



UNIVERSITY OF CALIFORNIA

Michael V. Drake, MD
President

March 7, 2023

Office of the President
1111 Franklin St.
Oakland, CA 94607

The Honorable Nancy Skinner
Chair, Joint Legislative Budget Committee
1020 N Street, Room 553
Sacramento, California 95814

universityofcalifornia.edu

Dear Senator Skinner:

CAMPUSES

- Berkeley
- Davis
- Irvine
- UCLA
- Merced
- Riverside
- San Diego
- San Francisco
- Santa Barbara
- Santa Cruz

Pursuant to Item 6440-001-0001, Section 2, of the 2022 Budget Act, Provision 11(c) (AB 179, Chapter 249, Statutes of 2022), enclosed is the University of California’s report to the Legislature on Programs in Medical Education (PRIME).

If you have any questions regarding this report, Associate Vice President David Alcocer would be pleased to speak with you. David can be reached by telephone at (510) 987-9113, or by e-mail at David.Alcocer@ucop.edu.

MEDICAL CENTERS

- Davis
- Irvine
- UCLA
- San Diego
- San Francisco

Sincerely,

Michael V. Drake, MD
President

NATIONAL LABORATORIES

- Lawrence Berkeley
- Lawrence Livermore
- Los Alamos

Enclosure

DIVISION OF AGRICULTURE AND NATURAL RESOURCES

- cc: Senate Budget and Fiscal Review
The Honorable John Laird, Chair
Senate Budget and Fiscal Review Subcommittee #1
(Attn: Mr. Christopher Francis)
(Attn: Mr. Kirk Keely)
The Honorable Kevin McCarty, Chair
Assembly Budget Subcommittee #2
(Attn: Mr. Mark Martin)
(Attn: Ms. Sarah Haynes)
Mr. Hans Hemann, Joint Legislative Budget Committee
Ms. Erika Contreras, Secretary of the Senate
Ms. Amy Leach, Office of the Chief Clerk of the Assembly
Ms. Sue Parker, Office of the Chief Clerk of the Assembly
Mr. Chris Ferguson, Department of Finance
Mr. Jack Zwald, Department of Finance
Ms. Gabriela Chavez, Department of Finance

Mr. Gabriel Petek, Legislative Analyst Office
Ms. Jennifer Pacella, Legislative Analyst Office
Executive Vice President and Chief Financial Officer Nathan Brostrom
Senior Vice President Brent Colburn
Executive Vice President Carrie L. Byington, MD
Associate Vice President Zoanne Nelson
Associate Vice President David Alcocer
Executive Director Kathleen Erwin

UNIVERSITY OF CALIFORNIA

Efforts by UC Medical Schools to Help Meet the Needs of Medically Underserved Communities through UC PRIME

This report is submitted by the University of California (UC) in response to language contained in the 2021 Budget Act, which states:

“(c) The University of California shall report the following information about UC Programs in Medical Education program outcomes to the Department of Finance and the Legislature by March 1, 2022, and annually thereafter until March 1, 2027:

- (1) Enrollment numbers and student demographics in each program.*
- (2) A summary of each program’s current curriculum.*
- (3) Graduation and residency placement rates for each program.*
- (4) To the extent feasible, postgraduate data on where each program’s graduates currently practice and the extent to which they serve the populations and communities targeted by the program in which they participated.*

This report provides an update on enrollment for FY 2022-23 for existing PRIME programs; an overview of PRIME curricula for each program; information on outcomes with respect to meeting program goals and objectives; and an update on plans for the development of new programs.

I. Introduction and Background

California is home to nearly 40 million residents and its population is increasing in size, age, and diversity. The state also faces a growing shortage and persistent maldistribution of physicians. According to the 2019 report of the California Future Health Workforce Commission (Commission), the state had an estimated need of approximately 4,100 more primary care providers by 2030. The COVID-19 pandemic has further amplified the need to increase the supply and diversity of health professionals throughout the state. Increasing the racial and ethnic diversity of the health workforce and deploying effective strategies to address provider shortages in medically underserved communities throughout this state can both improve health outcomes and achieve health equity.

Launched in 2004, UC Programs in Medical Education (PRIME) are part of an innovative systemwide initiative focused on addressing physician workforce shortages and meeting the needs of California’s underserved populations by increasing medical student enrollment and the capacity of UC medical schools to train highly motivated, socially conscious graduates who will become physician leaders committed to serving medically underserved groups and communities across the state.

PRIME-LC (Latino Community) at Irvine, est. 2004

Emphasizes Latino health issues, including increased proficiency in medical Spanish and Latino culture.

<https://www.meded.uci.edu/curricular-affairs/prime-lc.asp>

Rural PRIME (Rural California) at Davis, est. 2007

Incorporates an award-winning model program in telemedicine with a commitment to outreach and rural healthcare.

<https://health.ucdavis.edu/mdprogram/community-health-scholars/index.html>

PRIME-HEq (Health Equity) at San Diego, est. 2007

Builds upon research about health disparities to help students learn and contribute to achieving equity in healthcare delivery.

<https://medschool.ucsd.edu/education/diversity/prime-heq/Pages/default.aspx>

PRIME-US (Urban Underserved) at San Francisco and Berkeley, est. 2007

Offers students the opportunity to pursue interests in caring for homeless and other underserved populations in urban communities.

<https://meded.ucsf.edu/prime-us-program>

<https://publichealth.berkeley.edu/academics/joint-medical-program/curriculum/prime-us/>

PRIME-LA (Leadership and Advocacy) at Los Angeles, est. 2008

Trains future physicians to lead and advocate for improved healthcare delivery systems in disadvantaged communities.

<https://medschool.ucla.edu/prime-about-us>

San Joaquin Valley PRIME at San Francisco and UCSF- Fresno, est. 2011

Provides specialized training with an emphasis on community-based research and educational experiences to improve the health of populations in the San Joaquin Valley region of California.

<https://meded.ucsf.edu/ucsf-san-joaquin-valley-prime-sjv-prime>

PRIME-LEAD-ABC (Leadership Education to Advance Diversity - African, Black, and Caribbean) at Irvine, est. 2019 and Riverside, est. 2022)

Examines the intersections of Anti-Black racism, medicine, and health to effectively address health inequities impacting African, Black, and Caribbean communities in Southern California and beyond.

<https://www.meded.uci.edu/curricular-affairs/lead-abc.asp>

<https://ume.ucr.edu/prime>

Tribal Health PRIME (Indigenous Community) at Davis, est. 2022

Trains future physicians to identify, understand, and serve the unique health needs of California's Indigenous, rural, urban, and Central Valley communities.

<https://health.ucdavis.edu/mdprogram/community-health-scholars/index.html>

PRIME- TIDE (Transforming Indigenous Doctor Education) at San Diego, est. 2022

Prepares medical students for careers focused on providing healthcare to Native populations.

<https://medschool.ucsd.edu/education/diversity/prime-tide/Pages/default.aspx>

Each program includes a specified area of focus and combines structured activities ranging from student outreach and recruitment to specialized coursework, population-focused clinical training and research experiences, health care leadership and management training, community engagement experiences, master's degree educational opportunities, faculty mentoring, and sponsored events that are open to the broader campus community.

II. UC PRIME Enrollment

In January 2007, the UC system completed a multi-year health sciences planning effort that recommended the development of new health professions programs to respond to statewide needs for physicians and other health care professionals and to increase enrollment in new and unprecedented ways. This plan included a systemwide framework for medical student enrollment growth through 2020. While the first PRIME program was launched prior to the completion of that planning effort, the development of the programs that followed was aligned fully with it. Despite the precipitous decline in state support for medical education (and other health professions educational programs) over the last two decades, the University has moved forward in an effort to implement this plan with a focus on California's health workforce needs, including a focus on achieving health equity as a core principle for enrollment growth.

The \$12.9 million augmentation approved in the 2021 Budget Act for PRIME supports previously unfunded enrollments (at originally planned levels) in all existing programs, and the development of new programs focused on the needs of American Indian/Native American (AI/NA) communities and Black/African American (Black/AA) communities in California. This funding benefits all six UC medical schools, stabilizes resources for teaching, and ultimately will grow total enrollment to nearly 500 PRIME students systemwide over the next five years. One-third of the funding is set aside for need-based student financial aid.

Student Enrollment 2022-23: There are currently 396 PRIME students enrolled across 10 programs. As of fall 2022, all new programs have enrolled their inaugural class of new PRIME students. Full enrollment at planned levels (489) is expected to occur by 2026-27. Current and planned enrollment for the program are shown in Table 1.

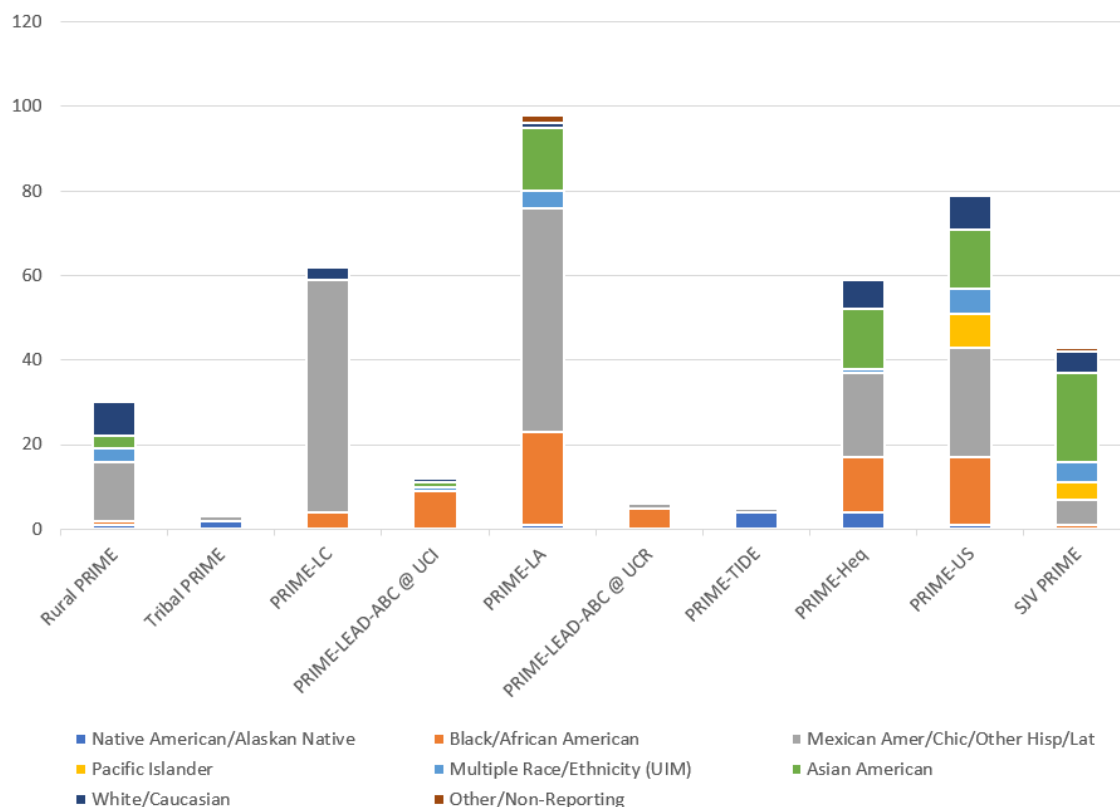
Table 1. PRIME Program Enrollments, 2022-23

