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5 Centuries to Reach Parity:

An Analysis of How Long it Will Take to Address California's Latino Physician Shortage

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EXECUTIVE SUMMARY



Physicians make choices about their practice locations and conditions (e.g. accept Medi-Cal or refuse Medi-Cal patients). While Latino physicians are more likely to choose to practice in underserved heavily Latino areas and accept Medi-Cal patients than non-Latino physicians, the persistent racial/ethnic disparities across California's physician pipeline significantly reduces the pool of physicians likely to choose to practice in medically underserved areas and treat patients of color (Hayes-Bautista, 2000). The Latino physician shortage is well documented in public health and medical scholarship (Sanchez, 2015). This policy brief is the first to articulate the direction and magnitude of California's Latino physician shortage by estimating the number of years it would take for medical schools in California to close the Latino physician gap. This research suggests that if the racial/ethnic composition of California MD graduates persist, it will take upwards of five centuries fully address the Latino physician shortage.

METHODOLOGY

How the Data Were Obtained:

The 2015 American Community Survey (ACS) asked individuals to self-identify their occupation. The ACS grouped physicians and surgeons under the same occupational code; this data reflects that categorization (Alexander, 2010).

The number of medical school graduates in California, by race/ethnicity, were obtained from the Association of American Medical Colleges (AAMC). The most recent available was for 2016-17 (AAMC, 2018).

How the Study Was Conducted:

Identifying the Shortage: Using the ACS, we first identified the number of Latino and White Non-Hispanic inhabitants in California for 2015. We also identified the number of the Latino and White Non-Hispanic physicians for the same year. We then divided the number of physicians by the population for each respective group to arrive at a rate of physicians per 100,000 population.

Filling the Shortage.

Filling the Shortage: We then used AAMC data to determine the number of medical school graduates for each race/ethnic group. In 2017, all of the California medical schools graduated a total of 110 Latino physicians (out of a total of 1,133 medical graduates). We used these values to project the number of years it would take to make up the Latino physician shortage for 2015. Assuming that the number of graduates by race/ethnicity stay constant, how many years would it take to fully address the Latino physician shortage?

To provide different scenarios, we also estimated the number of years needed if the number of Latino medical school graduates in California were doubled, tripled, etc, including a "max" scenario where all graduates from all California medical schools were Latino.

FINDINGS

The Latino Physician Shortage: Table 1 summarizes the size of the Latino physician shortage for 2015. In the Non-Hispanic White (NHW) population, there are 60,106 NHW physicians for 14.8 million NHW Californians. This represents a rate of 405.7 NHW physicians for 100,000 NHW Californians. In comparison, there are only 6,953 Latino physicians for the 15.2 million Latino Californians. This represents a rate of 45.8 Latino physicians per 100,000 Latino Californians.

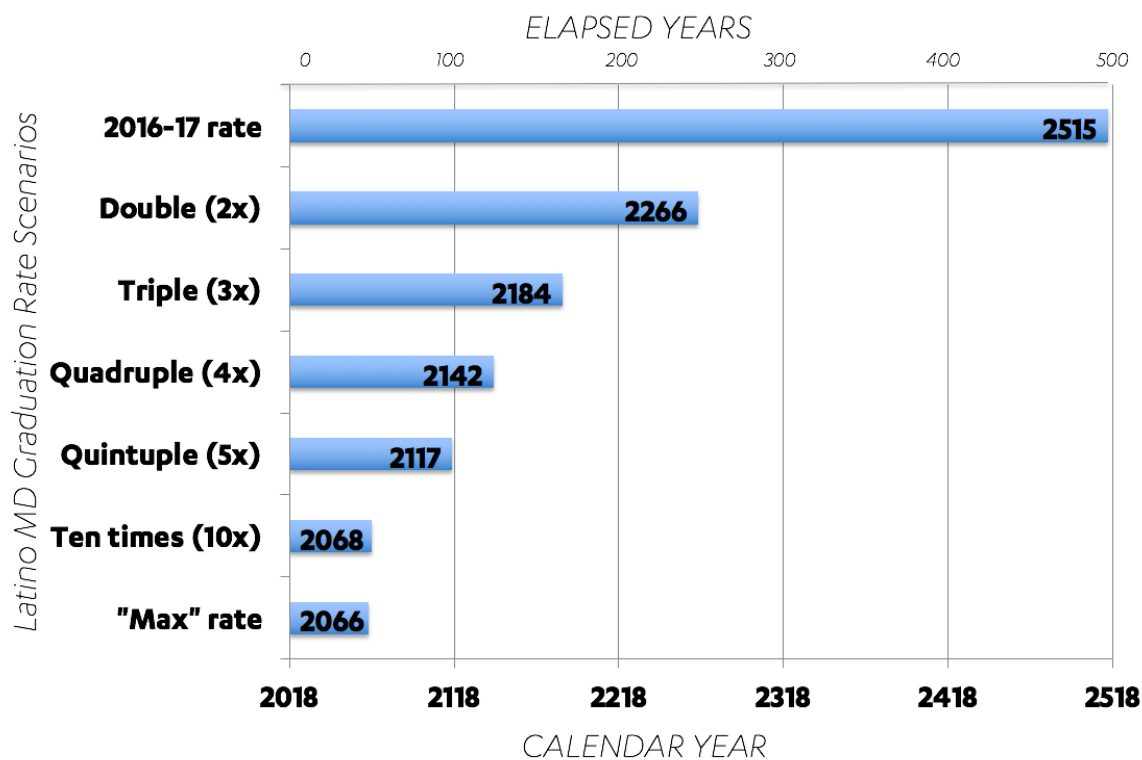
Table 1: California Latino Physician Shortage, 2015

Racial/Ethnic Group	Population	# of Physicians	Physician Rate per 100,000 Population	Shortage for Parity
Non-Hispanic White	14,814,590	60,106	405.7	----
Latino	15,184,905	6,953	45.8	54,655

California has a shortage of 54,655 Latino physicians when compared to the NHW population and number of NHW physicians. The Latino physician rate is nearly 90% lower than the NHW rate in California. From this perspective, California needs 54,655 Latino physicians so that both NHW and Latino Californians achieve parity in the physician per 100,000 population rate.

