

UC Health

Health expertise in service of three missions

The University's 19 health sciences schools, six health systems, student health centers, and self-funded health plans are connected by UC Health, the division office within the Office of the President. The activities of the division, and the broader health enterprise, are aligned to support the University's tripartite mission of teaching, research, and public service.

A refreshed strategic framework and new leadership

The strategic plan for the division office of UC Health was developed in December, 2017 and is refined annually based on feedback from stakeholders, including chancellors, medical center CEOs, deans of the health professional schools, UCOP leadership, and UC Health department heads. UC Health's strategic plan also aligns with the strategic framework of UCOP.

An update completed in January, 2020 also reflects the new leadership of UC Health. On October 31, 2019, Dr. Carrie L. Byington, a physician-scientist, pediatrician, and internationally recognized infectious disease expert, became executive vice president of UC Health, succeeding Dr. John D. Stobo, who led the division since 2008.

The UC Health division office functions as a catalyst for change, coordinating various systemwide activities and providing a strategic framework while respecting the need for local leadership in responding to the needs of their communities, employees, faculty, and students.

The 2020 strategic plan outlines 13 goals to set the direction through 2022. This multi-year framework also sets in motion collaborative efforts that draw upon academic, research, and clinical capabilities across the University's enterprise. As a "living document," the strategic plan anticipates and provides flexibility within broad market forces that include changes in reimbursement from governmental and commercial payers, evolving demographics of the state, changes in drug prices, the impact of climate change on health, and expectations for improved management of chronic conditions, including the opioid epidemic.

At the time of the plan's development, the outbreak of novel coronavirus (SARS-CoV-2) was in its earliest stages, and its spread within the U.S., and its impact on all health systems, not yet realized. Given the unprecedented scale of the COVID-19 pandemic, UC Health and the University of California are responding with the full scope of their patient care, education and training, and research capabilities. The division will continue to drive progress towards its strategic goals within the context of the broader public health threat of COVID-19.

Mission, vision, and values

UC Health's mission is to improve the health of all people living in California now and in the future, promote health equity through the elimination of health disparities, and reduce barriers to access to clinical, educational, and research programs by creating more inclusive opportunities for employees, students, and trainees.

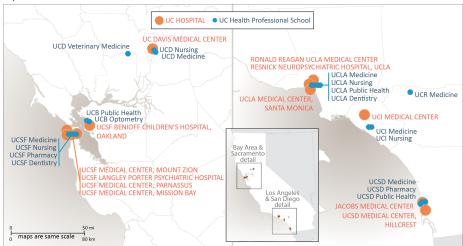
The vision is expansive; UC Health's collaborative approach will be recognized as the foundation for building the pre-eminent data-driven learning healthcare system that improves the human condition. Its actions are rooted in core values of accountability, collaboration, diversity and inclusion, excellence, integrity, innovation and being mission-driven. UC Health's mission, vision, and values are appropriately ambitious for an academic health system committed to the health of California and reflect the spirit of being 'Boldly Californian.'

Preparing the next generation of health care professionals

California's 40 million people need access to care, now and in the future. The state's growing population is increasingly diverse, growing older, and faces myriad health needs. While some geographic areas have a sufficient supply of health providers, other parts of the state, such as the San Joaquin Valley and Inland Empire, have far fewer health professionals than needed. UC's health sciences programs are a vital source of the state's future dentists, doctors, nurses, optometrists, pharmacists, public health professionals, and veterinarians. The University is the largest and one of the most comprehensive health sciences training programs in the nation, with nearly 15,000 students. Based on historical averages, more than 70 percent of graduates from these programs will remain in California after graduation or residency.