PRIME Program	Total Enrollment (2022-23 Actual)	Total Planned Enrollment [^]
EXISTING PROGRAMS		
Rural PRIME (UCD)	30	60
PRIME Latino Community (UCI)*	62	60
PRIME Leadership & Advocacy (UCLA/CDU)*	98	90
San Joaquin Valley PRIME (UCSF/Fresno)	42	48
PRIME Health Equity (UCSD)	59	60
PRIME Urban Underserved (UCSF/UCB)	79	75
NEW PROGRAMS		
American Indian/Native American (UCD/UCSD)	3 (UCD)/5 (UCSD)	48
Black/African American (UCI/UCR)	12 (UCI)/6 (UCR)	48
TOTAL	396	489

[^]: Planned enrollment varies by campus. Programs prior to the establishment of the SJV program were originally established as five-year programs that included a Master’s/research year (e.g. 12 students over five years is 60 total students for Rural PRIME compared to 12 students per year over four years totaling 48 SJV PRIME students).

* Some campuses have students who remain in the program longer than five years in order to complete a two-year master’s degree program or who have taken a leave of absence, which reflects slightly higher enrollment numbers in 2022-23.

Figure 1. Total PRIME Enrollments by Program, Fall 2022[^]

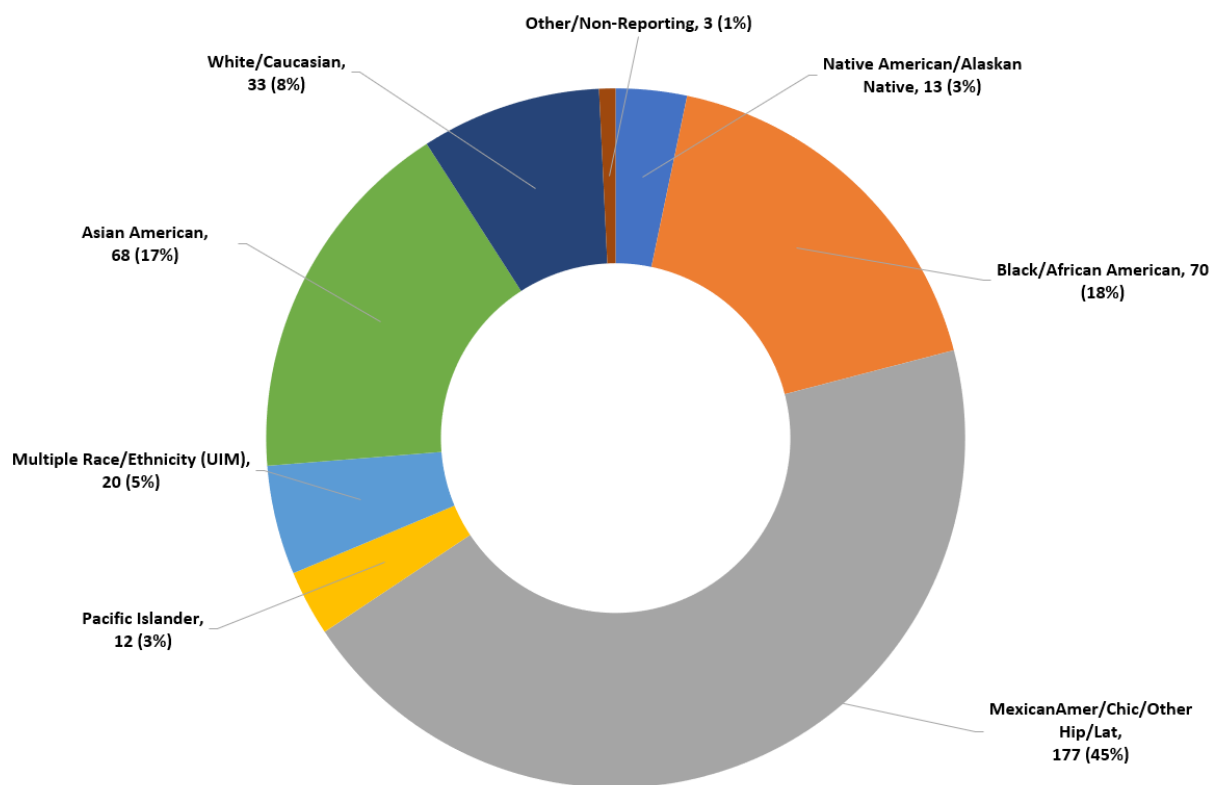


[^]: See Appendix for total PRIME enrollment numbers by program for Fall 2022.

Medical Student Diversity: According to the 2019 Commission Report, communities of color will make up over 65% of California’s population by 2030, yet they are severely underrepresented in the health workforce and educational pipeline. Language capabilities are also not aligned, with a large and growing public unable to effectively communicate with its health providers. For the physician workforce to better reflect California’s diverse population, it will be critical that California medical schools continue to prioritize efforts to increase diversity among trainees, faculty, staff, and leaders. It is also well documented that physicians from groups underrepresented in medicine (UIM) are more likely to practice in shortage areas and to care for underserved and uninsured populations as compared to others.

Although more progress is needed, UC Schools of Medicine have shown steady gains in the enrollment of UIM students over the last 20 years. This year, 40% of first-year UC medical students are UIM compared to only 16% in 2000. The UC PRIME programs have contributed to these gains, reflecting extraordinary success for racial, ethnic, and socioeconomic diversity across the UC medical education system – with 74% of PRIME students being from groups underrepresented in medicine (Figure 2). PRIME has been recognized by the Commission (and others) for establishing a successful model that can be replicated in other disciplines, aligning with the state’s initiatives and needs of California communities.

Figure 2. Total PRIME Enrollment, Fall 2022



III. PRIME Curricula

All PRIME programs offer specialized education, training and support for students who wish to acquire added skill and expertise as they pursue future careers caring for medically underserved groups and communities. Each program has its own area of focus, which was selected based upon the priorities of the medical school, faculty expertise, the patient populations served by each campus, and other local/regional considerations. The core elements of UC PRIME include:

- Specified Area of Focus and Clear Program Identity
- Targeted Student Outreach and Recruitment
- Supplemental Criteria for Admissions
- Curricular Enrichment
- Population-Focused Clinical Training and Research Experiences
- Dedicated Faculty Mentorship

Although the curriculum for each program is unique, the curricula generally include a summer orientation/immersion experience, a seminar series with site visits, clinical immersion in underserved settings, community engagement, options for a master's degree or research year, and sponsored events that are open to the broader campus community.

UC Davis: Rural-PRIME

Rural PRIME is part of the Community Health Scholars (CHS) Pathway programs at UC Davis School of Medicine (UCDSOM). This collection of programs, which also includes the new Tribal Health PRIME (THP) program, share curricular elements but have their own program-specific experiences as well. The mission of the CHS programs is to train medical student leaders to identify, understand, and serve the unique health needs of California's rural, urban, Native American, and Central Valley communities. Rural-PRIME was developed to address the lack of access to care in rural areas and to reduce health care disparities in rural populations. The program admitted its first class in 2007, admitting 12 students each year.

Rural-PRIME students meet all of the SOM graduation competencies in addition to the Rural-PRIME curriculum requirements, which are designed to enhance the core curriculum by increasing exposure to rural communities and practice, providing mentorship by rural physicians and community leaders, and providing the tools to best equip students for life-long learning in rural areas. The Rural-PRIME curriculum spans four years of medical training and aims to provide students with the foundation to provide outstanding, culturally humble clinical care for underserved communities, with a focus on five pillars of excellence: community engagement, leadership, professional development, mentorship, and scholarship. The major elements of the program include:

Orientation: A one-week long orientation before they start their first year which introduces students to each other, program leadership, and rural community partners.

Rural-PRIME Seminars: One- to two-hour sessions occurring twice a month during the first and second year of medical school delivered through a combination of faculty and community guest

speakers, as well as student-led seminars. Each session aims to address at least one of the curricular pillars as it relates to caring for vulnerable and marginalized populations.

Longitudinal Scholarly Activity: Students are required to engage in a longitudinal scholarly activity that spans the entirety of their medical school experience. Students may work together or alone, and their scholarly activity must address a specific need or issue within the community that the student identified in their first year through collaborative conversations with community members. Examples of acceptable scholarly projects include a community engagement project with a local organization, a needs assessment and recommendations for meeting those needs, community-based health fairs, and community-oriented research. Students regularly present their work-in-progress and receive peer and faculty feedback throughout medical school, with a final capstone project presentation at the end of their fourth year prior to graduation.

Summer Elective (4 weeks): Rural-PRIME students are required either to enroll in the *Summer REACH* elective, which is an immersive experience within Central Valley Communities where students work closely with local hospitals and community groups to understand the needs of those specific communities; *Summer Institute on Race and Health*; or engage in a rural-based activity, which can include community engagement projects, community research, or other scholarly activities in or in support of rural communities.

Clinical Experiences: Rural-PRIME students have opportunities for early clinical immersion in rural communities via a two-week pre-matriculation program prior to starting medical school and through the summer elective after the first year of medical school. When possible, their longitudinal clinical preceptorship experiences during the first two years are with federally qualified health centers serving rural communities. In their third year, Rural PRIME students complete a minimum of 20 weeks of clerkships in a rural community. Clerkship opportunities are offered in internal medicine, family medicine, pediatrics, obstetrics and gynecology, and surgery. The program is actively developing opportunities for psychiatry clerkships.

Medical Care for Underserved and Marginalized Communities: Beginning in 2023, Rural PRIME fourth year students will be required to do a two-week rotation, during which they will reflect on their medical training, learn new clinical skills, and make plans to utilize these skills in service for patients from marginalized communities.

Leadership Development and Mentorship: Leadership development is a core pillar of the CHS curriculum. All students participate in leadership workshops on effective advocacy, change management, and crucial conversations. Additionally, students can serve on the CHS student advisory council which meets quarterly with CHS leadership to provide program feedback. They may also participate as a PRIME Statewide Student Council member, which includes representatives from PRIME programs systemwide to discuss ongoing issues and student initiatives. Students are highly encouraged to serve as clinical skills facilitators in their fourth year to develop leadership and teaching skills.

