

# Presenting for Duty

## Lessons From A Specialty Surgery Division at the Pandemic Epicenter

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### INTRODUCTION

In December 2019, the first novel coronavirus infection (coronavirus disease 2019 [COVID-19]) was reported in China. In late January 2020, news about the virus's lethality emerged. The declaration of a US National Emergency on March 13, 2020, presented healthcare institutions with 2 challenges: (1) managing existing hospitalizations, and (2) managing COVID-19 patient diagnoses/hospitalizations. A third challenge soon emerged, balancing the needs of these 2 groups with patients prospectively scheduled for surgery. Throughout the pandemic, changes in patient expectations, government regulations, institutional policies, and hospital conditions required restructuring of a specialty surgery division. Alterations in patient scheduling, clinic, and staff management were now rapidly expected. A description of these activities and outcomes is presented to assist others encountering similar situations. This was the landscape as physicians presented for duty in March 2020.

### Cancellation of Elective Operations

Initial recognition of a potential surge was recognized by early March 2020; however, elective operations continued through March 13, 2020, when administrators communicated that due to new regulations, all elective cases were cancelled to increase critical care beds/hospital capacity. All of the Breast, Melanoma and Soft Tissue surgical divisions cases were cancelled. Cancer cases were included in this cancellation. The only operations that could be performed were the emergency operations that had to be performed within 4 hours of posting. This was followed by a request to submit "urgent" cases with a stratification of operations and diagnoses for triage. As expected, this occurred after 5 PM on a Friday, quickly cancelling family plans to allow for conferences, ad hoc schemas, and a flurry of emails, which resulted

in a pandemic triage scenario (Fig. 1A). The Hospital Incident Command System communicated with the Chair of Surgery in regards to resources and surgical volume as well as the changing policies. The Chair of Surgery then provided information to the division chiefs for dissemination and action.

### Evolution of Posting Cases

Immediately, decisions were made to prioritize cancer and indefinitely cancel benign and high-risk excisional biopsies and mediports. Soon, medical societies created pandemic guidelines.<sup>1,2</sup>

During the last week of March 2020, increased demand for patient beds required the conversion of operating rooms (ORs) to intensive care units (ICUs). Twenty-eight of the 32 ORs were converted to OR-ICUs housing 3–6 patients per room. Leadership mandated a protocol whereby operations were reviewed 48 hours in advance and then approved based on urgency. Case review was conducted by surgical and hospital leadership.

By the first week of April 2020, all OR-ICUs were occupied by intubated COVID-19 patients. As the number of ICU patients escalated, a new triage process was initiated. This required submission of cases on Saturdays via an institutional form including the name, diagnosis, ancillary care needs (intensive care included), length of operation, patient comorbidities/surgical risk, and a commitment from the surgeon to be available for the operation at any moment it was given clearance to be performed. This was reviewed by the Surgical and Procedural Scheduling Committee (SPSC). Members of the SPSC were confidential but reportedly included clinical leadership and legal services. Because submissions were expected on Saturdays, the division structured a video conference-based "triage" meeting on Fridays where cases were reviewed by leadership. A diagnosis-based patient list was used to facilitate discussion. This spreadsheet also included patients who were not able to be scheduled. In addition to case review, this allowed for discussion of overall clinical and administrative issues and provided a touchpoint to re-engage. This video conference was particularly important given protocols to only have half of the workforce on campus at a time.

Given the large amount of variability across the New York metroplex in regards to management of operations, it is estimated that there were ≈15% of patients who transitioned care out of Columbia. Particularly salient was an opportunistic health system that classified all cancer cases as urgent. Irrespective of the shortage of personal protective equipment (PPE), that institution specifically increased capacity for patients from facilities actively engaged in COVID-19 care with the likely goal of increasing their market share and finances.

