The Regents of the University of California

HEALTH SERVICES COMMITTEE

February 10, 2021

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 Blum, Guber, Lansing, Makarechian, Park, Sherman, and Zettel;

Ex officio members Drake and Pérez; Executive Vice President Byington; Chancellors Block, Hawgood, and Khosla; Advisory members

Ramamoorthy and Spahlinger

In attendance: Regents Leib, Muwwakkil, Reilly, Stegura, and Sures, Regents-designate

Lott and Zaragoza, Faculty Representatives Gauvain and Horwitz, Secretary and Chief of Staff Shaw, Deputy General Counsel Nosowsky, Executive Vice President and Chief Financial Officer Brostrom, Vice

Presidents Brown and Nation, and Recording Secretary Johns

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

1. **PUBLIC COMMENT**

Committee Chair Lansing explained that the public comment period permitted members of the public an opportunity to address University-related matters. The following person addressed the Committee concerning the item noted.

David Warren reported that he and his wife were patients at the UC Davis Medical Center, which had outstanding physicians; however, in the emergency department, floors were not always cleaned and there was sometimes a lack of blankets or pillows for patients. When a neurologist from Stanford Health asked the UCD emergency department to provide certain tests for Mr. Warren's wife, UCD refused. Mr. Warren had spoken with UC Davis Health representatives about his concerns. He asked that UC Davis Health cooperate with doctors at other facilities and that direction be provided to the emergency department to address his concerns.

2. APPROVAL OF MINUTES OF PREVIOUS MEETING

Upon motion duly made and seconded, the minutes of the meeting of December 15, 2020 were approved, Regents Blum, Drake, Guber, Lansing, Makarechian, Park, Pérez, Sherman, and Zettel voting "aye." ¹

Committee Chair Lansing welcomed Advisory member Sonia Ramamoorthy to the Committee. Dr. Ramamoorthy was a surgeon at UC San Diego and filled the position on

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

the Committee that was designated for a member of the Academic Senate holding clinical appointments at one of the University's health sciences schools.

President Drake reflected on the current moment, the beginning of the second year of the COVID-19 pandemic. Unfortunately, the direst predictions made in spring 2020 regarding mortality had been exceeded. The fall surge was worse than expected. The pandemic had been devastating to many people around the world but now appeared to be on a downward trajectory. There were new COVID-19 variants and certain behavioral patterns had thwarted public health efforts. President Drake praised the frontline workers in emergency rooms and intensive care units, food service workers, and people engaged in testing and vaccinating, who had done yeoman's work on a daily basis to deal with the pandemic in the most effective manner. He expressed appreciation for their work, which kept society safe in the face of the pandemic, and thanked all those at UC Health involved in these efforts.

President Drake commented on a few developments at UC. A COVID-19 vaccination clinic at UCSF was focused on patients over the age of 75, and, while on campus, President Drake had observed a steady stream of patients coming to be vaccinated. UC Davis had recently been featured in an article in the *New York Times*, which reported that UC Davis, in addition to taking care of its healthcare workers, was opening up a program to take care of all residents in the City of Davis, providing free testing to help keep the community safe. This was a great example of what public research universities can do. There had also been attention by the news media to UC San Diego's "Return to Learn" program. More students had returned to UCSD than to any other UC campus, but the campus had maintained a very low COVID-19 positivity rate throughout the fall. The rate had increased slightly in January but was now down to below one percent. Overall, UC campuses now had positivity rates lower than one percent; some campuses had rates lower than 0.5 percent. President Drake expressed pride in work being done on all the campuses to help move toward the end of the pandemic.

3. UPDATE OF THE COVID-19 IMPACT ON THE UNIVERSITY OF CALIFORNIA: UC HEALTH ISSUES

[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 welcomed Advisory member Ramamoorthy, who was Chief of the Division of Colon and Rectal Surgery at UC San Diego. Dr. Ramamoorthy was a physician scientist and an expert in colon cancer.

Following a career of 40 years at the University, UCSF Health Chief Executive Officer Mark Laret had announced that he would be retiring at the end of the calendar year. Dr. Byington expressed gratitude for his service.

The past week, February 6 had marked the one-year anniversary of the first U.S. death from COVID-19 in Santa Clara County. There had now been more than 460,000 deaths in the

U.S., and Dr. Byington predicted that this number would reach 500,000 by early March. This was a number no one could have contemplated a year earlier.

Case counts were now declining in the U.S., but there were still a seven-day average of 125,000 cases per day. Testing had confirmed more than 26 million cases in the U.S., and medical professionals and others multiplied this number by four for an estimate the total number of COVID-19 cases. One estimated that about 100 million people, almost one-third of the U.S. population, had had COVID-19. The death rate was declining, but there were about 3,500 deaths per day. Dr. Byington recalled that, at the January Regents meeting, the U.S. had just reached 400,000 deaths; in 24 days since then, about another 70,000 people had died of COVID-19.

Maps of COVID-19 hot spots for February showed that intensity had decreased from January to February. California had improved significantly. The goal continued to be to contain COVID-19 through public health measures and vaccinations. Daily reported new cases were declining in California, and Dr. Byington hoped that the number of daily reported deaths would decline in the coming month. Deaths in California had exceeded 40,000. One out of every 1,000 Californians had died of COVID-19 in the last year. January was the deadliest month and difficult for UC Health. One-third of all deaths experienced in California occurred in January 2021. The epicenter was Los Angeles County, with almost 6,000 deaths in January alone.

Dr. Byington raised the question of who was dying of COVID-19 in California. A study that had just been published showed excess mortality in the 18 to 65 age group by occupation. Working-age adults experienced a 22 percent increase in mortality compared to prior periods. Excess mortality was highest among food and agricultural workers, who experienced a 39 percent increase in mortality; transportation workers, who experienced a 28 percent increase; and manufacturing workers, who experienced a 23 percent increase. Latinos had the highest increase in mortality, at 36 percent, and 59 percent of this increase was in the agricultural sector. African Americans had a 28 percent increase, with 36 percent in the retail sector. Asian Americans had an 18 percent increase, with 40 percent in the healthcare worker occupation. Whites had a six percent increase, with the largest part of the increase among agricultural workers. This information was critically important for the next phase of vaccine distribution and for efforts to reach individuals who were essential workers and who had suffered significantly during this pandemic.

UC Health experienced some of the highest rates of inpatient mortality in the first surge of the pandemic. There was a decrease in these rates during the second surge. Now, in the third surge, UC was seeing high inpatient mortality rates in seniors: 12.5 percent among patients aged 70 to 79, and 21 percent among patients 80 years and older in December 2020. Final January figures were not yet available, but Dr. Byington expected them to be high as well. There were many reasons for the high numbers, including overcrowding within facilities, difficulty in obtaining care, health declines that occurred during the pandemic, lack of usual care, and, perhaps, COVID-19 variants.

Most California counties were still in the purple tier of positivity rates, with 99.9 percent of Californians living in counties with widespread transmission. The state was not ready to decrease vigilance. All UC facilities were located in counties with widespread transmission.

In January, almost 21,000 patients with COVID-19 were hospitalized in California, and this caused great stress for all California health systems, including UC Health. Earlier that week, the number had decreased to 13,000, and it was continuing to decline. This was giving some respite to hospitals.

A chart with numbers of UC Health COVID-19 inpatients showed that the third surge was now declining. UC currently had 441 COVID-19 inpatients, down considerably from a peak of 806, but this was still a high baseline, and almost twice as high as during the summer surge. It was important to reduce these numbers. There was a risk of a fourth surge, should the COVID-19 variants begin to spread rapidly. In order to protect hospital capacity, UC did not wish to enter a fourth surge with such high numbers of inpatient hospitalizations.

Dr. Byington presented charts with UC medical center operating statistics through December 2020. UC was seeing as many patients as in the past, and sometimes even more. In ambulatory and virtual visits, UC Health was seeing more patients than it had in 2019 and early 2020. Emergency department visits continued to be lower than during fiscal year 2020. Compared to fiscal year 2020, the number of hospital discharges was similar, the average daily census was similar or higher, and the number of paid full time equivalent employees was similar.

Given the declines in case count, test positivity rates, and inpatient and intensive care unit admissions in California, the State had lifted the statewide "stay at home" order on January 25. Dr. Byington cautioned that there was still significant COVID-19 transmission in the majority of California counties, COVID-19 variants continued to be a threat, and one needed to continue practicing non-pharmaceutical interventions as California raced to get as many people as possible vaccinated.

