

## “From the Valley, for the Valley”

# Insights on Health Care Workforce Development in the San Joaquin Valley

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### Overview

California’s San Joaquin Valley faces a critical health workforce shortage that threatens access to care, particularly in its rural and low-income communities. This case study examines how locally led initiatives are addressing these shortages by building culturally responsive, regionally rooted health career pathways. Focusing on two programs—the *University of California (UC) San Francisco (UCSF) Fresno’s Raíces in the San Joaquin Valley* and *HealthForce*—this report explores how early exposure, technical support for high school pathways, and community-based mentorship are being used to grow a workforce more likely to serve where they are most needed. These efforts aim to improve not only the supply of health professionals but also equity, diversity, and long-term retention in the San Joaquin Valley. However, while promising, these initiatives face challenges including limited clinical infrastructure, dependence on short-term funding, and structural barriers tied to rural education systems. This study does not offer a universal solution but highlights how tailored, locally driven approaches can better align workforce strategies with community needs and can ultimately improve health outcomes in systematically underserved regions.

## Background

There is a national health care provider shortage that is projected to worsen over the next decade. This crisis is especially severe in the San Joaquin Valley, located in Central California (Figure 1), where structural barriers, economic inequities, and geographic isolation deepen health care disparities. Despite being an agricultural powerhouse known to produce a quarter of the nation's food, six of the region's eight counties—Fresno, Kings, Madera, Merced, San Joaquin, and Tulare—are designated as Health Professional Shortage Areas (HPSAs), facing critical shortages in primary care, dental, and mental health providers.<sup>1,2</sup> All eight counties, including Kern and Stanislaus, are also considered Medically Underserved Areas (MUAs), signaling insufficient access to basic but essential primary care services (Figure 2).<sup>3</sup> These designations signify the urgent need for targeted, region-specific health interventions.

To understand the region's persistent health challenges, however, the geography, demographics, and historical context of the San Joaquin Valley becomes important. Much of the region is considered rural or semi-rural with communities spread across vast distances. The area is home to a large Latino immigrant population, with most of the farm labor workforce identifying as Latino and having limited English proficiency.<sup>4</sup> Chronic diseases are rampant due to food insecurity, low educational status, limited access to insurance, and high rates of poverty.<sup>5</sup> Residents, particularly farmworkers, are further discouraged from seeking timely care, most often due to language barriers, lack of transportation, associated costs, and fear of deportation.<sup>4</sup> Hospital crowding and closure of local hospitals—such as Madera Community Hospital in 2023—has only intensified this crisis, leaving entire counties without the care they desperately need.<sup>6</sup>

Historically, Central California has experienced systemic underinvestment in health and infrastructure, particularly in unincorporated and rural communities. Generations of environmental injustice have placed a disproportionate burden of pollution, pesticide exposure, and poor air quality on predominantly low-income neighborhoods, worsening health outcomes.<sup>7</sup> Compared to more urban areas like San Francisco and Los Angeles, the San Joaquin Valley has long received fewer resources for health care, education, and job development.<sup>8</sup> Thus, addressing the health care workforce shortage here requires a multifaceted approach that acknowledges this regional history and focuses on building culturally responsive, locally rooted solutions.