### Counseling Patients

Phone calls were made to patients who had been scheduled for surgery. The majority of patients who had benign diagnoses were comfortable with observation and postponement; many self-cancelled their operations. For cancer patients, a transparent

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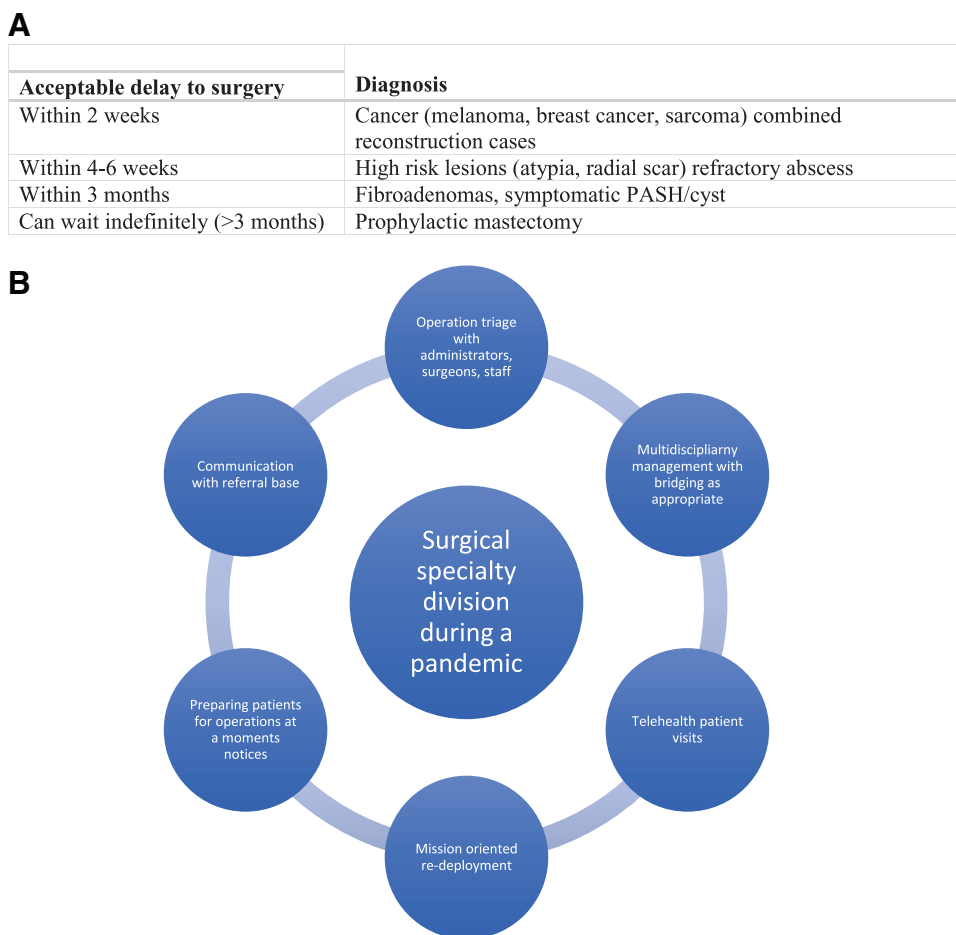
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**FIGURE 1.** A, Initial, ad hoc triage plan. B, Overall factors to consider when a surgical specialty division is faced with a pandemic. PASH indicates psuedoangiomatous stromal hyperplasia.

description of the situation and the plans for only performing urgent cases was conducted, typically by the surgeon. Medical secretaries were responsible for calling patients when the surgeons were unable to. Although limited in terms of capacity, telehealth visits by psychological counseling services was also offered.

**Management of Referral Base**

Efforts were made to communicate with patients’ referring physicians about the surgical scheduling process with the overall goal to accommodate as many patients given OR constraints. A letter communicating this specific process was sent to referring physicians to ensure continued engagement.

**Multidisciplinary Management: Bridges to Surgery**

**Tumor Board**

The breast tumor board was transitioned to a video conference platform. This allowed for social distancing and complied with mandates to not have meetings with more than 10 participants. This remarkably easy transition was set up as a recurring meeting with a password, and then admission granted by the host. This allowed for compliance with confidentiality, security, and facilitated entry of only those who were recognized by the host. There have, thus far, not been any illicit attempts to gain entry.

