The Regents of the University of California

HEALTH SERVICES COMMITTEE
June 17, 2020

The Health Services Committee met on the above date by teleconference meeting conducted in accordance with Paragraph 3 of Governor Newsom's Executive Order N-29-20.

Members present: Regents Guber, Lansing, Makarechian, Park, Sherman, and Zettel; Ex officio members Napolitano and Pérez; Executive Vice President Byington; Chancellors Block, Hawgood, and Khosla; Advisory members Hernandez, Hetts, Lipstein, and Spahlinger

In attendance: Regents Butler, Leib, Sures, Um, and Weddle, Regent-designate Stegura, Faculty Representatives Bhavnani and Gauvain, Secretary and Chief of Staff Shaw, Deputy General Counsel Nosowsky, Interim Executive Vice President and Chief Financial Officer Jenny, Vice President Nation, and Recording Secretary Johns

The meeting convened at 10:05 a.m. with Committee Chair Lansing presiding.

1. **PUBLIC COMMENT**

A. Celine Dill asked the Regents to take action in support of emergency diploma privilege for 2020 law school graduates. Due to the COVID-19 pandemic, the California Supreme Court had ordered that the State Bar examination, scheduled for July, be moved to September and taken online. Recently, the Court had issued a statement that the examination could be moved to October. This was done without considering the impact this delay would have on test takers. Many law school graduates could simply not afford this months-long delay imposed by the Court. Diploma privilege would allow graduates to seek work as lawyers now, rather than extending their period of unemployment.

B. Clare VanDeMark, a registered nurse in the intensive care unit at UCSF, reported that a nurse had been removed from her unit, making staffing in this unit short of the recommended ratio. This decision had been made for budgetary reasons. During each shift, unsafe assignments were being made in the intensive care unit. A petition and letter about these concerns had been sent to UCSF Senior Vice President and Chief Operating Officer Sheila Antrum, but no response had been received. UCSF was prioritizing money over the safety of patients and nurses.

C. Christy Monsma, a registered nurse at UC Davis Medical Center and member of the California Nurses Association, noted that she had been offered positions at other hospitals but had remained at UC Davis because she believed that UC Davis had the best nurses in the region. Department managers were proposing mandatory call reportedly due to a backlog of cases related to COVID-19. Management had tried

to implement mandatory call in past years. The current proposal did not include an end date. This would put a stressful burden on already exhausted nurses. Mandatory overtime has been shown to cause increased fatigue, burnout, and stress; these in turn have adverse effects on patient care. The UCD Medical Center was understaffed and had a need for more part- and full-time nurses, not mandatory overtime. UC Davis nurses might leave the institution to work elsewhere if mandatory call was implemented, and Ms. Monsma urged that mandatory call not be implemented at UC Davis, and that the voluntary call process continue to be used.

2. **APPROVAL OF MINUTES OF PREVIOUS MEETING**

Upon motion duly made and seconded, the minutes of the meeting of April 15, 2020 were approved, Regents Guber, Lansing, Makarechian, Napolitano, Park, Sherman, and Zettel voting "aye."[1]

3. **REMARKS OF THE EXECUTIVE VICE PRESIDENT – UC HEALTH**

[Background material was provided to the Committee in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Executive Vice President Byington began her remarks by recognizing President Napolitano, since this would be the President's last meeting with the Health Services Committee. President Napolitano had elevated UC Health throughout all its missions of education, research, and public service. She had supported the development of resources that helped UC Health to act as a system, such as the UC Health Data Warehouse, which had proven an indispensable resource for the response to the COVID-19 pandemic, and UC Biomedical Research, Acceleration, Integration, and Development (UC BRAID), which linked UC's clinical and translational efforts, allowing UC to be an engine for clinical trials for the State of California. President Napolitano had co-chaired the California Future Health Workforce Commission, which provided recommendations for training programs to better meet the needs of the state. Dr. Byington stated that she had enjoyed working with President Napolitano, who had been an exceptional leader during these unprecedented pandemic times, and thanked President Napolitano for all she had done for UC Health.

Dr. Byington recalled that, at the time of the April 15 meeting of the Health Services Committee, there were two million cases of COVID-19 in the world. There were now more than two million cases in the United States. The world had been aware of the coronavirus for six months and in a recognized pandemic for three months. A chart of daily confirmed COVID-19 cases in the U.S. showed a downward trajectory, but there was significant variation across different regions. The overall decreasing number of cases was caused primarily by the decrease in the Northeast, especially in New York and New Jersey. At the same time, there were increases in the South and the Western United States. On June 12,

[1] Roll call vote required by the Bagley-Keene Open Meeting Act [Government Code §11123(b)(1)(D)] for all meetings held by teleconference.

California was the state with the greatest number of new positive cases, a total of 2,702. The U.S. had arrived at a plateau in the pandemic, having flattened the pandemic curve, but not able to eliminate transmission. COVID-19 outbreaks in various states were due to different responses across the U.S. and travel from state to state. Early on in the pandemic, observers had hoped there might be a sharp decline by the summer months, allowing for some respite before the fall. Dr. Byington did not believe this would be the case. Instead, the plateau would continue for some time. The majority of California's population, likely 96 percent to 98 percent, remained susceptible to COVID-19. As the state began to loosen restrictions and more in-person interactions took place, there would be additional cases and outbreaks. While on this pandemic plateau, there was a need to reframe the approach. The pandemic was moving from being an acute condition to being a chronic condition that one would have to manage actively, while always being prepared for exacerbation or surges in case numbers.

There had been some good news that week regarding active management of COVID-19, with the announcement that dexamethasone, an inexpensive steroid, appeared to be an effective treatment, reported to decrease mortality by 30 percent for patients who required ventilators, and by 20 percent for those who required oxygen. UC Health was awaiting the peer-reviewed publication of these data in order to make a final judgment. There were now also a number of studies indicating that consistent use of masks could lower transmission. Dr. Byington expected the pandemic plateau, and the management and preparedness mode, to continue for at least the next two years. She looked forward to interventions which would help lessen the burden of the disease until a vaccine was available.

By January 2020, it had become clear that expertise related to infectious diseases and pandemics would be a primary requirement for maintaining operations for UC Health. For the foreseeable future, Dr. Byington's primary focus would be on UC's response to and recovery from the pandemic. This work would provide a unique opportunity to remake UC Health in ways that supported its mission to work to deliver health equity and to serve all Californians.

The first months of the pandemic had been a time of unprecedented change and intensive work across UC Health. The beginning of the pandemic required learning about a new virus, including its basic science, the coronavirus' proteins and binding sites, the epidemiology of infection, and public health interventions that might limit its spread. There was the work of clinical trials and identifying health disparities that should inform public policy. The work also included preparing hospitals for surges in patient numbers, learning to care for patients while protecting healthcare workers from infection, using technology to support care and work from a distance, addressing the economic impact of changes to UC Health operations, and, more recently, understanding the chronic nature of the pandemic and finding ways to safely return essential services to UC hospitals and resume normal functions. These were all challenging activities, but were made easier by working as a system, and by the depth and breadth of expertise at UC. Dr. Byington was grateful to be able to work with so many talented and committed individuals.

Pandemics were interesting times in human history, and some people might be inclined to regard pandemics as apocalyptic events. Dr. Byington noted that the word "apocalypse" was derived from Ancient Greek *apokálupsis*, which meant "revelation" or "uncovering." Pandemics were great revealers, uncovering the strengths and weaknesses in societies, organizations, and people. The emergence of SARS-CoV-2 had been a revelation in the U.S. and across the world. The profound connection of people across the world was revealed as the virus spread to almost all countries on earth in 90 days. Lack of preparedness in the U.S. and many countries had been revealed. There was a new recognition of the importance of public health, clinical trials, diagnostic testing, and the supply chain. One had seen the fragmented infrastructure in the U.S. of both healthcare coverage through insurance and healthcare delivery. The United States did not have an equitable healthcare system. Crushing health disparities endured for generations by marginalized populations in the U.S. had been starkly revealed by COVID-19.

