



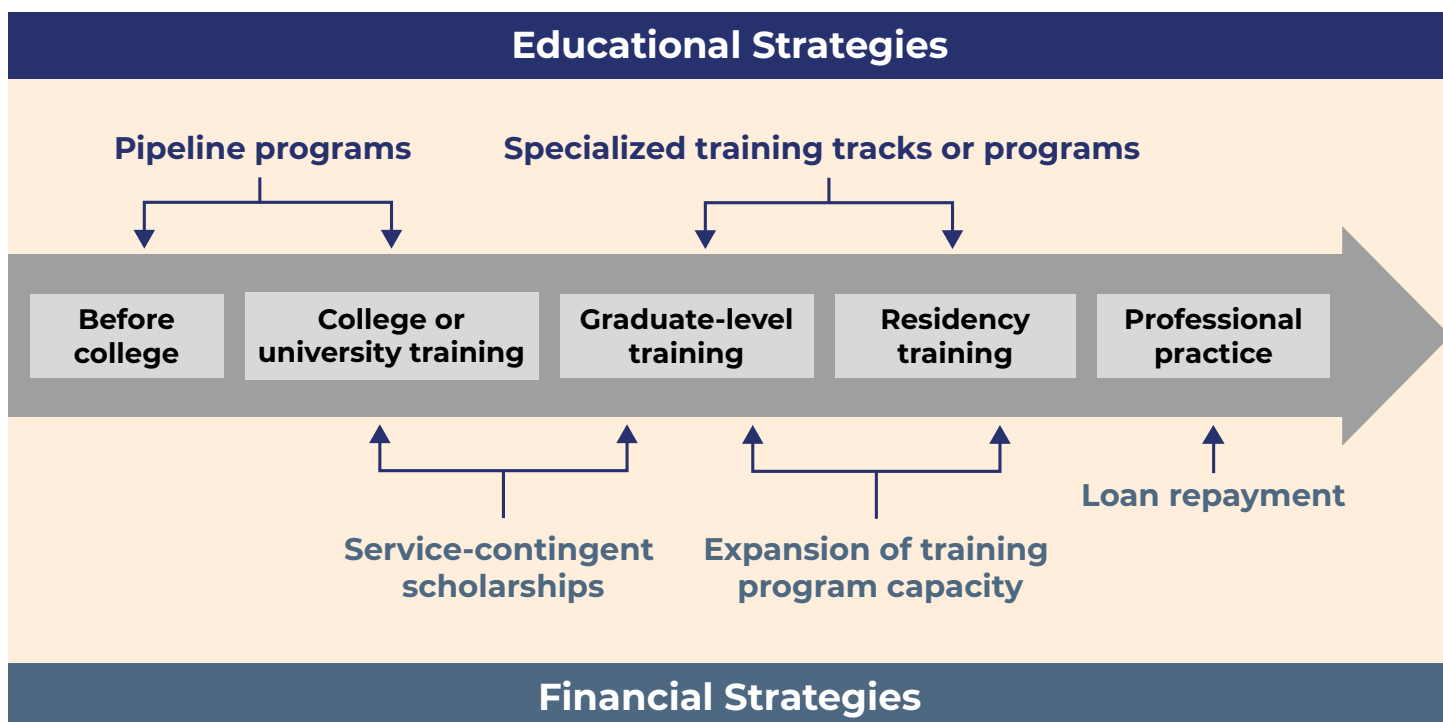
# Health Workforce Strategies for California: A Review of the Evidence

This infographic summarizes the full report, [Health Workforce Strategies for California: A Review of the Evidence](#)



**The Crisis:** There are not enough health workers to meet the needs of the large, increasingly diverse, and aging population in California. Current public- and private-sector efforts are not sufficient to alleviate the crisis. Pipeline programs, scholarship programs, loan repayment programs, graduate-level health professional training programs, and residency funding programs have the potential to improve access to health care for Californians, the diversity of the health workforce, and the number of primary care, behavioral health, and dental providers able to provide services in a language other than English (to improve “language concordance”).