In the next phase of the pandemic, community partnerships would be vital in order to reach communities that might not have good access to health care and communities that have been marginalized, and in order to achieve the public health goal of ending the pandemic. Working with community partners was part of UC's and UC Health's public service mission. Dr. Byington presented a few examples of thousands of interventions that were taking place across the UC system. A partnership of UCSF and the Latino Task Force, called Unidos en Salud, had earlier brought diagnostic testing to San Francisco's Mission District, and had now set up a vaccine clinic. The entire UC Health system was involved in a new partnership with Merced County, UC Merced, Merced College, and Mercy Medical Center which would allow delivery in the next week of approximately 3,000 vaccinations to high-risk individuals and those 65 and older in Merced County. Merced County was struggling to vaccinate its population of approximately 300,000. The prior week, UC San Diego, in partnership with San Diego County, Petco Park, and the San

Diego Padres, had delivered more than 100,000 vaccinations to this community. This work had been recognized nationally, including by members of the Biden administration's COVID-19 task force as a model for the nation.

At this moment there was a limited vaccine supply. Individuals in high-risk categories were being immunized. Dr. Byington believed that more vaccines would be available in the next month. It would then be vitally important that all Americans choose to receive the vaccine. Addressing individuals' concerns about the vaccine and giving people confidence in the vaccine was an important goal of UC Health. UC Irvine, in partnership with Orange County and the Orange County Asian Pacific Islander Task Force, was addressing vaccine hesitancy in the Asian American community, who represented about 20 percent of the population of Orange County. This community had experienced disparities in deaths from COVID-19. UC Irvine and its partners were working to increase information about vaccines, translate materials into appropriate languages, and develop mobile vaccine pods to be deployed in communities at high risk.

UCLA, working with partners in Los Angeles County to provide COVID-19 education, had distributed more than 30,000 "Keeping U Safe" bags, which contained masks, hand sanitizers, soap, information, and food. UC Davis partnered with the City of Davis to offer free testing up to twice a week to everyone living in Davis, California. This program distributed masks and offered quarantine housing. It had received national attention and was also recognized as a model for the nation in keeping communities safe.

Dr. Byington reported that UC Health was able to vaccinate 88,000 of its employees in the first month of vaccine availability. The first date of vaccination was December 16, 2020 for the first dose and January 16, 2021 for the second dose. These vaccination dates were shown on a chart which tracked the third COVID-19 surge after Thanksgiving, which was also the period when vaccinations began. During that period, 431 UC Health workers tested positive each week, or 3.8 percent each week over a period of eight weeks. After the second vaccine dose, in late January, the positivity rate had declined to 171 employees per week, or 1.6 percent. This was a highly significant statistic, and Dr. Byington believed that it was entirely due to the vaccine. Two weeks after the second dose there were 94 positive tests per week, and this week there had been 71 positive tests. The vaccine was working and keeping UC healthcare providers safe. The vaccine would do the same for all essential workers, and for everyone else.

Dr. Byington discussed three new vaccines. The first was the Novavax protein subunit vaccine, a two-dose vaccine that was refrigerator-stable for up to three months, which was an excellent advantage. This vaccine had completed a phase three trial in the United Kingdom and demonstrated 89.3 percent overall efficacy, including 85.6 percent efficacy against the U.K. COVID-19 variant and 95.6 percent efficacy against the original strain. This was excellent news. Phase three trials for the Novavax vaccine were ongoing in the U.S. and might be completed in the next month, and subsequently ready for presentation to the U.S. Food and Drug Administration (FDA).

The second vaccine was the AstraZeneca chimpanzee adenovirus vaccine, a two-dose vaccine developed in collaboration with Oxford University. More data about this vaccine had appeared this week. There was considerable variation in efficacy depending on trial arm and doses received. There was some concern in Germany about the efficacy of this vaccine for people over age 65. There was also concern about its efficacy against the South African COVID-19 variant. Nevertheless, this vaccine had been approved in the U.K. and the European Union for emergency use. Dr. Byington was waiting for full trial information about this vaccine to be presented to the FDA.

The third vaccine, the Janssen/Johnson and Johnson vaccine, was also an adenovirus vector vaccine. This was a single-dose vaccine, which was very significant and would make delivery easier. The data for this vaccine showed 66 percent efficacy overall. Trials were conducted in countries with COVID-19 variants. Efficacy in the U.S. was 72 percent. This vaccine was shown to be 85 percent effective against severe disease, and 100 percent effective against death. This vaccine would be considered for emergency use authorization by the FDA on February 26. Dr. Byington hoped that this vaccine would be authorized for use in the U.S. She presented a chart with information indicating that a single-dose vaccine that can confer protection of at least 55 percent would avert as many infections as a two-dose vaccine with 95 percent efficacy. Although the Johnson and Johnson vaccine appeared to have lower efficacy than the mRNA Pfizer and Moderna vaccines, it represented a good result and was a vaccine that would help control the pandemic.

In all the vaccine trials for the Moderna, Pfizer, Novavax, AstraZeneca, and Johnson and Johnson vaccines, zero individuals were hospitalized for COVID-19, died from COVID-19, or died from the vaccine. These vaccines were needed to end the pandemic. In the U.S. at this point, about 32 million people or ten percent of the population had received one dose, while about 2.5 percent had received two doses and were considered immune. President Biden had earlier announced a goal of one million or more vaccinations each day for 100 days. In January, Dr. Byington had felt that this goal was not ambitious enough and that the U.S. could do better. In fact, President Biden's team had increased the goal to 1.5 million doses per day. With the correct vaccine supply, Dr. Byington believed that it would be possible to approach two million doses per day. Since January 23, more than one million doses per day had been distributed. As of February 6, about 1.4 million to 1.5 million doses were being distributed each day.

Dr. Byington presented a chart showing the pathway to herd immunity in the U.S. Total herd immunity in the U.S. at this moment was estimated at 32 percent, or almost one-third of the population. Most of this immunity came from past infection, but vaccination rates were accelerating. There was also good news from a study by the U.K. Biobank. The study followed 705 participants with COVID-19. Of the participants, 99 percent who had tested positive for previous infection retained neutralizing antibodies for three months after being infected, and 88 percent continued to have neutralizing antibodies after six months.

At this moment, UC Health had probably administered more than 300,000 vaccinations. UC Health had offered the vaccine to all its employees in the State's Phase 1A category; 88 percent of these employees had received one dose, and 65 percent had received the

second dose. UC Health was now immunizing the Phase 1B category at all medical centers, at all campuses since February 1, and in many communities. UC Health had reported to Governor Newsom that it was capable of administering 300,000 vaccinations per week, and UC hoped that there would be a vaccine supply to enable this work. If this supply became available, the next issue that needed to be addressed was vaccine disparities. The Centers for Disease Control and Prevention (CDC) found that, during the first month of vaccinations, there were disparities among the 13 million people receiving at least one dose of vaccine. The majority of those vaccinated were women, over the age of 50, and 60 percent were non-Hispanic whites. It was necessary to ensure equitable administration to all persons in each vaccine priority category, especially those with the highest risk of infection and severe health outcomes.

Regent Makarechian referred to past projections about months of the year when there would be higher COVID-19 transmission rates and asked about the relationship of cooler and warmer climates to transmission. Dr. Byington emphasized that January had been the deadliest month for COVID-19 in the U.S. Although the rates were declining, mortality from COVID-19 was much higher at this point, in winter, from December to February, than it had been in summer. It was the general view of medical professionals that transmission was lower in the summer due to heat and humidity, and because people can be outdoors and maintain distance. The coronavirus preferred colder temperatures, and people are indoors in winter, making transmission of the virus easier.

Regent Makarechian noted that construction workers were also at high risk for COVID-19 infection. He asked if UC was enforcing mask wearing on its construction sites and educating contractors and construction workers about COVID-19. Dr. Byington responded that was an area that needed attention. In the U.S., the pandemic had been addressed differently by the different states and counties. There had been little agreement or uniformity on mask wearing guidelines. She expected the CDC to issue new mask guidelines soon. It was important to educate the population so that people are safe in their workplaces.

Regent Makarechian asked again if UC had guidelines for its own construction projects. Dr. Byington responded that the systemwide public health group was considering education measures, including mask guidelines. She would find out what the UC requirements were for construction workers.

Regent Makarechian referred to the finding that COVID-19 antibodies were still present after six months. He asked if people who have had COVID-19 should still take the vaccine. Dr. Byington responded that it was recommended that everyone be vaccinated. It was recommended by some in the CDC that people who had had COVID-19 within the last 90 days wait and allow others to be vaccinated first. Dr. Byington recommended that everyone be vaccinated when their turn comes.

Regent Makarechian asked what the vaccine would do for someone who already had antibodies. Dr. Byington explained that the vaccine would boost that person's antibody

status, create more specific antibodies, and, it was hoped, prolong protection against COVID-19.

