

POLICY BRIEF

Addressing the Health Care Workforce Crisis Begins with Diversifying the Student Pipeline

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About Beyond 12

Beyond 12 is a national, technology-based nonprofit whose mission is to increase the number of historically underrepresented students who graduate from college and who translate those degrees into meaningful employment and choice-filled lives. We advance our mission through a digital coaching platform that combines (1) coaches who work with students virtually for their first two years of college; (2) mobile apps, MyCoach and GradGuru, that use evidence-based nudges to remind students of the activities, deadlines, and behaviors that lead to success; and (3) an analytics platform, powered by machine learning, that allows us to predict which students need help and when, and prescribe the right type of support.

Working in partnership with high schools, college access and scholarship organizations, colleges, and universities we are currently serving 17,500 students in California on our tracking and analytics platform, 600 of whom are working intensively with a virtual college coach. Nationally we track 47,000 students, and coach a total of 2,300. We recently acquired award-winning platform, GradGuru, through which we are serving an additional 38,000 community college students in California. Of the students coached by Beyond 12 for four years, 85% have either graduated or are still enrolled in college six years after entering; this is double the national average for similar students.

Executive Summary

In 2019, the California Future Health Workforce Commission released *Meeting the Demand for Health*, a report that highlights recommendations for addressing California's workforce gaps: the state does not have enough of the right types of health workers in the right places to meet the needs of its growing, aging, and increasingly diverse population.¹ To address these gaps, the Commission made a series of recommendations, including that the State support all students, but especially those who are first-generation, low-income and underrepresented students of color into and through health care professions.

This brief identifies the need to increase the number of health care professionals in California, reviews the benefits of diversifying student pipelines into health professions, and makes key recommendations for state policymakers' consideration that would increase the number of first-generation, low-income and underrepresented students of color who enter health care professions.

Recommendations

In order to address the looming shortage of health professionals in California and increase the number of underrepresented students that complete health-related degrees, California must invest in:

- 1. Diversifying pipeline and advising programs at post-secondary institutions:** Pipeline, advising, and mentorship programs help students get and stay on track in health majors where there is little room for error. Mentorship and advising needs to be comprehensive and persistent throughout the duration of students' college careers.
- 2. Broadening the availability and accessibility of academic programs and supports:** California colleges and universities must receive the necessary state funding to increase the number of gateway courses offered in impacted health-related majors so that students are able to enroll in courses on schedule and in a timely fashion.
- 3. Increasing institutional and financial aid and paid internship opportunities:** Underrepresented students need access to paid opportunities, expanded Cal Grants, or institutional funds in order to support internship and lab experience. This, along with more public and centralized resources for internship, mentoring and lab opportunities would broaden access to the social networking and skill-building necessary to launch strong early careers in the health professions.

The California Landscape: A Looming Health Care Workforce Crisis

California is facing a health care workforce crisis. According to the California Future Health Workforce Commission:²

- The state will face a shortfall of 4,100 primary care clinicians and 600,000 home care workers in the next decade and will only have two-thirds of the psychiatrists we need;
- Seven million Californians, the vast majority of them Latino, Black, and Native American, live in counties with insufficient primary care, dental care, or mental health care providers;³
- The population of California is expected to increase by six million people in the next decade, but the state's medical school enrollment rate is the third lowest in the country and as a result, 60% of Californians looking to pursue a medical degree have to move out-of-state for school;⁴ and
- The current health care workforce doesn't reflect the diversity of the state: Latinos make up nearly 40% of California's population, but only 7% of its doctors.

In order to meet the increasing demand, as well as to expand the diversity of the health care workforce, it is necessary to increase opportunity for all Californians to advance in the health professions. In 2019, the California Future Health Workforce Commission released *Meeting the Demand for Health*, a report that highlights recommendations for addressing California's workforce gaps: the state does not have enough of the right types of health workers in the right places to meet the needs of its growing, aging, and increasingly diverse population.⁵ To address these gaps, the Commission made a series of recommendations, including that the State support all students, but especially those who are low-income, first-generation, and historically underrepresented into and through health care professions. The Commission found that to build the diverse health care workforce necessary to address the needs of our state, we need to:

"Expand and scale pipeline programs to recruit and prepare students from underrepresented and low-income backgrounds for health careers with mentorship, academic, career, and psychosocial support. Under these health pipeline programs, as many as 5,700 low-income and underrepresented minority professionals will be able to join the California health care workforce during a 10-year period at a cost of just \$11,000 per person. (Recommendation 1.1)"