All Rural PRIME students have an academic coach with expertise in rural health. Their academic coach guides their clinical skills sessions during their first two years and meet with them regularly throughout medical school for mentorship. Each clinical skills group is also co-

facilitated by a CHS fourth-year student. Additionally, PRIME students have access to a large UCD CHS alumni network and CHS faculty facilitate connections to alumni with shared interests. PRIME students regularly participate and initiate mentoring events with UCD postbaccalaureate students and undergraduate students, many of whom become medical students in CHS programs.

Community Engagement: Rural PRIME students participate in community engagement opportunities that advance their understanding of rural health care. Examples include, volunteering at the Yolo County Food Bank and visiting Yolo Cares – a hospice and palliative care organization serving five rural counties nearby. This year, students will accompany hospice nurses on home visits to rural communities. Students also receive additional addiction medicine education from a local Rural PRIME alumnus and visit a medication assisted treatment clinic. Many Rural PRIME students serve as co-directors of the Knights Landing student-run clinic, which was initially founded by Rural PRIME students to meet the needs of that community. Students also partner with community organizations to complete their longitudinal scholarly projects.

Master's Year (optional): An optional fifth-year master's is available.

UC Irvine: PRIME-Latino Community (LC)

Established in 2004, PRIME-LC was developed to help meet the increasing demand for physicians who are better prepared to address the health needs of the Latino population. This five-year program is designed to improve the cultural and linguistic competence of future physicians by developing Spanish language proficiency and increasing familiarity with the socio-cultural values, health beliefs, and lifestyles of Latino patients. Instruction on health disparities and disproportionate disease burdens suffered by many Latino patients is emphasized.

Pre-matriculation Curriculum: The PRIME-LC curriculum begins with a survey course prior to the first year, which serves as an overview of PRIME-LC and establishes a baseline for the next five years of training. This one-month course introduces students to the concept of physician-leadership, with a highlight on health disparities around the state. Students spend time at local community advocacy centers and visit nonprofit organizations active in health issues that are prevalent along the US/Mexico border and in California's Central Valley. Students also spend a day at the Capitol in Sacramento advocating for health equity with legislators and staff.

Cultural Immersion: During the first three years, the UCI Department of Chicano/Latino Studies provides cultural immersion experiences for students and exposes them to the history, politics, and socio-cultural experiences of U.S. and non-U.S. Latinos. In the summer of the first year of medical school, PRIME-LC students take an introductory course on Latin American culture, society, history, and geography that is structured to complement their clinical experiences in health related organizations across the state. This course is conducted entirely in Spanish and focuses on historical and political antecedents of health disparities. In the second and third years of medical school, students take part in 10-week seminars focused on contemporary issues that are relevant to health and medical treatment in Latino populations. Overall, the Chicano/Latino Studies courses form the backbone of the curriculum for PRIME-LC.

The capstone of the PRIME-LC curriculum is a rotation in Latin America. The goal of this one-month clinical rotation is to compare the physician-patient relationship and healthcare systems in Latin America with that of the United States, and a similar comparison of the health care systems in the US compared with Peru. UCI chose Universidad Peruana Cayetano de Heredia (UPCH) as a partner for this rotation because of their devotion to teaching and success with previous international programs. Students rotate through multiple departments at UPCH and present at conferences in Spanish. They are exposed to pathology that is advanced in comparison to what they see in the U.S. and have the privilege to care for patients in this setting.

Clinical Experiences: Students in PRIME-LC begin their clinical experience prior to their first year with experiences in community clinics in central Orange County and in the Central Valley. All UCI medical students complete a weekly *Patient and Community Engagement* longitudinal clerkship spanning the first two years. For PRIME-LC students, this clerkship is completed in primarily Spanish-speaking practices. PRIME-LC students have priority selection for rotation sites with primarily Latino populations during the third year while year four leads off with the clinical rotation in Peru. Lastly, *Clinical Foundations* training during years one and two have written cases and simulated patient scenarios altered to reflect issues of language, culture, and health disparities for PRIME-LC students.

Leadership Development and Mentorship: PRIME-LC students participate in a seminar on leadership and their coursework with Chicano-Latino Studies emphasizes critical thinking and leadership through community engagement and policy. There is also a PRIME-LC Student Advisory Committee which has multiple leadership positions for students and provides critical feedback and support for the program. The program also hosts a monthly student-faculty meeting to support students and share important news.

PRIME-LC has made the hidden curriculum of emotional, academic, and spiritual support for students more explicit, with multiple programs to promote wellness and teamwork. The connections created during medical training are especially durable among PRIME-LC students, and the PRIME-LC Alumni Association is built to promote ongoing engagement and wellness through the careers of students and alumni.

Community Engagement: In addition to the pre-matriculation curriculum that includes site visits to community partner organizations and clinics described above, all students complete a service-learning project related to Latino health in the first and second years. Students primarily focus on the Santa Ana community for their service learning projects. For example, they have created a health education series called *Una Hora con la Doctora*, in which they team with the Madison Park Neighborhood Association and an alumna from the first cohort of PRIME-LC to provide health tips on a variety of different conditions. They have also produced a health education program with the Centro Cultural de Mexico through Radio Santa Ana. Overall, these programs have reached thousands of participants and provide culturally and linguistically fluent information.

Master's Year: Students begin their master's degree training within two months of their return from Latin America. A master's degree is required of PRIME-LC students who have not previously completed a master's degree pertinent to Latino health. The most popular choices for master's programs include Public Health and Business Administration, but students are free to

choose a program based on their personal ambitions to become a leader in Latino health. Although most students take one year to complete their master's degree program, some complete two-year programs that include research.

UC Los Angeles: PRIME-Leadership and Advocacy (LA)

PRIME-LA is a five-year program focused on healthcare leadership and advocacy for diverse disadvantaged communities. The program aims to enhance the development of physician leaders whose careers will advance public policy and research in health care for the underserved. PRIME-LA students are admitted to either the David Geffen School of Medicine (DGSOM) or the Charles R. Drew University of Medicine and Science (CDU).

The DGSOM launched a new curriculum – [HEALS](#) in August 2021. The first and second-year PRIME-LA students are learning under the new curriculum and all other PRIME-LA students remain under the legacy curriculum.

HEALS Curriculum (Year One): HEALS replaces the longitudinal preceptorship with a new *Early Authentic Clinical Experiences* curriculum designed to expose first-year medical students to immersive, real-life clinical experiences that will provide context and opportunities to apply the knowledge, skills, and abilities acquired in *Foundations of Practice*, and begin to form their professional identity. PRIME-LA's unique curricular components during the first year of medical school include:

- *Pre-Matriculation Curriculum* – The goals of the PRIME- LA Summer Pre-matriculation Foundations Program are to:
 - Provide a deep understanding of key issues in underserved communities and health and healthcare disparities on a local, regional, or national level,
 - Discuss strategies in health policy or education that address increased equity and reducing health disparities for underserved and vulnerable populations,
 - Become familiar with service projects, community engagement and participatory research methods so that students can effectively work collaboratively with underserved communities during their career
 - Become familiar with effective cultural and linguistically appropriate care for underserved patients and communities.
- The summer program consists of didactic learning focused on health equity for the underserved, site visits to community organizations focused on dismantling health disparities (e.g. LA County Department of Public Health, community clinics, county hospitals, and ethnic neighborhoods in LA), mentorship, and advising.
- *Early Authentic Clinical Experiences* – Clinical exposure in student-run, free homeless clinics, AltaMed clinics (Federally Qualified Health Center), LA County community health centers, Saban Free Clinic, and Veterans Affairs facilities occur early in the curriculum. These experiences are designed to expose first-year PRIME students to clinical experiences that will enhance their skills working with underserved communities.

Students serve in roles such as health coach, patient navigator, intake coordinator, and other roles in a variety of different healthcare settings.

- The PRIME-LA *Health Equity and Leadership Seminar Series*, which includes guest lecturers with expertise in underserved and vulnerable populations.
- Year-long Community Partnered Cohort Service Project – Students are required to partner with a community organization to address a health disparity identified by the community. For example, last year, first-year students partnered with Black Women for Wellness to bring awareness to environmental justice issues through a reproductive justice lens. The goal of the cohort project is to equip students with experiential learning and community-based, real-world experience dismantling health disparities.
- Elective courses that align with the PRIME-LA mission and focused on health care for the underserved.

HEALS Curriculum (Year Two): Second year UCLA PRIME-LA students complete rotations in clinical sites that provide care to underserved populations in Los Angeles. Other highlights of the curriculum include:

- Longitudinal preceptorship in underserved communities or with an underserved focus
- *System Based HealthCare for PRIME* – PRIME-LA students form small groups to learn about how health systems provide care to underserved populations and communities.
- Two PRIME workshops designed for reflective learning on caring for underserved patients
- *Health Equity and Leadership Seminar Series*

Legacy Curriculum (Years Three – Five): All other PRIME-LA students will complete medical school under the legacy curriculum. This curriculum includes a master's year, and the following:

- Third-year clinical clerkships are situated in healthcare systems that particularly address underserved and disadvantaged populations (e.g., Harbor-UCLA Medical Center, Olive-View-UCLA Medical Center, West Los Angeles VA, community health centers, and other LA County ambulatory care facilities)
- *System Based HealthCare for PRIME* – PRIME-LA students form small groups to learn about how health systems provide care to underserved populations and communities
- *Health Equity and Leadership Seminar Series* – Includes guest lecturers with expertise in underserved and vulnerable populations
- Longitudinal preceptorship in underserved community settings

- Elective courses that align with the PRIME-LA mission. These electives are also available in the new HEALS curriculum.
- The fifth year will be facilitated via the DGSOM Colleges. The “colleges” further prepare students for residencies and future roles as leaders. College activities include seminars, special and specific electives, a research project and, an intense advising and mentoring program.
- PRIME seniors present a leadership project as part of the UCLA School of Medicine Senior Scholarship Day.

Leadership Development and Mentoring: The PRIME Leadership and Advocacy Summer Pre-matriculation Foundations Program occurs over three weeks and provides immediate opportunities to start building the student’s leadership skills. The bi-monthly *Health Equity and Leadership Seminar Series* (noted above), year-long community partnered cohort project and PRIME-LA workshops also focus on leadership development. Mentorship occurs through a PRIME peer mentoring program, faculty and staff mentoring, and other programs focused on first generation students.

Community Engagement: There are several aspects of the program that have a strong community engagement component including *Early Authentic Clinical Experiences in Underserved Communities* which provides students with exposure early in the curriculum to clinical settings including homeless healthcare sites, community clinics, and the LA County Department of Health Services. PRIME students also mentor underrepresented pre-health students and participate in community health fairs.

