Deployment of Surgeons for Out-of-Specialty Patient Care

Introduction

The Coronavirus Disease 2019 (COVID-19) pandemic has inflicted unprecedented stresses upon healthcare institutions and the caregivers who provide the front-line services needed to maximize the chances of survival and return to normalcy for patients who are infected and develop clinical symptoms. In this challenging time, it will be necessary to deploy surgeons to work outside of their usual specialty in order to maximize effectiveness of available clinicians. In this brief report, potentially helpful options will be provided based on the experience of surgeons involved in the care of patients with COVID-19 infection.

The material presented here will focus on the provision of critical care services. The ideas described are suggestions; it is clear that the solutions chosen for individual patient care units will need to be based on patient needs, availability of trained critical care surgeons, residents, physician’s assistants, advanced practice nurses and medical students. Once the need has been assessed, deployment of surgeons to provide out-of-specialty care can be determined.

A team-based approach is a familiar means of providing surgical critical care. Integration of out-of-specialty surgeons into these teams is an easily understood and implemented method of meeting these needs. One large health system has been faced with the need to provide care for two 32-bed units caring for a total of 64 patients. They enlarged two teams, one led by a critical care surgeon and the other led by a critical care anesthesiologist. Two residents currently assigned to the unit(s) or with recent critical care experience were assigned to each team. A younger general surgeon with recent critical care experience was assigned to each team. Older general surgeons and out-of-specialty surgeons were used to bring each team to a total of 5-8 members. Physician’s assistants, advanced practice nurses, and medical students were used as needed when these resources were available. Team leaders, younger surgeons, and residents with recent critical care experience were asked to oversee procedures and provide instruction for older general surgeons and out-of-specialty surgeons. Knowledge needs assessment and training for older and out-of-specialty surgeons was a responsibility assigned to all team
members who have critical care experience. Feedback from nursing and respiratory therapy staff was recognized as a valuable resource in these areas. Team meetings were held at the beginning and at the end of 12-hour shifts to provide hand-off and teaching. Team leaders were encouraged to “lead from the rear” to minimize the risk of infection of experienced clinicians. Available teaching resources were provided to team members (see these in the list below). To date, this approach has worked well in the institution in which it was implemented.

Resources for Out-of-Specialty Surgeon Learning

Listed below are suggested resources for learning. These should be valuable for older surgeons and out-of-specialty surgeons. Early resources that will be valuable at the time of entry into ICU care activities are the Society of Critical Care teaching modules for non-critical care clinicians, the ATLS video modules, and the Surviving Sepsis Campaign practice guidelines for management of critically ill patients with COVID-19 infection. Links to these and other resources are provided.

ACS Committee on Trauma

The ACS Committee on Trauma has made available teaching videos from the Advanced Trauma Life Support® course that cover the topic areas listed here:

- Hospital Preparation
- Hand-Over
- Initial Assessment
- Log-Roll
- Secondary Survey
- Nasopharyngeal Airway
- Oropharyngeal Airway
- Adult Orotracheal Intubation
- Endotracheal Intubation with BURP
- Needle Cricothyroidotomy
- Surgical Cricothyroidotomy
- Needle Decompression
- Open Pneumothorax
- FAST - Pericardial
- Pelvic Blood Loss
- Pelvic Binder
- Chest Tube
- Focused Assessment with Sonography for Trauma

Military Health System Strategic Partnership American College of Surgeons

The Blue Book: Military-Civilian Partnerships for Trauma Training, Sustainment, and Readiness
Other Resources

**Orthopedics This Week**
*How to Deploy Residents During COVID-19*

**Society of Critical Care Medicine**
*Teaching Modules for Non-Critical Care Practitioners*
*Disaster Response Recommendations*

**Surviving Sepsis Campaign**
*Surviving Sepsis Campaign Website*
*Guidelines on the Management of Critically Ill Adults with Coronavirus Disease 2019 (COVID-19)*

**University of Pennsylvania**
*Suggested Health Care System Response to Needs for Personnel Deployment during the COVID-19 Pandemic: ideas from the University of Pennsylvania*

*Released March 30, 2020*