**SHM Education Committee**

**Critical Care Needs Assessment Task Force**

**Recommendations to the SHM Board**

**September 2015**

**INTRODUCTION:**

The intensivist shortage in the United States is well-documented,[[1]](#endnote-1),[[2]](#endnote-2),[[3]](#endnote-3),[[4]](#endnote-4) and is likely most palpable in community hospital settings, where hospitalists serve as primary and possibly sole providers of critical care services. In some regions more than 80% of hospitalists deliver care in the ICU. Hospitalists who practice in the ICU come from varied training and practice backgrounds and have widely disparate critical care knowledge, skills, and competencies. To date, there is no standardized practice benchmark for hospitalists who practice in the ICU, nor is there any formal curriculum to facilitate achieving these competencies. As the professional society for hospitalists, SHM must step forward and advocate on behalf of these practitioners.

**GOAL OF THIS SURVEY:** Obtain a detailed understanding of how hospitalists practice in American ICUs.

**Survey Objective 1: Define the Demographics and Practice Role**

Clarify how and where hospitalists care for ICU patients (types of hospitals, how they practice), how they are supported, and the extent to which their training matches the demands placed upon them.

1. Describe your hospital

 Academic medical center

 Large community hospital: referral center or major academic affiliate

 Small community or satellite hospital

 Critical access hospital

2. How large is your hospital?

 >500 beds

 300-499 beds

 150-299 beds

 50-149 beds

 <50 beds

3. How many ICU beds are in your hospital?

 >50

 25-49

 10-24

 <10

4. Define the setting of your hospital

 Large urban (population >1,000,000)

 Medium urban (population 250,000-1,000,000)

 Small urban (population <250,000)

 Suburban

 Rural

5. Do you manage ICU patients?

Yes, as the attending of record or primary physician during the hospitalization

Yes, as a consultant only for selected medical issues

No, I do not have a role in the ICU

6. What types of ICU patients do hospitalists primarily manage in your hospital?

 Hospitalists manage most or all ICU patients in my hospital

 Hospitalists manage some ICU patients (surgeons, intensivists, or others manage the remainder)

 Hospitalists only provide medical consultation in the ICU

7. What types of specialty ICU patients do hospitalists manage in your hospital (check all that apply)

 Hospitalists do not manage specialty ICU patients (do not check any others)

 Orthopedic/trauma

 Neurology/neurosurgery

 Cardiology/cardiac surgery

 General surgery

8. What role do board-certified intensivists play in managing ICU patients in your hospital?

 All major decisions are made by an intensivist 24:7

 Major decisions are made by an intensivist during daytime only; hospitalists provide the majority of care after hours

 Intensivists are consultants only; hospitalists make major decisions throughout the day

 Hospitalists provide all critical care services without on-site intensivist input (telemedicine excepted)

9. How many hours per day are board certified intensivists immediately available (physically present in the ICU or nearby; not in clinic or out of the hospital)?

 0 to <4 hours

 4 to <8 hours

 8 to <14 hours

 14 to <24 hours

24 hours

10. Under typical circumstances, how many of the ICU patients under your direct care are mechanically ventilated?

 0-1

 2

 3

 4

 5 or more

11. When your patients are mechanically ventilated, who manages the ventilators?

Hospitalists manage all ventilators

Only hospitalists with specialized interest and/or training manage ventilators

Hospitalists manage some ventilators (intensivists manage complex or prolonged cases)

Board-certified intensivists manage all ventilators

Respiratory therapists independently manage all ventilators

12. Do you routinely transfer critically ill patients from your ED or ICU to another medical center for a higher level of care? (if “no”, skip the next 4 questions)

 Yes

 No

13. Why do you transfer patients to higher levels of care? (check all that apply)

 Lack of nursing/respiratory support for critically ill patients

 Lack of intensivist availability/support

 Lack of other medical subspecialty support (nephrology, cardiology, gastroenterology, etc)

 Procedures/interventions not available at our center

14. How difficult is it for you to transfer critically ill patients for a higher level of care?

One call, no delays

Few calls, some delays

Many calls, frequent delays

15. How many of the following procedures do you perform each year? (check all that apply)

 Central venous catheter insertion: 0, 1-5, 6-10, 11-20, >20

 Arterial catheter insertion: 0, 1-5, 6-10, 11-20, >20

 Endotracheal intubation: 0, 1-5, 6-10, 11-20, >20

 Chest tube insertion: 0, 1-5, 6-10, 11-20, >20

 Flexible bronchoscopy: 0, 1-5, 6-10, 11-20, >20

 Thoracentesis: 0, 1-5, 6-10, 11-20, >20

 Paracentesis: 0, 1-5, 6-10, 11-20, >20

 Bedside diagnostic ultrasonography: 0, 1-5, 6-10, 11-20, >20

16. Do you participate in ICU committees or quality improvement initiatives?

 Yes. My hospital medicine group leads some or all of these initiatives

 Yes. My hospital medicine group participates, but others lead them

 No

**Survey Objective 2: Identify Practice Gaps**

Identify what specific services (cognitive, procedural, and organizational) are required of hospitalists in the ICU and define whether or not hospitalists providing these services feel qualified and adequately trained to do so.