Master’s Year: A master’s degree is required of PRIME-LA students who have not previously completed a master’s degree. The most popular choices for master’s programs include Public Health, Business Administration, and Public Policy, but students are free to choose a program based on their personal ambitions to become a physician leader and advocate.

UC San Diego: PRIME-Health Equity (HEq)

The PRIME Health Equity (HEq) program was established in 2007 to train physician leaders to care for and advocate on behalf of vulnerable populations and communities at risk for health disparities, in order to provide equitable care in California and across the nation.

Orientation: All incoming PRIME-HEq students participate in a four-day PRIME-HEq orientation to introduce students to local San Diego community sites and the PRIME-HEq community. Students participate in community building and leadership activities and are given an introduction to health disparities research projects.

Pre-Clinical Electives:

Core Topics in Biomedical Sciences (CTBS) - The CTBS course is given during the summer and provides students a head start in mastering some of the more challenging topics presented in the first-year UCSD SOM curriculum. It models the pace and intensity of the SOM curriculum.

Influences on Health: From Genes to Communities – A person’s health is affected by a myriad of influences – everything from genetic inheritance to the places in which we live. In this course, the concept of health equity is introduced, with a discussion of health care system models that may either increase or decrease health equity in a given population. The course includes the opportunity for students to hear health-related stories about people from varied backgrounds through cultural immersion tours to the Indian Health Council and San Ysidro Health Center.

Healthy Minds, Healthy Bodies – UCSD medical students are trained to give lessons on health topics to a local high school class providing a longitudinal health curriculum experience. Medical students learn teaching strategies, receive written feedback, track student learning, and act as role models. Students alternate each week between attending lesson training on the medical campus and teaching in the high school classroom. This course culminates with the Doctor-4-a-Day event, in which high school students are invited to the UCSD SOM campus to participate in hands-on activities in their simulation suite. UCSD medical students supervise stations that highlight key principles in medicine.

Beyond the Bench and Bedside: Partnering with Communities – This course is designed to provide students with the knowledge and skills to partner with communities to develop, conduct, and evaluate community-based research, as well as design and implement community program evaluations. During this course, students complete a Community Snapshot assignment to conduct an in-depth analysis of a region or community in San Diego County. Students learn about the demographics of the community including race, ethnicity, as well as barriers to access economic, educational, and health resources. At the end of the course, students present their Community Snapshot assignment to their class, providing an opportunity for students to learn about similarities and differences that exist among regions, thus allowing them to become more familiar with diverse areas in San Diego County.

Clinical Experiences:

Ambulatory Care Apprenticeship in underserved areas – During the first and second year, PRIME-HEq students are matched with a primary care physician who practices in an underserved community. The course places an emphasis on best practices for history-taking, physical examinations, and patient interaction in an underserved setting.

Primary Care Core Clerkship in underserved areas – During the third year, PRIME-HEq students are matched with a family medicine physician who practices in an underserved community. The year-long longitudinal course places an emphasis on caring for patients with a holistic approach, taking into consideration the socioeconomic factors and striving to practice disease prevention and patient education.

Leadership Development, Mentoring, and Community Engagement: In addition to the content provided in PRIME-HEq courses such as the *Healthy Minds, Healthy Bodies* and *Beyond the Bench and Bedside* electives, the following activities are examples of how leadership and community engagement are built into the program:

- UC San Diego Student-Run Free clinic – provides respectful, empowering, high quality health care for the underserved
- Doc-4-A-Day Educational Outreach – first and second year medical and pharmacy students conduct a one day visit for high school students to learn about medical and pharmacy school through hands-on clinical experiences
- Health Frontiers in Tijuana (HFit) – the UC San Diego Health Frontiers in Tijuana Student-Run Free Clinic is located in Tijuana's Zona Centro. HFit provides quality health care that is accessible to the underserved
- Health Professions Exposure and Recruitment Program – high school students are mentored by medical students at the UC San Diego Campus where they have the opportunity to participate in workshops, clinical skills sessions, mock patient encounters, and medical education encounters

Master's Year: All PRIME-HEq students are required to complete a one-year master's degree to develop research skills and knowledge on factors impacting social determinants of health and health disparities. Although most UCSD SOM students complete a Master's in Public Health, there are several other master's degree programs available to PRIME HEq students such as a Master's in Advanced Clinical Sciences, Leadership of Healthcare Organizations, Education, Business Administration, and Public Policy.

UC San Francisco: PRIME for the Urban Underserved (US)

PRIME-US is a five-year curricular track at the UCSF School of Medicine and UCB-UCSF Joint Medical Program (JMP) for medical students who are committed to caring for under-resourced communities and becoming health equity and social justice leaders.

PRIME-US cultivates a community of diverse students who are dedicated to improving all aspects of primary and specialty care in under-resourced communities and catalyzing healthcare and societal systems change. PRIME-US students acquire unique knowledge and skills that will enhance their capacity as future physician leaders to lead transformational change through quality improvement, research, education, workforce development, community engagement, policy, advocacy, and activism.

Summer Introduction: Students arrive at medical school early for an immersion experience that focuses on team building and an introduction to the framework of cultural humility. This experience includes: visiting community-based organizations; meeting public health and community leaders, clinicians and community members; learning about UCSF and UCB resources and support services; and getting to know one another and the Bay Area.

Pre-Clinical Curriculum: Afternoon seminars and a month-long capstone course (which marks the culmination of their program) create a solid foundation in understanding health equity principles and practices. Seminars during the first two years provide PRIME-US students with a

foundation in the principles, practices, and populations of urban underserved care. In small group settings, they meet with faculty and community members to discuss their work and careers in health and healthcare equity and underserved care. These interactive teaching sessions are complemented by site visits to community-based organizations and institutions. Seminars focus on critical reflection, skills-building, and project-based learning. In addition, the curriculum prepares PRIME-US students with skills to critically examine and reflect upon how to collaboratively create just and healing changes in medical education, healthcare, and society. The capstone experience provides PRIME-US students with the opportunity to review the core principles and practices of health equity promotion and underserved care, acquire new leadership and management skills, and work together on community-based projects.

Clinical Experiences: Students are placed in healthcare systems that care for under-resourced communities to learn about direct patient care and quality improvement. All medical students at UCSF are assigned a faculty coach. Coaches are clinician educators who provide advice, assistance, and encouragement in all aspects of a student's education and professional development. Coaches are assigned for the entire medical school curriculum. All PRIME-US students are assigned coaches who are health equity champions and whose clinical base is located at San Francisco County's largest safety-net hospital, Zuckerberg San Francisco General Hospital (ZSFG). As a result, PRIME-US students participate in interprofessional and quality systems improvement work at ZSFG with marginalized populations during their first year of medical school. Additionally, PRIME-US students have clinical preceptorships based at ZSFG, practicing their clinical skills with patients from traditionally marginalized populations.

Leadership Development and Mentoring: To increase the impact of PRIME-US, the program sponsors numerous activities, in partnership with local pipeline programs, to increase the number of diverse, historically excluded students who are prepared to enter the healthcare workforce. PRIME-US hosts and co-sponsors activities at UCSF and the JMP, including noontime seminars, evening talks, weekend events, and conferences. PRIME-US students also visit local undergraduate institutions and participate in many pipeline events to encourage young people from diverse backgrounds to pursue careers in the health professions. Students also strengthen their leadership skills through the completion of the capstone project (noted above). It is during this portion of the program that students are linked with community partners/leaders as well as alumni, providing students a significant opportunity for growth and development.

Program and peer mentorship and support are incorporated throughout PRIME-US to ensure personal, professional, and academic success. Each student is paired with a PRIME-US faculty or staff member who serves as their mentor throughout their medical school experience. In addition, first-year PRIME-US students are paired with a second-year PRIME-US student who serves as their "Big Sib" mentor. The curriculum for students in their first year and a half includes early education and practice focused explicitly on: developing bi-directional mentoring relationships, developing mentoring networks, and "managing up" (cultivating) strong effective mentoring relationships. PRIME-US students also have a robust network of PRIME-US Alumni who are available to them as mentors. The program hosts annual mentorship events with alumni sharing their career journeys and providing advice to current students, as well as opportunities to establish and nurture important relationships between alumni and students.

Community Engagement: Students learn anti-racist, anti-oppression frameworks to build and sustain equitable community partnerships. PRIME-US students participate in mentored short-term and longitudinal community engagement projects where they are introduced to community resources, advocacy, and policy efforts in the San Francisco Bay Area. Community engagement is “wrapped around” all components of the PRIME-US curriculum through core seminars and site visits, critical reflection, and community engaged activities such as:

- Health pathway outreach – medical student panels
- Health education workshops
- Nutrition workshops
- Short evaluation planning
- Survey development and dissemination
- Health information summaries/infographics
- Foster Youth COVID-19 Vaccination Project
- Rafiki Coalition

Master’s Year: All students do an additional year of master's level education or research to enhance their health equity leadership capacity. PRIME-US is a two-campus program and students on each campus have different master’s degree options. To graduate, all JMP students are required to complete a Master of Science (MS) degree. PRIME-US students must do a master’s thesis research study on an issue relevant to urban underserved communities.

All PRIME-US students based at UCSF may choose any type of master’s degree, as long as it is relevant to developing skills to fulfill the PRIME-US mission. To date, most students have chosen to pursue a Master of Public Health degree with a small number having completed Master of Social Work and Master of Public Policy degrees. Some students have done both research and completed a master’s degree, such as the UCSF joint MD-Master’s in Advanced Studies program for those interested in receiving rigorous training in conducting clinical research.

UC San Francisco: San Joaquin Valley PRIME (SJV)

In 2011, the SJV PRIME program was launched by UC Davis (as the sponsoring and accredited medical school), in partnership with regional partners at UCSF Fresno and UC Merced. The program was designed to develop future physicians to become health care leaders who will practice in the SJV region of California. Starting in 2019, responsibility for accreditation, degree-granting authority, finance, and other responsibilities associated with the management and oversight of the program transitioned from UC Davis to UCSF. This move was in alignment with plans to expand medical education in the SJV through a unique partnership with the UCSF Fresno regional campus for clinical studies and a newly designed UCSF Fresno regional campus that will ultimately include pre-clerkship studies at UC Merced.

At this time, the four-year SJV PRIME curriculum which introduces the PRIME students to the health issues and needs of the SJV, is supplemental to the UCSF Bridges curriculum at the UCSF School of Medicine. The curriculum has three major components: the first 18 months is called Foundations 1 (F1), the next year of core clerkships is called Foundations 2 (F2), and the final 18 months is called Career Launch (CL). SJV students participate in F1 at the UCSF campus and undertake F2 and CL at the UCSF Fresno campus. In addition, there are eight weeks dedicated to

professional identity development (PI weeks) integrated throughout the four years, at which time students come to the valley to participate in leadership and professional identity formation activities.

