Bulletin: COVID-19 Surgery Information and Resources

Because many of you are experiencing the effects of the novel coronavirus and have questions about how to handle the anticipated onslaught of cases, the American College of Surgeons (ACS) has developed a twice-weekly newsletter from the Bulletin to keep you informed and updated on best practices. The information in the newsletter was conceived and compiled by members of the ACS Board of Regents and Officers and is published under the aegis of our Division of Integrated Communications. During this time, we will be pausing My ACS NewsScope and ACS NewsScope. We will resume publication of these newsletters when the demand for information regarding COVID-19 slows. In the meantime, we anticipate you will find this newsletter useful in providing optimal care to your patients.

In this first issue of COVID-19 Updates, we provide answers to frequently asked questions regarding management of COVID patients, links to journal articles addressing the topic, and federal and regulatory updates, and other updates on the issue.

Our goal is to keep you informed on how to address this ever-evolving pandemic using the best available information. The Regents and staff look forward to receiving your feedback.

Coronavirus: Frequently Asked Questions

How Do I Manage Surgery for COVID-19 PUI/Confirmed Patients?

It is important to be prepared for the potential need to operate on a Coronavirus Disease 2019 (COVID-19) person under investigation (PUI) or a COVID-19 patient. Preparation of a specific operating room (OR) and detailed education of the entire OR team who will be providing care for these patients during their procedure is imperative, without using stock protective equipment. The specific roles and responsibilities of all OR team members must be clear, with a common goal of minimizing the spread of infection to health care workers.

- Develop a dedicated COVID-19 OR to control the spread of the disease
  - Centers for Disease Control and Prevention (CDC) Guidelines for droplet/aerosol room environments with # air exchanges.
- Empty OR of all nonessential materials
- Consider a negative pressure anteroom with separate access if possible
- Anteroom is used for donning/doffing of personal protective equipment (PPE) and separate OR carts for the COVID-19 OR
- Separate OR airway cart; specific airway guidelines for COVID-19 PUI/confirmed patients
- Separate OR equipment cart
- Separate OR medication cart
- Runner outside OR for drugs, devices, equipment
- If intubation required for OR procedure, recommend intubation in negative pressure room prior to OR; avoid intubation in OR
- Use dedicated transport ventilator if being transported on mechanical ventilation (ambulatory bag with viral filter, if ventilator unavailable)
- Additional heat and moisture exchange (HME) filter and viral filter on expiratory limb of anesthesia machine circuit
- Consider additional viral filter on expiratory limb of anesthesia machine circuit
  - APSF recommendation, *FAQ on Anesthesia Machine Use, Protection, and Decontamination during the COVID-19 Pandemic*
- Minimize airway circuit disconnection, endotracheal tube (ETT) must be clamped if any circuit disconnection planned
- Special PPE for OR (N95 or OR powered air-purifying respirator (PAPR), goggles or face shield, gown, boot covers)
- Provide appropriate PPE education (CDC guidance copied below) and post in anteroom in OR
- Must use N95 or OR PAPR for all aerosol-generating procedures
- Extubation should occur in a negative pressure intensive care unit (ICU)/ward room if possible
- Recover patient in the negative pressure ICU/ward room or in the dedicated COVID-19 OR if negative pressure room not available
- Consider dedicated OR teams to manage COVID-19 patients in the OR with detailed education
- Consider performing procedures in negative pressure rooms with anesthesia team support if possible

Following are links to infographics from other sources that offer additional salient details:
- *Canadian Journal of Anesthesia* – Management of COVID-19 Cases in OR
- *Canadian Journal of Anesthesia* Twitter – What we do when a COVID-10 patient needs and operation: Operating room preparation and guidance from a frontline Singapore Hospital
What Is the Best Strategy for Protecting the Anesthesia Machine from Contamination by a Potentially Infected Patient?

Short answer: Place high-quality viral filters between the breathing circuit and the patient’s airway and between the expiratory limb and the machine. The use of these filters is essential to prevent contamination of the machine. (See previous article for details on which filtration devices to use). Note: Even with filters, breathing circuits should be discarded after every patient.

The anesthesia machine needs to be protected from contamination by a potentially infected patient for two reasons. First, if pathogens can enter the internal parts of the machine, they could be passed on to a subsequent patient. Second, respiratory gases sampled for gas analysis can pass pathogens on to other patients or health care professionals after leaving the gas analyzer if improperly managed.

The good news is that the same precautions can be applied to all patients. The strategy is the same regardless of the patient’s risk of infection. A high-quality filter placed between the breathing circuit and the patient’s airway will protect the machine from contamination and also filter gas sampled for analysis. Heat and moisture exchange filters (HMEFs) are a good choice because they preserve airway humidity and are designed so that sampled gas is filtered before it enters the gas analyzer. It is possible to use a filter at the airway that is not also an HMEF. If a filter only is used, lower fresh gas flows (1-2 L/min or less) are desirable during maintenance of anesthesia to preserve humidity in the circuit.

