

## CALIFORNIA'S PHYSICIAN SHORTAGE BRIEF

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### EXECUTIVE SUMMARY

Approximately seven million Californians live in areas with a shortage of primary care physicians [1]. As California's population grows older and increasingly diverse, this shortage is expected to increase. Previous research shows a disparity between the racial/ethnic composition of physicians in California and their increasingly diverse population. Research shows that patient-provider concordance is positively associated with better interpersonal processes of care, access to care, and health outcomes [2, 3]. According to research from the UCLA Latino Policy & Politics Initiative (LPPI), it could take up to five centuries to fully address the Latino physician shortage if present trends continue [4]. This report discusses how to address the physician shortage in California by: *Increasing physician admissions for Underrepresented Minority (URM) students, Increasing Primary Care Residencies, and Expanding International Medical Graduate Placements* in the near-term.

### INTRODUCTION

California is experiencing an increasing shortage of primary care physicians. The California Healthcare Workforce commission has recently estimated that approximately seven million Californians live in a Health Professional Shortage Area (HPSA), a federal designation for counties experiencing a shortage of primary care, dental or mental health care providers [1]. Latinos, African Americans, and Native Americans are the majority of residents in areas with a physician shortage. This shortage is expected to increase with population aging. The population aged 65 years and older is projected to grow by 48% [5]. By 2050, approximately 19.5% of the population will be 65 years or older. Population aging is likely to worsen the physician shortage due to increased health care demand. By 2030, California is projected to face a shortage of 4,100 primary care providers if present trends continue [1]. By 2032, the demand for physicians will exceed supply by a range of 46,900 to 121,900 full-time physicians [6].

#### **Racial/Ethnic Concordance and Health Care Delivery**

Provider linguistic and cultural competency are key determinants of health inequities in patient experience and quality of care [3, 7]. Previous research shows that racial/ethnic concordance is positively associated with better interpersonal processes of care, access to care and health outcomes [8-13]. Increased mutual respect, trust, communication, and satisfaction improve concordant patient-doctor relationships [10, 11].

California's physician shortage is particularly acute in areas needing primary care providers that can deliver language-concordant care. According to research from the UCLA Latino Politics & Policy Initiative (LPPI), nearly 44% of California's population speaks a language other than English at home and Spanish-speaking physicians are the most underrepresented in the physician workforce in California with only 62.1 per 100,000 Spanish-speakers [14].

### FINDINGS: CALIFORNIA'S LATINO PHYSICIAN CRISIS

Latinos became California's plurality population in 2015. By 2050, Latinos are estimated to represent 44.5% of the state's population [15]. While the Latino population continues to grow, the supply of Latino physicians have not met the demand [16]. The scarcity of Latino physicians in California has led to a deficit of 54,655 Latino physicians that are required to achieve parity with non-Latino Whites [4]. The magnitude of the Latino physician crisis is reflected in the shortage of Latino medical graduates and resident physicians actively practicing in states with growing Latino populations. In 2000, the overall supply of Latino physicians was projected to increase by approximately 30% by 2020, a growth projection that would be overshadowed by a projected 74% Latino population growth in California [17]. Over the last few decades, efforts to recruit and retain physicians to practice in California's Latino communities have been ineffective [18].

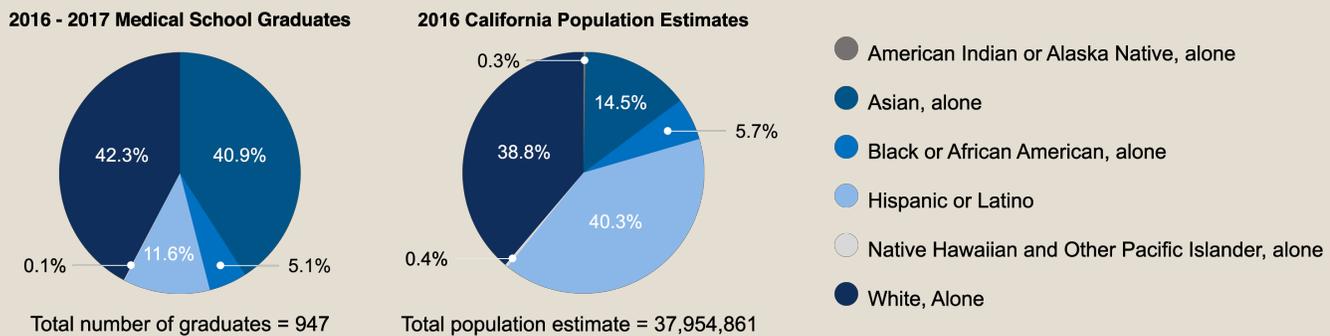
### 5 Centuries to Reach Parity: California's Latino Physician Shortage

Recent research from LPPI estimates the magnitude of California's Latino physician shortage by projecting the number of years it would require to close the disparity gap between Latino and non-Latino White (NLW) physicians. This research suggests that, if present trends continue, it will take five centuries to fully address this disparity [4]. Importantly, this estimate assumes perfect parity between Latino physicians and patients. In practice, a diversity of providers would continue to deliver care to a diversity of patients. This calculation by LPPI, however, shows the underrepresentation of Latino physicians in California compared to NLW physicians.