Dr. Byington presented a chart showing numbers of COVID-19 deaths in the U.S. per 100,000 people through June 9, by racial groups. The white population of the U.S. had a mortality rate less than its proportional representation in the overall population, while for black Americans, the rate of deaths is twice as high as their representation in the overall population. For other groups, the disparity was also stark. If black Americans and other groups had died at the rate of white Americans, at least 14,400 black Americans, 1,200 Latino(a) Americans, and more than 100 Native Americans would still be alive at this time. These disparities in health care were longstanding. Dr. Byington presented another chart showing the health status of minority groups in the U.S. after the implementation of the Affordable Care Act, based on data from the Kaiser Family Foundation. The chart indicated that, by many measures, health outcomes for black, Hispanic, and Native American people were worse than for white Americans. There were also disparities for Asian Americans, Native Hawaiians, and other Pacific Islanders. These disparities were not due to accidents of birth, nor were the individuals who suffered these disparities to blame. Health disparities were a tragic result of systemic racism in the U.S., which was more easily visible at this time because of the pandemic. People across UC Health recognized the Black Lives Matter movement and the health disparities in the United States. Later in this meeting, there would be presentations about UC clinical teams who served in New York City and in the Navajo Nation, and about plans for medical education at UC Merced. These were tangible examples of work done by UC Health to build a more inclusive health system and to stand in solidarity with communities and patients seeking health equity.

Periods of pandemic could also reveal what is best and necessary, and call for reflection and change. UC Health's goal should not be a return to the status quo. These times were a call for a mindset of remaking, not just rebuilding. UC Health would work through layers of individual and institutional discomfort so that, instead of working to return to normal, it would forge a new normal of health care accessible to all. In doing this, UC Health had the opportunity to be the health system for all of California. At a retreat meeting in December 2019, UC Health had articulated systemwide goals of improving the health of all people living in California, promoting health equity by eliminating disparities, and reducing barriers to access to UC clinical, education, and research programs by creating more

inclusive opportunities for employees, students, and trainees. These goals would be a cornerstone for UC Health during the recovery from COVID-19. Dr. Byington also wished for UC Health to carry forward what it had learned from responding to this pandemic, including lessons in collaboration, communication, preparedness, resilience, and service. She outlined topics to be discussed at an upcoming UC Health leadership retreat in July and concluded her remarks by thanking Advisory members Hetts and Lipstein for their service on the Health Services Committee. Committee Chair Lansing expressed her gratitude to Dr. Hetts and Mr. Lipstein for their service.

4. **HOSPITAL BED REPLACEMENT TOWER, UC DAVIS HEALTH, DAVIS CAMPUS**

The President of the University recommended that the Health Services Committee approve UC Davis Health's proposed presentation of the Hospital Bed Replacement Tower Project and subsequent requests to the Finance and Capital Strategies Committee at its future meetings to (1) approve preliminary plans funding and (2) approve the budget, external funding, and design pursuant to the California Environmental Quality Act (CEQA) for the Project.

[Background material was provided to the Committee in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Executive Vice President Byington introduced the item, explaining that UC Davis Health proposed to construct a Hospital Bed Replacement Tower adjacent to the existing main hospital to address seismically deficient and obsolescent inpatient facilities and to be able to meet community needs for high-acuity inpatient care in the context of a growing population in the Sacramento region. Senate Bill 1953 required seismic compliance with code, mandating that the hospital's North/South Wing be removed from service by July 2022, and the East Wing by 2030.

UC Davis Human Health Sciences Vice Chancellor David Lubarsky stated that the campus had no choice but to build a new tower, given that existing buildings were seismically deficient and in order to sustain current patient populations, including high-acuity patients. UC Davis had carried out extensive modeling, demographic projections, and population analyses. The most important factor to consider was the impact on patients. In the current aging facilities, almost all beds outside the intensive care units were in double occupancy rooms. This was not a standard situation in most academic medical centers in the U.S. This project would address this issue, although it would not eliminate all double occupancy rooms. The UC Davis Medical Center currently had 625 licensed beds and was one of the 100 largest hospitals in the U.S.; it would have to demolish 157 beds in the course of this project. The proposed tower would provide approximately 200 beds, and there was the possibility of another bed tower at an adjacent site, if this became affordable or necessary due to increasing patient volume. The new rooms would be patient-centered and provide a secure and positive healing experience for patients and families. The project plan was fiscally responsible, and the campus was confident about its financial means to support the project, both in hospital reserves and capacity for borrowing. There was flexibility in the

design. The project design could advance with changing paradigms of medical care. Patient rooms would be flexible and adaptable, able to house inpatient, medical surge, or intensive care unit beds. Dr. Lubarsky imagined that, in the future, most academic medical centers would move to having inpatients in nearby facilities with hospital technologies. The new design would lead to increased staff satisfaction; it was not easy for staff to ensure patient privacy in the current facilities. The new hospital would be designed to increase operational efficiency and use the latest technology to improve patient care. Dr. Lubarsky briefly presented a diagram for the building project, describing the needs for demolition, renovation, and new construction. He concluded his remarks with an outline of the phasing strategy, including a potential future Phase 2. The project fit within Long Range Development Plan parameters. Implementing a phased strategy would reduce the impact on the central plant and infrastructure.

Regent Makarechian praised the project and noted that many universities were taking advantage of low financing rates at this time; he suggested that UC Davis could consider the financing for Phase 2 together with the first phase. He asked if the project designs had been developed before or after the COVID-19 outbreak, and if the design took into account factors such as elevator size and forced air. Dr. Lubarsky agreed with Regent Makarechian's suggestion. The campus would like to seek early financing, given current low interest rates, and, if it could accelerate the project, it would, in order to reduce the overall cost of the building and the cost of borrowing. UC Davis would be exploring this option. The design was a pre-COVID design, and the campus would have to consider features such as larger elevators to avoid crowding. COVID-19 would not be the only infectious disease that would be experienced during the lifetime of this building, which was projected to be occupied in 2027. COVID-19 considerations would be incorporated into the design.

Regent Makarechian commented that UC Davis should avoid a situation of finalizing a design and then having to change the design due to new building codes. He referred to background information provided, according to which the campus' debt service coverage ratio was projected to remain at or near the recommended floor of 3.0x throughout the projection period, while days' cash on hand were projected to remain above the required 60 days. He asked if this projection was based on the pre-COVID-19 situation or was forward-looking, taking the impact of COVID-19 into account. UC Davis Health Chief Financial Officer Tim Maurice responded that these figures were based on projections both pre-COVID and going forward as well. Dr. Lubarsky commented that UC Davis Health was in solid financial shape at this time; it had returned to pre-COVID-19 levels. The apparent losses related to COVID-19 had been ameliorated by the fact that patient volumes this year had been higher than projected. UC Davis Health was confident that, unless there was a very bad fall season, it had sufficient resources currently and in the projected future for this project. In addition, UC Davis Health had received Coronavirus Aid, Relief, and Economic Security (CARES) Act funding which almost covered the losses due to COVID-19.

Regent Zettel praised the project and asked about UC Davis' plans for the sites of the towers that were to be demolished. Associate Director Jill Tomczyk responded that the

North/South Wing and the East Wing, as they were demolished, would become future redevelopment sites. In the shorter term, particularly on the far west end of the hospital, they would be developed as open, green, and respite space. Dr. Lubarsky added that this space might include a "healing garden" for patients, families, and visitors.

Regent Park asked about the sequencing in this project, recalling that towers with 157 beds would be demolished. She asked if there would be a loss of beds for a period of time. Dr. Lubarsky responded that there would be a short-term potential loss of 29 beds. Patient beds in the rehabilitation hospital might offset this loss, and therefore the timing of the building of the rehabilitation hospital was important.

Regent Park noted that UC Davis Health had returned to pre-COVID-19 levels of patient occupancy, while systemwide, the level was closer to 75 percent. She asked about the reasons for this, and why the Davis-Sacramento region had recovered more quickly than other regions in the state. Dr. Lubarsky attributed this outcome to the dedicated work of people at UC Davis. UC Davis Health began planning early for how it would reopen. Having the trust of staff, faculty, and patients was critical to being able to reopen all areas of the organization. Restrictions on patient movement in San Francisco affected UCSF, while the Southern California medical centers had a greater burden of COVID-19 patients.

