

UCSF Ancillary Staff at ZSFG: Managing COVID-19

Providing daily to support physicians, nurses and other staff in critical, although not always visible ways.

Biomedical Engineering Services at ZSFG provides on-site technical support service to maintain and repair over 10,000 medical devices/systems for patient-care operations, biomedical systems integration, Information Technology (IT) security for medical devices, and state & federal regulatory compliance. Currently, their main priority is sourcing enough ventilators for a COVID-19 surge, working with Respiratory Therapy to procure parts, and reviving machines to bring them to full functionality by replacing parts, internal batteries, power supply, maintenance kits, stands and accessories. The worldwide run on manufacturers and vendors forces them to be creative about refurbishing found equipment. They are also responsible for assuring adequately equipped ICU rooms if the hospital needs to convert additional spaces.

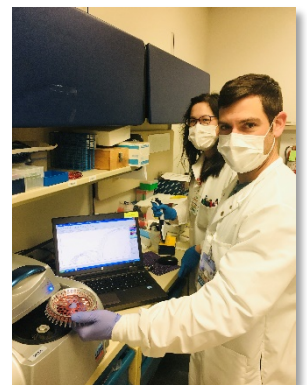


Respiratory Therapists help all patients with breathing problems and who need artificial airway management. They offer respiratory support, assessment, consultation and treatment in all areas of the hospital, although primarily in the ED, ICU, NICU, and Pediatric floor. During the COVID-19 pandemic, the number of ventilators used per day has nearly doubled and the use of PPE makes the interaction more time-intensive. The typical course of the disease process demands that patients are more carefully observed, their oxygen demands change rapidly and the need for



ventilator management lasts longer. Prone Ventilation, a treatment which significantly improves patients' oxygenation, is a logistically challenging, multifaceted repositioning procedure requiring more time and staff. The team is learning to manage these changes by creatively dividing assignments and checking in with each other frequently. They have also been instrumental in developing clinical staff PPE guidelines, advising departments on how to adapt to their patients' changing needs, and training providers to use PAPR respiratory systems. The leadership team worked with Anesthesia and ICU leadership to help create a surge plan for ventilators at ZSFG and SFDPH.

Clinical Laboratory staff work 24 hours every day to perform over 500 different diagnostic laboratory procedures for patients at ZSFG, Laguna Honda hospital, and other DPH clinics. They normally report over 4.3 million test results per year. Recently, both the Microbiology and Core Laboratory divisions Implemented COVID19 testing and collaborated to increase testing capacity from 50 to 300 specimens per day. They implemented a 45-minute COVID-19 assay, COVID-19 testing on upper respiratory specimens and will soon launch the COVID-19 Serology assay to provide IgM and IgG antibody levels on a patient's blood. The Laboratory scrambled through supply chain issues to obtain and adapt materials to run on the assay on the Lab's analyzer. They worked closely with the infection control team, clinicians, and SFDPH and UCSF Laboratory staff to ensure all were trained to safely handle potential COVID-19 specimens and put into place the house testing, validation, procedures and staff training.



UCSF Inpatient Social Workers in the Department of Psychiatry assess patients and ensure their connection with family and supports in the community, provide counseling and education to



patients and their families, coordinate care for their entire stay and partner with DPH social workers around discharge planning. Under COVID-19 conditions, the onsite social work team is often patients' only consistent link to outpatient providers, conservators, family, and other members of the community who are no longer allowed to come to the hospital. Many patients who already grapple with depression, anxiety, mania, or psychosis are being admitted to the inpatient units with more

severe symptom presentations. There are also increased challenges related to job loss or other economic stressors, substance use, and violence and abuse at home. Already limited step-down facilities are becoming scarcer and the Social Work team have begun advocating for more resources and developing partnerships with new organizations for shelter and services.

On Friday, March 13, when Mayor London Breed and UCSF announced plans to restrict non-essential personnel from coming to work by the following day, there was a run on the **UCSF IT Field Services at ZSFG** for loaner laptops and help in setting up remote work stations. Since then, their highest priority is outfitting providers who need to use Zoom to meet with patients. Their incident rates nearly doubled from February to March and each of those numbers represents someone who needed IT help to get back to work.