The social determinants of health, health disparities among the SJV population (including environmental health), and medical conditions that are prevalent in the region serve as the backbone to the SJV PRIME didactic and clinical curriculum. The major healthcare priorities for the SJV are immigrant health, diabetes and obesity, pre-term birth, valley fever, methamphetamine use disorder, and human trafficking. Community engagement with community partners is the foundation of the leadership curriculum.

Summer Introduction: The program begins with the *Advance Regional Information Summer Education (ASPIRE)* experience held jointly on the UC Merced and UCSF Fresno campuses, in which the students are introduced to community partners and begin to understand the health issues facing the Valley. Presentations from community partners engaged in work related to social determinants of health and the six priority healthcare issues discuss the challenges of different patient populations in the region and educate the students about their work and resources.

Pre-Clinical Curriculum: First-year and second-year students complete their pre-clerkship work over an 18-month period in San Francisco. The students build on the themes identified in the summer experience and the issues that make up the curricular backbone outlined above in a supplemental course, *Activities for Longitudinal Interaction to Generate New Leaders in the SJV (ALIGN SJV)* for the duration of their pre-clerkship period. This course consists of interactive bi-monthly sessions with faculty from UC Merced, UCSF Fresno, and UCSF, as well as community partners. A sampling of these sessions includes: Cardiovascular Disease Burden in the SJV, Human Trafficking (presented by Central Valley Against Human Trafficking), Nutritional Intervention and Health Promotion, and Climate Change in the SJV (presented by the California Water Board).

During F1, all UCSF students participate in *Clinical Microsystems*, a longitudinal course in which small groups of students not only learn the basics of clinical medicine but participate in a quality improvement project at their clinical preceptor site. Each group works with a mentor at Zuckerberg San Francisco General hospital, known for its care of the underserved.

The final component of the pre-clinical curriculum is the *AHEC-affiliated Summer Program Including Research and Community Engagement* which is a six-week program that integrates community engagement activities, such as working with community health workers/promotoras, clinical experiences in AHEC (Area Health Education Centers) clinics, and a research project of the student's choice done with a faculty mentor focused on one of the priority health issues for the region.

Clinical Curriculum: As the second-year students transition to UCSF Fresno, they complete the *Longitudinal Integrated Fresno Experience (LIFE)* program. LIFE is a one-year longitudinal integrated clerkship that encompasses the core clerkship year for students in the UCSF SJV PRIME program. It is designed to address competencies for all of the core medical student clerkships. In contrast to a traditional "block rotation" curriculum, LIFE students participate in

patient-centered longitudinal care with scheduled clinical experiences in the SJV for all core disciplines over the course of an entire year, under the mentorship of faculty preceptors in each specialty.

The final phase of the medical school curriculum, *Career Launch*, starts in the spring of the third year. This phase includes internships, longitudinal outpatient experiences, electives in their field of choice, and three or more months of an inquiry (often research) project, also with a faculty mentor of their choice. A final gathering including reflection and a celebration of their Residency Match Day concludes their SJV PRIME experience.

Leadership Development and Mentoring: SJV PRIME students are asked to serve on various governance committees in the SOM, including those serving SJV PRIME. There is also an F1 seminar focused on leadership development for PRIME students. Students also take *SJV PRIME Leadership and Clinical Skills Building* – an F2 course taken during the clerkship year where students take a leadership role with a community partner to address SDH and/or the six priority health issues of focus. Students participate in a seminar on mentorship and all are assigned coaches in San Francisco and in Fresno. They also have check-in with the LIFE directors.

Community Engagement: Community engagement is a core element that is integrated throughout all four years of the SJV PRIME curriculum, as well as during the professional identity formation weeks which occur in the SJV for all classes. Moreover, during the F2 year, students undertake a project with a community partner as noted above. Examples of community engagement opportunities include the following:

- Golden Valley Health Centers Tour
- UCSF Fresno Mobile Health and Learning
- Poverello House - tour and blood pressure/blood glucose readings
- Black Infant Health Program speaker
- UC Merced PreMed/PreHealth/Public Health Meetup Series
- Doctors Academy/Junior Doctors Academy at Sequoia Middle School, Sunnyside High School and Caruthers High School
- COVID Equity Project
- Madera High School - panels, simulation activities, and booths
- Deaf and Hard of Hearing Service Center - Fresno Headquarters
- Design Science HS - surface anatomy workshop

Master's Year: SJV PRIME currently does not have a master's degree component included as part of their curriculum.

III. New PRIME Programs

As noted above, the 2021 State budget included funding to develop two new PRIME programs, which will be focused on Black/African American and American Indian/Native American health. This new funding will support the enrollment of 48 PRIME students in each program, eventually resulting in 96 new UC medical students per year by 2025-26, preparing for a career dedicated to high-quality care and health equity for Black and Native American patient communities. The new programs have been launched at four UC SOMs as follows:

- UC Irvine and UC Riverside share the increased enrollment (six students per year, or 24 total for each school) and funding for new programs focused on Black/African American communities.
- UC Davis and UC San Diego share the increased enrollment (six students per year, or 24 total for each school) and funding for new programs focused on American Indian/Native American communities.

Although these new programs are still under development, each of the campuses have welcomed their inaugural classes of 12 students in the PRIME-LEAD ABC program and 8 in the tribal health programs in fall 2022. The following overview provides information on campus plans for the new programs.

UC Irvine: PRIME Leadership Education to Advance Diversity - African, Black, and Caribbean (LEAD-ABC)

In 2019, UCI launched its LEAD-ABC program enrolling two-three students a year. When the state allocated enrollment funding to UC in 2021 to support the development of new PRIME programs, the program officially became part of UC PRIME. The PRIME LEAD-ABC program is a curricular thread of seminars, workshops, reflection sessions, and experiential learning opportunities spread across medical students during four years of education at the UCI School of Medicine. The thread examines the intersections of Anti-Black racism, medicine, and health with the goal of increasing students' knowledge of historic and current systems influencing health outcomes, and ability to effectively address health inequities impacting African, Black, and Caribbean communities in Southern California and beyond.

The curriculum is designed to strengthen students' skills in the clinical care of diverse populations, advocacy, community engagement, and scholarship through fostering awareness, and enhancing students' presentation and writing skills. In leaning on curricular frameworks such as: Social Justice – awareness, acknowledgement, and action; RAPS Thread – Reflection, Advocacy, and Public Speaking; Narrative Medicine; and Critical Consciousness, the four-year curriculum strives to foster growth based on fundamental goals outlined by the **ABC³ academic themes** below:

- Awareness
- Belonging
- Clinical care, Competence, & Compassion

The **ABC³ themes** are embedded in each year of the curriculum, but the preclinical – first and second – years have an increased emphasis on awareness and belonging. The themes of clinical care, competence, and compassion are an area of increased focus during the clinical third and fourth years, but these themes are also addressed as early as the first year.

Pre-Clinical Curriculum (Years One and Two): The first year of the curriculum begins during orientation and celebrates the interdisciplinary foundation of the curriculum by introducing scholars to diverse faculty from the School of Medicine, Department of African American

studies, Claire Trevor School of the Arts, and Schools of Nursing, Public Health, Pharmacy, and Law. Students are also quickly engaged in reflection about hard historic facts tied to the field of medicine, and also the importance of self-care in sessions led by faculty from the Department of African American studies.

Community is also further strengthened during pre-clinical years in weekly sessions supporting the development of patient care skills in communication, physical examination, and clinical reasoning during standardized patient encounters with core groups led by PRIME LEAD-ABC Dean Scholars. Select PRIME LEAD-ABC clinical faculty mentors at diverse sites also support early clinical exposure and reflection about the unique experience of Black patients with health systems during the Patient and Community Engagement (PACE) clerkship, in which all medical students participate. Seminars addressing imposter syndrome, capacity building, resilience and maternal-child health inequities also complement the standing curriculum fostering cultural humility and understanding of the diverse and unique needs of ABC communities in the region.

Students also are required to complete a service-learning project addressing ABC health issues or communities by the end of their second year, and are invited to help with *Confronting Anti-Blackness Curriculum* projects influencing the broader SOM curriculum, if interested.

Clinical Curriculum (Years Three and Four): The focus of the third and fourth years is to support students' professional identity formation as they work to determine their fields of interest, achieve scholarship, and begin to characterize their future career paths. Clinical exposure is introduced as early as the first year of medical school through standardized patient encounters and the PACE clerkship described above. Core clinical clerkship rotations beginning in the third year are complemented by evening seminars and workshops designed to expand students' awareness of historic and recent ABC health narratives, as well as topics such as health equity, intersectionality, structural competence, and cultural humility. During the third year, this is achieved through evening bi-monthly *Reflection, Advocacy and Public Speaking* seminars fostering reflection, conscientiousness and an appreciation of historic and patient narratives, led by faculty in the Department of African American Studies. Fourth-year students participate in monthly *Art of Doctoring* seminars and a two-to-four-week community-engaged clinical service elective entitled the *LEAD-ABC Harvest* elective, in partnership with nonprofit organizations including The Shared Harvest Fund and myCovidMD.

Leadership Development and Mentoring: PRIME LEAD-ABC has a running *Reflection, Advocacy, and Public Speaking (RAPS)* thread which runs throughout all four years of the curriculum. The RAPS thread is designed to foster self awareness and build confidence for these future leaders. Additionally, focused programming on identifying personality traits and skills such as working in teams was added this year in partnership with faculty in the UCI Paul Merage School of Business. Students are also supported and encouraged to apply for national fellowships and scholarships offering further leadership development.

All PRIME LEAD-ABC medical students participate in doctoring sessions learning clinical skills during their first two years where they work one-on-one with a faculty mentor in clinical settings. Although additional structured mentorship programs are under development, the program currently sponsors students by connecting them with faculty and community partners to support advocacy and service projects, research, and clinical growth.

Community Engagement: Community engagement is one of the core elements of the program. All students participate in *EAGLE (Enriching Anti-Racism Work Generating Learning, Equity, and Empowerment)* initiatives. Please reference some examples of work done included in the as attachment X. Community engaged projects typically are led during the first and second year. However, the fourth year *Harvest Elective* also fosters community engagement through clinical care in community settings.

Optional Curriculum – Graduate Training or Research: PRIME LEAD-ABC students are encouraged to pursue additional graduate training in public health or translational science, with scholarship support for master’s degrees in public health or translational science from UCI affiliated programs. Students with interest in completing a research year, or other graduate training in fields such as business, law, or humanities, or who want to pursue training outside of UCI must seek additional scholarship funding support.

