

## 2022 UC Tech Award Application [Operational Excellence] UC San Diego Health Information Services

**Project title:** UC San Diego Health Operational Readiness Dashboards

**Submitter's name, title, and contact information:** Melinda Battenberg, Communications Lead UC San Diego Health IS, mbattenberg@health.ucsd.edu

**Names of project leader(s) and team members:**

Christopher Longhurst, MD, Chief Medical Officer and Chief Digital Officer, UC San Diego Health (Exec Sponsor)  
Joshua Glandorf, Chief Information Officer (Interim), UC San Diego Health  
John Torello, Chief Technology Officer, UC San Diego Health  
Jennifer Holland, Director of Enterprise Reporting, UC San Diego Health

**Project Statement:** UC San Diego Health is using readiness dashboards, created in Tableau, to ensure organizational agility in response to the COVID-19 pandemic and ongoing challenges in healthcare.

**Project Narrative:**

Since 2018, UC San Diego Health has been using Tableau as an enterprise analytics tool to organize, manage, access, and utilize the data for patient care or operations. Since the implementation of Tableau, it has become the gold standard of data analytics software at UC San Diego Health, averaging over 16,000 views per month. The rapid adoption of the software also provided an unforeseen benefit when the COVID-19 global pandemic began. UC San Diego Health developed enterprise readiness dashboards using Tableau that tracked data around infection rates, emergency department visits, and hospitalizations and were critical to providing leaders at UC San Diego and UC San Diego Health with the knowledge they needed to make informed decisions about patient care and employee and student health. The dashboards were sent to all employees and provided a daily snapshot of key metrics related to operational readiness. Functioning as the source of truth for UC San Diego Health and UC San Diego campus leadership, the dashboards provided a unifying and transparent dataset across the organization.

The COVID-19 dashboards were created to be agile and changed based on feedback from leadership and the evolving needs of the pandemic. The dashboards were an integral component of the Incident Command Center and UC San Diego's Return to Learn program, helping monitor the positivity rates of students on and off campus. Since the initial dashboards were developed, they have evolved to keep pace with the needs of the health system. Over the second year of the pandemic, dashboards to continue to support the organization's need for accurate, agile, and timely data related to COVID-19 infection, symptom screening, contact tracing, vaccine supply, vaccine administration, and more recently vaccine mandate compliance. The tools inform UC San Diego Health leadership for patient needs, as well as health system and UC San Diego campus leadership to track employee testing/vaccination, student testing/vaccination and San Diego Unified School District COVID-19 testing. The journey of the dashboards parallels the pandemic twists and turns. The

# UC San Diego Health

architecture of the analytics laid the groundwork for the permutations of the data needed between patients, students, and employees along with hospitalization, capacity, testing, and vaccines. This provided opportunities not only for tracking, but for outreach as well. The dashboards set forth the foundation for continued operations excellence and data transparency through the UC San Diego Health readiness dashboard.

The use of Tableau for dashboards in the health system is guided by the UC San Diego Health Enterprise Analytics Steering Committee which assesses organizational needs and makes recommendations on how the software can best support organizational goals. The steering committee provides strategic direction and oversight for the overall data and analytics program including aligning resources, processes and toolsets across the enterprise to support clinical care, operations, research, strategy, education and innovation. To ensure data privacy, the committee also created policies on who can share data, what data they can share, and what the process is for sharing data ensuring strong data governance for metrics and reports

To help support the use of Tableau across the enterprise, a subcommittee was established to provide training to team members interested in developing within Tableau. The subcommittee is comprised of analytics point people inside and outside of Information Services who have access to Tableau and hold office hours, help to train users and can work directly with departments to assess needs. There are now over 100 Tableau developers at UC San Diego Health who have been trained to use the software.