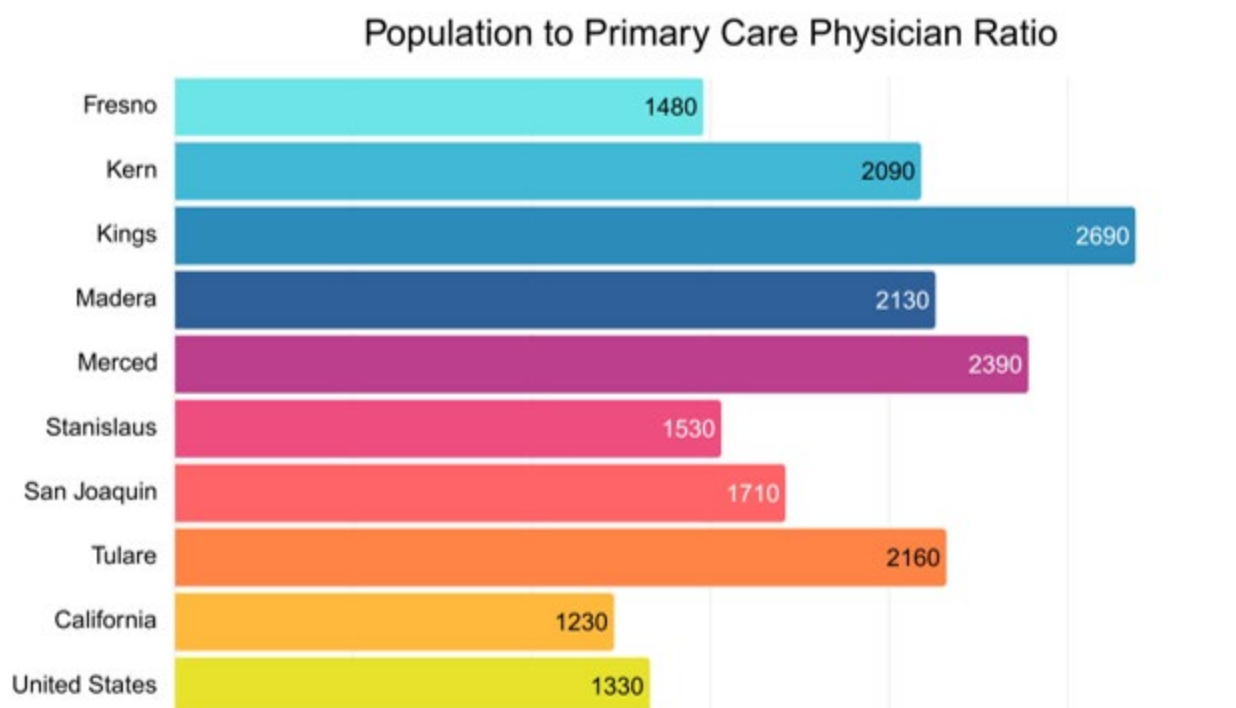


**Figure 1. Map of the eight San Joaquin Valley counties in California**

## Building a local workforce

In recent years, there has been a growing investment in expanding and diversifying California's health care workforce.<sup>9</sup> More than half of the high schools in the [Fresno Unified School District](#) have established health pathway programs that provide experiences, certificates, and job training for students in health careers.<sup>10</sup> For example, Bullard High School's Biomedicine Pathway provides a curriculum emphasized on the human body along with hands-on clinical experiences, while McLane High School's Medical Education and Research Academy prepares students for careers in medicine, public health, and research through certificates and internship opportunities. The pipeline then extends into local colleges where programs like Fresno State's Health Career Opportunities Program support students pursuing health careers. Initiatives in medical schools like the [UCSF San Joaquin Valley \(SJV\) Program in Medical Education \(UCSF SJV PRIME\)](#) and [UC Davis Reimagining Education to Advance Central California Health \(REACH\)](#) programs further train medical students from the region and prepare them to one day serve their home communities in the greater Central Valley. [UC Merced's SJV PRIME+](#) program is preparing to admit its third cohort of BS-to-MD [an accelerated pathway for students to earn both a Bachelor of Science (BS) degree and a Doctor of Medicine (MD) degree] pathway students.

These programs are overall part of a broader workforce development strategy. Health professionals are more likely to stay and practice in the communities where they train, and those with personal or family ties to a region are even more likely to return and work there.<sup>11</sup> According to the American Association