Filling the Latino Physician Shortage: California medical schools graduated 110 Latino MDs in 2017. If we assume the medical schools continue to graduate 110 Latino physicians per year, it would take almost 500 years before the Latino physician rate is equal to the White Non-Hispanic physician rate. Figure 1 illustrates the time needed to make up the Latino physician shortage.

Figure 1: Years Needed to Fill California Latino Physician Shortage, California (2015)



At California's current Latino MD graduate rates (110 graduates per year,) the shortage would not be made up until the year 2515 (well into the 26th century). Even if California's Latino graduation rates were tripled (330 graduates per year), reaching parity would not occur until 2184 (the end of the 22nd century). Finally, the "max" graduation rate scenario, whereby all California MD graduates were Latino (1,133 graduates per year), parity would take almost 50 years, occurring in 2066.



Multiple studies have highlighted the Latino physician shortage in California – addressing this disparity is crucial to the health and well-being of the state. At current rates, the number of Latino physicians graduating from California’s medical schools is inadequate to meet the demand of the growing and youthful Latino population (already 39% of California’s population in 2016, and projected to grow even more). This research makes clear the magnitude and direction of the Latino physician shortage in California, supporting the need for robust policy interventions.

Medical schools are the ultimate end-user of California’s K-14 educational pipeline. The Latino physician shortage is a highly visible indicator of problems in the educational pipeline. The Campaign for College Opportunity estimates that California will have a shortage of 1.65 million persons with a college degree by 2030. The policy solutions adopted to address the Latino physician shortage can be integrated into reforms that address the state’s college degree shortage.

Finally, the role of Latino physicians in satisfying the primary care needs of patients, including those that reside in medically underserved areas, is well-documented. The Latino physician shortage has direct implications on the health and well-being of the state’s Latino plurality, and frankly all Californians. Meaningful policy interventions must include short-term and long-term reforms, including retooling medical education in California to better meet primary care needs of all residents.

[Increase Latino medical school admissions.](#)

The most likely scenario would be a tripling of Latino medical student admissions. The backbone of the California Latino physician supply needs to be embedded in the state’s medical education and training system. Pipeline programs need to be an integral part of achieving such expansion, including programs that specifically target Community College transfers and California State University applicants.

[Retain Latino MD graduates who attend school out-of-state.](#)

Many Latino medical students cannot fit into the limited number of medical education and training slots in California. As a result, they pursue medical education out-of-state. These out-of-state graduates need to be persuaded to return to California to practice.

[Increase International Medical Graduates \(IMG\) in the state.](#)

While other states rely on International Medical Graduates to maintain their physician supply, California closed its door to IMGs in the early 1980s, and has kept the doors closed. The state’s doors should be opened to International Medical Graduates to meet the health care needs of all Californians, especially those that live in medically underserved regions of the state (e.g. Central Valley and Inland Empire).

[Increase the number of residency slots.](#)

Graduates from medical schools in other states and other countries are often unable to finish their training and establish practice in California because of the limited number of residency slots. Serious consideration must be given to increasing the number of primary care residencies by upwards of 30%.



REFORMS TO ADDRESS CALIFORNIA'S 5 CENTURY REALITY

1 INCREASE LATINO MEDICAL SCHOOL ADMISSIONS

- Expand enrollment in existing California medical schools, including private institutions to increase the admissions of community college transfers and California State University students through targeted funding.
- Mandate public medical schools in California admit a critical mass of Spanish language capable applicants.
- Evaluate the efficacy of new medical education programs and/or schools that focus exclusively on primary care. This can include partnerships between the University of California and the California State University systems and opportunities to train in rural parts of California, especially the Central Valley.

2 RETAIN LATINO MD GRADUATES WHO ATTEND SCHOOL OUT-OF-STATE

- Substantially expand the scope and parameters of loan repayment programs to target out-of-state MD graduates who practice primary care in California for at least 5 years.
- Create a new loan repayment program that targets MD graduates who are proficient Spanish speakers to practice in linguistically underserved communities.

3 INCREASE INTERNATIONAL MEDICAL GRADUATES IN CALIFORNIA

- Expand existing pool of IMG's in California to address the Latino physician shortage in the short-term.
- Create pathways to extend the length of practice for primary care IMG's who speak Spanish.

4 INCREASE THE NUMBER OF CALIFORNIA RESIDENCY SLOTS

- Significantly increase the number and scope of primary care residencies.
- Prioritize expansion of residency opportunities located in state hospitals and community clinics that are located in medically and linguistically underserved communities.
- Create a state-funded Spanish-language residency pilot program for IMG's, California residents, and out of state MD graduates to practice in linguistically underserved communities.

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