Although no students are currently enrolled in the UCI MD/PhD program, future MD/PhD scholars will be encouraged to participate in reflection sessions with their cohort throughout their doctoral training and will be invited to serve as session small group facilitators for pre-clinical training years, and mentors for students championing scholarship in partnership with students supporting PRIME LEAD-ABC *Confronting Anti-Blackness through Research* projects.

Future Curriculum Goals: As PRIME LEAD-ABC continues to grow, the *ABC Community Experiential Learning Lessons* will be strengthened in partnership with diverse regional stakeholders; *ABC Scientific Evidence & Epidemiology Sessions* will be implemented; and research opportunities will be enhanced in partnership with the Institute for Clinical and Translational Science and Center for Clinical Research as health equity is optimized in partnership with student scholars through service, research, and advocacy.

Overall, they plan to create formalized PRIME LEAD-ABC recommended fourth year electives in partnership with academic partners in regions with higher Black populations, Historically Black Colleges and Universities, and organizations and institutions addressing Global Health issues. The program will also continually strive to grow in humility as it listens and learns through sessions highlighting diverse ABC historical narratives, patient narratives, and community narratives, and acts to disrupt the cycles of racism and inequity that disproportionately impact Black and other historically marginalized communities.

UC Riverside: PRIME Leadership Education to Advance Diversity - African, Black, and Caribbean (LEAD-ABC)

This new PRIME program provides mentorship, sponsorship, coaching and other support for future physician leaders underrepresented in medicine. They learn critical skills in working with African, Black, and Caribbean (ABC) communities and advocating for better health outcomes with the communities’ priorities front and center. The UCR School of Medicine is developing their new PRIME program in partnership with the UCI School of Medicine and will utilize the blueprint of Irvine’s existing PRIME LEAD-ABC program to create a two-campus program. In addition, using conceptual frameworks from Transformative Learning Theory, Transformative Consciousness and Human Flourishing, UCR is also developing a five-year program

incorporating elements of immersive instruction, community-based education, clinical experience in underserved communities, and research designed to equip PRIME students with skills that:

- Demonstrate knowledge of the unique health issues affecting ABC communities
- Conduct culturally sensitive history and physical exams of patients from ABC communities
- Develop a service-learning project that examines and addresses health disparities that disproportionately affect ABC populations
- Serve as mentors and future leaders who will advance the provision of quality healthcare to ABC communities.

The five curricular pillars for the program (**F.A.H.C.T**) are:

FloW Series – Flourishing and Wellness. During this series students begin sessions in their first year, every other month, focusing on skills and strategies that promote human flourishing and wellness. Students have dedicated academic and financial wellness support and have scheduled “*Thrive Check-ins*” with designated PRIME faculty. They are involved in seminars and sessions on imposter syndrome, academic success, and professional identity formation. They also engage in mentorship sessions with faculty members, community leaders and senior students in the “*Meet-a -Mentor*” series. Students are encouraged to identify at least one mentor by the end of their first year.

Anti-Racism - Critical and Transformative Consciousness. Students begin sessions in their first year by engaging in *PRIME Seminars* on African American studies led by faculty from the Ethnic Studies Department of UCR and leaders from ABC communities. These seminars focus on historical perspectives, cultural humility, community empowerment and critical dialogue. Students learn and apply critical reflection and consciousness, anti-deficit perspectives, trauma informed and healing approaches in analyzing concepts, published literature, case studies and reflective pieces.

Health Justice – Awareness, Acknowledgement, and Action. Students are assigned to clinical sites serving primarily ABC communities starting in their first year as part of the school of Medicine’s *Longitudinal Ambulatory Clinical Experience (LACE)*. In their core clerkships during clinical years, every attempt is made to prioritize placement at ABC sites to provide ample opportunities for health justice-oriented care. Students are also required to complete at least one elective in their fourth year at an ABC site or with ABC faculty. In conjunction with UCR School of Medicine’s (SOM) Department of Social Medicine and Population Health and the SOM’s *Center for Healthy Communities*, students work with community leaders and faculty to identify a longitudinal project focused on health justice.

Community Partnership and Engagement – Through immersive experiences in the community and in meetings with elected local community leaders and officials, students identify opportunities for engagement, partnership, and service learning prior to beginning their first year. During their medical school training, students are encouraged to work in teams to develop a longitudinal, community empowered sustainable action plan or project addressing an identified

health disparity. Students have the option of partnering with their colleagues from the UCI campus.

Transformative Advocacy – To foster the development of leadership and advocacy skills, all students are required to enroll in either the *Community Health or Health Leadership Designated Emphasis Programs* offered by the school of medicine. These programs are designed to equip them with skills such as public speaking, crafting policies and legislative activism. *PRIME Seminars* are offered throughout all four years, focusing on leadership skills such as effective time management, leading a team and negotiation skills. Students have opportunities to participate in teaching and leadership opportunities such as student-led development of ABC pathway programs, leading an advocacy initiative, teaching, or creating ABC-centered curricular material for medical education. In addition, senior PRIME scholars will provide mentorship for the incoming cohort each year.

Master's Year (Optional): Students have the option of completing an advanced degree, research or master's program before graduating medical school to enhance their ABC/health equity leadership capacity.

UC Davis: Tribal Health PRIME (THP)

In Summer 2022, the Tribal Health PRIME program joined the Community Health Scholars (CHS) programs at UCD (which includes Rural PRIME) to train medical student leaders to identify, understand, and serve the unique health needs of California's Indigenous, rural, urban, and valley communities. The program welcomed its first class of three students this academic year. The anticipated capacity for THP will be four to six students per year.

The THP curriculum spans four years, and like other CHS programs, aims to provide students the foundation to provide outstanding clinical care for underserved communities, focusing on five pillars of excellence: community engagement, leadership, professional development, mentorship, and scholarship. THP students will meet all SOM requirements. In addition, THP scholars will explore the following core topics in their studies, service, and clinical work:

- History of indigenous people, regional sovereignty, and politics, and Indian Health Service/health policy
- Social, political, and economic determinants of health including effects of oppression, privilege, and colonization
- Environmental justice/relationship to the land
- Traditional Indian medicine/Indigenous healing practices
- Cultural humility including indigenous culture or cultural ways of being (general and regional)
- Bias, assumptions, self-evaluation, and stereotypes/discrimination
- Traumatic life experiences/loss

The curriculum for the new THP program includes the following components:

Orientation: A one-week long orientation before they start their first year which introduces students to each other, program leadership, and rural community partners.

Tribal Health PRIME Seminars: One- to two-hour sessions occurring twice a month during the first and second year of medical school delivered through a combination of faculty and community guest speakers, as well as student-led seminars. THP Students visit the California Rural Indian Health Board (CRIHB) to learn about the history of the Native American population within California. They also participate in ceremonies related to Indigenous Ways of Being. THP students attend lectures and presentations by tribal elders and professionals, one of whom is the Associate Professor and Chair of the Native American Studies Department at Cal Poly Humboldt. These seminars cover topics such as cultural tenets, indigenous health and health of underserved communities, California Indian History, Genocide, Loss of Land Base, Trauma History, and healthcare for Native communities.

Longitudinal Scholarly Activity: This longitudinal scholarly activity spans the medical school experience and must address a specific need or issue within the community identified during the student's first year as noted above in the Rural PRIME section.

Summer Elective (4 weeks): THP students are required to enroll in the *Summer Institute on Race and Health* or engage in a tribal health-based activity which can include community engagement projects, community research, or other scholarly activities in or in support of indigenous communities.

Clinical Experiences: THP students will complete their longitudinal clinical preceptorship experiences with Northern Valley Indian Health. They will also complete their family medicine clerkship with United Indian Health Services. Additional experiences with indigenous communities are being developed to expand clinical clerkship opportunities in pediatrics and psychiatry over the next two years.

Medical Care for Underserved and Marginalized Communities: Required elective for fourth-year THP students as described above for Rural PRIME students.

Pathway to Residency: THP students are encouraged to explore clinical electives at residency training sites with ties to California's and the Pacific Coast's many indigenous communities, including through UCD's participation in the California Oregon Medical Partnership to Address Disparities in Rural Education and Health (COMPADRE). This is a collaboration between two medical schools and a coalition of academic and community based residency training programs, which aims to train physicians who are better prepared to care for the underserved and more equitably distributed across northern California and Oregon. Additional opportunities for clinical immersion with partner residency programs focused on care for rural and indigenous communities are being developed through this partnership.

Leadership Development and Mentorship: As noted above in the Rural PRIME section, leadership development is a core pillar of the CHS curriculum. In addition to what was described above, THP students are also encouraged to participate in the Association of Native American Students west coast chapter.

All THP students have an academic coach with expertise in indigenous health. Their academic coach guides their clinical skills sessions during their first two years and meets with them

regularly throughout medical school for mentorship. Each clinical skills group is also co-facilitated by a CHS fourth-year student. Additionally, PRIME students have access to a large UCD CHS alumni network and CHS faculty facilitate connections to alumni with shared interests. THP students serve as mentors to postbaccalaureate students on the Wy'east Pathway Program at the Northwest Native American Center of Excellence, housed at Oregon Health Science & University, all of whom will become medical students at the UCD SOM.

Community Engagement: Although THP students are participating in some service opportunities with other CHS students and as part of their longitudinal scholarly projects, community engagement activities are currently under development for the new Tribal Health PRIME students.

Master's: Optional fifth-year master's available

UC San Diego: PRIME – Transforming Indigenous Doctor Education (TIDE)

The PRIME – TIDE program was established at the UCSD School of Medicine to prepare medical students for careers focused on providing healthcare to Native populations. This will be accomplished by didactic and experiential training on the specific healthcare needs, cultural context in which that care is provided, and how medical research may inform decisions made by healthcare personnel.

Orientation: All incoming PRIME-TIDE students participate in a four-day orientation to introduce students to local San Diego community sites and the PRIME-TIDE community. Students participate in community building and leadership activities and are given an introduction to health disparities research projects.

Pre-Clinical Electives:

Core Topics in Biomedical Sciences (CTBS) – The CTBS course is given during the summer and it provides students a head start in mastering some of the more challenging topics presented in the first-year UCSD SOM curriculum and models the pace and intensity of the SOM curriculum.

Influences on Health: From Genes to Communities – A person's health is affected by a myriad of influences – everything from genetic inheritance to the places we live. In this course, the concept of health equity will be introduced, with a discussion of health care system models that may either increase or decrease health equity in a given population. The course will include the opportunity for students to hear health-related stories about people from varied backgrounds through cultural immersion tours to the Indian Health Council and San Ysidro Health Center.

Beyond the Bench and Bedside: Partnering with Communities – This course is designed to provide students with the knowledge and skills to partner with communities to develop, conduct and evaluate community-based research, and design and put into practice, program evaluations of community programs. Students will complete a Community Snapshot assignment to become more familiar with diverse areas in San Diego County.