Committee Chair Lansing asked if the vaccine would be effective for as long as the natural antibodies were, now known to be six months. Dr. Byington responded that duration of the natural antibodies was known for people who had had natural infections. One did not yet know the duration of the vaccine antibody, and this was under active investigation. All the pharmaceutical companies who had produced vaccines would follow vaccine trial participants for two years to determine how long the vaccine antibody lasts.

Committee Chair Lansing asked if a person who has received the vaccine should be tested for antibodies. Dr. Byington responded that she would not suggest this for the general population. Committee Chair Lansing asked if a vaccinated person who did not have antibodies would still be protected. Dr. Byington responded that all trial participants who were vaccinated developed antibodies. The duration of the antibodies was not yet known. Committee Chair Lansing asked about data that had been presented by Pfizer and Moderna. Dr. Byington responded that these companies had data for two months when they made their presentations to the FDA.

Regent Zettel referred to information on a slide shown earlier. She was surprised that cooks were among the workers at higher risk for infection, since they generally do not interact with the public. Dr. Byington responded that essential workers were at risk in the workplace. Mask-wearing might not be universally practiced in kitchens, and these were closed spaces. These workers had been interacting with the general public in those places where indoor dining has been allowed. Better education and protection was needed for these workers, especially with new variants which made COVID-19 more easily transmissible.

Regent Zettel noted that UC Irvine and Lawrence Livermore National Laboratory were working to develop vaccines that would be effective for all COVID-19 variants. She asked how soon these might these be available. Dr. Byington responded that a universal coronavirus vaccine was a high priority for biosecurity in the U.S. and around the world. She remarked that, if one had asked her this question last year, she would have answered that this would take a decade or more. Much had been learned in the last year about vaccine development. The companies that had developed the vaccines recently approved were already working to adjust these vaccines to address the COVID-19 variants. Dr. Byington was optimistic that work being done now to develop a universal COVID-19 vaccine would be successful. This might take a year or more, but, based on vaccine development in the past year, she believed this might occur sooner rather than later.

Regent Zettel asked if the coronavirus vaccine would become an annual vaccine, like the influenza vaccine. Dr. Byington responded that this was not yet known. It would not be surprising if this became an annual vaccination. One did not yet know the long-term duration of the vaccine antibody.

Committee Chair Lansing asked about the Pfizer and Moderna vaccines, protection against the South African COVID-19 variant, and booster shots. Dr. Byington responded that antibodies from the influenza vaccine last only about six months. The duration for the coronavirus vaccine was not yet known. The matter of COVID-19 variants was a different question. She believed that the current vaccines provided good protection against the U.K. variant and some but not as good protection against the South African variant. It was possible that vaccines would be adjusted and that there would be booster shots for protection against variants. As mentioned earlier, UC Irvine was working on a universal coronavirus vaccine.

Regent Sherman asked if UC Health was using dead space syringes in vaccinating people. Dr. Byington responded that UC Health was using these syringes when they were available, but they were in short supply. These syringes allowed for potentially getting an extra dose from the Pfizer vial. Regent Sherman asked if this would result in 20 percent more vaccine. Dr. Byington confirmed that the vials were meant to contain five doses; however, with these syringes, one could often get a sixth dose.

Regent Leib asked about the Brazilian variant and vaccine effectiveness against it. Dr. Byington responded that vaccine trials in Brazil showed that the existing vaccines' efficacy against this variant was lower, around 49 to 50 percent. Parts of Brazil were thought to have achieved herd immunity through natural infection, but they were now experiencing a tremendous surge in infections among this supposedly immune population. Their natural immunity did not appear to defend against the new variant.

Regent Leib asked if the vaccine antibodies would protect better than natural antibodies against this variant. Dr. Byington responded that this was not yet known, but there was hope that this would be the case and that the vaccines, especially the mRNA vaccines, could be changed to match variants.

Regent Park asked if immunity after infection would continue to be studied and tracked for a year and two years after infection. Dr. Byington responded that the U.K. Biobank study was following immunity over time. She expected that the data presented for six months would be updated at one year. UC Health was also interested in tracking the immunity of its healthcare workers and would seek to enroll them in a study to do this.

Regent Park referred to a slide with information indicating that herd immunity would be achieved when 91 million people had immunity from a past infection. Current known infection rates in the U.S. were less than 30 million, although the number of people infected in reality exceeded the confirmed number. She asked if the 91 million number was still valid. Dr. Byington responded that this number was based on mathematical models. It was an estimate, and it was modeled by the day, with changes over time as estimated natural immunity wore off. The investigator who developed this model had provided accurate predictions of COVID-19 cases and deaths in the U.S.

Regent Park recalled the statement that a single-dose vaccine that can confer protection of at least 55 percent would avert as many infections as a two-dose vaccine with 95 percent

efficacy. She asked if this was due to compliance issues, or to possible infection in the time between the first and second dose. Dr. Byington responded that a challenge of multi-dose vaccines was that it took longer than it should to reach everyone. There were currently delays in supply, which could be problematic. It could also be challenging for elderly individuals without transportation to follow up at the right time. Ensuring that everyone received the second dose was a challenge. If solid immunity could be achieved with one dose, it would be much easier to reach the goal of high vaccination rates. Single-dose vaccination was a goal for vaccine programs, but this had not been achieved for every disease. One should receive a tetanus shot every ten years throughout life.

Regent Park referred to information presented earlier on excess mortality among agricultural workers. She asked if anything was known more precisely about this excess mortality and where these workers were being infected, whether in fields or in processing plants. Dr. Byington responded that excess mortality was found among agricultural field workers and people working at close quarters in processing plants.

Regent Park asked if infections among field workers, who were outdoors, was due to a lack of personal protective equipment. Dr. Byington responded that being outdoors was safer in general, but it was not perfectly safe to be outdoors with others without masks. Agricultural field workers might also congregate during meal times or when commuting to and from work.

Regent Guber observed that there was confusing messaging to communities of color and disadvantaged communities, and wondered if news about the different variants and vaccines was causing delay in the acceptance of the vaccine. He asked about protocol and messaging. Dr. Byington responded that one of the biggest failures of this pandemic had been a lack of consistent messaging, simple guidance that was easy to understand. This guidance was that (1) vaccines work and (2) you should take whichever vaccine was offered to you when it was your turn. This needed to be communicated about vaccines and non-pharmaceutical interventions such as masking. Clear guidance was needed for all the U.S. in order to bring the pandemic under the best control possible.

4. **CONSENT AGENDA**

A. Approval of Sacramento Ambulatory Surgery Center, 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 Sacramento Ambulatory Surgery Center (SASC Project) and subsequent presentations and requests to the Finance and Capital Strategies Committee at its future meetings for approval, including approvals of (1) preliminary plans funding and (2) budget, external funding, and design following action pursuant to the California Environmental Quality Act (CEQA) for the SASC Project, and (3) any amendment or modification to the foregoing.

[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 Davis Human Health Sciences Vice Chancellor David Lubarsky explained that there were no added costs to UC Davis Health's Capital Financial Plan in connection with the Sacramento Ambulatory Surgery Center project and no added ambulatory surgery operating rooms in the planned building. There was no change in UC Davis Health's borrowing or strategic approach. The campus had rebalanced the decision of where to spend money and where to locate 12 operating rooms that were already included in the Capital Financial Plan. UC Davis Health had funding to renovate its largest ambulatory building and to build four operating rooms on the main Sacramento campus, and had planned to buy or lease an additional eight operating rooms around the region to address burgeoning surgical volume, which had reached capacity in the main hospital. Based on the need for 23-hour admissions, which existing ambulatory surgery operating rooms could not provide, the fact that UC Davis Health could now build this facility on its main campus and append it to the hospital license, and the fact that this would increase margins for the organization, UC Davis Health had decided that it would be best to consolidate this facility on the Sacramento campus. There would be no additional operating rooms, spending, or borrowing. UC Davis had the money on hand to build this facility, based on earlier borrowing by UC. The campus was merely directing this funding to a more efficient and functional building. Dr. Lubarsky anticipated that the campus would present an item to the Finance and Capital Strategies Committee at the May meeting requesting preliminary plans funding for the project.

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

B. UC Health Capital Financial Plan

The President of the University recommended that the Health Services Committee waive its authority to review the UC Health-related projects included in the 2020-26 Capital Financial Plan approved by the Regents in November 2020, subject to the following conditions:

(1) The Health Services Committee's waiver shall not apply to the following projects:

UC Davis	Inpatient Regional Strategy
UC San Diego	Hillcrest Replacement Hospital
UC San Francisco	UCSF Benioff Children's Hospital Oakland Phase 2

- (2) The Health Services Committee's waiver shall apply only to the extent of UC Health-related projects at the medical centers and campuses occurring during fiscal years 2020-21 to 2025-26 (Waived Projects).
- (3) Any Waived Project requiring review, approval, concurrence, or other action by the Finance and Capital Strategies Committee shall require consultation with 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.]