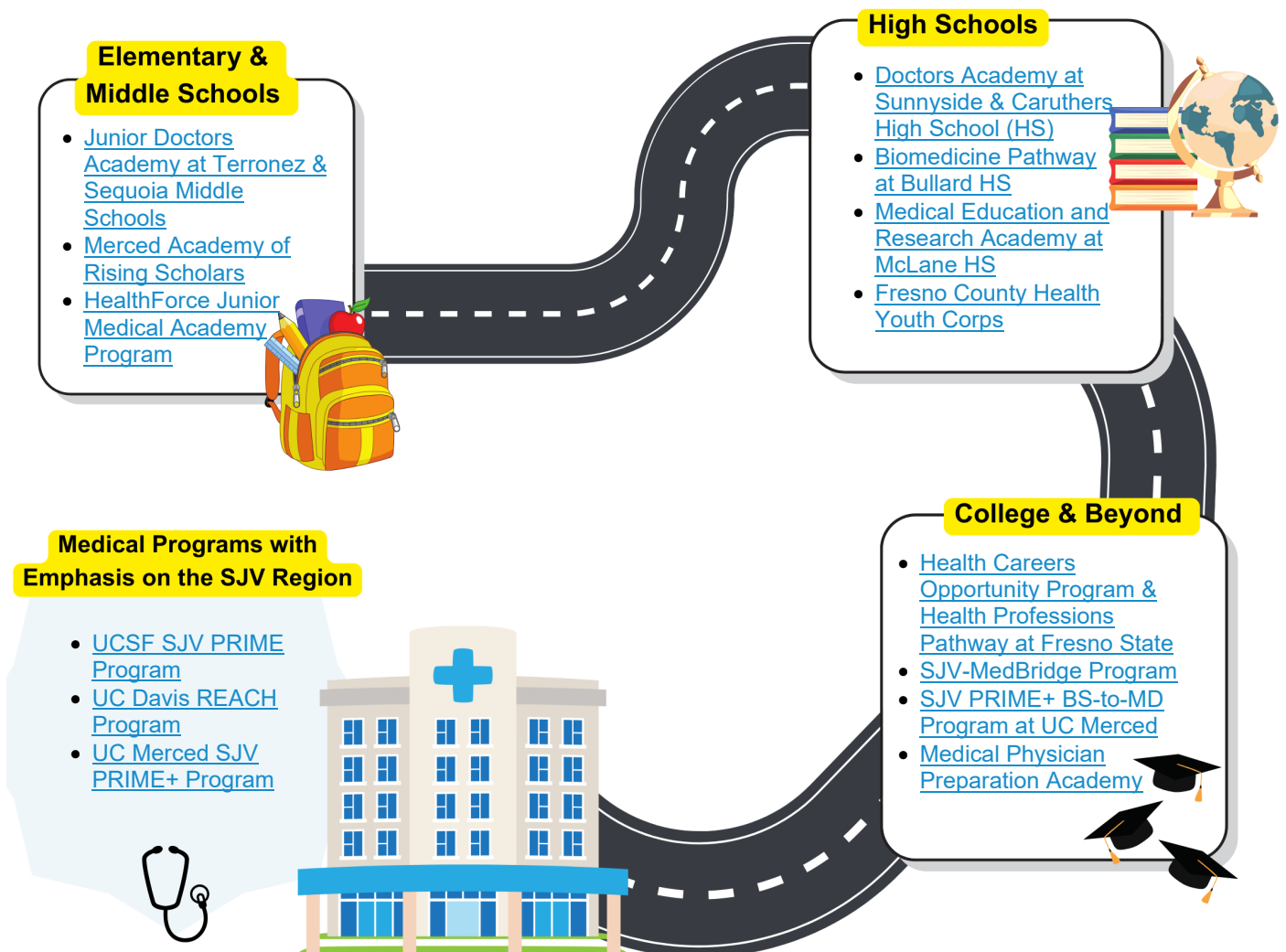


**Figure 2. Population to primary care physician (PCP) ratio in San Joaquin Valley counties compared to that of California and the United States.** All counties serve a greater number of people per PCP when compared to the state and country.

Source: <https://www.countyhealthrankings.org> (2021)

of Medical Colleges, California retained nearly 78% of its medical residents who graduated in 2023 to practice medicine in California as attendings—the highest rate in the country.<sup>11</sup> Locally, 72% of UCSF Fresno graduates stay in California, with 44% specifically staying in the Central Valley to practice in their chosen specialty.<sup>12</sup> California Health Sciences University, the only four-year osteopathic medical school in the region, also reported that 23% of their 2025 medical graduates stay to train in the Central Valley area.<sup>13</sup> Recruiting and training health students in the region is not just about filling gaps; it is also about improving quality of care. People who are from the area are more likely to understand the culture, language, and values that shape community health. A workforce rooted in the region will reflect its people and better serve their needs in the long run.

But how do we ensure that students even reach the point of becoming health professional graduates? It starts much earlier, in the K-12 education system. Early exposure to science, technology, engineering, and mathematics (STEM) is key to fostering STEM identity, confidence, and long-term interest in science and health fields.<sup>14</sup> In the San Joaquin Valley, where many students come from families with limited formal education, early engagement is critical, and when combined with mentorship from



**Figure 3. Non-exhaustive list of health pathway programs and health-related opportunities available to students in San Joaquin Valley counties starting from elementary school**

individuals with shared backgrounds, pursuing a health career becomes much more accessible and achievable.

