California Health Care Foundation

Five Ways to Cure California's Doctor Shortage

JANUARY 11, 2019

We know that primary care is essential for good health, but access to primary care in California varies greatly, with large swaths of the state competing for attention from increasingly fewer doctors. The primary care shortage is complex, rooted in decisions that future doctors make long before they attend medical school, the cost of their education, where they choose to live, and the financial lure of specialty practice.

First, a few facts:

- "Research shows that greater use of primary care is associated with lower costs, higher patient satisfaction, fewer hospitalizations and emergency department visits, and lower mortality," according the Patient-Centered Primary Care Collaborative.
- In California, only two regions have a sufficient number of primary care doctors: between 60 and 80 doctors per 100,000 people, according to a 2017 University of California, San Francisco (UCSF), study (PDF).
- Most regions fall below the 60-doctor benchmark that experts consider adequate, and California's rural regions fared much worse. There were fewer than 50 doctors per 100,000 people in three rural areas, and the Inland Empire region, east of Los Angeles, had only 39 doctors per 100,000 people.
- Experts estimate that by 2030, California will need an extra 10,500 primary care providers to effectively treat its population.

"If we continue along our current path, more and more Californians will need to visit the emergency room for conditions like asthma, ear infections, or flu because they lack a primary care provider," said Janet Coffman, PhD, MA, MPP, an expert on the state's health care workforce at UCSF.

The California Health Care Foundation asked a half-dozen leading health care experts in California — from medical school deans to community health executives — how they would increase the supply of primary care doctors in California. They offered a range of solutions, from subsidizing medical school loans to expanding residency programs.

(L-R) Amy Shin, Health Plan of San Joaquin; Jane Garcia, La Clínica de la Raza; Kevin Grumbach, Department of Family and Community Medicine at UCSF; David Carlisle, Charles R. Drew University of Medicine and Science; Janet Coffman, Institute for Health Policy Studies, UCSF; Sheila Thornton, OneFuture Coachella Valley

While there is no single panacea for the shortage, a combination of these approaches and a sense of urgency to pilot working models could reverse the trend.

1. Make Primary Care Pay

At a glance:

- Expanding loan repayment programs can help primary care physicians who struggle with crippling medical education debts.
- Replacing a fee-for-service model with an alternative payment model can narrow the income gap between primary care physicians and specialists.

The first step in stemming the primary care shortfall in California is providing incentives for existing primary care physicians to stay in their jobs. One of the most obvious — but more complicated — ways to do this is to improve the way primary care physicians get paid.

"There's such a discrepancy between what somebody can make as an anesthesiologist or a dermatologist or a gastroenterologist than what you can make as a family doctor," said Kevin Grumbach, MD, chair of the Department of Family and Community Medicine at UCSF. "Until that income gap is closed, at least to some degree, it's very hard to persuade future physicians to pick primary care careers."

To narrow the large income gap between primary care and specialist physicians, Grumbach recommends a different approach to payment. Most primary care physicians in California get reimbursed by insurance companies using a fee-for-service model: The doctor invoices the insurance company for the specific services she provides for her patients.

Grumbach suggests replacing this model with something known as capitated payment. In this model, an insurance company pays the primary care provider an annual sum of money to cover potential patient care costs. Whatever money is left over at the end of the year is taken home by the doctor as profit. This model works best when paired with standards for noncompliance; otherwise, the incentive for doctors to underserve patients becomes too strong.

"I think those have been quite successful, and I think California has really been incredibly missing in action," Grumbach said of models in other states. "California is the largest state in the nation and has been embarrassingly absent in participating in some of these alternative payment models for primary care."

Other experts point to California's progress in adopting additional innovative payment models, including value-based payments, which tie physicians' compensation to the quality rather than the quantity of care they provide.

But neither model actually increases the reimbursement rates for primary care physicians, said Amy Shin, PharmD, CEO of the Health Plan of San Joaquin, a region with fewer than 40 primary care physicians for every 100,000 people.

"Whether it's capitation or value-based is simply rearranging the problem," Shin said. "So many of our health care payment structures are actually based on a percentage of rates set by government-based systems like Medicare, primary care rates which need to be increased in order to sustain long-term improvements for primary care practice."

While alternative payment models may increase a primary care physician's take-home salary, many still struggle to pay off crippling student loans even with the additional income they might see from alternative payment models.