Dr. Byington explained that this item requested that the Health Services Committee waive its authority, pursuant to Section H of the Committee Charter, to review the UC Health-related projects that were included in the University's 2020-26 Capital Financial Plan, which was approved by the Regents in November 2020. The waiver would not apply to certain projects set forth in the item due to size, scope, or strategic significance. The Health Services Committee approved similar waivers in February 2019 and February 2020. This item would supersede the previous year's waiver and was based on the recently approved 2020-26 Capital Financial Plan.

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

5. ANNUAL REPORT ON STUDENT HEALTH AND COUNSELING CENTERS AND THE UC STUDENT HEALTH INSURANCE PLAN

[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.]

Chief Medical Officer Brad Buchman presented the annual report on student health and counseling centers and the UC Student Health Insurance Plan (UC SHIP). He first discussed the student health centers' response to the COVID-19 pandemic. Testing of COVID-19 symptomatic students had increased from spring to fall 2020. Among the symptomatic students, there was a small and slowly increasing positivity rate. He presented data on the number of students who were isolated or quarantined on campus and off campus, and the number of student cases that were investigated. This required much time and effort by the student health and counseling centers, including work on nights and weekends, in order to address large outbreaks of 100 to 200 students. In the fall, almost 5,000 students had to be isolated or quarantined. The University had carried out a large number of screening tests for COVID-19. The campuses raced during the summer to create testing capacity, and carried out almost 300,000 tests in the fall. The test positivity rate was low at 0.56 percent. The campuses' efforts to keep students safe, along with public health measures, had resulted in lower positivity rates on campus than those found in the surrounding communities.

Dr. Buchman reported that UC SHIP was faring well. The prior year, UC SHIP decided to provide complete out-of-pocket expense coverage for all COVID-19 evaluation, testing, and treatment. In January 2021, the UC SHIP executive oversight board elected to extend this coverage through the end of the current plan year. The plan was in its renewal season. The anticipated base pooled renewal for this year was four percent, compared to 1.4 percent the previous year. Each campus had adjustments to this pooled renewal, based on the campus' population performance relative to the pool and plan design changes that might be made by the campus.

With regard to UC SHIP reserves, Dr. Buchman reported that UC had started, at the end of the last plan year, with a balance of approximately \$57 million. UC SHIP placed \$19.2 million of these reserves in the Total Return Investment Pool, where they earned about \$600,000 in interest. The remaining UC SHIP reserves funded a number of programs—Therapy Assistance Online, the Campus Medical Care Assistance Fund, which campuses can use to assist those students most in need for co-payments and out-of-pocket expenses, the Virtual Care Collaborative Pilot program, and the Non-Medical Transportation Pilot program, which provides transportation to and from medical and mental health office visits for students who do not have access by any other means.

Dr. Buchman then presented charts showing the total number of counseling visits by fiscal year and fiscal quarter from 2017 to 2020 and average number of visits per client for the same period. In the fall and winter quarters, there had been a decrease in the average number of visits per client over each of the past three years, but in the spring and summer quarters, especially this year, UC experienced a dramatic increase in this number.

Charts with data on average wait times for routine intake visits for this period showed that the average wait time was nine to 12 days. There was a significant decrease in spring 2020 to five days. The statistics on student access for urgent issues were favorable. More than 90 percent of those students were seen on the same day as requested, and 99 percent were seen within two days.

The average wait time for the first follow-up appointment showed an improvement over the past three fiscal years, from 23 to 18 days. There was variation in demand in the fall, winter, and spring quarters. The effect of COVID-19 on the campuses was shown in spring 2020, when the average wait for a follow-up appointment decreased to 11 to 12 days, and this number decreased to five days in summer 2020.

A chart with data on overall psychiatry visit volume for the same period showed that, when COVID-19 was beginning to appear in the news in the winter quarter 2019-20, there was a decrease in psychiatry visits, followed by a significant decrease in spring 2020. The average number of psychiatry visits per patient had remained stable during the three fiscal years, with a large increase in spring 2020. The average days' wait for a routine psychiatry intake visit was 11 to 13 days for the past three fiscal years; the quarter averages were 12, 13, and 14 days until spring 2020, when this decreased to seven days and remained at seven days for the summer. Dr. Buchman observed that there were fewer psychiatry visits in summer in general. The average wait time for the first follow-up psychiatry appointment

had decreased over the past three years from 39 to 26 days. In the winter and spring quarters of 2020, the wait times were 24 and 25 days, respectively. Student accessibility for psychiatry visits in summer was favorable.

Genie Kim, Director of Student Mental Health and Well-being in the Division of Graduate, Undergraduate and Equity Affairs at the Office of the President, introduced herself to the Committee. She had been in this new position for about five months. She recalled that, since 2005, UC had been using a tiered model for conceptualizing student mental health. Tier One represented critical mental health services, Tier Two was targeted intervention for vulnerable groups, and Tier Three was the goal of creating healthier learning environments. In her time at UC, Ms. Kim had already begun working collaboratively with UC basic needs functions to learn about critical services and support that have been developed. An expanded definition of basic needs included student mental health, as well as equity in access to services and care. Among the strategies that the University would like to implement this year was a systemwide survey for student mental health and wellbeing. All ten campuses had signed on to participate in the survey, which would provide insight into how COVID-19 had affected student mental health. Ms. Kim shared that one area of particular interest to her was establishing partnerships with the State to ensure that there is a continuum of care and to address treatment gaps for youth and the college-age population. This was based on knowledge of students' accounts of struggling to find care among county-, campus-, and community-based services. Ms. Kim also looked forward to working on a health equity framework, examining systemic challenges and reasons why some of UC's most vulnerable populations are not able to access services and studying evidence-based practices to develop a strategic framework for UC to ensure that the University was meeting the needs of its students. Finally, Ms. Kim was interested in innovation: what UC could do to support its students and to elevate its services in order not just to meet needs adequately, but to excel in the services and support it provides.

Regent Makarechian asked if the University collected data on the issues that students bring forward in counseling, such as financial issues, family issues, COVID-19, drugs, and alcohol. He asked that these data be shared with the Committee in order to see where efforts should be focused. Ms. Kim responded that these data were collected at the campus level. UC was considering how to aggregate these data effectively for reporting. Counseling centers collected data on diagnoses and treatment, and this could be shared with the Regents. Dr. Buchman added that students complete a screening questionnaire before counseling visits and participate in an outcome survey which helps UC monitor progress over time. The trends that the University was observing were an increase in anxiety as a primary concern brought forward by students; depression appeared to be decreasing slowly as a concern over the past three fiscal years. Academic concerns, which had represented nine to 11 percent of the total on average, had decreased to seven percent over the summer.

Regent Makarechian asked if the increase in anxiety was seasonal and occurred every year, or was related to COVID-19 this year. Dr. Buchman responded that the trends he outlined had been in progress before the COVID-19 pandemic.

Regent Park asked about the location of the budgets for student health services and centers. Dr. Buchman responded that these were embedded in campus budgets, typically under the vice chancellor for student affairs; at UC Berkeley, the budget was under the vice chancellor for administration.

Regent Park asked if it was possible to see these budgets broken out as separate line items within the campus budget. Dr. Buchman responded that he did not know how these data were collected and collated. He could provide these data from the campuses, which might not be in a consistent format.

Regent Park asked if UC SHIP paid the student health services and counseling centers, or if UC SHIP only paid Anthem for use of its provider network. Dr. Buchman responded that UC SHIP reimbursed for services billed to UC SHIP. There was variation among the campuses on how many services were billed to UC SHIP. Most campuses billed UC SHIP for ancillary services, pharmaceuticals, and laboratory services, but most did not bill for primary care visits. UC Irvine, due to lack of sufficient student services fee revenue or campus-based funding, billed UC SHIP for all services provided. For students not covered by UC SHIP, UC Irvine billed the students, who would try to receive reimbursement from their own insurance. Until the COVID-19 pandemic, most UC counseling centers did not bill for counseling services, but this had now begun to change with the move to telehealth counseling.

Regent Park stated her understanding that the student health and counseling centers can bill UC SHIP, but billing varies among the campuses. Dr. Buchman confirmed that this was the case. Regent Park suggested that UC Health explore the possibility of greater standardization in which services are billed to UC SHIP.

Regent Park assumed that reported ratios of counselors and psychiatrists to students were based on the number of providers who are employed directly by the campus, not the additional counselors available through the Anthem network. Dr. Buchman confirmed that this was the case. The new telehealth service, the Virtual Care Collaborative, would fit in between the service provided on campus and services available in the community.

