When Things Got Real: Optimizing Perioperative Resources in the Face of a COVID-19 Surge

Zachary Deutch, MD, FASA

The COVID pandemic continues to impact us domestically and globally two years after the viral contagion was first identified and initial predictions regarding its course were made. Some of these predictions were accurate, many were not. A case in point were assumptions about how hospitals and the medical field would be impacted: there were “doom and gloom” predictions about sky-high hospital census, enormous staff attrition due to illness, and consumption of disposables leading to insufficient/non-existent PPE and OR stocks. The accuracy of these assumptions varied widely by geographic region.

In northern Florida, we experienced a near-total medical “lock down” in March 2020, which followed the “swing” beds), and there were never less beds taken (including dozens of created positive, with all available ICU and floor rooms becoming overwhelmed. At the inpatient floors, ICUs, and emergency department like “veterans” of the pandemic, all the emotion, anxiety, and fear experienced in spring 2020 was absent. Everyone from hospital leaders to rank-and-file medical professionals seemed businesslike, dispassionate, and logical in their approaches to the situation.

Clinical crisis

So, what exactly was the situation? In brief, abruptly reaching a high-number, high-acuity census left the health system with no available beds and, on top of that, there were not enough nursing staff to care for the inpatients (COVID positive or not). The floors and ICUs were completely full, and there were patients in the ER not just waiting for placement but experiencing ongoing inpatient care there (i.e., their “hospital bed” was literally a stretcher parked in the ER hallway). Any surgical procedure requiring admission was impossible since there was literally nowhere for the patient to go after recovery. Thus, same-day admit cases were cancelled. The specific challenge in the perioperative environment was to mitigate this public-health (and hospital financial) catastrophe by continuing with whatever surgical and procedural care was feasible. Our perioperative leadership group, normally on a monthly meeting schedule, entered crisis mode and began convening twice per week, forming action/contingency plans. The plans themselves needed to be altered from day to day, depending on each morning’s report of hospital census, COVID counts, and available nurses.

University of Florida Health North, an academic community hospital, was fortunate in that its procedural volume consisted of 85% outpatient encounters. There was no shortage of PPE or other crucial perioperative equipment (as had been greatly feared earlier in the pandemic’s course). COVID testing procedures were made more reliable and more restrictive: no “outside” tests were accepted, and PCR testing was required to be done 24-28 hours prior to procedure date. Based on this, we were able to continue uninterrupted with ambulatory cases such as GI endoscopy, orthopedic sports medicine, and basic general surgery (hernia repair, cholecystectomy). Further, surgical chairs were told that “if your faculty can get patients home the same day, we can schedule them.” Surgeons took this to heart and recruited appropriate surgical candidates, such that procedures that had previously entailed admission (for at least a subset of people) could become 100% ambulatory. Examples included minimally invasive hysterectomy (laparoscopic/robotic), total knee replacement, and one-level spine surgery (cervical or lumbar). As a result of these efforts, our surgical volume did not plummet precipitously, and a number of our days were scheduled with near-normal OR utilization levels.

The cancer conundrum

There was a prolonged interruption in care for “bigger cases” that could not be done on an outpatient basis. The majority of these were oncologic. Not all cancers are created equal, but it is safe to say that none of them have an improved prognosis when definitive surgical care is delayed. Patients became very anxious when informed that surgical treatment for their serious/life-threatening medical condition was to be put off, possibly for months. After several weeks of the moratorium on inpatient surgery, our perioperative leadership team agreed that, despite the unceasing bed and nursing crisis, we could not keep postponing oncology cases indefinitely. Consequently, the decision was made to “manufacture” several inpatient beds per day, using the PACU at both UF Health facilities. As a result of the

Continued on next page
Burnout or Resilience? How Anesthesiologists at an Academic Institution Dealt with the Pandemic

Neha Dasmunshi, MD  Katharine Miles, MD

As anesthesiologists, we are trained to be flexible and adapt our plans to rapidly evolving circumstances. Being an anesthesiologist, however, is only one facet of our identities. We balance our roles as physicians, family members, friends, and community members. Few would deny the challenge of triaging these commitments, even prior to the COVID-19 pandemic.