## Methods

This exploratory, mixed-methods case study examines how locally led health workforce initiatives in California’s San Joaquin Valley are addressing longstanding provider shortages and educational inequities. Specifically, this study investigates the role of two community-based programs—*Raíces in the San Joaquin Valley* and *HealthForce*—in building culturally responsive, sustainable health career pathways.

The programs under study are participants in the Fresno-Madera K-16 Collaborative, a region-wide effort to align educational institutions and employers in addressing workforce needs across all sectors, including health care. Both initiatives focus on “grow-your-own” models that center equity, early exposure, and localized mentorship as core strategies to increase representation in health care fields.

Primary data sources include semi-structured key informant interviews conducted in spring 2025 with program leaders from [UCSF Fresno’s Office of Health Career Pathways](#), which leads the *Raíces* in the San Joaquin Valley initiative, and from HealthForce, an education-industry partnership that operates throughout rural San Joaquin Valley. These interviews provided insight into program origins, operational challenges, successes, and future goals.

In addition to interview data, this study draws on publicly available documents and program materials, including organizational websites, policy briefs, evaluation reports, and government designations (e.g., HPSA and MUA data from the Health Resources and Services Administration). Archival analysis of these materials was conducted to contextualize regional workforce disparities and findings from the interviews.

This case study does not aim to offer generalizable conclusions but instead provides an in-depth, practice-based look at how San Joaquin Valley communities are responding to systemic barriers through innovation-driven health workforce strategies.

## The K-16 Collaborative

The [Fresno-Madera K-16 Collaborative](#) is a regional partnership that works towards transforming the educational and economic landscape in the San Joaquin Valley. It was established as part of California’s broader [Regional K-16 Education Collaboratives Grant Program](#) which brings school districts, colleges, and local employers together to address barriers to workforce entry in business, education, engineering and health care. In the health sector, this means aligning K-12 health pathways with postsecondary programs and expanding opportunities for systematically underserved students to access health professions. The Fresno-Madera K-16 Collaboration is laying the groundwork for a home-grown health workforce that reflects the communities in the region.

## *Raíces in the San Joaquin Valley*

UCSF Fresno’s [Raíces \(Spanish for “roots”\) in the San Joaquin Valley](#) program embodies a strategy to strengthen and sustain high school health pathway programs across the region. As part of the Fresno-

Madera K-16 Collaborative, Raíces serves as a critical technical support hub for five high-need school districts: Sanger, Parlier, Cutler-Orosi, Central, and Madera. Through this initiative, UCSF Fresno provides hands-on guidance in curriculum alignment, clinical placement coordination, access to career exposure opportunities, and college and research mentorship.

Rather than using a one-size-fits-all model, Raíces works directly with educators and school leaders to identify needs and provide flexible assistance. Support can range from coordinating industry guest speakers and helping students access college field trips, to solving immediate barriers that threaten program continuity. For example, when a high school's medical assistant program lost its clinical placement site, UCSF Fresno helped identify new placements so students could still meet certification requirements and graduate ready to work.

Raíces also supports broader student development beyond academics. At a different high school, the team attends mentor-mentee events, supports research opportunities, and facilitates connections to higher education through visits to institutions like Stanford. These efforts help expose students—many of whom will be first-generation college students—to professional pathways that otherwise may be inaccessible.

Like many rural education efforts, Raíces faces ongoing challenges related to program capacity, institutional alignment, and long-term sustainability. Building consistent support from school staff and aligning with existing administrative structures can take time. In some cases, program implementation is shaped by broader curricular or policy constraints that limit flexibility. Additionally, many pathway efforts rely heavily on one or two dedicated staff members, making continuity difficult without broader institutional support or succession planning. With more investment, priorities would include expanding clinical placement access, hiring additional staff to reduce program bottlenecks, and embedding sustainability mechanisms to reduce dependence on individual educators.

Ultimately, Raíces is more than a program; it is a community-rooted strategy for reimagining who gets to pursue health care careers in the region. By partnering with schools on their terms and building trust through responsiveness, UCSF Fresno is not only keeping pathway programs alive but also nurturing a generation of students with the tools, exposure, and support needed to serve their communities.

## **HealthForce**

HealthForce is a Tulare County-based initiative committed to expanding access to health care careers by cultivating a “grow-your-own” workforce model rooted in rural and underserved communities. Originally launched from a consulting agency that worked with physicians on the business side of health care, HealthForce evolved into a broader educational partnership after engaging with local efforts to expand the nursing program at College of the Sequoias. Today, it focuses on bridging gaps between education and industry while providing hands-on, career-aligned experiences for students at all levels.

