NEWS

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Joint Statement: Roadmap for Resuming Elective Surgery after COVID-19 Pandemic

American College of Surgeons
American Society of Anesthesiologists
Association of periOperative Registered Nurses
American Hospital Association

Read the Joint Statement: Roadmap for Resuming Elective Surgery after COVID-19 Pandemic (PDF)

Introduction:

In response to the COVID-19 pandemic, the Centers for Medicare and Medicaid Services (CMS), the U.S. Surgeon General and many medical specialties such as the American College of Surgeons and the American Society of Anesthesiologists recommended interim cancelation of elective surgical procedures. Physicians and health care organizations have responded appropriately and canceled non-essential cases across the country. Many patients have had their needed, but not essential, surgeries postponed due to the pandemic. When the first wave of this pandemic is behind us, the pent-up patient demand for surgical and procedural care may be immense, and health care organizations, physicians and nurses must be prepared to meet this demand. Facility readiness to resume elective surgery will vary by geographic location. The following is a list of principles and considerations to guide physicians, nurses and local facilities in their resumption of care in operating rooms and all procedural areas.

1. Timing for Reopening of Elective Surgery

Principle: There should be a sustained reduction in the rate of new COVID-19 cases in the relevant geographic area for at least 14 days, and the facility shall have appropriate number of intensive care unit (ICU) and non-ICU beds, personal protective equipment (PPE), ventilators and trained staff to treat all non-elective patients without resorting to a crisis standard of care.

Considerations: Facilities should evaluate the following before resuming elective surgery:

a. Timing of resumption: There should be a sustained reduction in rate of new COVID 19 cases in the relevant geographic area for at least 14 days before resumption of elective surgical procedures.[1,2,3,4]
b. Any resumption should be authorized by the appropriate municipal, county and state health authorities.
c. Facilities in the state are safely able to treat all patients requiring hospitalization without resorting to crisis standards of care.
d. Does the facility have appropriate number of ICU and non-ICU beds, PPE, ventilators, medications, anesthetics and all medical surgical supplies?
e. Does the facility have available numbers of trained and educated staff appropriate to the planned surgical procedures, patient population and facility resources? Given the known evidence supporting health care worker fatigue and the impact of stress, can the facilities perform planned procedures without compromising patient safety or staff safety and well-being?

2. COVID-19 Testing Within a Facility

Principle: Facilities should use available testing to protect staff and patient safety whenever possible and should implement a policy addressing requirements and frequency for patient and staff testing.

Considerations: Facility COVID-19 testing policies should account for:

a. Availability, accuracy and current evidence regarding tests, including turnaround time for test results.
b. Frequency and timing of patient testing (all/selective).
   1. Patient testing policy should include accuracy and timing considerations to provide useful preoperative information as to COVID-19 status of surgical patients, particularly in areas of residual community transmission.
   2. If such testing is not available, consider a policy that addresses evidence-based infection prevention techniques, access control, workflow and distancing processes to create a safe environment in which elective surgery can occur. If there is uncertainty about patients' COVID-19 status, PPE appropriate for the clinical tasks should be provided for the surgical team.
c. Indications and availability for health care worker testing.
d. How a facility will respond to COVID-19 positive worker, COVID-19 positive patient (identified preoperative, identified postoperative), "person under investigation" (PUI) worker, PUI patient.

3. Personal Protective Equipment

Principle: Facilities should not resume elective surgical procedures until they have adequate PPE and medical surgical supplies appropriate to the number and type of procedures to be performed.

Considerations: Facility policies for PPE should account for the following:

a. Adequacy of available PPE, including supplies required for potential second wave of COVID-19 cases.
b. Staff training on and proper use of PPE according to non-crisis level evidence-based standards of care.
c. Policies for the conservation of PPE should be developed (e.g., intubation teams) as well as policies for any extended use or reuse of PPE per CDC and FDA guidance.

4. Case Prioritization and Scheduling

Principle: Facilities should establish a prioritization policy committee consisting of surgery, anesthesia and nursing leadership to develop a prioritization strategy appropriate to the immediate patient needs.

Considerations: Prioritization policy committee strategy decisions should address case scheduling and prioritization and should account for the following:

a. List of previously cancelled and postponed cases.

b. Objective priority scoring (e.g., MoNTS instrument).[5]

c. Specialties' prioritization (cancer, organ transplants, cardiac, trauma).[6,7]

d. Strategy for allotting daytime "OR/procedural time" (e.g., block time, prioritization of case type [i.e., potential cancer, living related organ transplants, etc.]).

e. Identification of essential health care professionals and medical device representatives per procedure.

f. Strategy for phased opening of operating rooms.

1. Identify capacity goal prior to resuming (e.g., 25% vs. 50%).
2. Outpatient/ambulatory cases start surgery first followed by inpatient surgeries.
3. All operating rooms simultaneously – will require more personnel and material.

g. Strategy for increasing "OR/procedural time" availability (e.g., extended hours before weekends).

h. Issues associated with increased OR/procedural volume.

1. Ensure primary personnel availability commensurate with increased volume and hours (e.g., surgery, anesthesia, nursing, housekeeping, engineering, sterile processing, etc.).
2. Ensure adjunct personnel availability (e.g., pathology, radiology etc.).
3. Ensure supply availability for planned procedures (e.g., anesthesia drugs, procedure-related medications, sutures, disposable and nondisposable surgical instruments).
4. Ensure adequate availability of inpatient hospital beds and intensive care beds and ventilators for the expected postoperative care.
5. New staff training.