Regent Sherman asked about the total capacity to build out the hospital in the future under the Long Range Development Plan. Dr. Lubarsky responded that this capacity was not tied to the number of beds but to building size and height. Based on size and height parameters, the campus determined the maximum number of beds that could be placed in the proposed building. Dr. Lubarsky hoped that, in the future, UC Davis could increase capacity so that all patient rooms would be single-bed rooms. UC Davis was also pursuing options for domiciling patients who are mostly recovered in other, non-hospital environments, using high-definition cameras and Bluetooth wireless communication technologies.

Regent Sherman asked why UC Davis would not build more in this phase and add more than about 35 beds, given current low financing costs, what would likely be a favorable environment for construction costs, and possible federal funding support for infrastructure projects. Dr. Lubarsky expressed full agreement and stated that he would be happy to double the size of this project. Cash flow would be necessary, and UC Davis has been conservative, anticipating that hospital-at-home technologies would lead to reduced hospital bed use over the coming 20 years.

Regent Sherman asked about planned square footage per patient bed and how this compared to square footage in projects at UC San Diego and UCSF. Ms. Tomczyk responded that, in designing the sizes of the care, service, and support spaces in the new facility, UC Davis' approach was very much in line with that of other UC medical center projects.

Upon motion duly made and seconded, the Committee approved the President's recommendation, Regents Guber, Lansing, Makarechian, Napolitano, Park, Sherman, and Zettel voting "aye."

5. **CALIFORNIA'S MEDICAL EDUCATION LANDSCAPE**

[Background material was provided to the Committee in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Executive Vice President Byington began the discussion by observing that California faced a growing shortage and persistent inadequate distribution of physicians. Expanding the supply of physicians could likely best be achieved by expanding medical school enrollment and growth in graduate medical education.

Vice President Nation recalled that California's racially, ethnically, culturally, and linguistically diverse population would soon reach 40 million. The state had been challenged for a long time in meeting the medical needs of underserved communities. Most counties had a federally designated status as Health Professional Shortage Areas. The physician workforce in California was aging. Nearly a third of practicing physicians in California were 60 years of age or older. Fewer than ten percent of California's active physicians identified as Latino(a) or African American, although these groups made up more than 40 percent of the state's population. By 2030, California was expected to have a shortage of 4,100 primary care clinicians and only two-thirds of the psychiatrists that would be needed.

California had a relatively small medical education system when one considered the size of its population and geographic area. On a per capita basis, California had a statewide medical school enrollment that was the fourth lowest in the nation among all states with medical schools—19.8 students per 100,000 population, by contrast to a median of 32.7. In the current 2019–20 academic year, there were approximately 7,800 students enrolled in California's 13 medical schools. Dr. Nation presented a list of these medical schools, including UC's medical schools and private medical schools. Along with the longstanding M.D.-granting private medical schools—Loma Linda University, the University of Southern California, and Stanford University—she drew attention to California Northstate University, located near UC Davis, which opened in 2015 as the first for-profit M.D.-granting institution in the U.S., and the California University of Science and Medicine, which opened in Southern California in 2018. In addition, there were two private schools of osteopathic medicine.

Two new medical schools would soon be added to this list. The Kaiser Permanente Bernard J. Tyson School of Medicine in Pasadena, a nonprofit school, would admit its first class in August. The School would admit 48 students and had waived fees for its first five classes. The California Health Sciences University College of Osteopathic Medicine, the second for-profit medical school in the state, located not far from UCSF-Fresno, would open in September. With regard to medical schools that might be established in the near future, Dr. Nation noted that the Charles R. Drew University of Medicine and Science in Los Angeles, which has had a longstanding joint medical education program with UCLA, had signaled its intent to open an independent, four-year medical school while continuing its commitment to the joint program with UCLA. The Keck Graduate Institute in Southern

California had filed for applicant status with the Liaison Committee on Medical Education, with no starting date indicated.

California had the fourth lowest medical school enrollment per capita in the nation. Only 24 percent of the state's active M.D.s had graduated from a California medical school. About 49 percent graduated from medical schools in other states, and roughly 27 percent from medical schools in other countries. UC trains more than 3,500 medical students at its six schools of medicine and approximately 5,200 medical residents and fellows, or nearly half of the state's total. Medical students and residents, together make up roughly two-thirds of all UC health sciences students. Nevertheless, California ranks at the very bottom of the nation for the number of students enrolled in public medical schools per capita at 8.8 students per 100,000 population, compared to the median of 21.3. Dr. Nation underscored this last data point in the light of UC Health's efforts to increase both its enrollment of medical students and their diversity. For 2019–20, 31 percent of first-year students enrolled in UC health sciences schools and programs were from groups underrepresented in medicine. In the UC Programs in Medical Education (UC PRIME), with roughly 350 students, the percentage of students from underrepresented groups had risen to 64 percent. The UC PRIME framework was a model for enhancing diversity in California's future physician workforce.

In 2019–20, there were nearly 53,000 applicants to U.S. medical schools, competing for 21,869 places. Dr. Nation referred to information in the background materials on numbers of applicants and matriculating students at UC medical schools for 2019–20. Many applicants who wish to study at a UC school of medicine experience disappointment and are forced to go to another state for their medical education. The numbers ranged from 5,902 applicants to the UC Riverside School of Medicine, where 77 matriculated, to 9,825 applicants to the UCLA School of Medicine, where 156 matriculated. The systemwide average number of applicants to UC medical schools was about 7,411, competing for a total of 789 spaces. With the exceptions of the UC PRIME initiative, which was launched in 2004 as a strategy for enrollment growth, and the launch of the new UCR School of Medicine, the UC system had experienced virtually no enrollment growth in medical education in more than 40 years, in spite of significant growth of the California population.

Of the 11,646 medical residents and fellows enrolled in California's residency training programs in 2019–20, roughly 5,200, or about 45 percent of the state's total, were enrolled in UC-sponsored residency and affiliated family medicine programs. The remaining 55 percent were spread across a variety of sponsors statewide. These sponsors included longstanding private schools of medicine. Kaiser Permanente was also a long-time, major sponsor of graduate medical education. Other sponsors were free-standing children's hospitals and community hospitals, and a few others. The newer for-profit schools and schools of osteopathic medicine did not operate their own clinical facilities and hospitals and were sometimes not sponsors of their own graduate medical education programs.

The UC system could take pride in a number of outcomes of its medical education programs. California had the highest rate of retention in the nation for residency program

graduates. The percentage of active physicians who completed their graduate medical education in California and remained in the state was 70.6 percent; 62.8 percent of active physicians who graduated from a California medical school remained in California, and 68.6 of active physicians who graduated from a UC medical school were retained in California. California ranked second in the nation for retention of active physicians who graduated from a California medical school and completed residency in California (81.3 percent). These successes benefited the population of California. Dr. Nation presented a chart showing the graduate medical education profile for UC medical school graduates in 2020. For UC's six schools of medicine, there were high percentages of graduates entering residency programs in California, within the UC system, and in primary care, where there was a dire need.

Dr. Nation reflected that world events at this time had made clear what was not working. The impact of health workforce shortages had been longstanding. The COVID-19 had painfully revealed the consequences of having an inadequate workforce of healthcare providers. There had been a steady erosion of State support for and a lack of investment in medical education, and this had been a major barrier in expanding medical education opportunities and graduate medical training for UC students. One recent exception was support for medical training provided by Proposition 56 revenues. Dr. Nation emphasized that the return on investment in medical education and training for the State of California was high, and that the people of California benefited from this investment.

The California Future Health Workforce Commission had recommended full funding for the UC PRIME programs and had highlighted the vital need for increased sustainable investment in the UCR School of Medicine, $25 million in annual, ongoing, and permanent operating support. The Commission also highlighted the value of expanding the partnership of the UCSF School of Medicine, UCSF Fresno, and UC Merced, as an opportunity to build a branch campus in the San Joaquin Valley. The Governor's January 2020 budget included $25 million for UCR and $15 million in ongoing support for an expanded partnership of UCSF, UCSF Fresno, and UC Merced. The legislative budget plan proposed on June 4 included full funding of $25 million for UCR and $15 million for UCSF.