"Students are graduating often with at least $200,000 of educational debt, sometimes as much as $300,000 for medical school," said David Carlisle, MD, PhD, a member of the California Future Health Workforce Commission, and the president and CEO of Charles R. Drew University of

Medicine and Science, a historically black university that trains practitioners in underserved areas of Los Angeles. "We can go much further with loan repayment programs."

One successful example in California is the Steven M. Thompson Physician Corps repayment program. Medical graduates who commit to practicing full-time primary care in underserved areas can apply for the program and qualify for up to $105,000 toward paying back their medical school loans.

"This is a program whose success has been demonstrated, but the amount could be increased per student," Carlisle said. "The total funding of loan repayment programs could be increased as well."

Some medical school graduates won't have to deal with loans at all. Last year, New York University's medical school announced it would do away with tuition altogether. And on the other side of Manhattan, Columbia University had a similar idea by offering students full scholarships based on financial need. UCLA adopted a more modest approach several years ago by establishing a $100 million fund that pays for the medical education of roughly the top fifth of the student class.

All of these approaches, however, rely on generous alumni or benefactors and would need significant public support to be implemented at scale in California.

2. Expand the Care Team

At a glance:

- Primary care physicians have among the highest burnout rates of any medical specialty.
- Expanding training programs for nurse practitioners and physician assistants can reduce the workload and extend the capacity of primary care physicians.
- Training nurse practitioners and physician assistants takes between two and three years, compared to nearly eight for primary care physicians.
- To manage increasing demand for primary care, providers must expand the size and scope of primary care teams.

Burnout for primary care physicians is a chronic condition. A 2015 survey found that 68% of family practitioners would choose a different specialty if given the option of restarting their careers. Christina Maslach, who developed the the Maslach Burnout Inventory, a 22-question psychological questionnaire, describes burnout as "an erosion of the soul caused by a deterioration of one's values, dignity, spirit, and will."

In fact, primary physicians ranked second only to critical care doctors regarding the severity of their burnout, according to a recent American Medical Association survey.

Why are so many primary care physicians experiencing career-stalling burnout? The pressures of meeting escalating patient demands coupled with a growing battery of administrative tasks have transformed the role of the primary care physician over the past two decades. The practice has moved away from a focus on treating families in the local community to managing paperwork and correspondence, gathering and synthesizing data, and negotiating with insurance companies.

"There's more and more work that is falling on primary care physicians, and I just see that as a big issue for our retention work," said Jane Garcia, CEO of La Clínica de la Raza, a network of 22 health clinics across Alameda, Contra Costa, and Solano Counties.

To help mitigate burnout among primary care physicians, Garcia and other experts recommend expanding training programs for nurse practitioners and physician assistants, who can supplement

care from primary care physicians and allow more time for necessary routine patient interactions and administrative tasks.

"Our physicians are supported by registered nurses, medical assistants, even health promoters," Garcia said. "These are lay people, community health workers that are there to take off as much work away from the doctors."

Training nurse practitioners and physician assistants is much quicker — and cheaper — than graduating increasingly greater numbers of medical doctors, Carlisle said, noting that it takes only two years to train a physician assistant and less than three for a nurse practitioner.

"A medical student, by comparison, takes four years of medical school and three years of residency, so seven years of training before they become a primary care doctor," Carlisle said.

Shin, of the Health Plan of San Joaquin, warns against hiring nurse practitioners and physician assistants as a panacea for burnout, citing scope of practice and reimbursement limitations as a barrier.

"There are too many regulations that prohibit these expanded teams from running efficiently, and a physician ultimately needs to supervise or approve much of what the expanded team is tasked with doing," Shin said. "And because most insurance companies only reimburse for actual patient services, medical teams don't get paid for the important care coordination that happens before or after a patient visit."

3. Keep It Local

At a glance:

- Studies show that primary care physicians are more likely to practice where they were trained.
- Less than 5% of all practicing primary care physicians in California are Latino or black.

The shortage of California's primary care workforce is complicated by maldistribution. There is a distinct difference in coverage between coastal urban areas such as San Francisco, with one primary care physician for every 160 people, and more rural areas such as Grass Valley, about an hour north of Sacramento, with one physician for every 1,100 people.

"To the extent that we cannot increase the number of primary care doctors, we are kind of dooming those areas to remain underserved and underresourced," Carlisle said. "A result of that would be that the level of health care, and ultimately the level of health, in these communities suffers."

Rather than designing complex incentive packages to push recent medical graduates toward rural areas where they've never lived — a strategy used to varying degrees of success in the 1970s (PDF) — experts today propose a much simpler and more effective approach: Train students already from underserved areas who will stay and practice in their home communities.