It is also recommended to add an effective viral filter between the expiratory limb of the circle system and the machine. Not only is this second filter a reasonable backup to protect the machine from any particles that pass the primary filter, but it significantly amplifies the effectiveness of the first filter. Given the fact that the primary filter can become less effective if soiled, the backup filter is a good recommendation. Another filter between the machine and the inspiratory limb is added sometimes but is not necessary to protect the machine from the patient nor to protect the patient if the machine is kept clean. The main reason to add an inspiratory limb filter is to eliminate the chance of error by placing a single filtered limb on the inspiratory rather than expiratory port.

How Do Trauma Centers Maintain Access During the COVID-19 Pandemic?

The American College of Surgeons Committee on Trauma (ACS COT) has released a guidance document, “Maintaining Trauma Center Access & Care during the COVID-19 Pandemic: Guidance Document for Trauma Medical Directors,” which was recently sent to all medical directors of trauma centers. The ACS COT recommendations provide guidance to facilitate
trauma centers’ response to the COVID-19 pandemic and assist with safe access to care for injured patients who require time-sensitive life-saving interventions.

“The current worldwide COVID-19 pandemic threatens to overwhelm the health care system and thus impact the ability to care for critically injured patients and other surgical emergencies,” the document notes.

The ACS COT advises trauma medical directors and trauma program managers to engage in the regional and hospital planning process for providing care during the COVID-19 pandemic. The ACS COT recommendations cover the following aspects of the planning process:

• Regional planning
• Hospital planning
• Policies and procedures to protect and support the trauma team
• Strategies at point of care
• Strategies for managing scarce resources

The full guidance document is available online.

How Do I Triage for Elective Operations During the COVID-19 Outbreak?
The American College of Surgeons (ACS) has released “COVID-19: Guidance for Triage of Non-emergent Surgical Procedures” to provide surgeons with additional guidance on the management of non-emergent operations during the Coronavirus Disease 2019 (COVID-19) pandemic. The document was developed in response to the rapidly evolving challenges faced by hospitals in response to COVID-19 outbreak, including broad calls to curtail “elective” surgical procedures. This document follows the release of the College’s “COVID-19: Recommendations for Management of Elective Surgical Procedures.”

What Does the CDC Recommend for Clinicians Who May Have Been Exposed to COVID-19?
The Centers for Disease Control and Prevention has issued guidelines on health care professional exposure to COVID-19.

The key elements of the CDC site for surgeons are the definitions of close contact, whether the patient was wearing a facemask, whether the patient is COVID-positive, and personal protective equipment the health care professional is wearing. The site defines close contact, but pertinent to surgeons is the possibility of aerosolization during an event in which they could have been exposed (cardiopulmonary resuscitation, intubation, extubation, bronchoscopy, nebulizer treatments, sputum production). Laparoscopy is not mentioned in the guidelines.

The guidelines also address postexposure isolation and monitoring based on risk level of the exposure (high, medium, or low). High-level and some medium-level exposures require 14 days restriction from work with active monitoring. Low-level exposures may only require restriction for 14 days with self-monitoring. For patients under investigation (PUI), exposure requires
restriction from work until the COVID status of the patient is determined—usually 24–72 hours.

Use of personal protective equipment (PPE) recommended guidelines include gown, gloves, N-95 mask, and eye protection. Although N-95 masks are recommended, even non-N-95 masks lower the risk of exposure according to the CDC.

Despite all such precautions, community exposure and travel remain a possible cause of healthcare professional. Therefore, all surgeons should be self-monitoring for symptoms early, immediately report symptoms, and self-isolation if symptoms arise.

How Can I Protect Myself and My Patients in the Office?
Vanderbilt University, Nashville, TN, has developed guidance on managing office visits effectively and safely. They are as follows:

• Prescreen new patients by telephone. Screening for the urgency of the condition can usually be completed using this approach, and nonurgent consultations may be deferred.
• Decrease the number of patients in waiting rooms. Spread out chairs and throw away magazines/handouts/materials that may acquire persistent reservoirs of pathogens. Some offices are instituting “wait in your car” mandates in which patients are contacted by cell phone or a pager when to come into the office to avoid excessive numbers of people in the waiting rooms. Vanderbilt is limiting the number of visitors/family members to one per patient in outpatient offices.
• Use telehealth services for routine postoperative consultations as appropriate. This may also be useful for return visits for monitoring as opposed to an in-person visit.

What Lessons Can We Learn from Other Countries?
Italy, Spain, and China have experienced terrible losses during the pandemic. They have also shared their experience with the ACS. Following are recommendations from a surgeon in Spain:

• This virus is an almost perfect machine: many people (especially young and healthy individuals) will be carriers with few or no symptoms.
• Educate surgeons and other health care workers about prevention. Social distancing and handwashing are key.
• Most viral infections will come into the hospital from the community. In-hospital viral transmission is rather unlikely.
• Test as many people as possible (health care workers, surgeons, patients).
• Cancel all elective procedures in patients with a vital or functional prognosis that will not be significantly poorer after a two-month delay in treatment.
• Cancel all nonessential appointments at outpatient clinics. Implement telemedicine solutions.
• Use the institutional ethics committee to support decision making under these critical conditions.
• Design and implement an emotional support program for your teams.
• Design and implement an emotional support program for patients/families who have their surgeries canceled
• Prohibit family visits. Technology can be used to keep them informed and in contact with their loved ones.
• Create two independent areas for COVID-negative and COVID-positive surgical patients in the operating room, surgical intensive care unit, and wards.
• Personal protective equipment must be used for positive and suspicious patients undergoing surgery, bearing in mind that a shortage of equipment is likely to occur.
• When the virus is very prevalent in the community, it would be ideal to have patients tested before surgery.
• There is a dearth of data about the outcomes of COVID-19 positive surgical patients.
• Move fast and act before you see the virus in your institution. If you don't do it, you'll be too late.