Regent Park asked about the cost of producing a primary care physician or a psychiatrist. Dr. Byington responded that Dr. Nation was leading a group examining the cost of medical education. Dr. Byington had studied this question in other states. In her experience this cost was roughly $100,000 to $106,000. The cost of this education had been increasing over time. Relationships between medical centers and medical schools were important.

Regent Park requested clarification; she assumed that the quoted figures did not include the cost of residency programs. Dr. Byington confirmed this. The figures cited were for medical school education. Regent Park asked about the total cost including medical school and residency, not the cost to the individual student or trainee, but the generic cost to the institution of producing a medical professional. Dr. Byington responded that she had been involved in a study in Utah of the cost of educating an individual up to the first faculty position, including undergraduate college, medical school, residency, and fellowship. The

cost of producing a pediatrician was estimated at between $2.5 million and $3 million. A substantive investment was required to train individuals over a period of 12, 15, or 17 years.

Regent Park asked about possible innovations to the medical education pathway that might lower the cost or accelerate the process. The State would only have about two years of time for planning in order to meet its 2030 goals for the healthcare workforce. Dr. Byington responded that there were opportunities for innovation in UC partnering with the State. The UC system had outstanding undergraduate students, some of whom already knew that they wanted to become physicians. These students could be identified and guided into UC training programs. There should be discussions about what kind of undergraduate work would prove useful in medical school, and what work in medical school would prove useful in residency. One should consider this as a continuum rather than as discrete units of time and education. Not all undergraduates or medical students should need four years to complete college or medical school. Not all medical residencies needed to be a certain number of years. Dr. Byington was interested in competency-based measures rather than only time-based measures. There were opportunities in the UC system because it owned the entire continuum, from undergraduate education through medical residency programs. Dr. Nation added that a competency-based program at the UC Davis School of Medicine removed a year from the continuum for students who were focused on primary care. These students were ready to move into residency training in primary care after three years of medical school. This program was intended to benefit the greater Sacramento region. Dr. Byington commented that there were opportunities for UC, as a public institution of higher education, to work with the State in a different way, in particular in regard to fourth-year medical students. These students were close to becoming licensed physicians. Allowing them to work in settings identified by the State as underserved might be beneficial for both California and the students. Students would receive an exceptional experience under supervision and perhaps a loan reduction, while the state would have healthcare providers it otherwise would not have. Dr. Byington stated that she would like to gather a systemwide group to discuss this.

Regent Park asked about opportunities for collaboration with the private sector, with entities who might be considered competitors in another context. Dr. Byington recalled that Kaiser Permanente was starting its own medical school. Kaiser wished to train its own providers so that these providers understood the Kaiser system. UC had the opportunity to train providers for other health systems. If UC could identify future medical students early on and match them to UC programs, this might remove pressure on students; for example, pressures and costs related to interviewing.

Regent Park referred to background information provided in the agenda item indicating that, for years, California had relied on recruitment of physicians from other states and countries to meet workforce needs, but that the high and rising cost of living had made reliance on these sources more challenging. A footnote identified this information as derived from the February 2019 final report of the California Future Health Workforce Commission. She asked if the California Future Health Workforce Commission had examined data on the ability to recruit physicians from out of state. Dr. Nation responded that much of the data analysis related to the recommendations in the Commission's report

had been provided by the Healthforce Center at UCSF, which had a rich and growing database. This particular statement was based on examining the growth in the number of designated Health Professional Shortage Areas in California, the rising cost of living, and the number of students forced to leave the state for medical education who did not return. Shortage areas and types were growing, and the physician workforce would soon be significantly reduced by a wave of retirements. Dr. Nation stated that she could provide more information about these data.

Student observer Noah Danesh stressed the positive impact that UC Health can have on medical education, such as increasing diversity in the medical school student body, and in academic work that takes into account the diversity of California's patient population; one example was the work of UCSF Assistant Professor of Dermatology Jenna Lester. Increasing medical school enrollment and residency training capacity was a fundamental way of giving the best students the opportunity to enter the field, no matter their background. Even with budget cuts by the State, the Regents and the University should make it a priority to advocate for funding of increased class enrollment. Mr. Danesh stated that he would like to see updated reports on the demographics of the medical schools. Having accessible data was the foundation for making needed changes. It was essential to advocate for adequate funding of medical education in the San Joaquin Valley and the Inland Empire. He hoped that UC would focus on retaining physicians who had been trained at the medical schools in these regions to practice in these communities. Innovations in the medical education pathway could make it more flexible. The University should do more to help current applicants to UC medical schools. The interview process and application fees were burdensome. UC could be a leader in reducing these fees.

Mr. Danesh commented on the reopening of UC campuses. Returning students would be checked for COVID-19 symptoms. However, given what was now known about the high rate of asymptomatic cases, the University should work toward increasing the availability of COVID-19 testing on campus and near students. Students should not hesitate about getting a test if they feel they are at risk. UC should communicate statistical information about how many students were being tested and the rates of positivity. Providing this information would remove another stressful factor for students while they are on campus. Mr. Danesh emphasized the importance of telehealth for students, since some students would not be returning to campus in the fall.

UCR School of Medicine Dean Deborah Deas referred to information presented by Dr. Nation about the disparities in numbers of physicians from underrepresented groups in California. The University was addressing this issue and must continue to do so. In its next incoming class, the UCR School of Medicine would be enrolling a class with 50 percent of students from groups that were underrepresented in medicine. Dr. Deas also underscored another data point that had been mentioned, the fact that, by 2030, California would have less than two-thirds the number of psychiatrists needed. Although there were programs that supported residency training and physician retention, psychiatry did not qualify for these programs, namely Proposition 56 funding and the Song-Brown Healthcare Workforce Training Programs. The UC system should communicate with the State about this and seek to remove the restrictions on such support. Psychiatry should be a primary care specialty.

Without retention programs, it was likely that psychiatry students might leave the state after their training.

Regent Zettel asked about efforts to expand the education and training of nurse practitioners and physician assistants. Dr. Nation anticipated that these areas of training would be discussed in more detail in a future presentation. She noted that she served on the California Higher Education Health Professions Steering Committee, which had also advised the California Future Health Workforce Commission. The Steering Committee compiled an inventory of health professions education offerings at UC, the California State University, and the California Community Colleges, and this helped inform some of the Commission's recommendations. One of the recommendations concerned the mental health crisis. Dr. Nation stated that the Song-Brown Commission would revisit the question of support for psychiatry training and psychiatry support through Proposition 56. One of the recommendations made by the California Future Health Workforce Commission was for three UC schools of nursing to develop a psychiatric nurse practitioner program and to train 300 nurse practitioners.

Advisory member Hetts stated that the Academic Senate looked forward to working with Dr. Nation and others on innovative approaches to the health professional education continuum. With regard to Dr. Deas' comments on psychiatry, he observed that the definitions of what is considered primary care would have to be reexamined. Addressing population health in California would require one to consider the continuum of healthcare providers, including nurse practitioners and physician assistants.

6. **PROPOSED REQUEST FOR APPROVAL OF THE HEALTH AND BEHAVIORAL SCIENCES BUILDING (HBS-ME BUILDING), MERCED CAMPUS**

The President of the University recommended that the Health Services Committee approve UC Merced's proposed discussion of the Health and Behavioral Sciences building (HBS-ME building) with the Finance and Capital Strategies Committee, and, at subsequent Regents meetings, UC Merced's proposed requests to the Finance and Capital Strategies Committee for (1) approval of preliminary plans funding, (2) approval of design pursuant to the California Environmental Quality Act (CEQA), and (3) approval of budget and construction financing.

[Background material was provided to the Committee in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

UC Merced Executive Vice Chancellor and Provost Gregg Camfield introduced this item, which requested approval for pursuing a Health and Behavioral Sciences building project. The current moment was a propitious one for the development of medical education in the underserved San Joaquin Valley. One of the reasons for establishing UC Merced in this region was to participate in medical education. With its programs in psychology, public health, anthropology, and sociology, the campus had significant expertise in cultural

competency and community engagement. UC Merced had also developed capacity in biology and bioengineering and prepared itself for participation in medical education.