UC Health's 19 health sciences schools are:
Dentistry (UCSF, UCLA)
Medicine (UCD, UCSF, UCLA, UCR, UCI, UCSD)
Nursing (UCD, UCSF, UCLA, UCI)
Optometry (UCB)

Pharmacy (UCSF, UCSD)
Public Health (UCB, UCLA, UCSD)
Veterinary Medicine (UCD)



Integral to UC Health's training of physicians is UC Programs in Medical Education (UC PRIME), which is at five health campuses and an extension at UCSF-Fresno. These programs supplement the standard medical school curriculum with additional courses and field experience designed to meet the unique needs of medically underserved populations and areas. Students who join UC PRIME are mission-driven and often come from the regions and groups that have lacked access. Thus, UC PRIME provides a ladder of academic achievement and economic mobility as well as a source of health care access for their communities. Similarly, the UC Riverside School of Medicine trains students and places residents at area hospitals to encourage physicians to remain in the region.

The caliber of UC health professional programs is demonstrated in the rankings produced by U.S. News & World Report, shown below as of 2019-2020:

Category	UC Berkeley	UC Davis	UC Irvine	UCLA	UC San Diego	UC Riverside	UCSF
Best Medical Schools - Research*		40	44	6 (tie)	21	91	6 (tie)
Best Medical Schools - Primary Care*		7	81	11	26	92	2

Category	UC Berkeley	UC Davis	UC Irvine	UCLA	UC San Diego	UC Riverside	UCSF
Best Nursing Schools – Masters*		40	51	20	36		11
Best Graduate Schools Public Health	9			11			
Best Pharmacy Schools*					18		2
Best Veterinary Medicine Schools		1					

^{*} Indicates 2020–2021 update by U.S. News & World Report. All others based on 2019–2020 rankings. USN&WR does not rank dental or optometry programs.

Academic Health Systems

UC Health includes six academic health centers (AHCs), five of which own or operate their hospitals, and one that leverages a community-based training and care delivery platform. The hospitals of UC Davis Health, UCI Health, UCLA Health, UC San Diego Health, and UCSF Health admitted 172,991 patients in FY18/19 for a total of 1,092,522 inpatient days. The hospitals also provided 4,876,439 hospital-based outpatient clinic visits. When combined with outpatient services of the health professional schools, UC Health provided more than 7.6 million outpatient visits and cared for 1.8 million unique patients in the most recent fiscal year.

UC health systems are part of the backbone of California's safety net for health care. Care is provided regardless of whether the person has health insurance. The medical centers are supported almost entirely by reimbursement for clinical services paid by Medi-Cal (Medicaid), Medicare, and commercial payers. Systemwide, in FY18/19, 35 percent of inpatient days were associated with Medi-Cal, 34 percent with Medicare, and 30 percent with private market payers. The remaining 1 percent lacked any form of insurance or were self-paid. Almost one in three Californians — 13.5 million people — have health insurance coverage through Medi-Cal.¹

Although UC hospitals represent less than six percent of the acute care beds in the state,² they are the third-largest provider of inpatient services and the fourth-largest provider of hospital-based outpatient services. The number of people eligible for Medi-Cal may expand as the economic fallout from the pandemic continues.



UC has less than 6% of the acute care beds in California but is the second largest provider of Medi-Cal inpatient care.

Non-UC bed

¹ Source: chcf.org/publication/2019-medi-cal-facts-figures-crucial-coverage/

² Source: ahd.com/states/hospital_CA.html

All five UC medical centers are ranked among California's top ten hospitals and two are on the national honor roll, according to U.S. News & World Report, which has ranked hospitals for more than three decades. The 2019–2020 Best Hospital rankings for UC hospitals are:

Best Hospitals - Nationally	#6 UCSF	#7 UCLA			
Best Hospitals - California	#1 UCLA	#2 UCSF	#6 UC Davis	#8 UC San Diego	#10 (tie) UCI

Leveraging Scale for Value (LSfV)

One of the earliest systemwide collaborations is the Leveraging Scale for Value initiative (LSfV), which works on supply chain, revenue cycle, and information technology improvements. The cumulative financial benefit for this project is more than \$950 million as of FY18/19.