At the core of HealthForce's model are two tracks: an Education Academy for students in grades 1-8 and pathway advising for high school and postsecondary students. Through a structured series of Junior Medical Academies (targeting grades 1-3, 4-6, and 7-8), students participate in afterschool programming that introduces them to clinical and nonclinical roles in health care through skill-building activities, career exploration, and community-based events. These activities are often hosted in



partnership with expanded learning programs and rural health fairs. The goal is not only to raise awareness but to change community attitudes around what is possible and help students see that they can build successful careers in health care without leaving their home community.

For high school and college students, HealthForce offers career fairs, interactive workshops, and engagement sessions such as clinical skills lab or speaker panels. The organization also plays a critical role in encouraging industry partners, especially health care employers, to participate in internships, externships, and work-based learning opportunities. Their approach focuses on making it easier to say “yes” by creating structured, low-barrier opportunities for student engagement such as plug-and-play workshops (e.g., suture demonstrations), standardized learning modules, and ready-to-go career fair stations. In districts like Woodlake and Porterville, and in colleges like Lemoore and Fresno City, HealthForce helps deliver early college exposure and smooth transitions into higher education and health care training programs.

HealthForce is also an active participant in the Fresno-Madera K-16 Collaborative and related regional efforts. By collaborating with schools, expanded learning programs, and workforce agencies, the organization brings a hands-on, locally tailored approach to pipeline development. Their focus on rural, Spanish-speaking communities makes them uniquely positioned to address regional disparities in both access and representation within health care professions. Their impact is reflected in not just the number of students engaged but also in moments when a child can go home and teach their parents what they have learned; early exposure can ripple outwards to families and communities.

Despite its broad impact, HealthForce—like many regional efforts—faces structural limitations. Many students lack access to basic certifications such as CPR or clinical licensure, making it harder to move directly from high school into employment. Simulation spaces, personalized career coaching, and long-term infrastructure investments are still needed to scale efforts. Funding offers a potential boost, but sustained policy and institutional support will be critical to long-term success.

HealthForce is working to ensure that students, regardless of background, have the exposure, encouragement, and resources to pursue a future in health care. As one HealthForce leader shared, the most powerful outcomes come not just from student achievement, but from seeing fifth graders go home and teach their parents what they’ve learned—proof that changing futures begins with shifting mindsets.

## **Key takeaways and recommendations**

While Raíces focuses on strengthening existing high school health pathways through technical assistance and partnerships, HealthForce complements this work by starting earlier and building community-based pipelines that span from elementary school through college. Several shared themes emerged from both initiatives:

## 1. Start early and build continuity

Early exposure to health care careers is essential for fostering long-term interest and confidence. Programs like HealthForce and Raíces show that a continuous pathway from early elementary education through postsecondary training strengthens student commitment and readiness for health care careers.

### *Policy Recommendation*

Fund elementary and middle school STEM and health pathway programs, with dedicated resources for mentorship and hands-on learning in rural schools.

## 2. Community-based, culturally responsive models work

Programs rooted in local culture and community needs are effective at reaching systematically underserved students. When students see their language, values, and lived experiences reflected in mentors and programming, they are more likely to engage and persist in the health workforce pipeline.

### *Policy Recommendation*

Support culturally tailored curriculum development and incentives for recruiting local mentors who reflect the community's demographics.

## 3. Hands-on support drives outcomes

Direct, personalized support such as securing clinical placements or offering suture workshops can make or break a student's progress in a health pathway program. These experiences not only build skills but also make health care careers feel achievable and relevant.

### *Policy Recommendation*

Expand funding for school-industry partnerships that offer clinical simulations, internships, and certifications as part of high school curricula.

## 4. Sustainability is a shared challenge

Both Raíces and HealthForce rely on short-term funding and a limited number of committed staff. Long-term sustainability requires multiyear investments, succession planning, and institutional commitment to avoid burnout and ensure continuity.

### *Policy Recommendation*

Establish sustained state funding streams for K-12 collaboratives and local workforce pathway programs to ensure staffing and program continuity.



## 5. Infrastructure gaps limit student advancement

A lack of simulation labs, certifications, and licensure pathways creates barriers for students trying to transition directly into the workforce. Addressing these infrastructure gaps is essential to translating education into employment opportunities.

### *Policy Recommendation*

Develop funding or incentive programs to build high school lab infrastructure and to expand credentialing making it easier for students to directly enter allied health roles.