"Recruit and support college students, including community college students, from underrepresented regions and backgrounds to pursue health careers, and form associated partnerships that provide academic, advising, and health career development support. College students from low-income and first-generation backgrounds will be targeted for inclusion in this priority, which has the potential to add at least 25,500 new California health care workers over 10 years. (Recommendation 1.2)"

"Support scholarships for qualified students who pursue priority health professions and serve in underserved communities under a new Emerging California Health Leaders Scholarship Program. Approximately 3,810 students (1,707 physicians, 696 nurse practitioners, 152 physician assistants, 325 public health professionals, and 930 social workers) would be supported over the next 10 years, making the path to health education and service in underserved communities a reality for many more Californians. (Recommendation 1.3)"

Ensuring that underrepresented students can obtain higher education degrees and high-quality credentials in the health professions is key to closing the health care workforce gap and to ensuring equal opportunity for all within California. For far too long, however, institutions of higher education have engaged in practices that reinforce inequities or failed to provide support that would improve outcomes for first generation, low-income, and historically underrepresented students of color.⁶ The current higher education system lacks key support structures that are necessary for underrepresented students, and the COVID-19 pandemic is exacerbating these challenges and disproportionately pushing low-income, first-generation, and underrepresented students of color out of health professions, at the very moment when they are most needed.

Challenges to Building a Diverse Health Care Workforce

Supporting students in their desire to obtain a college degree needs to begin early and continue through their college journey. This is especially true for underrepresented students who are often the first in their families to enroll in an institution of higher education, and as a result, may need strong support in order to navigate an unfamiliar college experience. Beyond 12 has observed three primary sets of challenges in the health professions among the first-generation, low-income and underrepresented students of color that it coaches through college.

Underrepresented students experience and internalize the **lack of diverse representation and support** in health-related academic programs. Beyond 12 coaches report that even before entering post-secondary majors in health-related fields, students express their surprise and frustration that they don't see people "like them" in academic departments or in mentoring and support programs. Once engaged in health-related majors, students find a lack of support on campus, can't find trusted advisors or mentors, and often miss out on career-related opportunities because of this. Similarly, while certificate programs at two-year institutions are the strongest pathways into health professions for underrepresented students, these programs have high attrition rates and underrepresented students often leave without usable credentials.⁷ At four-year institutions, underrepresented students are less likely than their more privileged peers to be engaged in scientific research and less likely to know or be taught about post-baccalaureate pathways outside of nursing and medical school.

When entering post-secondary degree programs, first-generation, low-income and underrepresented students of color are most likely to be enrolled at large state institutions or at community colleges. These programs are often impacted and students are unable to enroll in the required gateway classes on time. These **academic progress delays push students out of health-related majors**, especially when their education pathways and financial packages cannot accommodate extra academic terms. Additionally, students at large state institutions and community colleges have more **limited access to the academic supports they need**, and few opportunities to seek support from professors. Even when support is provided, it's traditionally front-loaded into students' first one or two terms, and yet students don't experience college in a linear manner. Because of these pressures, many Beyond 12 coaches report that students in health-related majors experience substantially more stress and negative impacts to mental health than their peers in other fields of study. These challenges, coupled with narrow degree pathways mean that when underrepresented students struggle with coursework, they are more likely to leave the major completely.

Moreover, COVID-19 is affecting already-marginalized communities more intensely and deepening inequalities in California. Among students served by Beyond 12, we are seeing that students in health-related majors are experiencing high levels of uncertainty about enrolling in lab classes during remote learning. Students are struggling with securing

Reflections from Beyond 12 Coaches:

Success Stories:

"Beyond 12 students who have been successful in health majors enrolled in school without remedial requirements. If a student had to do a remedial class or if they had to prioritize working over studies, then they haven't been able to stay enrolled in a health related major. In the few cases where my students did continue, they had to add a 5th or 6th year of school in order to take all their graduation requirements."

"Students who begin school with a clear 4 year plan for their major experience a lot more success. Students who had less knowledge about the major requirements or changed their path along the way feel really discouraged and end up switching majors."

"Students who are very proactive in networking and are able to build connections in the field and find mentors are the most successful."

Push Outs:

"Most of my students in health-related fields had to switch out of nursing because of how impacted and competitive the major is. Students felt like they didn't have enough opportunity to engage in the major. Some students are even thinking about transferring schools to see if they can find a program that supports them more in the major."