Tribal Ambulatory Healthcare Experience – The School of Medicine will partner with various local native health clinics to provide students with the opportunity to explore the delivery of healthcare to American Indians and Alaska Natives (AI-AN). Over the course of the quarter, students will shadow physicians at the native health clinics to become familiar with the full spectrum of on-site services, outreach services, and programs provided by the clinic. They will also be able to further understand and learn the key components of the physical exam and disease management of Native Americans.

Clinical Experiences:

Ambulatory Care Apprenticeship (ACA) in underserved area – During years one and two, PRIME-TIDE students are matched with a primary care physician that practices in an underserved community. The course places an emphasis on the students learning the best practices for history taking, physical examinations, and patient interaction in an underserved setting.

Summer Project – Each student will start a scholarly project in the summer between years one and two, and engage with a mentor in preparing a proposal for a scholarly project. The scholarly project may involve biomedical, clinical, or social science research, as well as healthcare education, promotion, or disease prevention in an AI-AN community. The project may address a specific scientific question or involve the creation of a new methodology in medical education or patient care.

Primary Care Core Clerkship in underserved area – During year three, PRIME-TIDE students are matched with a family medicine physician that practices in an underserved community. The year-long longitudinal course places an emphasis on caring for patients with a whole-person approach, taking under consideration the socioeconomic factors and striving to practice prevention and patient education. In addition, they will also rotate through one Internal Medicine/Diabetes/Endocrinology and one Psychiatry/Substance Abuse clerkship.

Indian Health Services (IHS) Clinical Rotation – All PRIME-TIDE students are expected to participate in a clinical rotation (or a combination of clinical and research experiences) at an IHS site for academic credit. The experience must take place over a minimum of four weeks, but may be longer. The experience must be sponsored by a UCSD faculty member who can ensure proper oversight of the experience and assign academic credit. There are opportunities for completion of this rotation outside of San Diego.

Leadership Development, Mentoring, and Community Engagement: In addition to the content provided in PRIME-TIDE courses such as the *Healthy Minds, Healthy Bodies* and *Beyond the Bench and Bedside* electives, the following activities are examples of how leadership and community engagement are being integrated into this new program:

- IHS Clinical Rotation – all PRIME-TIDE students are required to participate in a clinical rotation at an IHS site
- Doc-4-A-Day Educational Outreach – first and second year Native American medical and pharmacy students conduct a one day visit for Native high school students to learn about medical and pharmacy school through hands on clinical experiences

- Local AI-AN Community Relationships – students will provide youth outreach, community health screenings, and health education in Native communities.
- Mentorship – each student has an “Auntie” pairing with an older Native medical student as well as a Native faculty mentor
- Informational tables at the UC San Diego Pow Wow

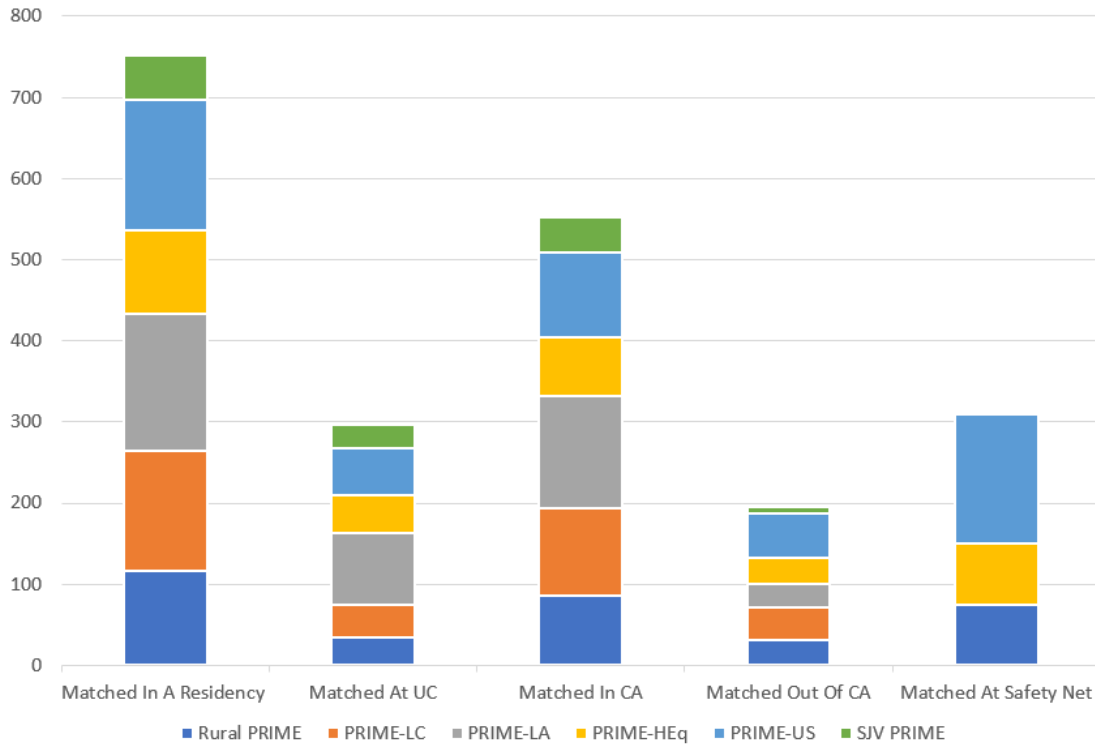
Master’s Year: PRIME-TIDE students are expected to complete a one-year master’s degree to develop research skills and knowledge on factors impacting social determinants of health and health disparities. Although most UCSD SOM students complete a Master’s in Public Health, there are several other master’s degree programs available to PRIME HEq students such as a Master’s in Advanced Clinical Sciences, Leadership of Healthcare Organizations, Education, Business Administration, and Public Policy.

IV. PRIME Program Outcomes

The development and implementation of the PRIME programs across the University of California system have been a remarkable success. There have already been measurable gains for health care in California including student diversity, specialty choice, location of residency, health disparities research, leadership, and engagement with underserved communities. There have also been substantial positive outcomes and goal achievement with regards to medical student recruitment strategies, the admissions processes, and active interaction and integration between PRIME students and students enrolled in the core (i.e., non-PRIME) medical school classes. PRIME has also led to the first significant increase in medical school enrollment within the UC system in more than four decades. This unique program reflects innovation in medical education and is a model in California and nationally for programs committed to addressing the needs of medically underserved groups and communities.

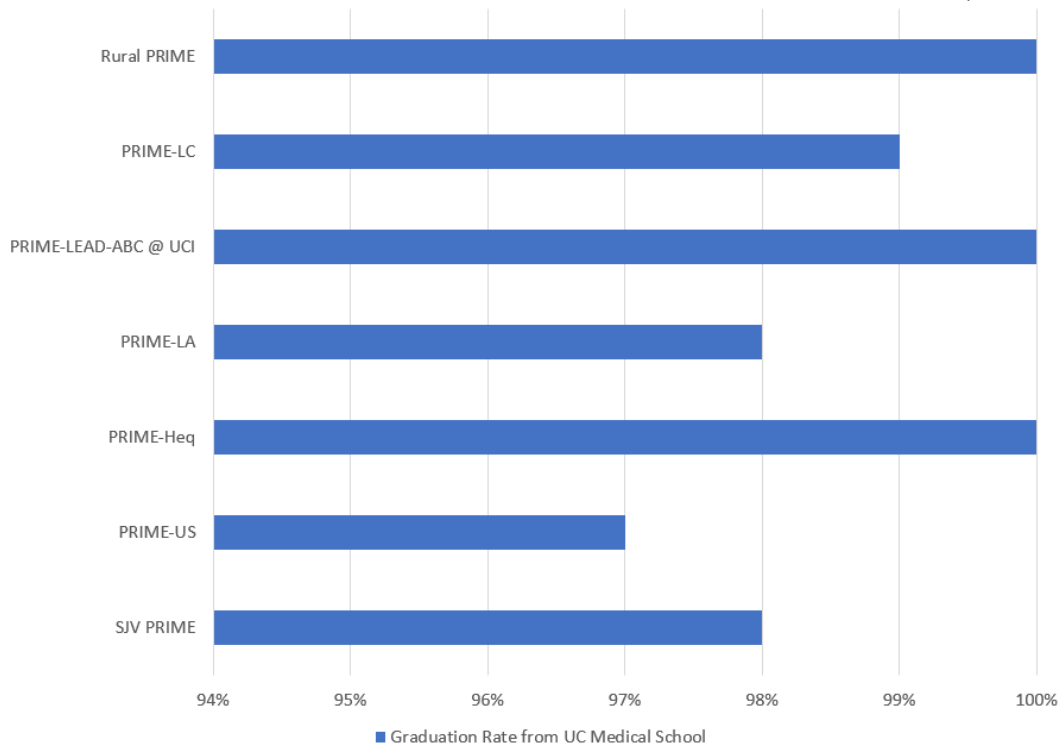
California leads the nation in the retention of public medical school graduates and those who complete residency training in state. According to the Association of American Medical Colleges (2020), among physicians who graduated from a UC medical school, 69% practiced in California. Over 750 UC PRIME students have graduated since 2004, the majority of whom (i.e., more than half/Figure 5) have completed residency training in primary care specialties (i.e., family medicine, pediatrics, and internal medicine) and in residency programs serving designated health workforce shortage specialties (e.g., psychiatry, general surgery, emergency medicine). The majority of PRIME graduates are in California residency programs (nearly 70%) (Figure 3) or are practicing in the state.