## 6. Partnerships are key but need strengthening

Effective collaboration across K-12, higher education, and industry partners is central to program success. However, these relationships often depend on individual champions; formalized structures and policy support are needed to scale and sustain impact.

### *Policy Recommendation*

Encourage regional workforce councils or formal memorandums of understanding among districts, colleges, and employers to stabilize partnerships beyond individual leaders

## 7. Investing in local programs builds long-term capacity

Programs like Raíces and HealthForce not only support individual student success but also strengthen the broader ecosystem of health workforce development. Strategic investment in locally led efforts creates ripple effects in community trust, cross-sector collaboration, and long-term workforce growth.

### *Policy Recommendation*

Prioritize grant and philanthropic investments in place-based, community-driven workforce models to amplify regional health equity.

## About us

Healthforce Center's [Policy Advisory](#) is a trusted partner to California's state and regional leaders, providing expert guidance and community-informed research that accelerates cross-sector health workforce policy solutions.

## Acknowledgements

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Find [more research and evidence](#) from Healthforce Center on the health workforce.

## References

1. Geological Survey. California's Central Valley. US Dept of the Interior. <https://ca.water.usgs.gov/projects/central-valley/about-central-valley.html>. Accessed April 3, 2025.
2. Health Resources and Services Administration. HPSA Find. US Dept of Health & Human Services. <https://data.hrsa.gov/tools/shortage-area/hpsa-find>. Accessed April 3, 2025.
3. Health Resources and Services Administration. Find Shortage Areas: MUA/P by State and County. US Dept of Health & Human Services. <https://data.hrsa.gov/tools/shortage-area/mua-find>. Accessed April 3, 2025.
4. Cha P. Health care access among California's farmworkers. Public Policy Institute of California. <https://www.ppic.org/publication/health-care-access-among-californias-farmworkers/>. Published 2022.
5. Community Health System. 2022 Community Health Needs Assessment. [https://www.communitymedical.org/getmedia/a79018eb4-f102-4932-bd43-78378afee64f/CommunityHealthSystem\\_2022CHNA\\_9-19-22.pdf](https://www.communitymedical.org/getmedia/a79018eb4-f102-4932-bd43-78378afee64f/CommunityHealthSystem_2022CHNA_9-19-22.pdf). Published 2022.
6. Ibarra AB, Foy N. A Central Valley community lost its only hospital. More statewide closures may follow. KQED. <https://www.kqed.org/news/11938681/a-central-valley-community-lost-its-only-hospital-more-statewide-closures-may-follow>. Published January 20, 2023.
7. Brookings Institution. How California's Central Valley is confronting environmental and food injustice by supporting farmworkers to grow where they live. <https://www.brookings.edu/articles/how-californias-central-valley-is-confronting-environmental-and-food-injustice-by-supporting-farmworkers-to-grow-where-they-live/>. Published 2023.
8. Tides. The Central Valley's leading edge. <https://www.tides.org/blog/the-central-valleys-leading-edge/>. Published 2022.
9. California Health Care Foundation. How California is strengthening its health workforce: five key questions and answers. <https://www.chcf.org/wp-content/uploads/2024/05/StrengtheningWorkforce.pdf>. Published 2024.
10. Fresno Unified School District. Health science and medical technology. <https://www.fresnounified.org/departments/cr/cte/sectors/health>. Accessed April 6, 2025.
11. Association of American Medical Colleges. Table C6: Physician retention in state of residency training. <https://www.aamc.org/data-reports/students-residents/data/table-c6-physician-retention-state-residency-training-state>. Published 2023.
12. UCSF Fresno. 2023-2024 Annual Report: Improving Health in the San Joaquin Valley. [https://fresno.ucsf.edu/sites/g/files/tkssra7616/f/UCSF%20Fresno%20Annual%20Report%2023-24\\_Interactive.pdf](https://fresno.ucsf.edu/sites/g/files/tkssra7616/f/UCSF%20Fresno%20Annual%20Report%2023-24_Interactive.pdf). Published 2024.
13. California Health Sciences University College of Osteopathic Medicine. CHSU-COM match results. <https://osteopathic.chsu.edu/match-results/>. Accessed April 6, 2025.
14. National Association for the Education of Young Children. Promoting identity and equity in STEM. <https://www.naeyc.org/resources/pubs/tyc/winter-2025/promoting-identity-equity-stem>. Published 2025.