An important motivation for developing medical education at UC Merced was the desire to train health professionals who would be committed to working in the San Joaquin Valley. The campus would establish a combined bachelor of science/M.D. program, and it hoped to enroll the first students in this program in 2023. One-third of UCM faculty would like to participate in medical education. This program would strive for a seamless approach to medical education that would be patient-centered and problem-based.

The program for this building was in harmony with the campus' Long Range Development Plan. It would house the departments of psychology and public health as well as medical education. The building would include state-of-the-art digital anatomy laboratories, a substantial simulation environment, and distance learning teaching spaces, since the medical program would be working in collaboration with UCSF-Fresno and UCSF.

The building would feature a Child and Family Development Research Laboratory, and this reflected UC Merced's commitment to the community. The campus had already performed a great deal of community-engaged scholarship, but one challenge was easy access to the campus for the community. The building would be located on a new access road. UC Merced was eager to proceed with this project in order to address urgent healthcare needs in the Central Valley.

Regent Park asked how UC Merced could ensure that this investment would translate into better health care and access to health care for the community, and a direct, near-term benefit. She referred to background information provided which indicated an inaugural class size of 12 students. This seemed small, and Regent Park asked if there were ways that this inaugural class could be increased. The background information also noted that the design for the building included a 300+ seat auditorium. She asked if there was really a need for a large lecture hall. Due to technical difficulties with the video conferencing experienced by the presenters at that moment, Committee Chair Lansing suggested that the campus could provide the answers to Regent Park's questions at a later point.

Upon motion duly made and seconded, the Committee approved the President's recommendation, Regents Guber, Lansing, Napolitano, Park, Pérez, Sherman, and Zettel voting "aye."

7. **SPEAKER SERIES – CLINICAL CARE IN THE WAKE OF COVID-19: UC SAN FRANCISCO DELEGATIONS TO NEW YORK PRESBYTERIAN HOSPITALS AND THE NAVAJO NATION**

[Background material was provided to the Committee in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Lundy Campbell, Clinical Professor in the UCSF Department of Anesthesia, began this presentation. He had participated in a UCSF delegation to New York City in April to

provide assistance during the coronavirus pandemic at New York-Presbyterian Hospital. While California and New York had been in similar situations at the beginning of the COVID-19 outbreak, California had closed down and moved to sheltering in place about six days before New York, and this had made a big difference. Other factors were the population density of New York City compared to California, and the large number of New York City residents who use the subway system. Many people at UCSF wished to volunteer to help in New York. As it happened, the decision to send this delegation was made with only a few days' notice, since the level of immediate need for healthcare professionals in California was not clear, and not as many volunteers as had wanted to participate were able to go to New York. At the time the delegation was sent, New York City had approximately 200,000 COVID-19 cases and more than 16,000 deaths. Queens County was the second county in the nation in number of coronavirus deaths, currently at 5,200, and 4,700 to 4,800 when the UCSF delegation arrived.

Initially, UCSF sent nine nurses to New York-Presbyterian Queens Hospital: four from the emergency department and five from the intensive care unit. UCSF also sent 12 physicians. Eight went to New York-Presbyterian Queens Hospital: four hospitalists, two critical care physicians, an emergency medicine doctor, and one anesthesiologist. Four physicians went to New York-Presbyterian/Weill Cornell Medical Center: one emergency medicine doctor, two critical care physicians, and one anesthesiologist. Two weeks later, UCSF sent a second group. One physician, a cardiologist, went to the Cornell Medical Center. Two more physicians, an anesthesiologist and a critical care physician, and a nurse practitioner went to Queens Hospital.

Queens Hospital was a 500-bed hospital and the largest hospital in Queens. Queens Hospital had been receiving more than 100 patients daily into the emergency room for a week or two when the UCSF delegation arrived. At that point, there were more than 700 COVID-positive patients in the hospital. Of these patients, 110 to 120 were in intensive care unit (ICU)-level care daily. The hospital was staffed for 40 ICU beds. Many patients were in makeshift ICU beds. Even the cafeteria was opened as a makeshift ICU.

Dr. Campbell enumerated some of the lessons learned from this experience. Personal protective equipment was effective. All participants tested negative for the virus and antibodies when they returned, and had essentially not had exposure to the virus. In his view, there was an over-emphasis in the news media on personal protective equipment and ventilators. The UCSF team was not short of ventilators, but experienced shortages of medications, dialysis machines and other key equipment, and physical space. Most critically, there was a shortage of key personnel. There were ventilators but not enough respiratory therapists to operate the ventilators. There were not enough dialysis machines for all patients who needed them. There was a shortage of nurses to perform dialysis. While working in this outstanding hospital in New York City, it became apparent to Dr. Campbell that any healthcare system can become overrun and resource-limited. This situation reminded him of some global health missions in which he had participated, vastly short of personnel and equipment. This same situation could occur at UCSF or other UC medical centers.

The UCSF team was able to provide significant support to the local physicians, work in their system, rotate within their ICU, and relieve physicians and nurses from some stresses. Many physicians and nurses had not seen their families in over a month because they were afraid of bringing the virus home. One month was good timeframe for the work of the delegation, long enough to become used to working in a different system but short enough to prevent burnout. This was a difficult experience. Patients died every day, and this left UCSF team members with a feeling of helplessness. Family members of the patients could not see their loved ones. The likelihood of death for intubated patients in this situation was high, at 80 to 90 percent.

Dr. Campbell had remained in contact with the New York colleagues. The Queens Hospital personnel had all tested negative for the coronavirus. The hospital had now shut down all its makeshift ICUs. There were currently only two COVID-19 units still in operation. Physicians and nurses were able to return to their families and normal schedules. All the UCSF volunteers said that they would do this again.

Sriram Shamasunder, UCSF Professor in the Department of Medicine and Director of the HEAL (Health, Equity, Action, and Leadership) Initiative, reported on the UCSF delegation to the Navajo Nation. The HEAL Initiative was a UCSF global health fellowship program, begun in 2015, with a goal of improving healthcare services to underserved populations in the U.S. and abroad. To date, the program had 149 health professional fellows and alumni at 19 sites in nine countries. Half of them were U.S. doctors and nurses, one quarter were Navajo, and another quarter were from countries around the world, including Haiti, Mexico, India, and Nepal. The program matched physicians and nurses with counterparts in the Navajo Nation and other countries.

The HEAL Initiative depended in part on U.S. government contracts with the Navajo Nation, where there was a 30 percent healthcare workforce vacancy rate. HEAL Initiative fellows filled these vacancies. The HEAL Initiative had been working in the Navajo Nation for the past five years. The Navajo Nation was 27,000 square miles in size, located across the states of New Mexico, Arizona, and Utah. Currently, the Navajo Nation was the area in the nation hardest hit by COVID-19 per capita, with over 6,200 cases and nearly 300 deaths. This was a significant amount of suffering in an area with an already underfunded health system. As COVID-19 surged in the Navajo Nation, the HEAL Initiative heard about the need for critical care nurses and emergency room nurses. Healthcare providers were having to shut down units and locate COVID and non-COVID patients together. On April 12, Dr. Shamasunder suggested to UCSF leadership that UCSF nurses might wish to volunteer to work in the Navajo Nation. Within 48 hours, 70 nurses volunteered. On April 22, the first group of UCSF volunteers joined the 51 HEAL Initiative fellows already working in the Navajo Nation. A second group went to the Navajo Nation in late May. More than 40 UCSF health professionals took part in this effort, which worked in five healthcare facilities and in motels, where 175 homeless COVID patients were housed. There were only a few ICU beds in the Navajo Nation. Many patients, when they were about to be intubated, were transferred away to facilities in Albuquerque, Phoenix, and Flagstaff.