Figure 3. Residency Match Location of PRIME Graduates By Program (2009-2022)



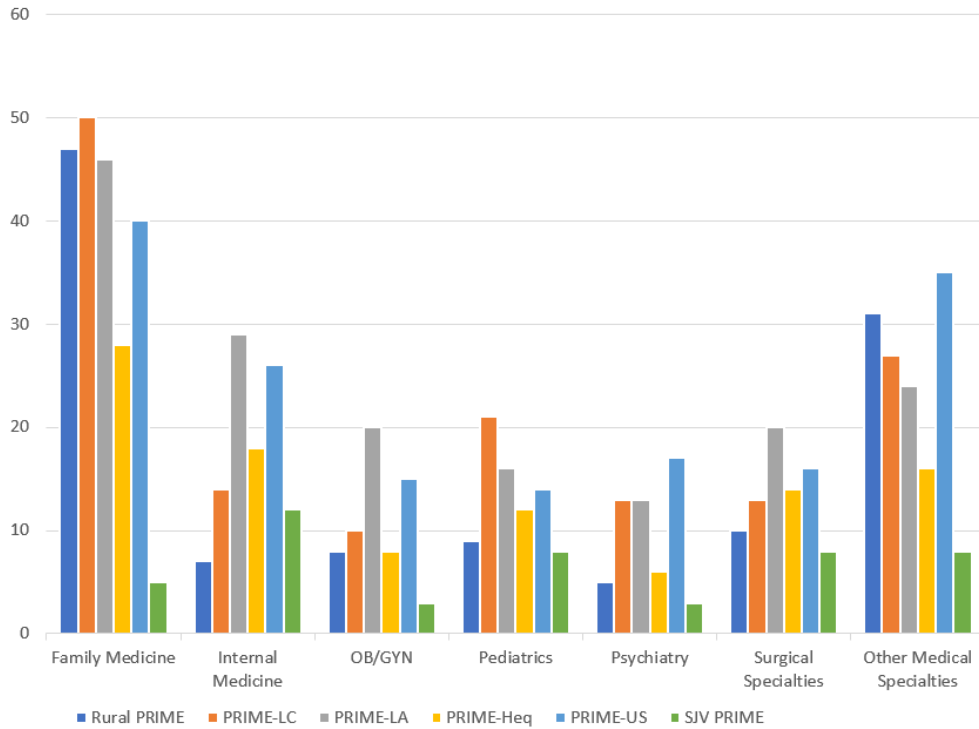
Note: No graduates as of 2022 for Tribal PRIME, UCR PRIME-LEAD-ABC, and PRIME-TIDE. PRIME-LEAD-ABC @ UCI excluded from the graphic (too small to decipher).

Figure 4. Graduation Rate of UC PRIME Students from UC Medical School (2009-2022)



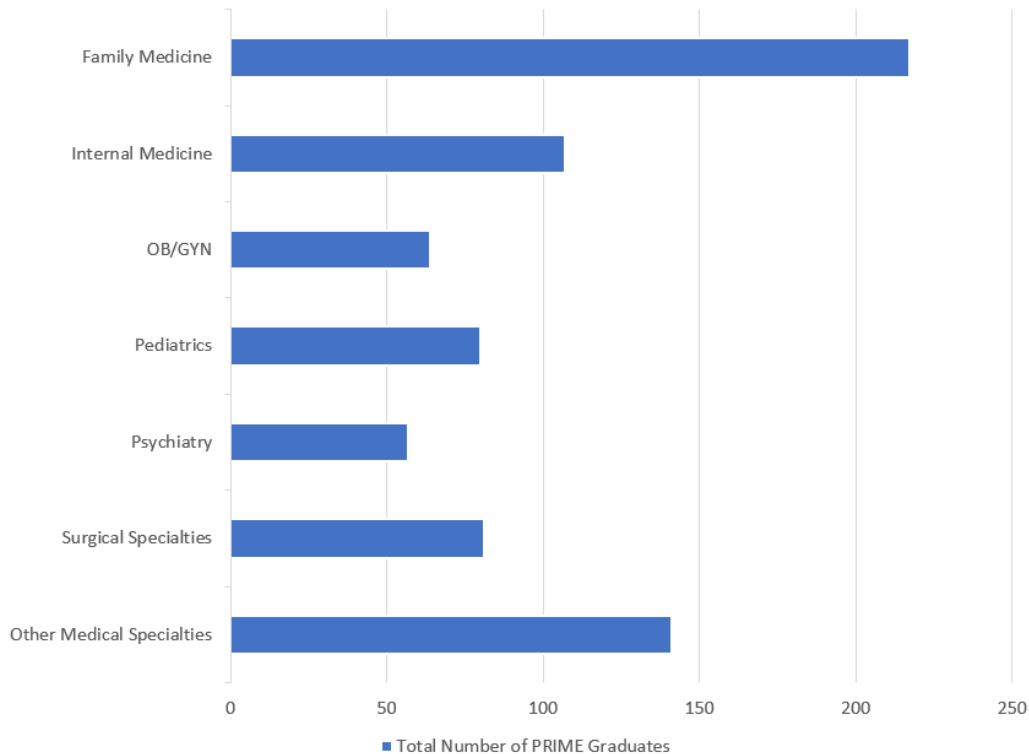
Note: No graduates as of 2022 for Tribal PRIME, UCR PRIME-LEAD-ABC, and PRIME-TIDE.

Figure 5. Specialty Choice of Graduates By PRIME Program



Note: No graduates as of 2022 for Tribal PRIME, UCR PRIME-LEAD-ABC, and PRIME-TIDE. UCI PRIME-LEAD-ABC was excluded – only two graduates of the program currently (one in FM and the other in IM).

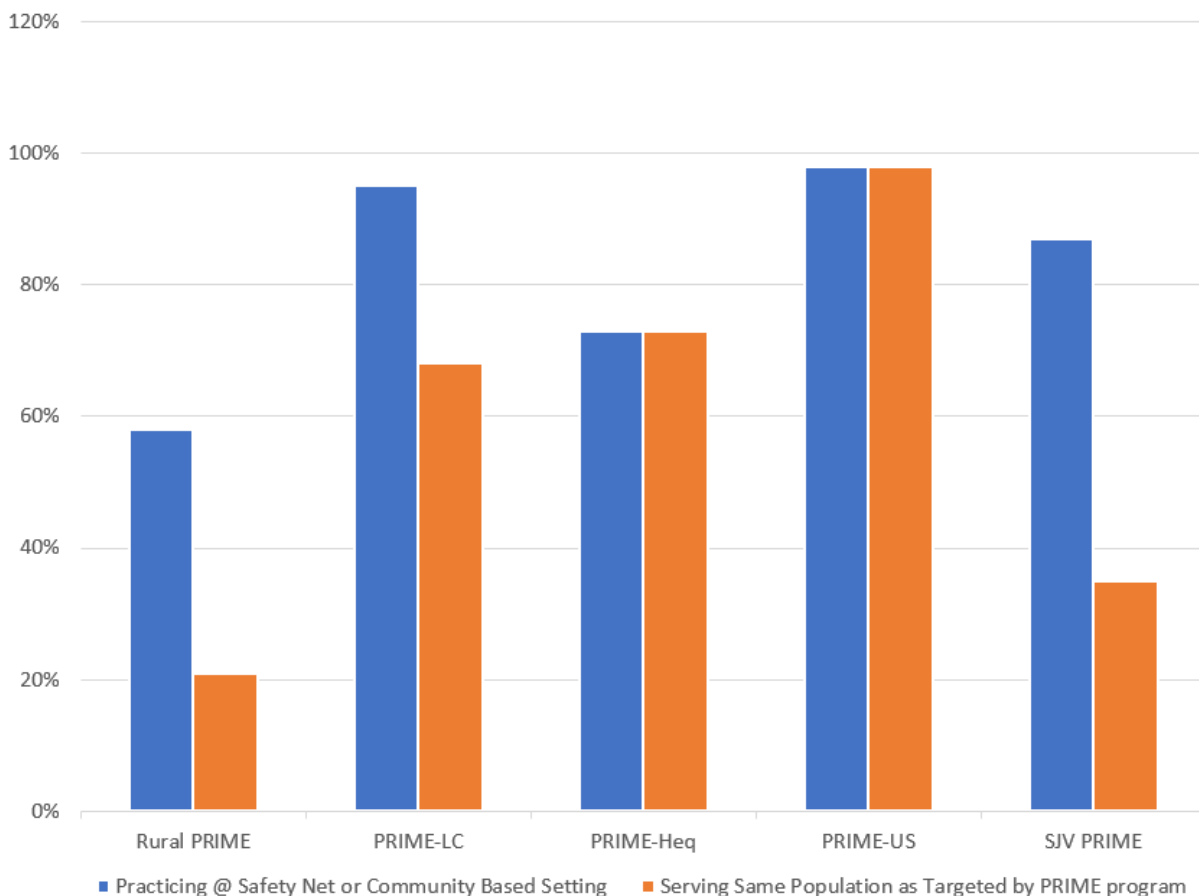
Figure 6. Specialty Choice of PRIME Graduates Systemwide



Note: No graduates as of 2022 for Tribal PRIME, UCR PRIME-LEAD-ABC, and PRIME-TIDE.

Although many PRIME graduates are in residency or fellowship training as it takes seven to ten years to become a practicing physician, over half of those who have completed their training are serving under-resourced communities (e.g., community health centers, academic teaching hospitals, hospitals or clinics that have a social mission) and report leadership experience outside of their practice setting including serving as mentors and teachers to students (Figure 7). It is important to note that UCLA and UCSF were unable to provide complete data on where their graduates are working as UCLA is undergoing a formal evaluation of their program and UCSF is in the midst of conducting their alumni survey which they do every three years. UCSF provided data for half of their alumni at this time. Both programs will be able to provide complete data on where their graduates are practicing by May 2023.

Figure 7. Community Based Practice Setting of PRIME Graduates Systemwide



Note: No graduates as of 2022 for Tribal PRIME, UCR PRIME-LEAD-ABC, and PRIME-TIDE. UCI PRIME-LEAD-ABC was excluded – only two graduates of the program currently (one in FM and the other in IM).

These outcomes demonstrate that UC PRIME programs have a substantial impact on increasing the number of UC medical school graduates who pursue careers devoted to improving the health of the underserved through leadership roles as community-engaged clinicians, educators, researchers, and social policy advocates.

Appendix

UC PRIME Enrollment by Race/Ethnicity (2022-2023)

Fall 2022 Race/Ethnicity	UCD Rural PRIME	UCD Tribal Health PRIME	UCI PRIME-LC	UCI PRIME LEAD ABC	UCLA PRIME-LA	UCR PRIME LEAD ABC	UCSD PRIME-Heq	UCSD PRIME-Tide	UCSF PRIME US	UCSF Fresno SJV PRIME	Total
Native American/Alaskan Native	1	2	0	0	1	0	4	4	1	0	13 (3%)
Black/African American	1	0	4	9	22	5	13	0	16	0	70 (18%)
MexicanAmer/Chic/Other Hip/Lat	14	1	55	0	53	1	20	1	26	6	177 (45%)
Pacific Islander	0	0	0	0	0	0	0	0	8	4	12 (3%)
Multiple Race/Ethnicity (UIM)	3	0	0	1	4	0	1	0	6	5	20 (5%)
Total UIM's & Other Hispanic/Latinos	19 (63%)	3 (100%)	59 (95%)	10 (83%)	80 (82%)	6 (100%)	38 (64%)	5 (100%)	57 (72%)	15 (36%)	292 (74%)
Asian American	3	0	0	1	15	0	14	0	14	21	68 (17%)
White/Caucasian	8	0	3	1	1	0	7	0	8	5	33 (8%)
Other/Non-Reporting	0	0	0	0	2	0	0	0	0	1	3 (1%)
TOTAL	30	3	62	12	98	6	59	5	79	42	396

Contact Information:
Office of the President
University of California
1111 Franklin Street
Oakland, CA 94607
<https://www.ucop.edu/>