The impact of Covid-19 on the health enterprise

In late 2019, China experienced an outbreak of a new virus, initially referred to as '2019-nCoV,' or 'novel coronavirus' and ultimately designated 'SARS-CoV-2.' The illness it produces is called COVID-19. The World Health Organization (WHO) declared a Public Health Emergency of International Concern on January 30, 2020, and subsequently a pandemic on March 11, 2020. Within months, the world witnessed one competent health system after another become overwhelmed with patients in acute respiratory distress and a high mortality rate.

To support the University's response, the health division established the UC Health Coordinating Committee and formed working groups of subject matter experts. Among the immediate challenges was a disruption to the global supply chain for Personal Protective Equipment (PPE), which is disproportionately made in China, where manufacturing operations had been suspended.

By late February, UC medical centers had cared for six patients confirmed to have COVID-19, and another 31 whose tests results were pending. Two months later, more than 600 inpatients with COVID-19 had been cared for at UC hospitals. In January and February 2020, there was a national shortage of reliable, mass-produced tests capable of rapidly detecting the virus. Widespread testing is a cornerstone of calibrating infectious disease response based on an understanding of how far the virus has spread, its rate of transmission, and the percent of infected persons who will require hospitalization and ventilation support.

In late February, the Food and Drug Administration permitted sophisticated non-federal labs to independently develop and use tests. By March 10, several UC medical centers had begun in-house testing, and by mid-March, all UC medical centers had the capacity to test with a faster turn-around time than was possible through tests shipped to the CDC. A little more than a month later, more than 35,000 tests had been performed for UC Health patients, and an equivalent number conducted for other hospitals and public health departments.

On March 4, Governor Newsom declared a state of emergency to strengthen the state's response to the pandemic. UC hospitals had already begun implementing emergency operations plans, ultimately adding 1,481 surge beds to the existing 3,911 beds, an increase of nearly 40 percent.

UC and its health enterprise also responded with accelerated research initiatives. By early April, more than 300 research projects, proposals and clinical trials for COVID-19 were active, and the University had begun distributing initial grants to jump-start efforts.

The pandemic's threat to health and safety continues, as does its mounting financial toll. UC Health's medical centers are incurring substantial costs for surge expansion, surge staffing, development of testing capabilities, and other expenses. At the same time, revenues are down due to the cancellation of thousands of non-emergency procedures to prepare for a potential COVID-19 patient surge.¹

Although the federal government has implemented a series of stimulus bills that will provide some relief, the extent of available funds and how it compares to the expenses and lost revenue will not be known for some time. This is significant as the revenue generated by UC's clinical activities also support the health professional schools. In FY 18/19, the health services support totaled \$606 million.²

The economic disruption caused by COVID-19 is enormous. As people lose employer-sponsored health insurance, the people transitioning to Medi-Cal or becoming uninsured will have a direct impact on the payer mix and total revenue received by the medical centers.

Progress on Systemness

The first move toward 'systemness' began five years ago, through the Leveraging Scale for Value (LSfV) initiative. By 2019, there were more than a dozen collaborations across the system sharing best practices and coordinating activities. Today, as a result of COVID-19, that number has grown significantly.

One sign of this effort is a COVID-19 dashboard that leverages all five instances of UC's electronic health record platform. The dashboard shows the SARS-CoV-2 tests performed each day for UC Health patients, the positive tests by gender, age and geography, the inpatients with a COVID-19 diagnosis with details on ICU and ventilator use, and the disposition of patients at the end of treatment. These metrics are reported via UC Health's Twitter account (@UofCAHealth). As noted in the vision statement, UC Health intends to be the 'pre-eminent data-driven learning healthcare system,' and its ability to rapidly leverage information from the UC Health Data Warehouse is a sample of what can be accomplished.