Dr. Shamasunder referred to earlier discussions at this meeting about health inequities in the United States, especially for communities of color, which had been revealed by the COVID-19 crisis. It was impossible to talk about diabetes and obesity in the Navajo Nation without considering the fact that there were only 13 grocery stores in the Nation. Thirty percent of the population did not have running water or electricity. While sheltering in place might be inconvenient for people in California, it was impossible for much of the Navajo patient population. There had been systemic underfunding of the Indian Health Service; it was funded at one-third the rate per capita of the Department of Veterans Affairs or Medicare. Dr. Shamasunder shared a story of one of his patients, who had slept outside in a pickup truck in cold weather to avoid infecting her elderly parents. Her story illustrated Navajo multi-generational families, respect for elders, and resilience.

The experience of the HEAL Initiative, whose participants were 17 to 18 percent Latino(a) or African American and 25 percent Native American, could inform efforts to diversify the healthcare workforce in California and inform the efforts of academic medical institutions to partner with underserved communities.

Committee Chair Lansing expressed pride in the work done by UC Health. These presentations were inspiring and showed the direct impact of UC Health physicians and nurses.

Regent Zettel asked how diabetes and lack of dialysis care factored into the mortality rates experienced in New York. Dr. Campbell responded that patients with COVID-19 who became critically ill experienced multi-organ failure. In most patients, the kidneys were among the first organs to fail. This would also be the case for pneumonia patients. Most of the population living around the hospital in Queens was Asian American, but most of the COVID-19 patients were Latino(a). Dr. Campbell was not certain about the reasons for this, whether genetic factors or comorbidities. Patients with diabetes or other major medical problems were at much higher risk from dying from COVID-19. There were also a fair number of younger patients in their 40s and 50s dying from COVID-19, often with coexisting diseases and conditions, essentially obesity, diabetes, and hypertension.

Committee Chair Lansing asked which factor, age or underlying illnesses, was more significant in COVID-19 mortality, and if any study had been conducted on this question. Dr. Campbell responded that he was not aware of any specific study. He observed that the significant underlying illnesses were most likely to be found among the older patient population. These two factors were closely tied and difficult to isolate. One of the problems during the delegation's work was inaction at the level of the federal government. There was a missed opportunity to study these patients and perform autopsies. Few studies were being carried out, especially because hospitals were overwhelmed. There was no response from the federal government, no action to study this phenomenon in order to understand the high mortality rates of these patients, which was important in order to keep more patients alive. Dr. Campbell concluded that both factors were important. Older patients had fewer physiological reserves to fend off the assault of COVID-19, but the real problem was underlying critical illnesses, from which patients could not recover when they became infected with COVID-19.

Committee Chair Lansing commented that it would be interesting to study the population of patients over age 65, and how patients without underlying conditions fared with COVID-19. If comorbidities were in fact a more important factor than age, this might convince some younger people who refuse to wear masks to exercise greater caution. Dr. Shamasunder responded that, in the Navajo Nation, where families with four generations sometimes live under one roof, he had patients in their 40s who were close to being intubated, while the grandparents, also infected, fared better. A 40-year-old with comorbidities might suffer more from the disease than an 80-year-old without underlying illnesses.

UCSF Health Chief Executive Officer Mark Laret praised the teams for their courage and work and expressed UCSF's gratitude to them.

President Napolitano stated that the University was inspired by and grateful for the work of these teams. She asked how the delegation to the Navajo Nation dealt with communication in cases of patients who spoke only the Navajo language. Dr. Shamasunder responded that the team relied on Navajo nurses and nursing assistants to provide translations. This situation illustrated the importance of language and trust.

Regent Pérez noted that, while much national attention had been paid to the COVID epicenter in New York, there was not the same awareness of the crisis in the Navajo Nation. It was important the UC went to assist in the Navajo Nation. This case also demonstrated the importance of cultural and linguistic competency in medicine. He referred to Dr. Campbell's statement that most of the patients in New York were Latino(a). There was a high incidence of COVID-19 among the Latino(a) population in San Francisco as well. There was also a high percentage of COVID-positive individuals of any ethnicity who had to work outside the home and could not shelter in place. He asked about these factors in light of the patients Dr. Campbell had seen in New York. Dr. Campbell responded that he did not have an answer. When most patients arrived at the hospital, they were very ill, and there was no time to find about their life history. In addition, their families could not join them. It was the case at UCSF that many COVID patients were people who worked outside the home and were not sheltering in place, such as Uber drivers. This might have also been the case in New York City, but Dr. Campbell did not have the answer.

Regent Butler stated that these reports were inspiring. She asked about the social mission of the HEAL Initiative, its correlation with demographic diversity, and if lessons from the HEAL Initiative were being applied in the UC system to diversify the medical profession. Dr. Shamasunder responded that black and Latino(a) applicants to the HEAL Initiative were motivated to join because they had seen disproportionately poor health outcomes in their communities. The experience they gained in the HEAL Initiative would help them serve in these communities. It was important to create and support pathways like this to train healthcare providers for underserved communities.

Regent Park reflected on health disparities and underlying conditions, which were like slow-moving accidents, damaging the quality of life, and now coming to a crisis point during the COVID-19 pandemic. One should not let these underlying conditions fester in

communities in the U.S. She asked what the University could do in its own regions to work with communities of color, especially the African American community, which had been hard hit by COVID-19. There was a need for immediate action. Dr. Campbell responded that many chronic health issues were swept under the rug, even by those who suffered from them. Diabetes was a major problem in the African American community. An important role for the University was to educate people about diseases. In this situation, chronic health conditions, which people might be inclined to consider not immediately dangerous, or dangerous only in ten, 20, or 30 years, might in fact become deadly very quickly. It was important to encourage individuals to seek out treatment. More education and treatment needed to be available in communities. Dr. Shamasunder added that there must be preferential options for underserved communities and an effort to anchor in these communities, the formation of long-term partnerships. Dr. Byington underscored the importance of being present in a community for the long term. UC could bring its students and trainees into these communities and create infrastructures for learning and providing service. Dr. Byington was eager to engage in this work.

Faculty Representative Bhavnani asked about the challenges and stresses for the UCSF volunteers. Dr. Shamasunder responded that the volunteers were close to the suffering and death of patients and at risk of infection themselves. The idea of maintaining "professional distance" sometimes broke down. The volunteers had sessions where they could speak of their concerns, and had access to UCSF support psychologists. Seeing this kind of suffering was a difficulty of the health profession.

Committee Chair Lansing thanked Drs. Campbell and Shamasunder for their presentations, which were a reminder of the purpose of UC Health.

8. **UC HEALTH FISCAL UPDATE AND COVID-19 RECOVERY STRATEGIES**

[Background material was provided to the Committee in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Interim Executive Vice President and Chief Financial Officer Jenny reported that the total financial impact of COVID-19 to the University through May 31, 2020 was estimated at $1.54 billion; $1 billion of this impact was to UC Health. This was a daunting number, but there were some positive trends. There would continue to be losses, but he pointed out that, while the growth in losses from March to April had been about 120 percent, from April to May it was only about 30 percent. In May, the University had estimated that total lost revenue systemwide would be $2.7 billion, but, based on UC's current position, it believed this loss would be below $2 billion; for the medical centers, the loss might amount to $1.3 billion to $1.4 billion. A loss of about $2 billion would represent a five percent impact in the fourth quarter of the fiscal year.

Mr. Jenny presented a list of COVID-19 cost impacts to the medical centers and clinical operations. Emergency medical services accounted for an impact of $140 million. This included purchases of personal protective equipment. He noted that the University was still in a phase of estimating; it had no firm understanding of the possible financial impact if

there were a second wave of COVID-19 in the fall, but UC was cautiously optimistic as patient services for non-COVID patients began to return. The impact to medical center revenues had been extraordinary, and many medical centers would take more than a year to recover.

Part of the recovery would be to reach out to the Federal Emergency Management Agency (FEMA). Chief Transformation Officer Dougie Graham explained that UC would receive FEMA funding only for the costs and expenses associated with delivering its response to COVID-19; this funding would not make up for revenue loss. At this moment, the University was ready to submit its application for FEMA funding in the range of $150 million to $160 million of COVID-19-related costs. There might be a minor discrepancy, as FEMA might not reimburse for the labor costs of care delivery. The University was working with advisors to ensure that it would claim every possible cent of FEMA funding. Mr. Graham anticipated that this application, for all UC medical centers, would be submitted by the end of the following week.

