meeting the Demand for Health: Final Report of the California Future Health Workforce Commission.

### **Key Outcomes and Evidence**

- One way to increase the number of students from communities underrepresented in the health professions is through their participation in postbaccalaureate premedical programs at University of California medical school campuses. PBPs also increase the number of students from underrepresented communities who graduate from medical school, choose primary care careers, and practice in medically underserved areas.<sup>2</sup>
- ➤ The UCSF School of Dentistry Post-Baccalaureate Program demonstrates improved short-, mid-, and long-term outcomes for students from economically and educationally disadvantaged backgrounds who were previously denied admission to dental school.<sup>3</sup>

"Postbaccalaureate programs have been successful in California for over 30 years, and 7% of [underrepresented minority]
Californians accepted to medical school are postbaccalaureate alumni. Such alumni are almost twice as likely to pursue primary care specialties as are general California medical school graduates (60% vs. <35%) and about four times more likely to pursue family medicine (37% vs. <9%). Many possess cultural, experiential, and linguistic skills needed to enhance access to culturally and linguistically concordant care for underserved minority patients."

Source: Meeting the Demand for Health: Final Report of the California Future Health Workforce Commission.

### Current Postbaccalaureate Programs in California

Medical and dental schools in the University of California (UC) system (UC Davis, UC Irvine, UC Los Angeles, UC Riverside, and UC San Francisco) offer PBPs oriented toward students from backgrounds underrepresented in the health professions. These programs currently enroll a total of 60 students and focus on academic enhancement.

University of California Academic Enhancement Postbaccalaureate Programs Serving Students Underrepresented in the Health Professions

Premed
UC Davis
UC Irvine
UC Los Angeles Re-Application Program
UC Riverside
UC San Francisco School of Medicine
Predental
UC Los Angeles School of Dentistry
UC San Francisco School of Dentistry
Source: Adapted from Postbaccalaureate Programs in California

## Expanding Postbaccalaureate Opportunities for Students from Underserved Communities

(PDF), UC Davis, last updated December 20, 2016.

The California Future Health Workforce Commission (the commission) recommended expanding premedical post-baccalaureate programs by adding 100 slots prioritized for underrepresented minority students from designated Health Professional Shortage Areas who are reapplying to medical school. The commission also recommended expanding funding to provide student scholarships for reapplicant postbaccalaureate students to cover 100% of program tuition. The commission estimates that the costs associated with this recommendation would be \$2.6 million per year (\$26 million over 10 years), with an estimated cost per participant graduated of \$32,700.4

2

California Health Care Foundation www.chcf.org

There is also a critical need for dentists in underserved areas. If the commission's recommendation were expanded to include 40 dental school applicants, the authors estimate the additional investment would be \$1 million annually at an estimated cost of \$25,714 per applicant. The estimated total cost for additional medical and dental slots would be \$36 million over 10 years.<sup>5</sup>

### Conclusion

Participation in postbaccalaureate programs has been an effective strategy for increasing diversity in health professions students and for graduating physicians and dentists likely to practice in underserved areas. Expanding the number of postbaccalaureate positions available in California holds promise as a high-yield investment to increase the diversity, access, and language concordance of the health workforce and to address California's health care workforce crisis.

### The Authors

Janice Genevro, PhD, MSW, senior researcher, Mathematica; Diane Rittenhouse, MD, MPH, senior fellow, Mathematica; and Alexandra Ament, MA, independent consultant.

#### **About the Foundation**

The California Health Care Foundation is dedicated to advancing meaningful, measurable improvements in the way the health care delivery system provides care to the people of California, particularly those with low incomes and those whose needs are not well served by the status quo. We work to ensure that people have access to the care they need, when they need it, at a price they can afford.

CHCF informs policymakers and industry leaders, invests in ideas and innovations, and connects with changemakers to create a more responsive, patient-centered health care system.

#### **Endnotes**

- Kevin Grumbach and Eric Chen, "Effectiveness of University of California Postbaccalaureate Premedical Programs in Increasing Medical School Matriculation for Minority and Disadvantaged Students," JAMA 296, no. 9 (2006): 1079–85; Anneke M. Metz, "Medical School Outcomes, Primary Care Specialty Choice, and Practice in Medically Underserved Areas by Physician Alumni of MEDPREP, a Postbaccalaureate Premedical Program for Underrepresented and Disadvantaged Students," Teaching and Learning in Medicine 29, no. 3 (July–Sep. 2017): 351–59; and Herbert C. Smitherman et al., "Impact of a 50-Year Premedical Postbaccalaureate Program in Graduating Physicians for Practice in Primary Care and Underserved Areas," Academic Medicine 96, no. 3 (Mar. 1, 2021): 416–24.
- 2. Grumbach and Chen, "Effectiveness"; Metz, "Medical School"; and Smitherman et al., "Impact."
- Cynthia D. Wides et al., "Long-Term Outcomes of a Dental Postbaccalaureate Program: Increasing Dental Student Diversity and Oral Health Care Access," Journal of Dental Education 77, no. 5 (May 2013): 537–47.
- Meeting the Demand for Health: Final Report of the California Future Health Workforce Commission, California Future Health Workforce Commission, February 2019.
- Diane Rittenhouse et al., Health Workforce Strategies for California: A Review of the Evidence, California Health Care Foundation, April 2021.

3