Regent Park stated that she would like a commitment from the chancellors to meet target ratios by fall of this year. All UC students should have equitable access to counseling and psychiatric services. There were challenges with regard to hiring, but using telehealth, and with efforts to secure authorization for engaging out-of-state practitioners, UC should be able to get the requisite number of professionals to meet target ratios. She found it befuddling that UC would not be compliant with recommended ratios. UC Merced and UC Riverside appeared to have the farthest to go in order to meet target ratios for psychiatry providers to students. Regent Park suggested that the University could use reserves to fill these empty positions. She asked Dr. Buchman, Executive Vice President Byington and the board of UC SHIP to consider this. This should be possible.

Regent Park asked if the ability to deploy telehealth services across state lines would expire at the end of the COVID-19 pandemic. Information in the background materials provided

indicated that proposed language changes in the California Board of Psychology regulations on the standard of practice for telehealth were currently in a public comment period. Dr. Buchman explained that the language changes the University was seeking would be to allow UC counseling providers to provide telehealth to UC students who are living at home outside California. If a UC counselor is not licensed for the state where a student is living, this might cause problems with that state's licensing board. The California Board of Psychology previously deemed this provision of services to students outside the state to be unprofessional conduct. Dr. Buchman hoped that UC's efforts with the California Board of Psychology would allow some leniency for UC provider to provide care to students outside the state. Unfortunately, this allowance would likely be limited to the period of the COVID-19 pandemic, but the California Board of Psychology had shown some willingness to change this language. The University did not have similar success with the Medical Board of California or the California Department of Consumer Affairs.

Regent Park asked if California had any reciprocity agreements with other states in this area. Deputy General Counsel Rachel Nosowsky responded that California was not part of interstate compacts that existed in various health professions among other states. There was proposed federal legislation under way intended to allow interstate practice for any licensed health professional, with few limitations, during the period of the COVID-19 pandemic and for six months following. The progress of this legislation was in question because of opposition.

Regent Park commented that this was a larger issue, but relevant, given the observed success of telehealth and the use of telehealth in the future. She asked if any students had encountered difficulties in accessing services covered by UC SHIP while they were at home. Dr. Buchman responded that he was not aware of any complaints by students about not having access to services. The Anthem network was nationwide. There had been almost 200,000 telehealth visits by students with UC SHIP coverage in 2020. UC SHIP was portable.

Regent Stegura drew attention to the fact that Governor Newsom's budget proposal included one-time funding of \$15 million for student mental health; this would also include telehealth. She asked if UC was examining demographic data with regard to students seeking psychiatric and counseling appointments and follow-up, to see if these were low-income or first-generation students, or if there were some other characteristics. Dr. Buchman responded that UC had access to these data. The demographic data came from the registrar at each office and were imported into the electronic health record at each office. When UC Health generated reports on accessibility, UC's vendor extracted this information from each campus and sorted the data to ensure "apples to apples" comparisons. The vendor then provided the data to UC Health, and UC Health analyzed the data and reported on them. Demographic data were available, but UC had not pulled them in order to compare them with accessibility data. This would be a worthwhile effort. Dr. Buchman did not know how difficult it might be for the vendor to extract these data. Regent Stegura encouraged the University to work on this effort. The demographics of the UC student body were changing, and all students should have access to the same services.

Regent Reilly asked about data on patient satisfaction, on how students were responding to the services they were receiving. Dr. Buchman recalled that prior annual reports had included benchmarking on patient satisfaction. Since the move to a telehealth primary delivery capacity in April, student health and mental health services had developed their own survey instruments. These instruments were developed in the fall, and data were not ready to include in this report. These data would be included in future reports. UC Health was very much interested in student patient satisfaction in this new situation, and this information would help UC Health determine how many telehealth services it might wish to maintain, even when students return to campus. Ms. Kim added that campuses have continually carried out patient satisfaction surveys, but this had not been done in a standardized way systemwide. UC Health looked forward to doing this. Dr. Buchman noted that the survey instrument for mental health services had been completed in the past few weeks. Regent Reilly stated that she looked forward to seeing these data.

Regent Leib commented that, during campus visits, Regents have heard about the lack of student mental health services and the growing need for them. He welcomed the hiring of Ms. Kim. He suggested that the University might be able to access Proposition 63 funds, through the counties, for students with Medi-Cal coverage. Ms. Kim responded that, with regard to the gap between county services and campus-based services, UC had been hesitant to engage in grassroots advocacy. The California Mental Health Services Oversight and Accountability Commission would be offering listening sessions for prevention and early intervention strategies, within counties and regions. Ms. Kim had suggested to the State Governmental Relations office that UC students and staff representatives might attend these meetings and speak about gaps in service and how UC could serve its campus population. In her conversations with the California Department of Public Health and their offices for suicide prevention, she had been advocating for better understanding of the experiences of the college age population. There were incorrect perceptions of college students and their needs. In its efforts on student basic needs, the University had learned that there is a subset of students who need these services and support and who might not fit into a typical category with regard to accessing mental health services. The diversity of students in higher education was now different than ever before. It was now a question of providing services that reflected this population in an equitable way. Some of this work would be grassroots advocacy, ensuring that students tell their stories, about their challenges and struggles, so that the counties know that there is a need. Then it would be a matter of the counties providing services or, if counties were unable to provide services, of restructuring funding streams so that UC can provide the best possible services to its students. Dr. Buchman recalled that UC had begun to make progress with the California Mental Health Services Oversight and Accountability Commission in fall 2019 and early 2020; the COVID-19 pandemic had suspended these efforts. UC Health was now back on track to making student mental health services a priority.

Regent Leib emphasized the Regents' wish to assist these efforts. Committee Chair Lansing thanked Dr. Buchman and Ms. Kim for their work. Mental health was one of the most significant issues for UC students.

6. SPEAKER SERIES – TRANSLATING EVIDENCE INTO ACTION: BENIOFF HOMELESSNESS AND HOUSING INITIATIVE, SAN FRANCISCO CAMPUS

[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.]

Margot Kushel, Professor of Medicine at UCSF, Division Chief of the UCSF Center for Vulnerable Populations, and Director of the Benioff Homelessness and Housing Initiative, discussed her work with vulnerable populations in the San Francisco Bay Area. She related that she had completed her residency at UCSF in internal medicine in the 1990s, spending most of her time at San Francisco General Hospital, where, at any given time, one-third to one-half of patients were homeless. She described her and her colleagues' experience of doing their best to care for a patient and discharging the patient back to the street; a few days later, that patient would return, sicker than before. Based on these experiences, Dr. Kushel decided that she wanted to understand homelessness in order to be able to do something about it. She expressed her appreciation for working at a place like UCSF, where this interest was encouraged and supported. She had been able to study various aspects of homelessness and apply her findings to clinical practice, programs, and policy.

In 2019, following his involvement in a campaign for Proposition C, which was a November 2018 measure in San Francisco to raise funds to address homelessness, Marc Benioff became aware of the need for a single source of information to provide nonpartisan and evidence-based recommendations. Marc and Lynne Benioff made a generous donation of \$30 million to UCSF to start the UCSF Benioff Homelessness and Housing Initiative (BHHI). It had been Dr. Kushel's privilege to lead this effort, which built on her and her colleagues' efforts since the late 1990s. She reflected that, at its heart, homelessness is not a health problem, but the reflection of a series of policy decisions and inequities that have led to a problem with enormous implications for health and healthcare systems. The true cause of homelessness is the lack of affordable housing in California. Homelessness becomes more acute with greater income inequality, and this issue cannot be separated from the issue of structural racism in society, which has resulted in the overrepresentation of African Americans among the homeless population by three or four times. The BHHI endeavors to prevent and end homelessness by identifying, evaluating, and amplifying research-driven solutions. The BHHI responds to questions in the field in order to further policy objectives, conducts rigorous and policy-oriented research, translates evidence into action and policy recommendations, communicates findings to various stakeholders, and informs effective, scalable homelessness and housing policies and strategies in the San Francisco Bay Area, California, and across the U.S.

The BHHI used a research method known as strategic science, a different approach to research. Rather than the researchers deciding on the questions, they try to involve the end users or change agents, the people who need to act on these findings: policymakers, executive branch leaders, elected officials, nonprofit organizations, health systems, and communities. Researchers spent a great deal of time talking with these groups in order to understand their struggles and then turn these questions into scholarship, which is returned

to the end users for refinement, and to start the process over again. The effectiveness of this model depends on constant communication with end users.

The BHHI had a variety of partners in its work, including the City of San Francisco, the City of Oakland, the California Health and Human Services Agency, State and local departments of public health, and many advocacy and housing organizations.