Are There Any Research Studies Underway regarding Surgery and COVID-19?
SAGES included this in its newsletter: Register your center for CovidSurg, a global collaborative research effort seeking to report on the comprehensive experience and outcomes of COVID-19 surgical patients and providers. With more centers included, better knowledge can be gained to improve the safety, quality, and outcomes during this pandemic. The study protocol, registration, and details are available online at: globalsurg.org/covidsurg.

Federal & State Legislative & Regulatory Activities

U.S. Congress Temporarily Waive Telehealth Restrictions
The president March 6 signed into law the first of three spending bills intended to fund the federal government’s response to the coronavirus disease 2019 (COVID-19). The legislation includes provisions that grant the Secretary of the U.S. Department of Health and Human Services (HHS) with the authority to temporarily ease restrictions around telehealth services for Medicare beneficiaries, including: lifting the rural and geographic requirements to provide and receive telehealth services, waiving federal requirements that physicians and health professionals be licensed in the state in which they are providing services if they have an equivalent license in another state, and loosening restrictions on the use of telephones to deliver care.

The Secretary of HHS has temporarily activated the provisions regarding telehealth to increase access by Medicare beneficiaries, but only while the COVID-19 public health emergency is in place. For more information regarding telehealth or health information technology, contact Amelia Suermann, American College of Surgeons Congressional Lobbyist, at asuermann@facs.org.

COVID Response Brings Attention to Good Samaritan Laws
Reps. Raul Ruiz, MD (D-CA), and Larry Bucshon, MD (R-IN), last week introduced the House companion to The Good Samaritan Health Professionals Act. Federal and state Good Samaritan laws provide some civil liability protections for volunteer health care providers, but only if they are licensed in the state where the services are provided. This will leave many health care professional volunteers who provide care in other states without Good Samaritan protections. Without federal intervention, these states cannot address the gaps in Good Samaritan laws to protect providers from out of state. The Good Samaritan Health Professionals Act (S.1350/H.R. 6283) provides certainty by extending federal Good Samaritan civil liability protections (equivalent to the protections found in the federal Volunteer Protection Act of 1997 and many state laws) to interstate volunteers who are licensed in their home state.

The American College of Surgeons (ACS), along with various provider groups, are advocating for the inclusion of this legislation as part of the response to the Coronavirus Disease 2019 pandemic to ensure providers can assist where the need is the greatest.

Read the ACS letter of support. For more information on medical liability reform efforts, contact Hannah Chargin, Congressional Lobbyist, hchargin@facs.org.

States Respond to COVID-19

State and local officials have been working overtime to address the Coronavirus Disease 2019 (COVID-19) crisis. From governors, to public health departments, to state legislatures and local municipalities, all legislators and policymakers are responding and making the tough decisions. Surgeons who are interested in what may be happening at the state and local level regarding medical licensure/telemedicine, emergency declarations, legislative actions, and state health department initiatives should consider the following online resources:

- State Emergency Declarations and Licensing Waivers
- State Health Departments
- National Governors Association
- National Conference of State Legislatures

New Billing Processes Established for COVID-19 Testing

The Centers for Medicare & Medicaid Services (CMS) issued two new Healthcare Common Procedure Coding System (HCPCS) codes to help track testing related to Coronavirus Disease (COVID-19) and standardize reporting and reimbursement for such tests offered by hospitals, health systems and laboratories across the country. Beginning April 1, providers can bill Medicare and other payors for the administration of tests developed by the Centers for Disease Control and Prevention (CDC) for dates of service on or after February 4 using HCPCS code U0001. Providers performing non-CDC laboratory rests for COVID-19 can bill for them using HCPCS code U0002.

To further streamline billing processes and ensure proper payment for COVID-19 testing, the Current Procedural Terminology (CPT) Editorial Panel issued CPT code 87635 (Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Coronavirus disease [COVID-19]), amplified probe technique), which may be submitted
on claims for services furnished on or after March 13. Providers are encouraged to contact payors to determine their guidelines regarding applicability for retroactive billing and payment for this code.

HCPCS and CPT codes should not both be reported on the same claim, and the appropriate code to be reported is dependent upon the billing requirements of the payor to which the claim is being submitted. More information about each code can be found on the CMS and CPT Editorial Panel websites. Contact Lauren Foe, Senior Regulatory Associate, at lfoe@facs.org with questions.