5. Post-COVID-19 Issues for the Five Phases of Surgical Care

Principle: Facilities should adopt policies addressing care issues specific to COVID-19 and the postponement of surgical scheduling.

Considerations: Facility policies should consider the following when adopting policies specific to COVID-19 and the postponement of surgical scheduling:

a. **Phase I: Preoperative**
1. Guideline for preoperative assessment process.
   - Patient readiness for surgery can be coordinated by anesthesiology-led preoperative assessment services.
2. Guideline for timing of re-assessing patient health status.
   - Special attention and re-evaluation are needed if patient has had COVID-19-related illness.
   - A recent history and physical examination within 30 days per Centers for Medicare and Medicaid Services (CMS) requirement is necessary for all patients. This will verify that there has been no significant interim change in patient's health status.
   - Consider use of telemedicine as well as nurse practitioners and physician assistants for components of the preoperative patient evaluation.
   - Some face-to-face components can be scheduled on day of procedure, particularly for healthier patients.
   - Surgery and anesthesia consents per facility policy and state requirements.
   - Laboratory testing and radiologic imaging procedures should be determined by patient indications and procedure needs. Testing and repeat testing without indication is discouraged.
   - Assess preoperative patient education classes vs. remote instructions
3. Advanced directive discussion with surgeon, especially patients who are older adults, frail or post-COVID 19.
4. Assess for need for post-acute care (PAC) facility stay and address before procedure (e.g., rehabilitation, skilled nursing facility).

b. **Phase II: Immediate Preoperative**
1. Guideline for pre-procedure interval evaluation since COVID-19-related postponement.
2. Assess need for revision of nursing, anesthesia, surgery checklists regarding COVID-19.

c. **Phase III: Intraoperative**
1. Assess need for revision of pre-anesthetic and pre-surgical timeout components.
2. Guideline for who is present during intubation and extubation.
3. Guideline for PPE use.
4. Guideline for presence of nonessential personnel including students.

d. **Phase IV: Postoperative**
1. Adhere to standardized care protocols for reliability in light of potential different personnel. Standardized protocols optimize length of stay efficiency and decrease complications (e.g., ERAS).

e. **Phase V: Post Discharge Care Planning**
1. PAC facility availability
2. PAC facility safety (COVID-19 or non-COVID-19 issues)
3. Home setting: Ideally patients should be discharged home and not to a nursing home as higher rates of COVID-19 may exist in these facilities.

6. Collection and Management of Data

Principle: Facilities should reevaluate and reassess policies and procedures frequently, based on COVID-19 related data, resources, testing and other clinical information.

Considerations: Facilities should collect and utilize relevant facility data, enhanced by data from local authorities and government agencies as available:

a. COVID-19 numbers (testing, positives, availability of inpatient and ICU beds, intubated, OR/procedural cases, new cases, deaths, health care worker positives, location, tracking, isolation and quarantine policy).
b. Facility bed, PPE, ICU, ventilator availability.
c. Quality of care metrics (mortality, complications, readmission, errors, near misses, other – especially in context of increased volume).

7. COVID-related Safety and Risk Mitigation surrounding Second Wave

Principle: Facilities should have and implement a social distancing policy for staff, patients and patient visitors in non-restricted areas in the facility which meets them current local and national recommendations for community isolation practices.

Considerations:

a. Each facility's social distancing policy should account for:
   1. Then-current local and national recommendations.
   2. The number of persons that can accompany the procedural patient to the facility.
   3. Whether visitors in perioperative areas should be further restricted.

8. Additional COVID-19 Related Issues

a. Health care worker well-being: post-traumatic stress, work hours, including trainees and students if applicable.

b. Patient messaging and communication.

c. Case scheduling process.

d. Facility and OR/procedural safety for patients.

e. Preoperative testing process.

1. For-COVID-19 positive patients.
2. For non-COVID-19-positive patients.
3. Environmental cleaning.

f. Prior to implementing the start-up of any invasive procedure, all areas should be terminally cleaned according to evidence-based information.

g. In all areas along five phases of care (e.g. clinic, preoperative and OR/procedural areas, workrooms, pathology-frozen, recovery room, patient areas, ICU, ventilators, scopes, sterile processing, etc.):

1. Regulatory issues (The Joint Commission, CMS, CDC).
2. Operating/procedural rooms must meet engineering and Facility Guideline Institute standards for air exchanges.
3. Re-engineering, testing, and cleaning as needed of anesthesia machines returned from COVID-19 and non-COVID ICU use.

1. "National coronavirus response: A road map to reopening," American Enterprise Institute, March 29, 2020
2. "Dr. Anthony Fauci on How Life Returns to Normal," *Wall Street Journal*, April 7, 2020
3. "COVID-19 Projections," Institute for Health Metrics Evaluation
4. "COVID-19 Hospital Impact Model for Epidemics (CHIME)," Penn Medicine
5. "Medically-Necessary, Time-Sensitive Procedures: A scoring system to ethically and efficiently manage resource scarcity and provider risk during the COVID-19 pandemic (PDF)," Prachand V, Milner R, Angelos P, et al., *JACS* in press.
6. "COVID-19: Guidance for Triage of Non-Emergent Surgical Procedures," American College of Surgeons, March 17, 2020
7. "COVID 19: Elective Case Triage: Guidelines for Surgical Care (PDF)," American College of Surgeons, March 27, 2020 (Updated)