The BHHI realized early on that COVID-19 would have a disproportionate impact on people experiencing homelessness. They would have a higher risk of acquiring the virus due to crowded conditions in homeless shelters and due to age or underlying health conditions they might have. During the first week of the "shelter in place" orders, the California Department of Public Health asked the BHHI to help devise a plan to address COVID-19 and homelessness. The BHHI and its State partners considered the high risk of homeless people acquiring COVID-19, the risk of hospitals becoming overwhelmed, and the fact that hotels would be nearly empty due to the decline of the tourism industry, and developed Project Roomkey. The Project used State, federal, and local funds to provide non-congregate shelter to people experiencing homelessness, prioritizing people aged 60 and older or with serious underlying conditions. The goal was to move these people into hotel rooms for the duration of the pandemic, where they could receive meals, some medical support, and social worker support. The Project also reserved some rooms for people infected with COVID-19 and homeless but who did not require hospitalization. BHHI and its partners developed the idea of the Project in the course or two to three days, based on previous work, and wrote the first proposal of this kind in the nation for the Federal Emergency Management Agency (FEMA). For the first time, FEMA agreed to provide housing services for homeless people, and initially agreed to pay 75 percent of the cost for eligible populations. Over the course of the pandemic, more than 24,000 people had been housed in 15,000 hotel rooms across California. Dr. Kushel believed that Project Roomkey had played an important role in keeping the number of deaths and hospitalizations of people experiencing homelessness low. The Biden administration had recently extended the FEMA payment retroactively to the beginning of the pandemic and at 100 percent of cost. Project Roomkey, which had been developed at the California Emergency Operations Center in only a few days, had become a model for the nation; many states were operating similar programs.

As the pandemic went on, it became clear that testing and resources were not always reaching the communities that needed them. There were several large outbreaks at homeless shelters, but little was known about the positivity rate among the homeless shelter populations. BHHI embarked on an effort to bring widespread testing to the homeless population, partnering with the San Francisco Department of Public Health, the Chan Zuckerberg Biohub, and various nonprofit organizations. BHHI carried out two large testing events in the most highly affected districts in San Francisco in order to learn how far COVID-19 was spreading in these districts and to develop a usable model. This model included working with community health outreach workers. These were people hired from the community, often people with a recent lived experience of homelessness. They went out to their communities ahead of the events and educated people in encampments and on street corners about COVID-19 and testing. Many hundreds of people were tested each

day. These activities provided benefits that one might not have expected. Some of the community health outreach workers reported that this work had been an important experience for them and had led to better, higher-paying jobs; some medical and nursing students involved in the testing events stated that they would change the course of their career toward work in the community, based on this experience.

The California COVID-19 Testing Task Force contacted Dr. Kushel and was interested in the approach BHHI used in testing the homeless. BHHI collaborated with the Task Force, Kaiser Permanente, and nonprofit organizations over the winter holidays on further testing in homeless shelters in San Francisco. People who work in shelters were engaged to educate shelter residents and staff about testing. This effort was now testing twice a week in ten homeless shelters in San Francisco and would expand to more shelters. Dr. Kushel and her colleagues had been able to identify cases and outbreaks, and to prevent outbreaks.

Another concern during the pandemic was the number of people at high risk of becoming homeless due to economic disruptions. BHHI was working to develop interventions to prevent people from becoming homeless. A pilot program with the City of Oakland, City of Berkeley, hotels, and nonprofit organizations would be tested to see if this kind of effort could prevent homelessness. The goal of this pilot program would be to present a model to government bodies that might be considered for sustained funding. BHHI was collaborating with local, State, and federal partners on plans to vaccinate people experiencing homelessness.

Regent Pérez referred to the space between shelters and people who were on the edge of homelessness, encampments, tent cities, and clusters of people living in a quasi-congregate but homeless environment. He asked about Dr. Kushel's experience with this. She responded that there was a striking number of people in California who were unsheltered. Nationally, about one-third of homeless people were unsheltered; in California, about two-thirds of people experiencing homelessness were unsheltered. Unsheltered people appeared to be at lower risk for COVID-19 than those living in shelters, but it was harder to bring resources to unsheltered people and bring them out of homelessness. Dr. Kushel cautioned against expending too many resources on keeping people in shelters where there were often poor health outcomes. It would be desirable to design an emergency response system so that no one is sleeping outdoors, but expend resources on approaches that were known to end homelessness. Funds being spent on shelters could be directed toward permanent housing. Investment in low-income housing was necessary to address homelessness.

Regent Pérez asked if there was an effective public health intervention model for people who were homeless but not associated with shelters. Dr. Kushel responded in the affirmative. She described BHHI work among this category of homeless people and emphasized how important it was that people with an experience of homelessness participate in this work; they can reach out to these homeless people effectively.

Regent Park referred to the broader question of homelessness and asked if it would be within the scope of BHHI's work to research the response of California cities to the decision in the *Martin v. City of Boise* case. There appeared to be frustration on the part of

cities. Homelessness was an overwhelming circumstance and public policy problem. There was a question of the legal ruling versus the actual response at the local level. Regent Park expressed concern that this legal decision had ensured the right of people to live on the street, but without society doing anything to help them. Dr. Kushel responded that this was a major concern. There were concerns about what to do about homeless encampments, which were unsanitary and unsafe. One had learned that putting resources into policing and moving people from one place to another was not a solution; this disrupted community relationships on which public health work relied. Some cities had no place to move people and were seeking to introduce hygiene facilities and reduce public health risks. Many homeless people were fearful of shelters and would not move into them, but most would move into housing when it was offered. She described a project that successfully provided housing for homeless people with the most difficult cases, people who had frequently been in jail or in psychiatric emergency services. BHHI had been trying to help cities design similar projects.

UC Riverside School of Medicine Dean Deborah Deas asked if BHHI had conducted research on homeless families with children, with particular attention to children, and, if so, what policies or interventions had been developed. Dr. Kushel responded that BHHI was just beginning work on homeless families with children. In this area, insightful research had been done by other entities on voucher, rapid rehousing, and transitional housing programs. Voucher programs were shown to have better outcomes for homeless families with children. BHHI was doing work on the effect of the COVID-19 pandemic on families on the edge of homelessness to learn about their housing situations and what would keep them housed.

7. UNIVERSITY OF CALIFORNIA SYSTEMWIDE ECONOMIC, FISCAL, AND SOCIAL IMPACT ANALYSIS REPORT: UC HEALTH IMPACT

[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.]

Vice President Brown, of Institutional Research and Academic Planning at the Office of the President (UCOP), presented findings from a January 2021 report by Beacon Economics, "The University of California: Systemwide Economic, Fiscal, and Social Impact Analysis." Ms. Brown recalled that the University was established to transform the state's economy and the lives of its citizens through teaching, research, and public service. For more than 150 years, UC had helped the state tackle its most pressing problems. UC research showed farmers how to remove salts form the alkali soils in the Central Valley, and this transformed barren land into one of the world's most productive farming regions. UC faculty shared their discovery of how chlorofluorocarbons in aerosol spray cans were destroying the Earth's ozone layers, spurring companies to remove chlorofluorocarbon-containing products from the market. UC physicians and scientists pioneered new medications and patient care, transforming an HIV diagnosis from the equivalent of a death sentence to a chronic but survivable condition for which there was now hope of finding a cure.

Today, the University was helping the state fight the COVID-19 pandemic. UC could also be a critical player in helping California's social and economic recovery after the pandemic. UC was advocating for the State to provide full restoration of prior budget cuts and funding increases in critical areas such as the Programs in Medical Education (UC PRIME). State funding not only helps UC address the challenges California faces, but, as demonstrated in the Beacon Economics report, it also provides a significant return on investment.

The report examined three types of UC-related spending: spending on operations, such as employee compensation; construction; and personal spending of UC students beyond tuition. This spending had a direct effect, such as buying goods and services for teaching, research, and healthcare operations, as well as a ripple effect, an indirect effect in that UC suppliers increase their business-to-business spending. There was also an induced effect of household spending by UC employees and retirees. All this spending considered together was the total economic impact of UC. UC-related spending generates \$4.2 billion in State and local tax revenue; this number increases to \$12 billion if federal taxes are considered. For every dollar of State support, UC generates over three dollars in federal, State, and local tax revenue.

Through its spending, UC supports more than 500,000 jobs, or one in every 45 jobs in California. UC is the third-largest employer in the state, directly employing about 229,000 full- and part-time faculty and staff. About 60 percent of the employment impact is generated by general campus activity, about 37 percent by UC Health activity, and three percent by other UC entities, including the Lawrence Berkeley National Laboratory, UCOP, Hastings College of the Law, and Agriculture and Natural Resources. The labor income produced by UC spending amounts to over \$37 billion; about \$24 billion of this amount attributable directly to UC. The labor income impacts of general campus activity and UC Health activity were almost the same, at 47 percent and 49 percent of total impact, respectively.