### California Medical School Graduates by Race and Ethnicity

The racial and ethnic composition of medical school graduates in California differs from the population demographics in the state, particularly among traditionally Underrepresented Minorities (URMs) in medicine. This disparity is likely to grow if action is not taken in the near-term to close this gap. **Figure 1** shows the share of medical school graduates by race and ethnicity from California medical schools for the Graduate Medical Education (GME) year 2016 to 2017, and it shows the corresponding race and ethnic composition of California's population.

**Figure 1.** Share of California medical school graduates vs. California's population by race and ethnicity for 2016-2017.



**Note:** The total state population estimate excludes non-Hispanic/Latino and Hispanic/Latino populations who reported "some other race alone" or "two or more races".

**Sources:** AAMC Data & Facts Table B-6.1 for total graduates by U.S. Medical School and Race/Ethnicity (alone) (GME year 2016-2017). Data excludes percentage estimates for other race/ethnicity; multiple race/ethnicity; unknown race/ethnicity; and non-U.S. citizens or non-permanent residents. U.S. Census Bureau, 2016 American Community Survey (ACS) 1-Year Estimates for Total Population by Race (Table B02001) and Hispanic or Latino Origin by Race (Table B03002).

### Latino Resident Physicians Underrepresentation in California

LPPI examined current trends in the demographics of practicing Latino resident physicians in the physician workforce of four U.S. states with some of the largest Latino populations: California, Florida, New York, and Texas [21]. The state of New York had the highest amount of Latino resident physicians per 100,000 Latinos at 28.4 in 2011 [21]. By contrast, California had the lowest rate of Latino resident physicians in 2011, with 5.4 per 100,000 Latinos, nearly 15% of the national average of 36.6 residents per 100,000 Latinos. These low Latino resident physician rates remained fixed during the 17 years examined.

### EXPANDING INTERNATIONAL MEDICAL GRADUATE PLACEMENTS IN CALIFORNIA

International Medical Graduates (IMGs) are physicians who received their medical school education outside the U.S. and Canada. About 3,000 IMGs enter residency programs in the U.S. every year, primarily filling slots in primary care [28]. The number of foreign-born IMGs training and practicing in California, however, lags behind other states. In 2019, 53 foreign-born IMGs matched into primary care residency programs in California. [29]. According to 2019 National Resident Matching Program (NRMP) match data, New York matched 691, followed by Florida's 175, and Texas' 137. Bilingual IMGs can help meet the needs of medically underserved regions with Limited English Proficient (LEP) populations.

## Policy Recommendations

Based on our study findings, the physician shortage in California could be addressed by considering the following recommendations:

1. **Increase financial resources available** to support prospective URM physicians.
  - a. Expand loan repayment programs to ease the financial burden of a medical education, particularly, for language capable primary care physicians.
  - b. Allocate resources to Post-Baccalaureate Pre-Medical (PBP) programs administered by Community Colleges (CC), the California State University (CSU), and the University of California (UC) systems, and provide scholarships to URM students enrolled in a PBP program to cover the cost of MCAT preparation courses.
  - c. Incentivize medical schools to create a higher supply of MD/DOs entering the California workforce. Recruitment and admissions practices should prioritize the matriculation of students specifically interested in pursuing primary care in underserved areas.
2. **Address academic disadvantages** by coordinating and expanding pipeline and pathway programs that support students from middle school until medical school.
  - a. Allocate resources to support the expansion of existing pipeline programs throughout the public university school system.
  - b. Create tutoring, summer programs, volunteering, and mentorship opportunities that will expose students to the health system and enable them to find mentors and role models while strengthening their academic skills.
  - c. Create incentives for medical schools to increase the number of spaces available to students from Minority Serving Institutions, such as those from CSU and CC systems, by funding scholarships aimed at students from these public university systems.
3. **Improve navigation resources** for high school and college students.
  - a. Support programs that provide guidance and promote skills needed to succeed in the medical profession [19].
  - b. Standardize pre-med programs in California's university systems to improve medical school navigation. In addition, support for programs that review applications and guide students through pre-med or when pursuing a PBP, such as Future Physician Leaders (FPL) and the Medical Professionals Empowerment Program (MedPEP), may improve the dissemination of information.
  - c. Strengthen mentorship programs focused on inspiring the next generation of diverse healthcare leaders for underserved communities, such as MiMentor (mimmentor.org) and other similar matching platforms. These organizations help URM students identify support networks and role models, and provide formal and informal information needed to be successful medical school applicants, and later on how to succeed in the medical profession [20].
4. **Monitor, evaluate, and disseminate best practices** from existing pipeline and pathway programs and new models of medical education.
  - a. Evidence from effective programs that are successful at training physicians for underserved areas should be collected and disseminated. Scaling-up these programs and ensuring adequate financial support should be prioritized.
  - b. Studying new teaching models of medical education that promote team-based care and skills such as language and cultural awareness should be further explored.
  - c. Evaluating the operation of these programs and disseminating best practices could encourage efforts by other universities in California to improve medical education and increase the representation of URMs in the medical profession.