In April, the Robert Wood Johnson Foundation, the country's largest philanthropic foundation focused solely on health, awarded UC Health a \$100,000 grant to work with other health systems to increase the availability of standardized, actionable information on COVID-19 impact and progression.

For more information

UC Medical Centers 2018-19 Annual Financial Report: finreports.universityofcalifornia.edu/index.php?file=med_ctr/18-19/Med-Centers-18-19-report.pdf

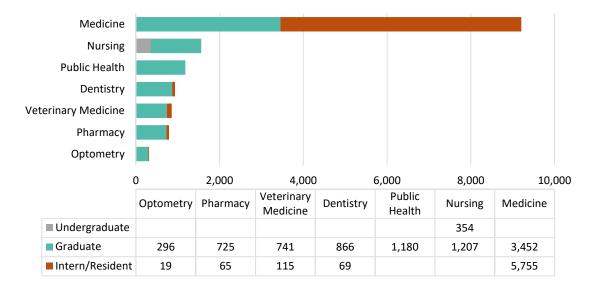
UC Budget for Current Operations, 2020-21: ucop.edu/operating-budget/_files/rbudget/2020-21-budget-detail.pdf

¹ universityofcalifornia.edu/sites/default/files/UC-COVID-19-budget-letter-to-state-leadership-041520.pdf

² Page 56: finreports.universityofcalifornia.edu/index.php?file=med ctr/18-19/Med-Centers-18-19-report.pdf

UC is currently training nearly 15,000 health care professionals.

11.1.1 Health sciences students by discipline, fall 2019

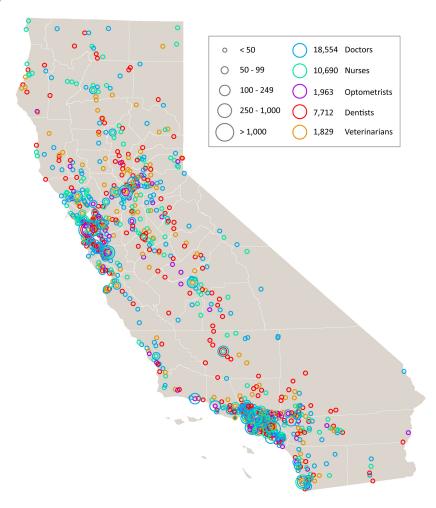


Source: UC Information Center Data Warehouse

Nearly 15,000 students are enrolled in UC Health's health sciences schools and residency programs. This next generation of caregivers is an important part of California's future as its population grows, ages, and becomes more diverse.

UC-trained health sciences professionals remain in California in high numbers.

11.1.2 Location of doctors, nurses, dentists, optometrists, and veterinarians trained by UC since 1999 and currently licensed in California.



Source: CA Department of Consumer Affairs

Based on the 2017 locations of practice of 2005—2010 graduates of UC health sciences' schools and residency programs, approximately 72 percent of UC health science students and 61 percent of medical residents are expected to remain in the state after completing training or education.

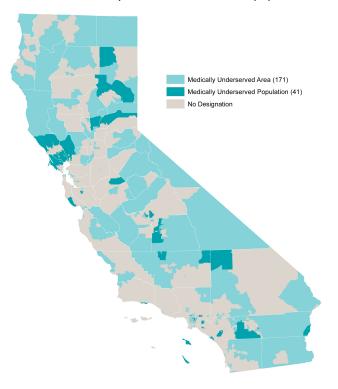
This high rate of retention makes UC Health one of the principal sources for the training of health professionals for California.

2005–2010 students and residents retained in

California, com	bined:
Doctors	66%
Dentists	65%
Veterinarians	60%
Nurses	71%
Ontometrists	72%

UC is addressing medical needs in California's underserved communities.

