

Resuming Elective Surgery at UTMB Predicated on Patient and Staff Well-Being

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The first COVID-19 case reported in Galveston County, TX, was March 13. Emergency operations began at University of Texas Medical Branch (UTMB) March 18. It was decided to begin canceling elective operations March 23.

We initially based our decisions on reports that predicted the pandemic would reach south Texas toward the end of May. On March the 13, the American College of Surgeons (ACS) released the first of its recommendations on how to prioritize cases based on diagnosis and acuity. Our decision to cancel elective operations was officially mandated by Governor Abbott's March 22 Executive Order. It took almost two weeks to clear the previously scheduled cases and bring the operating rooms to a minimal level. We canceled (postponed) 2,278 procedures. We still need to run six to seven rooms daily to care for the urgent/emergent patients presenting to an acute care hospital. Once the decision was made to only allow emergent/urgent cases, 100 percent of postings were reviewed as to their appropriateness. The [COVID-19: Elective Case Triage Guidelines for Surgical Care](#) produced by the ACS were invaluable for determining what cases could be postponed. When cases were deemed marginal, we required the surgeon to document that in the history and physical or pre-op note, stating that the case was "immediately necessary to correct a serious medical condition" per state guidelines.

The Pandemic

UTMB leadership opened our Incident Command Center and met daily. Protocols for management were implemented and beds, intensive care unit facilities, ventilators and staff were designated to care for COVID-19 patients. We were ready to manage large numbers of patients due to the conversion of units at all four of the main hospitals. Pulmonologists, intensivists, anesthesiologists and surgeons were designated and, in some areas, deployed. We had on-hand a large supply of personal protective equipment (PPE) (particularly N95 masks) and we never came close to using any of the reserves. Our ability to manage the COVID-19 threat was greatly supplemented by the presence of the Galveston National Laboratory on the UTMB campus.* The National Laboratory is the largest on a university campus and was one of the first to receive Coronavirus specimens for research in February.

Part of UTMB's success in managing the virus is due to its ability to perform both standard testing as well as the rapid testing early in the course of the pandemic. We are now performing five different types of testing in both the National Laboratory and our standard UTMB labs on four campuses. Starting April 6, all patient admissions to the hospital and all preoperative patients have been tested for the

Coronavirus. The ability to get test results in 15 minutes has greatly expedited care and has enhanced the safety of patients and staff. Fairly rapidly, we could test 1,200 specimens per day, and that number has continued to grow. As stated earlier, we are using five different types of test and comparing their accuracy. Fortunately, the actual number of patients was surprisingly low; the epidemic that we prepared for never really happened. See current numbers:

UTMB tests performed for UTMB patients:

Cumulative from March 13, 2020, to 9 am, April 22, 2020: 11,008

Positive results tests:

Cumulative from March 13, 2020, to 9 am, April 22, 2020: 611

Patients under investigation (PUI) for COVID-19:

Currently hospitalized across the UTMB Health System, as of 9 am, April 22, 2020; PUIs that have been tested and are awaiting results: 1

COVID-19-positive patients in UTMB hospitals

Currently hospitalized, as of 9 am, April 22, 2020: 17

COVID-19-positive UTMB hospital patients discharged to home Cumulative as of 9 am, April 22, 2020: 74

Deaths among UTMB hospital patients with COVID-19: Cumulative from April 9, 2020, to 9 am, April 22, 2020: 12

Before resuming elective surgery, we ask surgical and hospital leadership three questions:

- Can we do this safely for patients and staff?
- Do we have the facilities and PPE to expand surgeries without compromising our ability to care for a delayed surge in COVID-19 cases?
- Is now the time based upon review of our own scientific analysis of our number of patients with COVID-19?

The answers to all these questions was an unequivocal “yes.”

Perhaps more than anything else, it was our ability to test our employees and ascertain that we could see and care for patients safely that allowed us to resume surgery.

As of April 23, we have tested 2,250 employees. There are 65 patients that have tested positive for the COVID-19 virus. About half of that number are correctional care workers—UTMB is home to the largest prison hospital in the country, and half are a mix of frontline workers. We are unable to directly connect any institutional exposure to positive testing for Covid-19. Less than five physicians have tested positive and all are asymptomatic. The conversion of employees has been much lower than expected.

As we have resumed scheduling cases we have found that it has been harder to get the backlog reduced rapidly as the public has personal concerns regarding COVID exposure, they have trouble managing child care as many school-age children are now at home, and sadly many have lost insurance because of the rising levels of unemployment.

In conclusion, each city, county, region, and hospital should manage their response to the pandemic based on local penetration of disease and their ability to care for patients, just as we have always managed disasters. We at UTMB are fortunate to have exceptional leadership that have listened to clinicians and scientists and formulated plans that have kept us ready for any possibility while continuing to care for the citizens of Texas.

**Galveston National Laboratory. Wikipedia. Updated April 16, 2020. Available at: https://en.wikipedia.org/wiki/Galveston_National_Laboratory. Accessed April 23, 2020.*