Social distancing, remote learning, and quarantining are the new normal outside of the hospital walls. Masks have impaired our ability to express emotions through facial expressions. We have become accustomed to seeing only “half” of people’s faces in breakrooms, hallways, and in our neighborhoods. We occasionally fail to recognize our friends and colleagues until we hear their voices.

Our “new normal” life is based on risk assessments. We continuously, albeit imperfectly, assess the probability of COVID-19 transmission when caring for patients, having lunch at work, scheduling meetings, socializing, and participating in everyday activities, from shopping to restaurant dining.

Anesthesiologists practicing social distancing in the hospital breakroom during the COVID-19 pandemic.

We created a survey to learn how this unforeseen global pandemic has impacted our colleagues in both their personal and professional lives over the past year and a half. We sent a 10-question survey to 112 attending and resident physicians at the Department of Anesthesiology at our institution asking about stress levels, changes to personal and professional lives, and the impact of video conferences. There was a 25% survey response rate. Of those who responded, 71% identified as male, 21% female, and 8% declined to disclose their gender. A majority (64%) of the respondents identified themselves as White, 11% as Asian, 7% as Middle Eastern, 3% as Black, and 15% declined to disclose their race/ethnicity.

The majority of respondents (89%) stated they had experienced increased levels of stress because of the pandemic. Fortunately, most respondents did not decreased surgical volume, the PACUs themselves were not completely full despite the addition of several makeshift critical care beds. Staffing for these “impromptu” postoperative beds was provided by PACU nurses in rotating 12-hour shifts (7 a.m.-7 p.m./7 p.m.-7 a.m.), who graciously agreed to a major alteration in their work duties/hours for relatively nominal incentive pay. Thus, despite the “no room at the inn” situation, we were able to admit and provide care for up to 16 oncology patients per week between both campuses. Cancer cases were carefully selected for patients with highest acuity and need, each one requiring internal review and final endorsement by the department chair before scheduling.

Staffing challenges occurred not only on the floors, the ICUs, and the ERs (where physicians and nurses were truly stretched to the limit), but also in the perioperative setting. Though most of our staff members were vaccinated, the delta variant still infected a number of the vaccinated and, of course, infected many of the unvaccinated. Almost half of our nurses and surgical techs became ill at one time or another, some quite seriously. Each morning was an unpleasant cliff-hanger, waiting to find out who had tested positive, who was feeling sick, and/or who had an exposure and needed to be quarantined. Employee time away from work ranged from several days to two weeks (or more), depending on their individual situation. On an operational level, we adjusted via: a) consolidating rooms to the minimum number reasonable, b) using nursing leaders (manager, educator, and charge, who are not normally assigned to rooms) to physically staff sites, and c) asking our remaining healthy staff to be extremely flexible in their hours and their days off, which they were informed might need to be altered at the last minute. Fortunately, we did not ever have to close a room or cancel procedures due to staffing, but we came close on a couple of occasions; we were “saved” by utilizing staff members on their day off and by expanding workweeks (for those not on a five-day schedule). Though these moves were not necessarily welcome, all our nurses and techs understood the necessity. They were regularly briefed by perioperative leadership on the precariousness of the operational situation, and they were willing to pitch in when asked.

Underutilized pre-op/PACU nurses (there were a handful of these) and anesthesiology residents also acted as the “cavalry” in the understaffed critical care setting. Perioperative nurses who were comfortable enough to provide bedside ICU care were assigned there. Others, further removed from ICU experience, were assigned as runners/helpers for the permanent nursing staff, who were at times caring for patients in previously unheard of ratios, 1:6 and above. A number of anesthesiology trainees were pulled from existing rotations and were re-assigned to bedside care in the ICUs.

Our health system met and successfully managed the “true” COVID challenge when it finally came, through a great deal of effort, sacrifice, and flexibility. It would be nice to pat ourselves on the back and say, “all’s well that ends well,” but I don’t think any of us are comfortable doing that just yet as the end has not arrived.