11.2.1 Medically underserved areas and populations



Source: OSHPD, Workforce Development Division, 2018

All of UC Health's schools emphasize public service and caring for the underserved. These programs include:

UC PRIME: California has large regions that are Medically Underserved Areas (MUAs) and other regions with distinct Medically Underserved Populations (MUPs). PRIME (Programs in Medical Education) is a unique program at UC's six medical schools that supplements standard training with additional curriculum tailored to meet the needs of various underserved populations. Each program has a dedicated area of focus, targeted student recruitment, supplemental criteria for admission, relevant curricular content, and dedicated faculty mentorship. Since inception, PRIME has produced 470 medical school graduates. In 2018–2019, UC Health had 354 medical students enrolled in PRIME,

with 64 percent coming from underrepresented groups in medicine.

UC Riverside: Persistent shortages in certain areas also led to the creation of a different kind of medical school at UC Riverside. UC Riverside's medical school focuses on training for family medicine, obstetrics and gynecology, psychiatry, pediatrics, general surgery, and internal medicine — medical specialties with significant shortages.

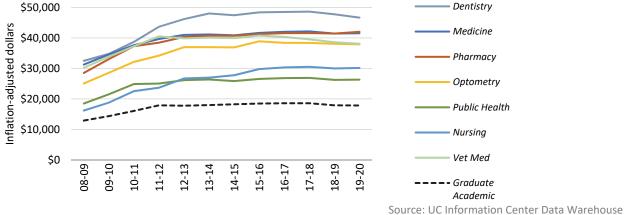
Rather than open an academic medical center to enhance physician training, UC Riverside embeds its students and residents in community-based health organizations, many of which serve indigent populations. Additionally, the school uses funds from foundations and individual donors to waive tuition and fees for graduates who agree to practice medicine in underserved areas for five years.

UCLA International Medical Graduate (IMG)

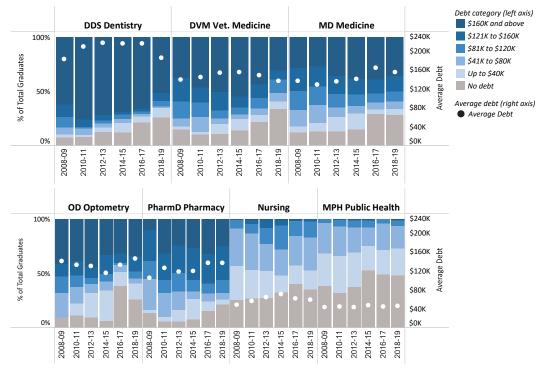
program: In 2018, the Governor signed AB 2311, a bill that extended UCLA's unique IMG program. The UCLA IMG program is a University-based preresidency training program for U.S. citizens and permanent residents who received medical educations from schools throughout Latin America, and who are fully fluent in both Spanish and English. These international graduates undergo an intensive, standardized course of professional instruction and clinical clerkships so they can pass the U.S. Medical Licensing Examinations (USMLE) and compete successfully for Family Medicine residency programs in California. In return, UCLA IMG scholars agree to serve for 24 to 36 months in medically underserved communities in California after completing their residencies.

Health science professional degree fees have leveled off after incurring sharp increases during years of declining state support. Average debt levels are increasing.

11.3.1 Average total charges for health professional degree students, Universitywide, 2008–09 to 2019–20



11.3.2 Health sciences professional degree student debt at graduation, Universitywide, 2008–09 to 2018–19



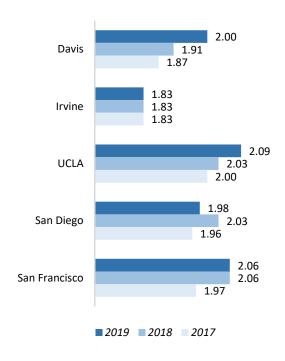
Source: UC Information Center Data Warehouse

The rising cost of graduate education has not been matched by increases in state support. In fact, state support declined significantly during recurring state fiscal crises, which caused the University to increase tuition, campus-based fees, and professional degree

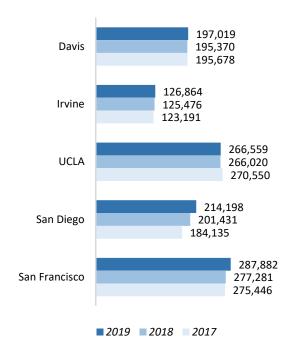
supplemental tuition (PDST). This cost-shifting has contributed to students taking on increasing amounts of debt. At least one-third of the revenue raised from professional school fees is used to provide financial aid to current students.