18. I feel that I am expected to practice beyond my scope of expertise when caring for ICU patients

 All of the time

 Most of the time

 Some of the time

 Rarely

 Never

19. The intensity of board-certified intensivist support in my hospital is sufficient to support my care of ICU patients

 All of the time

 Most of the time

 Some of the time

 Rarely

 Never

20. On a scale of 1-5 (1: very uncomfortable; 5: very comfortable), rate your comfort in managing the following areas:

Performing common ICU procedures (airway management, central venous lines, arterial lines, etc)

 Hemodynamic monitoring

 Identification and treatment of shock states (including initiation titration of fluids, vasopressors, and inotropes)

 Acute respiratory failure

Mechanical ventilation

 Neuro-critical care (stroke, hemorrhage, traumatic brain injury, status epilepticus)

 Cardiac emergencies (MI, severe dysrhythmias, cardiogenic shock)

 Management of ICU patients after major surgery

 Management of severe overdoses or drug withdrawal states

 Sedation, analgesia and paralysis of ICU patients

 Management of severe electrolyte or acid-base disturbances

 Management of bleeding, coagulopathy and massive transfusion

 Severe infection (diagnosis, antibiotic selection, and antibiotic de-escalation)

21. On a scale of 0-5 (0: not at all comfortable, 5: fully comfortable), rate your comfort with participating in ICU process improvement in the following roles:

Participating in process improvement initiatives within the ICU

Leading process improvement initiatives within the ICU

Participating in efforts to optimize multidisciplinary care within the ICU

Leading efforts to optimize multidisciplinary care within the ICU

Participating in efforts to improve patient triage into or out of the ICU based on the most appropriate level of care

Leading efforts to improve patient triage into or out of the ICU based on the most appropriate level of care

**Survey Objective 3: Propose Educational Offerings to Bridge Identified Gaps**

Elucidate what educational opportunities hospitalists would pursue to address cognitive or procedural gaps and delineate whether certification and/or designation would serve as a meaningful distinction for participating hospitalists.

22. If you were to seek additional ICU training, where would you choose to get it? Please rank each option (1: first choice; 6: last choice)

 Courses or pre-courses at national SHM meetings

 Courses or pre-courses at regional SHM meetings

 On-line modules (similar to SHM perioperative medicine modules)

 Stand-alone educational courses (similar to SHM Academies)

 Existing courses resources from critical care societies/organizations

 High-yield reference materials such as textbooks or on-line guidelines

23. How interested would you be in learning more about a formal course curriculum and certification process in critical care medicine for hospitalists (NOT a critical care fellowship)?

 Very interested

Somewhat interested

Not interested

24. What barriers might prevent you from participating? (check all that apply)

 Cost

 Time commitment / diversion from other duties

 I don’t need it

 Uncertainty about what I would get in return for my time commitment

 Why not just do a critical care fellowship and get the “real deal”?

 Other: \_\_\_\_\_\_\_

**Survey Feedback: Please help us improve**

#. If you are willing for the Critical Care Task Force to contact you in the future, please share your e-mail address: \_\_\_\_\_\_\_

(Note: Your address will NOT be linked in any way to your responses.)

#. Please share any comments:

**Thank you for your participation!**

SHM Education Committee Critical Care Needs Assessment Task Force

Alfred Burger, Elizabeth Cerceo, Jessica Fox, Dana Giarizzi, Charlene Knight, Thomas McIlraith, Eric Siegal, Joseph Sweigart

1. Angus DC, Kelley MA, Schmitz RJ, White A, Popovich J Jr. Current and projected workforce requirements for care of the critically ill and patients with pulmonary disease: Can we meet the requirements of an aging population? JAMA. Dec 6, 2000; 284(21): 2762-2770. [↑](#endnote-ref-1)
2. Kelley MA, Angus D, Chalfin DB, Crandall ED, Ingbar D, Johanson W, et al. The critical care crisis in the United States: A report from the profession. Chest. April 2004; 125(4):1514-1517. [↑](#endnote-ref-2)
3. Ewart GW, Marcus L, Gaba MM, Bradner RH, Medina JL, Chandler EB. The critical care medicine crisis: A call for federal action: A white paper from the critical care professional societies. Chest. April 2004; 125(4):1518-1521. [↑](#endnote-ref-3)
4. Krell K. Critical care workforce*.* Crit Care Med. April 2008. 36(4): 1350-1353. [↑](#endnote-ref-4)