Chief Strategy Officer Elizabeth Engel reported that, since April 10, the U.S. Department of Health and Human Services (HHS) had distributed approximately $115 billion of the $175 billion in the Provider Relief Fund provided by Congress in the Coronavirus Aid, Relief, and Economic Security (CARES) and Paycheck Protection Program and Health Care Enhancement (Stimulus 3.5) Acts. Of these funds, UC Health had received $290 million, representing the UC share of $50 billion in General Distribution funding to hospitals and healthcare providers, and $194 million, representing the UC share of $10 billion targeted to safety net hospitals, for a total of approximately $484 million systemwide in federal relief funds. So far, this was the only relief funding that could be used by UC medical centers to offset lost revenue; FEMA funding could not be used for this purpose. There were other funding streams that UC medical centers might receive in the future. In additional direct funding, HHS was allocating an additional $10 billion to hospitals that had high numbers of COVID-positive inpatients. The University had not qualified for this funding at a previous distribution. There was also $60 billion in the Provider Relief Fund not yet allocated by HHS. Several UC medical centers had applied for telehealth grants from the Federal Communications Commission, with a limit of $1 million per applicant. Some CARES Act funding flowed through the State, and UC might be eligible for this funding. This included another $8.8 million in funding to California for the existing Hospital Preparedness Program. This funding could be used for purposes such as surge and isolation capacity. There was also $10.5 million in grants to California through the California Hospital Association. UC received about $200,000 in the initial round and expected another modest distribution. Notably, in the most recent stimulus bill, $11 billion was allocated nationally to States and localities for testing. This included funding for contact tracing and to support employer testing. There had not yet been any guidance about when or how these funds would be released, but UC would track this. There was also a State and local relief fund; while UC was exploring the possibility of obtaining some of this funding, given stretched State and local budgets, this seemed unlikely. While significant amounts were being appropriated at the federal level, UC's share of these funds had not offset the University's total losses of revenue. The U.S. Congress was in the process of debating a CARES Act 4, but UC was not expecting any major funding changes from

this Act, if and when the bill moved forward. UC Health, Federal Governmental Relations, and finance divisions at the Office of the President were examining all possible funding opportunities.

Executive Vice President Byington then presented a chart showing the systemwide inpatient occupancy rate from April 21 to June 11. The rate was currently about 75 or 76 percent. There was variation across the system, which reflected local conditions and the fact that the number of COVID-19 cases in Southern California had not declined. With regard to ambulatory patient volume, UC Health was working to ensure that outpatient visits return to normal levels. A chart with data on weekly ambulatory visit volume from February 3 to June 7 indicated that, before the COVID-19, there had been few telehealth patient visits. During March, UC Health was able to transition to offering a large number of telehealth visits. At this point, in-person ambulatory visits were increasing, and the number of telehealth visits was declining. Even with a combination of telehealth and in-person visits, UC Health had not yet returned to its pre-COVID levels of ambulatory patient visits. An important current topic for UC Health was how to leverage what has been learned during the COVID-19 pandemic to increase access systemwide and the possible development of new service lines. Even as in-person visits increased, UC Health would preserve its telehealth capacity and use it in new ways.

UC Davis Human Health Sciences Vice Chancellor David Lubarsky reported that patient volume levels at UC Davis had fully recovered. The hospital census capacity the previous day had been 96.5 percent. The hospital was in fact full. Compared to pre-COVID levels, ambulatory volumes were at 105 percent, surgeries were at 105 percent, and emergency department volume at 95 percent. UC Davis had been fortunate in securing supply chains and personal protective equipment early on, in January. As a partner in the State's COVID-19 Testing Task Force, UC Davis had been able to receive preferential assignment of reagents.

UC Irvine Health Chief Executive Officer Chad Lefteris reported that UC Irvine was experiencing a late surge of COVID-positive patients over the past ten days, with 48 patients that day. This was being closely monitored. At the same time, UC Irvine was increasing its other services. Inpatient census was approximately 90 percent, while ambulatory visits were at 118 percent. Twenty percent of ambulatory visits were telehealth visits. Mr. Lefteris anticipated that telehealth would continue to be used and become a new norm. Compared to pre-COVID levels, surgery volume and emergency department volume were around 90 percent. UC Irvine had taken COVID patients from the border region to help UC San Diego and others address the outbreak there. UC Irvine laboratories were providing testing for healthcare providers in Orange County.

UCLA Health President Johnese Spisso recalled that, prior to COVID-19, the UCLA hospitals operated at 95 percent to 105 percent occupancy. The UCLA Medical Center was 99 percent occupied that day. The Resnick Neuropsychiatric Hospital was at 95 percent occupancy, the UCLA Santa Monica hospital was at 87 percent, and the Mattel Children's Hospital at 99 percent. Emergency department visits had increased to about 75 percent of pre-COVID levels. Operating room, ambulatory surgery, and interventional procedures

were at 85 to 90 percent of pre-COVID levels. UCLA's network of 180 clinics had averaged about 50,000 visits a week before the COVID pandemic. These visits had been increasing and were now about 42,000 per week; UCLA expected that this volume would return to 100 percent in the next two weeks. About 75 percent of these visits were now in person, and 25 percent via video or telephone. During the entire pandemic, oncology patients were still able to come into clinics and receive treatment. With regard to COVID testing, UCLA could perform over 1,300 PCR tests and 300 serology tests daily. To date, UCLA had tested 30,000 patients, with about 1,200 testing positive. UCLA had hospitalized 275 COVID patients. The peak census of COVID inpatients was about 60 patients several weeks prior; UCLA now had 20 to 25 patients per day. UCLA was fortunate in having sufficient supplies and personal protective equipment and was sharing these resources with its training partners at Harbor-UCLA Medical Center, UCLA-Olive View Internal Medicine Residency Program, and the Venice Family Clinic, which provides services to about 40,000 underserved patients. UCLA was providing expertise to community businesses about restarting operations.

UC San Diego Health Chief Executive Officer Patricia Maysent commented on how difficult it had been for UC San Diego patients not to be able to have visitors. Hospital personnel were using FaceTime and iPads to connect patients and families. UCSD's work on COVID-19 had begun 133 days prior with the first flights from Wuhan. UCSD Health learned a great deal in the early days of the COVID outbreak, implementing personal protective equipment and testing, and establishing command centers. Compared to pre-COVID levels, UCSD had returned to 93 percent of inpatient census, 101 percent of perioperative care volume, 83 percent of ambulatory care, with a fair number of visits via telehealth. For a while, the telehealth volume accounted for almost 50 percent of visits. In-person visits were now increasing. Telehealth visits were decreasing, but Ms. Maysent did not expect these to decrease below 30 percent of the total. UCSD Health had been active in Imperial County and across the border in Mexico. There was a COVID crisis in Imperial County. Two months earlier, UCSD teams went to Tijuana to provide personal protective equipment and critical care protocols. Many older physicians in Tijuana hospitals had been called off or become ill. UCSD teams were checking on patients in Tijuana daily. Mexicali was another center of COVID-19 infections, and a UCSD team had gone there the previous week. At the beginning of the COVID-19 outbreak, UCSD anticipated that the El Centro Regional Medical Center would see a high number of COVID cases and that there was a need for supporting critical care capacity. Before COVID-19, this hospital was able to keep six patients a day in critical care, with other patients transferred out of the region. At this point, El Centro was able to treat 40 COVID patients, with supplies and support from UCSD. Ms. Maysent anticipated that UCSD would continue to see the same numbers of patients, with patients transferring to UCSD from the east and south.