"People who grew up in underserved areas are more likely to practice there if they become physicians, dentists, or other health professionals," Coffman said.

This is especially important when addressing the startling lack of diversity within the state's primary care workforce. Less than 5% of all practicing primary care physicians in California are Latino or black, even though Latinos make up nearly 40% of California's overall population.

Forward-looking trends are not much brighter: Less than 10% of first-year medical students this year reported Latino or black backgrounds.

"We don't need more primary care doctors in Beverly Hills or affluent neighborhoods in San Francisco," Coffman said. "We need better access to primary care in underserved areas."

4. Reach the Students

At a glance:

- Career academies expose students as young as 15 years old to real-world primary care settings.
- Increasing medical education capacity by as little as 3% could solve most of California's long-term primary care shortages, according to UCSF.
- Novel medical programs and shortened degree tracks incentivize more students.

To ensure a steady supply of primary care doctors, California must find ways to encourage students to enter the field. One of the most dependable ways to do this is by expanding the number and scope of medical training programs across the state — especially in underserved areas.

"Medical school is not available for 75 miles from our region," said Sheila Thornton, president and CEO of OneFuture Coachella Valley, a region where, in some areas, 20% of students live in poverty. "And the first time you could start and finish a bachelor's degree in the Coachella Valley was five years ago."

California has already gathered momentum by establishing combined MD programs that shorten the time to a medical degree by two years, and by opening a handful of new primary care–focused medical schools, including the Keck Graduate Institute School of Medicine, the Kaiser Permanente School of Medicine, and the California University of Science and Medicine. All three are within an hour of Los Angeles and only recruit students who've already obtained a bachelor's degree.

To sustain long-term improvements to the primary care workforce, experts agreed that students must be exposed to health science and medicine as early as middle school.

"How do you provide enough exposure to students in the K–12 system that they're engaged, that they get some level of experience, and that they have the mentorship and navigation to actually aspire to these kinds of positions?" Thornton said.

One innovative solution, known as a career academy, is a partnership between medical schools and public high schools. There are 47 career academies in California that expose students as young as 15 to educational and career-related opportunities in primary care.

Doctors Academy is one example. It's a career academy established between the Fresno Unified School District and UCSF Fresno that exposes teenage students with an interest in health and science to the medical profession. These students are enrolled in premed and biology courses in their high schools, and spend part of their day shadowing real doctors and medical students at UCSF Fresno.

"Before they leave high school, they now have a leg up on what it means to be in the workforce and in the health care force, and they also are ready for college," Thornton said.

5. Expand Residency Programs

At a glance:

- Medical students who do their residencies in California are more likely to practice medicine in California.
- Federal efforts to expand primary care residencies have helped California in the past, but have stalled in Congress.
- Increase federal support for training primary care physicians in underserved areas.

Seventy percent of doctors who complete residencies in California will stay in the state to start their careers. The historical reliability of residency programs to keep newly minted doctors at home makes investing in them attractive to primary care experts in California.

"I think there are arguments to make for expanding medical schools in California, but I think we get more bang for our buck if we expand residency programs," Coffman said. "If I invest in a medical school, I have no guarantee they're going into primary care, and it's going to be at least seven years."

Although the federal government has initiated successful residency expansion efforts in the past, they have been short-lived and tangled up in politically divisive conversations. For example, the Affordable Care Act doled out $168 million to expand primary care residency programs in 2010, with California receiving $80,000 a year for every primary care resident it received. But the program was discontinued in 2015 as part of ongoing political battles around the legislation. Similar expansion programs have stalled in Congress or lack long-term funding, and California's residency positions remain disproportionately underfunded. One measure ranked the state 26th in the number of Medicare Graduate Medical Education positions it funded between 2008 and 2010.

Even well-established residency programs in primary care face challenges. For example, residents in these programs spend an average of just one full day a week in training in the clinic, and the training they do receive is anchored in a hospital setting, instead of the outpatient settings where the vast majority of primary care occurs.

"Residents and medical students are less likely to enter ambulatory primary care careers as a result of poor experiences in teaching clinics," the report said.

Restoring the vitality of California's primary care workforce will require a combination of remedies: some designed to keep primary care physicians where they are, others designed to recruit new ones. If we fail to implement these strategies, we may find already underserved communities unable to receive the care they need to thrive.

This article appeared online at https://www.chcf.org/publication/cure-californias-doctor-shortage/

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