As academic medical centers and safety-net hospitals, UC Health hospitals are destinations for some of the most critically ill patients in the state.

11.4.1 Patient complexity (Case Mix Index) UC medical centers 2019, 2018, and 2017 fiscal years



11.4.2 Hospital inpatient days
UC medical centers
2019, 2018, and 2017 fiscal years

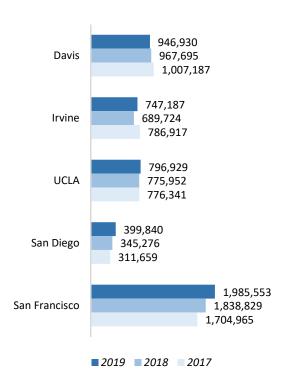


Source: UC Medical Center Audited Financial Statements

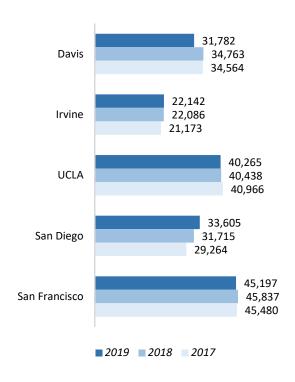
One way to understand the health needs of hospitalized patients is the Case Mix Index (CMI). Index values above 1.0 indicate increasingly poor health. In most acute care hospitals in California CMIs are between 1.1 and 1.5. The CMI at UC Health hospitals ranged from 1.83 to 2.09 in fiscal year 2018–19.

UC medical centers and UC schools of medicine accommodate millions of outpatient visits every year.

11.4.3 Outpatient visits
UC medical centers
2019, 2018, and 2017 fiscal years



11.4.4 Hospital admissions
UC medical centers
2019, 2018, and 2017 fiscal years

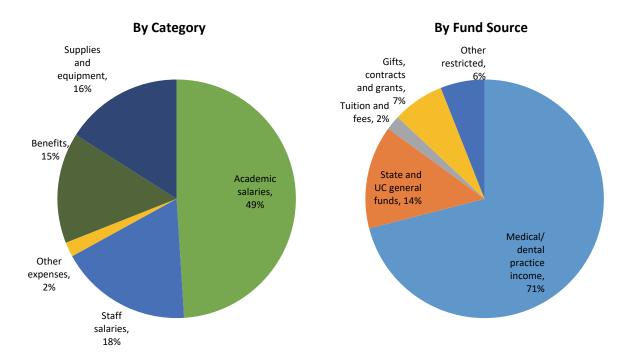


Source: UC Medical Center Audited Financial Statements

Supplementing its inpatient capacity, UC Health provides robust outpatient services. Outpatient services provided by the Medical Centers include clinic visits, primary care network, home health and hospice, and emergency visits. In fiscal year 2018–19, the medical centers provided nearly 4.9 million hospital outpatient visits. The schools of medicine and other non-hospital clinic visits accounted for another 2.5 million outpatient visits.

Medical and dental practice income supports over half of the instructional expenditures in the health sciences.

11.5.1 Health sciences instructional expenditures by fund source, 2018–19



Source: UC Budget for Current Operations

Although part of the University of California, only a small portion of UC Health's funding comes from the state's General Fund. The overwhelming majority comes from reimbursements and payments for clinical services.

More than half of the instructional expenditures at the health sciences schools are supported by medical and dental practice income. State and UC general funds only provide about 14 percent of revenue.