UC is a major contributor to the state's economic vitality, generating \$82 billion in economic activity annually. For every dollar of State support UC receives, it generates more than \$21 in economic output. Even by a more conservative measure, the value added impact, which subtracts intermediate input costs, UC's contribution to the gross state product is almost \$56 billion. Ms. Brown observed that this economic impact analysis was one way to demonstrate the return on State support to the University, but it did not account for other benefits that UC provides—social benefits to the state, contributions to economic mobility, promotion of business creation, and improvement of healthcare outcomes—benefits which also provide a return on investment.

Executive Vice President Byington discussed the impact of UC Health, which is a significant contributor to the overall economic engine of UC. UC Health's overall economic impact was almost \$37 billion in fiscal year 2019 and represented 37 percent of jobs supported, 49 percent of labor income, 46 percent of value added, and 45 percent of overall economic output for UC. These dollars come mostly from the academic medical centers which are owned and operated by UC Health. The output of the medical centers

represents the single largest source of UC funding, and the medical centers are almost entirely self-supporting. The medical centers also contribute a major portion of the University's State and federal contract and grant funding.

UC Health is the largest academic health system in the U.S., with 20 health professional schools which collectively educate and train 15,000 students and trainees annually. UC Health has six academic health centers, which are ranked top in the state; some are consistently ranked top in the nation. There are 12 hospitals within UC Health and almost 4,000 licensed beds. UC Health had 162,000 inpatient admissions in the year of the Beacon Economics report, and 8.1 million outpatient, clinic, and virtual visits. UC Health operates five Level One trauma centers and has 349,000 emergency room visits annually.

The UC Health resources just mentioned provide an economic benefit, but also a community and social benefit which is harder to quantify. The prior year, UC Health performed a community benefit analysis and identified a community benefit of \$2.8 billion, or 20 percent of the medical centers' operating expenses. This amount includes \$1.4 billion in net community benefits throughout California and \$1.4 billion in uncompensated care for Medicare patients. This contribution of 20 percent of UC Health's operating expenses places it in the top tier of hospital systems in the U.S. for contributions to community benefit.

UC Health also serves patients with high medical risk, including those with government insurance, Medi-Cal or Medicare, and the uninsured. In the year of the report, UC Health served over 800,000 Medi-Cal patients—about 55,000 inpatients and 778,000 outpatients. In the same year, UC Health served over one million Medicare patients, including 1.2 million outpatients. While the number of uninsured patients is lower in California than in many states, UC Health served approximately 53,000 uninsured patients in the year of the report. Many of these were likely people experiencing homelessness.

UC Health is addressing health disparities. UC Health has a systemwide goal of serving all Californians, improving the health of all Californians, and supporting health equity by eliminating health disparities. One of the most effective means of achieving this goal is to train a cadre of diverse healthcare providers who represent the demography of California. UC was pursuing this successfully with its Programs in Medical Education (UC PRIME). Dr. Byington briefly described the six PRIME programs, which are located in Irvine, the San Joaquin Valley, San Francisco, Davis, Los Angeles, and San Diego. The State budget for the upcoming year includes \$13 million in new funding for the addition of two more PRIME programs. UC Health was considering programs that would support Native Americans and African Americans. UC PRIME was one of the most important reasons for an observed increase in diversity among physicians in California.

The Beacon Economics report recognized UC Health's response to COVID-19 for developing testing, creating 1,500 new patient beds across the UC system, and research and clinical trials, including extensive participation in the clinical trials that led to emergency use authorization of the two vaccines currently in use in the U.S. Dr. Byington

encouraged the Regents to read this report, which would prove a valuable resource in advocating with the Legislature for the services that the University provides every day.

Regent Makarechian requested that this report be shared with the full Board. He asked if money spent by the University on construction projects had been included the calculation of UC's contribution to the state's economy. Ms. Brown responded in the affirmative. Regent Makarechian asked where this was listed in the report. Ms. Brown responded that these figures were included in the model. She could provide more specific information.

Regent Zettel referred to numbers shown on a slide of Medi-Cal patients served at UC hospitals. She asked why the number for UCLA was lower than for the other medical centers. UCLA Health President Johnese Spisso responded that she would need to see more detail on this figure, which might not include Medi-Cal patients served by UCLA at the Venice Family Clinic, a Federally Qualified Health Center (FQHC), at the Harbor-UCLA Medical Center, at the Olive View-UCLA Medical Center, and at the Martin Luther King, Jr. Community Hospital. UCLA Health Vice Chancellor John Mazziotta stated that including the patients cared for at the two large county hospitals which are completely staffed by UCLA would make a difference. Ms. Spisso stated that UCLA would examine these data and see if the number should be revised.

UC Davis Human Health Sciences Vice Chancellor David Lubarsky noted that the number of patients seen by UC Davis at its FQHCs was not included in the figure cited on the slide for UC Davis Health. It was important that UC Health get credit for the work it performed under contract across the state.

Dr. Byington commented that UC Health was trying to understand and gather data on the breadth of its reach through affiliations with FQHCs, other public hospitals, and the Department of Veterans Affairs.

Regent Zettel praised the report and underscored the continued need for updated statistics to show that UC deserves State investment and contributes to the well-being of California.

Regent Pérez requested information on how UC hospitals compared to other Disproportionate Share Hospital providers in the numbers of underprivileged patients they cared for.

Regent Leib commended the report. UC often did not get credit in the Legislature for its work. He noted that the new UC Center Sacramento building, close to the State Capitol, would provide opportunities to present information to legislators and to educate the Legislature about the outstanding work and projects UC was pursuing.

President Drake noted that, in the community hospitals where UC is active, like those mentioned by Ms. Spisso, UC not only cares for patients but provides education and transforms the practice of medicine, working with employees of the county or the Department of Veterans Affairs. The quality of care is improved by UC attending physicians and UC medical students. Studies had shown that the quality of care improves

in a teaching setting. There was a collateral positive effect when UC Health was at work serving patients in these other locations. It was important to recognize this when thinking about UC Health's impact.

Committee Chair Lansing concurred about the importance of broadcasting this message. She briefly reported a breaking message by Governor Newsom that several cases of the South African COVID-19 variant had now been identified in California. Dr. Byington responded that this was not unexpected. Infections presented opportunities for the virus to mutate. A paper published the previous day showed that the Pfizer vaccine was effective against the South African variant. This news reinforced the importance of continuing non-pharmaceutical interventions until everyone could be vaccinated. Ten percent of the California population had now been vaccinated. Committee Chair Lansing asked that Dr. Byington send an email to the Committee with updated information on the new variant.

8. UC HEALTH WORKING GROUP ON CONFLICTS OF INTEREST AND COMMITMENT AND REPORTING ON OUTSIDE PROFESSIONAL ACTIVITIES

[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 this discussion of conflicts of interest and commitment and reporting on outside professional activities in UC Health. She recalled that there had been reporting by the news organization ProPublica a year prior about UC physicians who had not appropriately reported their outside professional activities. The Regents instructed Dr. Byington to examine this issue, and she tasked Vice President Nation with convening a systemwide working group.

Dr. Nation introduced the co-chairs of the UC Health Working Group on Conflict of Commitment and Reporting on Outside Professional Activities, Elena Fuentes-Afflick, UCSF Professor and Vice Chair of Pediatrics, Chief of Pediatrics at the Zuckerberg San Francisco General Hospital, and Vice Dean for Academic Affairs in the School of Medicine, and Derek Kang, Chief Compliance Officer at UCLA Health. Dr. Nation thanked the other members of the Working Group, which began meeting in March 2020.

Mr. Kang explained that the Working Group was tasked with examining the challenges following the ProPublica reporting. A major concern was how to adequately develop a program to address and manage potential conflicts. Not every interaction a faculty member has with industry constitutes a conflict, but presents a potential conflict. The viewpoint of individuals with regard to a conflict can vary—it can be the perspective of the public, a patient, or a faculty member. The Working Group focused on four main points that would be necessary for any management program or activity to address conflicts: transparency, accountability, training, and management.

The Working Group's first recommendation was that UC Health develop a new industry relations policy. There were several existing policies at the systemwide level, the campus

level, and within the medical centers. The existing policies often addressed issues related to conflicts in only a fragmentary way and could at times present conflicting or confusing guidance. The new policy should provide uniform guidance and governance. The new policy should set standards, and these standards should address conflicts of commitment and conflicts of interest. While the public might not always understand the difference between these two types of conflicts, patients know that these conflicts appear to affect the relationship they have with their provider. The new policy should clearly enumerate prohibited and allowable activities, and define standards for industry interactions in UC's educational environment, not just with clinicians and faculty, but also with trainees and patients.