**Telehealth**

The institutional electronic health record has a video-based telehealth functionality. All faculty and staff received training on telehealth scheduling and billing. Patients with scheduled appointments during the pandemic were offered a telehealth visit. A large majority of the follow-up patients who required imaging in conjunction with their follow-up visits chose to reschedule both appointments, and these were moved into dedicated slots 3 months from the date of contact.

There were 70 telehealth visits during the month of April 2020, an increase of 100% when compared with the same 4-week time frame in 2019. New patients were offered multidisciplinary telehealth visits where they consulted medical oncology, surgery, reconstructive surgery, and radiation oncology in the same day. All patients who were candidates for endocrine therapy as a 12-week bridge to surgery were offered this, and those who clearly required neoadjuvant chemotherapy had this therapy initiated.

During the course of the transition to telehealth, it was recognized that visits were best conducted within the immediate presence of clerical and clinical support staff. To comply with social distancing, staff were stationed immediately at the door of or next to the office where video visits were being conducted. This allowed for staff to call upcoming patients and ensure that they had set up their login and were able to access telehealth and facilitated any immediate follow-ups, referrals, studies. It is neither efficient nor patient centric to simply have physicians doing telehealth for complex surgical issues without these staff in place. For new patients, support staff would call the patients before their video

visit, confirm standard new patient history data, and enter this into the electronic health record. This optimized efficiency for the surgeons and allowed for the video visit to focus on key diagnostic and management points. All faculty in this division speak Spanish, which was tremendously valuable for the telehealth visits.

### Localizations

As a standard, localizations were performed either the day before or the morning of a scheduled operation. With the cancellation of all screening mammography, the breast radiologists recognized the opportunity to have localizations performed to minimize scheduling obstacles to surgical interventions. Patients with a diagnosis of cancer requiring localization, at any time in the next 2 months, were immediately identified and this information shared with the breast imaging faculty and staff. Savi Scout reflector<sup>3,4</sup> localization procedures were escalated to allow patients to quickly flow to the ORs once operative time became available. The Savi Scout is approved for permanent implant. Subsequently Savi Scout reflectors were placed, up to 10 localizations a day, to prepare for surgical intervention. This approach allowed for flexibility with an operative schedule that was unpredictable and allowed the patients to be added on immediately if approval by the SPSC was obtained. Wire localizations were not performed during the pandemic.

### Preoperative Testing for COVID-19

Currently, all patients undergoing surgical intervention require same day COVID-19 testing via nasopharyngeal swab. Results typically take 45–90 minutes to return, which has caused delays in surgical start time. Thus far, no patient has tested positive for COVID-19 on the day of their operation. In contrast, a recent institutional series of 215 pregnant women identified 29 (13.7%) asymptomatic patients who were positive for COVID-19.<sup>5</sup> There were 4 women (1.9%) who had COVID-19 like symptoms and tested positive. The necessity of universal testing for COVID-19 is currently unclear.

### Redeployment

As the need for ICU beds increased, the need for staff to provide ICU care surged. Starting the second week of March, requests for volunteer redeployment to the emergency room, procedure

team, and ICU were put forward by the department of surgery. Medical assistants, nurses, and all faculty were redeployed. For faculty, an option to initially “apprenticeship” in the ICU before managing these patients was provided. In addition, a series of video lectures, presentations, and reading was made available to review and refresh critical care skills. As an alternative to critical care, there was also the ability to serve on the surgical procedure team. This redeployment clearly demonstrated a commitment to the institution as well as a dedication to patients suffering during the pandemic. PPE was readily available to those who required it, aside from reusing N95 respirators, all other PPE was used in the standard fashion.

### CONCLUSION

The pandemic's disruption of a specialty surgical practice was unprecedented. A collaborative focus (Fig. 1) on triage of operations, multidisciplinary management, team inclusive videoconferencing, telehealth, and an openness to redeployment facilitated the divisions ability to contribute to the care mission and maintain its identity.

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