Based on our study findings, [the shortage of primary care residencies in California could be addressed by considering the following recommendations:](#)

- 1. Prioritize the expansion of residency programs** that focus on primary care.
  - a. The expansion of training capacity include the addition of slots to existing residency programs and expanding community-based graduate medical education training such as Teaching Health Centers (THCs) and Community Health and Academic Medical Partnerships (CHAMPs) [22].
  - b. Prioritize investment in innovative models such as THCs funded by the Health Resources and Services Administration (HRSA), and CHAMPs. Both training models partner residency programs with Federal Qualified Health Centers (FQHCs) Community Health Centers (CHCs).
  - c. Academic-based residency programs can be leveraged to train additional primary care-focused residents through well-established residency programs while completing outpatient training in FQHCs or CHCs.
- 2. Create and sustain funding** to foster growth of primary care positions.
  - a. Time-limited grants are unlikely to promote sustainable growth of the primary care pipeline [23]. To ensure that the existing 1,872 primary care positions in California are maintained, established residency programs will require ongoing funding support.
  - b. Financially support programs such as the Song-Brown Program, which provides funding to primary care residency programs that train residents from underserved communities and those underrepresented in medicine.
  - c. Expand grant programs that support postgraduate placement in HPSAs.
- 3. Recruit and retain trainees** to practice in underserved areas.
  - a. Consider ways to recruit residents that have trained out of state back to practice in California and incentivize physicians to practice in underserved areas. Tax credits can be used, as in other states, for clinicians who practice in rural areas [24].
  - b. Recruitment and incentive programs modeled after successful programs established in other states should be considered. New York has implemented the Doctors Across New York Physician Practice Support, which provides funding to recruit new physicians, allowing participating physicians and physician practices to use funds for a variety of purposes [25].
  - c. Change physician compensation models to incentivize primary care practice in underserved areas, and reduce the income gap between primary care physicians and other specialties [26].
- 4. Incentivize medical students who pursue primary care** by providing financial support.
  - a. The California Future Health Workforce Commission recommends providing scholarships for students who pursue priority health professions and provide service to underserved communities under a new Emerging California Health Leaders Scholarship Program [1].
  - b. The L.A. Care Health Plan is working to expand the primary care workforce by offering full scholarships to select medical school students and loan repayment opportunities for physicians recruited to practice in underserved areas. Scholarships would be provided through the Elevating the Safety Net Initiative, which targets the growing shortage of primary care physicians in Los Angeles County's safety net and within some of the most vulnerable populations [27].
  - c. Expand loan repayment opportunities to incentivize practice in high priority, medically underserved areas.

**Based on our study findings, the shortage of IMG placements in California could be addressed by considering the following recommendations:**

**1. Expand the existing pool of IMGs in California.**

- a. Recruit bilingual physicians trained in Spanish-speaking countries and incentivize their practice in medically underserved areas with high Latino populations (e.g. Central Valley and Inland Empire).

**2. Support IMG training programs** that bolster match competitiveness.

- a. Programs that help prepare IMGs for admission to a residency program in a primary care specialty, in exchange for practicing in an underserved area upon completion of residency, should be supported and expanded. Funding should be allocated to support existing programs such as the UCLA IMG program to encourage matriculation and increase graduation rates of IMGs.
- b. Develop new IMG training programs modeled after successful IMG training pathways throughout the state. Allocate resources to support the expansion of existing IMG training programs to other UCs with existing medical schools and Family Medicine residency programs.

**3. Encourage IMGs to practice in linguistically underserved communities** by reforming visa rules to allow foreign-born IMGs to practice in medically underserved areas in California and other U.S. states.

- a. Expand the terms of service to priority areas to five-year terms for physicians to retain IMGs in underserved areas for extended times.
- b. A service contract should be added for those who enter the U.S. via H1B visas as these physicians do not currently have any service requirements and are a potential source of bilingual primary care physicians.

## CONCLUSION

California can be the leading model in beginning to address the national physician shortage by building and supporting a diverse physician workforce reflective of its population demographics. To effectively attract primary care physicians to medically underserved areas in California, we must address and offer solutions to remediate academic disadvantage conditions and challenges for URM students, which could substantially increase their acceptance and enrollment in California's medical schools. As primary care providers earn a fraction of what a specialist earns, and income disparities exist for certain racial/ethnic groups, such as Latinos, improved compensation, loan repayment policies, and additional incentives should be considered to encourage primary care physicians to work in underserved areas of California. Building a strong, financially secure health system infrastructure that minimizes administrative burden and advances health promotion will retain residents in medically underserved communities once their residency training is completed. Bilingual IMGs can help meet the needs of medically underserved regions with underrepresented LEP populations in California. Policymakers, health systems, and particularly those in underserved communities, must support their trainees and physicians in providing high quality care.

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