EM/Surgery Policy on Chest Tube Placement in the Emergency Department:

Background and intent:
EM residents have an ACGME requirement to perform a minimum of 10 chest tubes before graduation. The EM Program expects residents to achieve higher than minimal standards for all ACGME key index procedures, including chest tubes.

EM residents have 2 trauma surgery rotations during which they achieve the vast majority of their chest tube experience: TICU (4 weeks in PGY1) and ED Trauma (8 weeks in PGY2 and 4 weeks in PGY3). At any given time, there are on average 3 EM residents rotating on ED trauma. In 2021-2022, the average number of chest tubes placed in the ED was 14 per month.

Trauma surgery residents rotate on trauma as PGY2, 3 and 4s. Their call schedule is divided up between these residents as well as the surgical research residents.

The following policies have been agreed upon by the emergency medicine and trauma surgery leadership and will be in effect for all TRAUMA chest tubes placed in the emergency department:

1. The trauma surgery team should be notified in advance of any chest tube placed in trauma patients. The surgery senior resident, in house surgery chief, or trauma surgery attending is expected to be present assist the ED provider as needed.

2. The EM resident rotating on trauma will have first priority to place chest tubes on ED trauma patients when the senior trauma surgery resident is a lab resident, PGY 3, or PGY 4, and will be supervised accordingly.

3. When the EM resident has not yet demonstrated competence in placing an expeditious chest tube (for example, during the first PGY2 trauma surgery rotation with fewer than three chest tubes performed, and/or when the patient has hypotension, respiratory distress, or extremis for which tube thoracostomy is the treatment), then the Trauma surgery attending and/or EM attending should perform or delegate the procedure to the most qualified physician, who could be from EM or surgery.

4. The senior trauma surgery resident will have first priority to place a chest tube on ED trauma patients when that resident is a PGY2 during their first trauma rotation with fewer than three chest tubes performed. These residents need exposure to placing chest tubes such that they become facile with this procedure and can help guide future generations of both EM and surgery residents in their remaining 4 years of training.

5. Once deemed safe by the trauma surgery chief resident and/or the trauma surgery attendings, the PGY2 surgery resident should be walking ED residents through the procedures (like their PGY3 and 4 surgery peers) such that the EM residents can secure their appropriate procedure numbers and experience.

6. EM residents should be appropriately gowned and actively participate in ALL chest tubes that a surgical attending, an EM attending, or a surgical resident performs in the ED.
7. Supervision of the EM resident placing a chest tube in a trauma patient may be done by the Trauma surgery attending, the EM attending, or the senior trauma surgery resident. It is the

expectation that all trainees follow sterile technique in addition to the instructions of the supervisor.

8. This revised policy will ensure that the ED retains the vast majority of chest tube placements while ensuring appropriate trauma surgery involvement as the patients will be admitted to the surgical service and will therefore have to manage any complications etc.

9. This policy applies to patients with **traumatic** injuries only

Department of Surgery	**Department of Emergency Medicine**

References:

ACGME EM Program requirements:
https://www.acgme.org/globalassets/pfassets/programrequirements/110_emergencymedicine_2021.pdf
ACGME EM Program FAQs:
https://www.acgme.org/globalassets/pdfs/faq/110_emergency_medicine_faqs_2017-07-01.pdf

IV.B.1.b).(2) Residents must be able to perform all medical, diagnostic, and surgical procedures considered essential for the area of practice. **(Core)**
IV.B.1.b).(2).(a) Residents must demonstrate competence in:
IV.B.1.b).(2).(a).(i) **performing** diagnostic and **therapeutic procedures and emergency stabilization**; (Core)
IV.B.1.b).(2).(a).(ii) **managing critically-ill and injured patients** who present to the emergency department, prioritizing critical initial stabilization action, mobilizing hospital support services in the resuscitation of critically-ill or injured patients and reassessing after a stabilizing intervention; (Core)
IV.B.1.b).(2).(a).(iii) properly sequencing critical actions for patient care and generating a differential diagnosis for an undifferentiated patient; (Core)
IV.B.1.b).(2).(a).(iv) mobilizing and managing necessary personnel and other hospital resources to meet critical needs of multiple patients; and, (Core)
IV.B.1.b).(2).(a).(v) **performing invasive procedures**, monitoring unstable patients, and **directing major resuscitations of all types** on all age groups. (Core)
IV.B.1.b).(2).(b) **Residents must perform indicated procedures on all appropriate patients, including** those who are uncooperative, at the extremes of age, **hemodynamically unstable** and who have multiple co-morbidities, poorly defined anatomy, high risk for pain or procedural complications, or require sedation, take steps to avoid potential complications; and recognize the outcome and/or complications resulting from the procedures. (Core)