UCSF Health Chief Executive Officer Mark Laret recalled that UCSF had treated its first COVID-19 patient in February. UCSF activities had decreased by 30 to 50 percent, whether admissions, emergency department, or operating room. UCSF was recovering, and surgical volume was now higher than in January and February. Ambulatory visits had returned to pre-COVID levels, although a large portion of these were telehealth visits. Inpatient activity was at about 88 percent. Emergency department visits had declined to about

50 percent of previous levels and were still at this low level. Mr. Laret emphasized that this down period had hurt faculty, many of whom relied on clinical income to support their salaries. Many UCSF programs relied on clinical income. This had also been a difficult time for staff with children at home or spouses laid off from work. UCSF faced challenges in maintaining social distancing in elevators and small spaces in Moffitt Hospital and in ambulatory care spaces. Demand for UCSF care was still great. UCSF was receiving over 35 patient transfers daily from other hospitals. Mr. Laret expressed optimism about UCSF's situation over the long term; there were near-term challenges.

UC Riverside Health Chief Executive Officer Donald Larsen reported that, while UCR did not have a hospital of its own, it had had a similar experience with ambulatory clinical care. UCR implemented telehealth and telephone visits in March; UCR had already been moving in this direction in psychiatry. Within 72 hours, UCR was able to reschedule almost all visits. Currently, UCR had returned to almost 80 percent of ambulatory volume. Like other locations, UCR was considering how to integrate telehealth into its care model now and in the future. UCR provided hospitalists for several community hospitals, and these hospitalists were continuing their activity. UCR had sufficient supplies and personal protective equipment. In March, UCR Health set up a hotline to answer employees' questions and it was assisting the campus with reopening.

Dr. Byington noted that UC Health had now conducted more than 100,000 tests for patients and perhaps an equal number for community health partners. She recognized the work of Chief Data Scientist Atul Butte on systemwide data dashboards and tools which allowed tracking of equipment and personnel. Standardized systemwide data sets that could be shared would continue to be important. Although UC Health appeared to have sufficient personal protective equipment at this time, this would be a concern in fall and winter during the influenza season. UC Health had a goal of maintaining 90 days of personal protective equipment on hand. Balancing COVID-19 and other needs and being prepared for a COVID-19 surge would be part of life at UC Health in the coming months and years, and this would entail ongoing costs.

Committee Chair Lansing noted that masks were currently not required in Orange County and asked if this accounted for the surge at UC Irvine. Mr. Lefteris responded that this was one of many factors. UCI Health Affairs Vice Chancellor Steven Goldstein added that UC Irvine had predicted this to some extent. Early cases of COVID-19, resulting from international travel, had appeared in the coastal region of Orange County, which was more affluent. UCI had expected and was now observing a slow, steady increase in COVID-19 cases in inland communities, which were less affluent, where people had to continue to go to work outside the home and lived in high-density environments. The lack of a mask order might lead to more COVID-19 cases in the coastal area.

In response to another question by Committee Chair Lansing, Ms. Spisso confirmed that UCLA's average daily census of COVID-19 patients was 25. Only about one-third of these patients were in the intensive care unit.

Regent Leib asked how the increase in telehealth would affect UC hospitals over time, and if reimbursement rates made this economically favorable for the University. Ms. Spisso responded that billing for telehealth services was at an intermediate level, not the same as for in-person visits. Telehealth allowed UC to expand its capacity in the same amount of physical space. UCLA Health Sciences Vice Chancellor John Mazziotta added that there was low absenteeism or "no show" rate for telehealth patients. In a city with traffic like Los Angeles, telehealth was a great convenience for patients. Telehealth might result in fewer referrals, and UCLA was starting to examine this question. Telehealth was more difficult for elderly patients. Mr. Laret stated that UCSF clinics were hospital-based, and UCSF was paid the same for telehealth as for in-person visits for commercially insured patients; however, UCSF was paid considerably less for telehealth visits by Medi-Cal and Medicare patients. UCSF was hoping to return in-person visits to pre-COVID levels and use telehealth for additional capacity. Mr. Lefteris noted that UCI Health might adjust its growth plans if more patient volume moved to telehealth. Dr. Larsen observed that it would be hard to take telehealth away from patients. The Centers for Medicare and Medicaid Services might make telehealth coverage permanent.

Advisory member Lipstein referred to Ms. Maysent's comments on how hospital personnel were using creative means to allow patients to communicate with their families and he emphasized the importance of families in the healing process. The presentation had indicated a $1 billion loss for UC Health and, potentially, $500 million in recovery from various federal sources. If no other federal or State sources were identified, he asked if UC Health would engage in cost reduction or recovery measures to make up the $500 million. Dr. Byington responded that this was discussed regularly at the meetings of the chief executive officers. UC Health must look for ways to reduce costs and become more efficient, and for new sources of revenue as well. This acute financial loss would not be recovered in one year, but over time. It placed stress on the entire UC Health system.

Regent Park asked about the risk to UC Health revenue due to unemployment and a change in the payer mix. She asked about the level of risk and what UC should expect, given that unemployment would be more severe during this crisis than during the last recession. Mr. Jenny responded that UCSF's models took degradation in the payer mix into account. This was a significant factor. UC had not yet seen much change in its payer mix, but as people ran out of coverage, this was a great risk for UC. This varied by medical center, depending on unemployment rates in different regions. Ms. Maysent stated that UCSD Health was observing this degradation and movement to Medi-Cal. UCSD had stopped or delayed a number of capital projects and was recalculating its business models for projects. There would be a material effect on UCSD Health operations. UCLA Health Chief Financial Officer Paul Staton reported that Los Angeles County projected that Medicaid enrollments would increase by about 14 percent. For next year's budget, UCLA was modeling a ten percent shift from commercial insurance to Medicaid. For UCLA, this would result in $70 million less revenue, a substantial impact. Ms. Spisso stated that, in Los Angeles County, another 600,000 people were expected to move from commercial insurance to Medicaid. UCLA Health would have to work to make its operations more cost-effective. Mr. Laret noted that UCSF had not yet experienced a degradation in payer mix, but expected a five percent degradation over the course of the next year, and this

would have a significant impact on the UCSF budget. Mr. Lefteris stated that UCI Health was beginning to see a small degree of degradation. Dr. Mazziotta commented that, while hospitals were recovering, surgeons had experienced a loss from not having work for two months, and there was a $100 million hole in the UCLA Health budget that would take time to fill. Ms. Maysent stated that UCSD Health also had a $100 million gap to make up. UCSD was continuing to make changes to its labor profile and non-labor expenses. UCSD was taking measures such as not filling positions, not using contract labor, and temporary reductions in time. Mr. Laret stressed that UC was a major employer, and that many UC employees had commercial insurance. One way of preserving jobs inside UC was to seek to redirect premium dollars to UC employee health plans and to encourage employees to receive their care at UC medical centers. Dr. Lubarsky expressed agreement, noting that these monies would flow into UC Health and could be used for teaching, research, and training.

Regent Park asked if the projected 14 percent growth in Medi-Cal was based on unemployment numbers, and about the correlation between unemployment and growth in Medi-Cal. Ms. Spisso responded that, in Los Angeles, Medi-Cal and Medicaid growth had been tracking unemployment. In response to another question by Regent Park, she acknowledged that not all individuals would qualify for Medi-Cal and that UCLA would have a large percentage of patients as charity care, with no compensation. Dr. Byington concluded that UC Health would discuss these issues, among others, at its July strategic planning session.

9. **OVERSIGHT EXPECTATIONS UNIQUE TO HEALTH CARE BOARDS**

[Background material was provided to the Committee in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Committee Chair Lansing stated that this item would be deferred.

Faculty Representative Bhavnani thanked Advisory member Hetts for his service on the Committee and to the Academic Senate. The next advisory member to the Committee would be Andrew Bindman. Dr. Bindman was Professor of Medicine and Epidemiology at UCSF. He was a primary care physician with federal and State health policy experience. He worked in the U.S. Department of Health and Human Services in 2016 until the end of the Obama administration. He was the founding director of the California Medicaid Research Institute, and, in 2018, he authored a report for the California Assembly Select Committee on Health Care Delivery Systems and Universal Coverage on proposals to expand coverage and access in California. He was currently leading a UC-based team in support of the work of the Healthy California for All Commission.

Committee Chair Lansing also expressed thanks to Dr. Hetts.

The meeting adjourned at 2:50 p.m.

Attest:

Secretary and Chief of Staff