Dr. Fuentes-Afflick presented the Working Group's next recommendation, which was to require broad transparency. The policy should establish transparency by requiring disclosure of all outside activities. Currently, some activities were disclosed and reported, while others were not. This recommendation would enhance the transparency requirement. Faculty disclosures should be listed on UC websites, and all activities should be governed by guidelines related to time and earnings. UC Health reviews these two measures, time and earnings, in requests for outside professional activities.

Mr. Kang noted that the Working Group included broad representation of all UC Health locations and the Office of the President. Not every recommendation that the Working Group was proposing had been a unanimous recommendation.

UC Health needed to build a structure and processes for evaluating conflicts. A common theme that emerged in the Working Group's discussions was that UC's existing processes for managing potential conflicts were not well structured. Therefore, another recommendation of the Working Group was that the University implement a single, comprehensive system for receiving and evaluating disclosures. The Working Group had many conversations about whether a new system should be created or existing systems could be modified or improved to address conflicts of commitment and interest. The Working Group recommended that disclosures should be broadly reviewed and evaluated by multiple functions within UC Health, including the compliance and purchasing functions, medical staff leadership or committees, operating committees, and administrative leadership. This type of transparency did not exist currently. A wellintentioned faculty or staff member might disclose information to an office, but the mechanisms for communicating this information across the enterprise were not very effective. The Working Group recommended that each medical center should have a committee that evaluates and establishes management plans for potential conflicts. This would be a best practice, and Mr. Kang underscored reasons for establishing these committees: they would be able to address accountability and management of existing relationships and should be seen by those individuals making disclosures as encouragement for transparency, not a prohibition against having relationships with outside entities. The committees would develop management plans and provide guidance with regard to these relationships. Another recommendation, which was a natural part of a disclosure management process, was that there should be disciplinary standards for remedying noncompliance.

The Working Group's final recommendation was to create a clear definition of allowable and prohibited activities. Dr. Fuentes-Afflick noted that there was currently variability in common interpretations and understandings of what was allowed and not allowed. For this reason, the Working Group recommended a clear definition. Activities that would be prohibited would be prohibited because they could compromise the University, such as endorsement of a product or service without proper vetting. All UC activities should comply with Accreditation Council for Continuing Medical Education (ACCME) standards. The Working Group had many discussions about vendors. Vendors play an important role in bringing new equipment, diagnostics, and therapeutics to the attention of UC Health, but the University must be careful about how it interacts with them and about where it allows vendors access to UC facilities, faculty, staff, and trainees. The Working Group recommended that UC Health limit, and in some cases prohibit, vendors' access to UC Health facilities. This was a complex issue, and Dr. Fuentes-Afflick remarked that this was a simplified version of the recommendation.

Mr. Kang concluded with the Working Group's strong consensus that change was needed; the recommendations reflected changes that the University should implement. Some of the challenges in implementation were the questions of where to begin, how the build the structure, and how to make this an effective program for UC Health. He thanked the members of the Working Group for their contributions.

Regent Park remarked that some circumstances might not arise outside the health sciences context. She asked if the nature of conflict of interest was different for clinical faculty than for other faculty. Dr. Fuentes-Afflick responded that the Working Group focused on UC Health and the health professions, but there were robust discussions with campuses with multiple faculty constituents because, while conflict of interest existed everywhere, the rules that governed conflict of interest might be different for different fields. Mr. Kang added that health care presented a unique set of circumstances: the unique relationship between provider and patient, the trust between those individuals, and the vulnerability of the patient in that relationship. The Working Group's interest was focused on ensuring that patients feel trust in UC Health and its activities. The money flowing from industry to faculty members, physicians, and prescribers had implications not only for the patient relationship but also for federal and State regulations. The relationship between UC provider and patient must be transparent and foster trust. Dr. Byington noted that another reason for the urgency of this matter was that the federal government's Open Payments database presented data publicly on financial relationships between industry and healthcare providers; this was not the case for other fields and disciplines. UCLA Health Vice Chancellor John Mazziotta commented that, in addition to the concerns about patient trust and the federal database, the purchases of equipment, supplies, and pharmaceuticals were enormous in UC Health as a whole. Influence on that process would undermine trust.

President Drake underscored the complexity of the rules and guidelines and the need for systemwide guidelines. He noted that conflicts of interest or commitment can arise in the context of the relationship of patient and practitioner, but also with regard to the University as a whole or the public. There must be clear standards that apply to everyone, so that there are no isolated areas in the University where people believe that they have different rules.

Committee Chair Lansing asked about how broadly the guidelines would apply, recalling that there had been discussions in the past about conflict of interest guidelines for chancellors. President Drake responded that UC should have rules that can be applied to employees broadly. There can be circumstances in which a faculty member can do something in one context, but not in another. This can be confusing. There was a set of guidelines for chancellors. The University would consider which guidelines it should have for chancellors, administrators, UC Health, and for all faculty and would strive to be as consistent as possible.

Regent Park emphasized the importance of clarity. It was important that faculty understand the guidelines and compliance; therefore, these should be presented in a way that is easy to understand. She asked that UC proceed with caution on how these issues were framed, both for faculty and the public. With regard to industry relationships, there should be clear lines about prohibited activities, but UC should avoid a chilling effect on innovation. Mr. Kang responded that the Working Group recognized the important symbiotic relationship between UC and industry, which generates changes and improvements in health care and healthcare delivery. The Working Group's intention was not to create a chilling effect, but to create transparency about these relationships and define appropriate boundaries. Mr. Kang believed that the Working Group's recommendations and compliance program could easily be expanded to the campuses as well.

Regent Makarechian recalled earlier litigation in which the University was required to indemnify a physician who had inappropriate industry relationships. He asked about the consequences for faculty who do not disclose industry relationships or do not comply with UC guidelines. The University should seek to rid itself of this obligation of indemnification. Deputy General Counsel Rachel Nosowsky explained that most of the University's indemnification responsibilities were based on State law. The University has refused indemnification in cases where it was able to identify a conflict of interest. The development of clear policies was the first step in enforcing those policies. There had been cases in which conflicts of interest significantly increased UC's exposure in litigation. The Working Group's recommendations would address these concerns as well as the concerns about a chilling effect on innovation.

Regent Makarechian asked if the Office of the General Counsel (OGC) would determine the penalties for faculty who violated UC guidelines or policies. Ms. Nosowsky responded that OGC would advise on these matters, but stressed that these were policy questions for the University and not specifically legal. Regent Makarechian emphasized the importance of clear policy for UC Health, because it provides services to patients daily; in this way it was different from other academic departments and schools within UC. Dr. Fuentes-Afflick added that the University was working to develop a process that was more preventive and that would educate faculty, administrators, and all employees, so that people understand their obligations. If UC Health can promote compliance, it can avoid reaching the stage of litigation. This was a complex, long-term undertaking.

Regent Makarechian asked about coordination of this compliance program with information technology and human resources departments. Dr. Fuentes-Afflick responded

that the Working Group discussed this. The relevant information technology issues were fairly complex. The University currently had an Outside Activity Tracking System (OATS) for conflict of commitment. The Working Group's recommendation to include conflict of interest would add another layer of complexity.

Advisory member Ramamoorthy observed that, as a surgeon, she worked with device companies to innovate and make progress in the field. She stated that faculty would welcome clarity and transparency in this area. Faculty were asked to walk a fine line and wondered if they must constantly monitor the Centers for Medicare and Medicaid Services (CMS) database, mentioned earlier, to ensure that the data presented there were accurate. When data are inaccurate, faculty must initiate a process for correction with the relevant industry affiliate or vendor. Dr. Ramamoorthy stressed that there must be equity in compliance requirements for faculty and researchers across UC, whether they are in the health sciences or other fields. It was important to educate faculty not only about rules and regulations, but also how to monitor the CMS database or whatever source of information UC would use to evaluate this process.

Advisory member Spahlinger noted that he had dealt with these questions at the University of Michigan for the past eight years. There was complete transparency at his institution, which monitored the external database. In implementing these policies, he suggested that UC begin with UC Health faculty, who presented the most complicated situation, and then determine how to apply these policies to other faculty and schools while maintaining equity. He cautioned against underestimating the amount and importance of the work that must be done by local committees that manage conflicts of interest. This work was not just educating faculty, but examining each situation. Conflicts of interest and commitment in the health sciences had become more complicated over time. The relevant committee at the University of Michigan met at least once a week for several hours. He commended the recommendations of the Working Group. This was a nuanced issue requiring much ongoing work. UC should not underestimate the work needed to educate faculty and provide the ability to manage conflicts, while not dampening entrepreneurship.

The meeting adjourned at 2:15 p.m.

Attest:

Secretary and Chief of Staff