There are opportunities to increase the size and diversity of California’s health professions workforce at various stages of the educational journey.



# A Review of the Evidence



**Pipeline programs**



**Service-contingent scholarship programs**



**Loan repayment programs**



**Training programs**



**Residency funding programs**

## Definition

Programs that provide high school, college, and postbaccalaureate students with multifaceted support to enhance their readiness for graduate-level health professional training and to help them successfully pursue health careers.

Grants or payments made to support a student's health professional education in exchange for a commitment to provide postgraduate service in a particular specialty or geography. The commitment often comes early in the student's training.

Programs that provide external support to repay all or part of a health professional student's loans in exchange for postgraduate service in a predefined type of geographic area or setting. These programs mitigate financial burden without obligating recipients to a particular professional path before they finish their training.

Graduate-level health professional training programs such as medical schools, nurse practitioner schools, physician assistant schools, and master's degree programs at universities.

Programs that provide funding to hospitals or health centers to expand existing residency training programs and to launch new programs.

## Impact of Program

- Changes the attitudes and intentions of participants regarding (1) careers in health care, (2) their academic performance, and (3) their likelihood of enrolling in health professional schools.
- Improves graduation rates from health professions schools.
- Postbaccalaureate programs increase numbers of students underrepresented in health professions who graduate from medical school, choose careers in primary care, and work in Health Professional Shortage Areas and medically underserved areas.

- Offsets the financial burden of training.
- Effective for shorter career pathways (e.g., physician assistants) vs. longer ones (e.g., physicians). Service-contingent scholarships often require commitment early in a student's educational training. The longer the training, the more likely students' circumstances will change, impacting their ability to fulfill the service requirement.
- Retention of practitioners can vary greatly based on recipient demographics.

- Though results have been mixed, studies indicate that there may be higher workforce retention rates with loan repayment programs, compared to scholarship programs.
- Retention of practitioners can vary greatly based on recipient demographics.

- Programs that offer brief periods of exposure to underserved patients or rural locations demonstrated no impact on practitioners' future practice decisions
- Programs that expose students to underserved patients or locations throughout their training show a greater impact on future practice decisions

- Physicians who train in safety-net or rural settings are more likely to work in those settings after residency.
- Expanding existing residency programs that have a track record for high-quality graduates is effective but expensive.
- Creating new residency programs is risky, but it may increase the geographic diversity of programs and graduating physicians. It may also decrease financial burden on the state if the new location qualifies for federal contributions.

# Potential Investments to Address the Crisis



Addressing the health workforce crisis will require a combination of short-term interventions and long-term investments. Each investment plays a unique role in improving access, diversity, and language concordance in California's health workforce. No one piece of the puzzle will be able to solve the crisis on its own, and in many cases more evidence is needed to support solutions such as language concordance initiatives.

## Short-term Investment (immediate impact)

## Long-term Investment (long-term impact)

## No available evidence



### ↑ Access

- Increases access because residents provide care as part of their training, and physician supply increases (**California retains more than 70% of all residents trained in the state**). Increasing the size of graduate-level training programs also increases the pool of advanced practitioners available.

### ⇧ Diversity

- Increases diversity only if funding requirements address diversity needs.

### ↑ Access

- Increases access; however, retention of professionals over the long term is less certain.

### ⇧ Diversity

- Potentially increases diversity if programs are targeted to underrepresented populations.

### ↑ Access

- Increases access; however, retention of professionals over the long term is less certain.

### ⇧ Diversity

- Potentially increases diversity if scholarships are targeted to underrepresented populations.

### ↑ Access

Increases access because health professionals from underrepresented backgrounds are more likely to care for underserved populations and often choose to return to the areas where they grew up to practice.