"Students often switched majors because of the stress of balancing work and school, and sometimes also navigating remedial classes. Their well-being was so impacted they felt like they weren't able to do the work or compete in the program."

reliable technology for distance learning (e.g. computers, hotspots, technical equipment) and worry whether they will be prepared for future coursework in the major. Many schools are holding science labs in-person and students are confronted with the challenges of COVID-19 exposure, long commutes if they have moved back to home communities, and the complexity of hybrid learning schedules.

Finally, **financial support remains a significant barrier** for underrepresented students. A primary learning environment for students in health-related fields is lab positions, internships, and mentoring programs. These experiences build social capital and help students turn their degrees into early career jobs and graduate program acceptances. However, most internships and lab positions are unpaid and underrepresented students can rarely afford to accept these positions. Early differences in access to unpaid lab positions and internships parlay into fewer opportunities throughout students' post-secondary careers and ultimately into less competitive first jobs and fewer graduate program acceptances.

Recommendations

In order to address the looming shortage of health professionals in California and increase the number of underrepresented students that complete health-related degrees, California must invest in:

1. **Diversifying pipeline and advising programs at post-secondary institutions:** Pipeline, advising, and mentorship programs help first-generation, low-income and underrepresented students of color recognize – sometimes for the first time – that they can be successful in health care fields. These programs are often the first place underrepresented students meet successful health-related professionals from similar backgrounds and communities as them. These advising and mentorship programs also help students get and stay on track in health majors where there is little room for error. Support must also include proactive and institutionalized outreach early and often during post-secondary enrollment. Students from underrepresented backgrounds are both vulnerable to attrition at higher rates, and are less likely to have the knowledge or connections needed to seek out support on their own. Mentorship and advising needs to be comprehensive and persistent throughout the duration of students' college careers.
2. **Broadening the availability and accessibility of academic programs and supports:** California colleges and universities must receive the necessary state funding to increase the number of gateway courses offered in impacted health-related majors so that students are able to enroll in courses on schedule and in a timely fashion. Additionally, institutions need to fund sufficient and available academic resources to support students through these courses. We also need to advocate for more publicly-available resources to support degree-specific education and career pathway planning so that students have the tools they need to understand degree prerequisites, post-baccalaureate pathways, and average time-to-graduation at different institutions.
3. **Increasing institutional and financial aid and paid internship opportunities:** We need additional student financial aid, particularly institutional aid, and investment in health care industry partnerships that can fund paid internship programs. The availability of paid internships and lab opportunities will enable first-generation, low-income and underrepresented students of color to gain the hands-on experience needed to build professional networks, receive mentorship, and secure quality employment after graduation. Underrepresented students need access to paid opportunities, expanded Cal Grants, or institutional funds in order to support internship and lab experience. This, along with more public and centralized resources for internship, mentoring and lab opportunities would broaden access to the social networking and skill-building necessary to launch strong early careers in the health professions.

Conclusion

California is facing a looming shortage of health care workers, a crisis that has been exacerbated by the ongoing COVID-19 pandemic. Students are struggling with securing reliable technology for distance learning, experiencing uncertainty about whether they will be prepared for future coursework and are considering leaving their health pathways entirely, due to a lack of financial and academic supports.

Furthermore, the state's current health care workforce doesn't reflect the diversity of California, where Latinos make up nearly 40% of the state's population, but only 7% of its doctors. Ensuring that first-generation, low-income and underrepresented students of color can obtain health-related degrees is the key to bridging this divide and closing California's health care workforce gap.

The State must take immediate action by investing in 1) diversifying pipeline and advising programs; 2) broadening the availability and accessibility of academic programs and supports; and 3) increasing financial aid and paid internship opportunities for underrepresented students. Now, and as we emerge from this pandemic, it is critical that California has a diverse, well-trained health care workforce.

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Endnotes

- 1 <https://futurehealthworkforce.org/wp-content/uploads/2019/03/MeetingDemandForHealthFinalReport CFHWC.pdf>
- 2 <https://futurehealthworkforce.org/2019/02/04/ca-looming-workforce-crisis/>
- 3 <https://futurehealthworkforce.org/2019/02/04/ca-looming-workforce-crisis/>
- 4 <https://futurehealthworkforce.org/2019/02/04/ca-looming-workforce-crisis/>
- 5 <https://futurehealthworkforce.org/wp-content/uploads/2019/03/MeetingDemandForHealthFinalReport CFHWC.pdf>
- 6 Armstrong, E. A., & Hamilton, L. T. (2013). *Paying for the party: How college maintains inequality*. Harvard University Press; Wilbur, T.G., & Roscigno, V.J. (2016). *First-generation Disadvantage and College Enrollment/Completion*. *Socius*, 2.
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