### ↑ Diversity

- Increases diversity by supporting underrepresented students as they prepare to enter health professions training.

### ⇧ Language concordance

- May increase language concordance by recruiting and supporting students from underrepresented populations who speak languages other than English, though this could require upskilling.

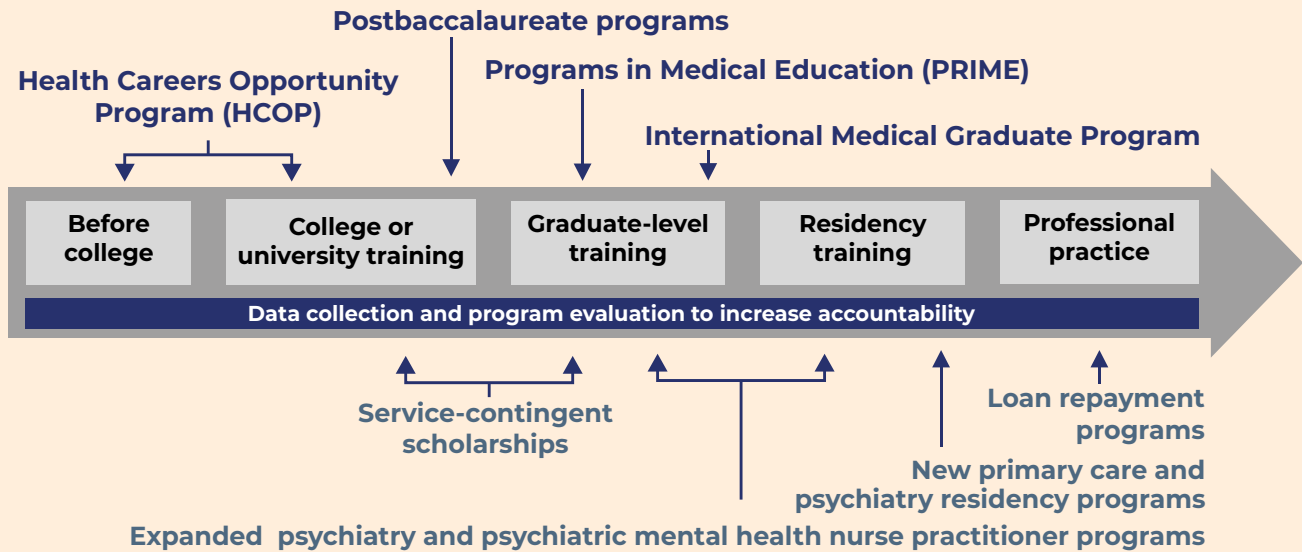
- Service-contingent scholarships and **language concordance**
- Loan repayment programs and **language concordance**
- Residency or training programs and **language concordance**

↑ Expected increase in access, diversity, or language concordance

⇧ Potential increase in access, diversity, or language concordance



## Educational Strategies



## Financial Strategies

Note: The outcomes of all interventions are enhanced when recruitment is targeted.

### HCOP funds institutional collaborations between health professions schools, colleges, and high schools.

These partnerships provide support and opportunities for students from disadvantaged and underrepresented backgrounds, helping them become more competitive applicants for health professions schools.

**Postbaccalaureate premedical and predental programs for underrepresented students are a type of pipeline program designed to make participants more competitive applicants to health professional school.** These one-year programs provide academic and enrichment experiences to college graduates, many of whom have previously applied unsuccessfully to medical or dental school.

**PRIME is a specialized medical school training program that is run out of each of the University of California medical schools.** The program supplements standard training with additional curriculum tailored to meet the needs of various underserved populations and includes dedicated faculty mentorship for students.

**The International Medical Graduate Program admits Latinx physicians who have already completed training outside the US but legally live in the US.** It prepares them for the US Medical Licensing Examination while simultaneously providing hands-on clinical training and teaching them about the culture of medicine in the US.

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