



HARVARD
MEDICAL SCHOOL

Beth Israel Deaconess
Medical Center

EIGHTH ANNUAL Principles of Critical Care Medicine for Non-Intensive Care Specialists

Sept. 23–26, 2020 HYATT REGENCY BOSTON, BOSTON, MASSACHUSETTS



EARN UP TO 31.50 AMA PRA Category 1 Credits™ • 11 Risk Management Credits • 31.50 MOC Points

**FEATURING ADVANCED SIMULATION AND PROCEDURAL
TRAINING WORKSHOPS FOR PHYSICIANS, NPs, PAs AND APNs**

**INTERACTIVE CASE-BASED LECTURES
HANDS-ON PROCEDURAL TRAINING
LIVE PATIENT DEMONSTRATIONS**

- Principles of mechanical ventilation
 - ECMO
 - Best practices for transferring critically ill patients
 - Tangible strategies for managing sedation and paralysis
 - Management of submassive pulmonary emboli
 - Critical care cardiology
 - Management of hemorrhagic shock and anticoagulant reversal
 - Practical strategies for approaching altered mental status
 - Updates in the management of chronic respiratory failure
 - Approaches to common toxicology cases
 - Electrolyte abnormalities
 - Evidence-based treatment of sepsis and pneumonia
 - Critical thinking in critical care
 - Care of the post-arrest patient
 - Physiology of shock and best practices for vasopressor use
 - Best practices for practicing comfort-focused care in your ICU
 - Oncologic emergencies
 - Chest tube management
 - Troubleshooting the ventilator (advanced training)
 - Hands-on practice of ultrasound-guided vascular access and IO placement (advanced training)
 - Individualized thoracic ultrasound and echocardiography training on live patient models (advanced training)
- See inside for complete agenda*

**REGISTER NOW:
CriticalMedBoston.com**

Course Overview

Keeping pace with the rapid changes in evidence-based critical care medicine is difficult for specialty-trained intensivists; for non-intensivists, the challenge of staying up to date can be overwhelming. **This cutting-edge CME course is intended to provide core clinical critical-care skills to health care providers who are not trained as intensivists but whose clinical duties involve taking care of critically ill patients.** The focus of this course will be to highlight recent important evidence-based advances in the practice of modern critical care medicine and leave the audience with tangible strategies to immediately improve their practices. Hot-off-the-press emerging topics will also be addressed, arming you with the latest information.



Our outstanding faculty, recognized as experts in the field, will use diverse teaching methodologies including: didactic sessions, interactive case-based discussions, Q&A sessions, panel discussions and hands-on procedure teaching. These sessions will test your clinical reasoning and leave you with strategies for incorporating, synthesizing and applying core critical knowledge to your intensive care practice.

Master the skills you need to practice modern critical care medicine by customizing your learning experience

Choose from a variety of specific-population workshops that are included in your tuition, or take advantage of the hands-on and advanced training sessions to enhance your medical knowledge, clinical reasoning and procedural skills. The following intensive care problems, techniques and updates will be addressed in this comprehensive course:

- Mechanical ventilation and patient-ventilator interactions
- Non-invasive ventilation and high-flow nasal cannula
- Point-of-care ultrasound utilization in the ICU
- Advancements in ACLS and post-resuscitation care
- Sepsis updates
- End-of-life care in the ICU
- Shock and vasopressors
- Sedation
- Hemorrhagic shock and massive transfusion protocols
- Pulmonary embolism
- Post-intensive care syndrome
- Refractory hypoxemia and ARDS
- ECMO
- Ventilator troubleshooting
- Infectious emergencies and updates in pneumonia and antimicrobial selection
- Toxicodromes
- Procedural complications
- Acute airway emergencies
- Oncologic emergencies
- Severe acid-base and electrolyte disturbances

CORE COURSE	REGISTER ON OR BEFORE JUNE 5	REGISTER AFTER JUNE 5
Physicians and Allied Health Professionals	\$1299	\$1399
Residents and Fellows in Training	\$999	\$1099

ADVANCED HANDS-ON TRAINING (OPTIONAL SESSIONS) — LIMITED AVAILABILITY

Troubleshooting the Ventilator (three sessions available)	\$300
Critical Care Procedures (three sessions available)	\$500
Ultrasound 101 (two sessions available)	\$575

Fees are shown in USD. Your tuition includes a daily continental breakfast and morning and afternoon refreshment breaks. All course participants will receive a comprehensive digital syllabus and complimentary Internet access.

General Information

Registration, Payment, Confirmation and Refund Policy

To register, please visit the course website at [CriticalMedBoston.com](https://www.criticalmedboston.com). At the end of the registration process, a \$10 non-refundable processing fee will be added to your registration, and you will have the choice of paying by check, credit card (Visa, MasterCard or American Express) or wire transfer in USD. If you are paying by check (draft on a United States bank) or by wire transfer, the online registration system will provide you with instructions for remitting your course fees. Postal, telephone, fax and cash-payment registrations are not accepted.

Upon receipt of your paid registration, an email confirmation will be sent to you. Be sure to include an email address that you check frequently. Your email address is used for critical information, including registration confirmation, evaluation and certificate. **Please do not make non-refundable travel plans until you have received an email from our office confirming your paid registration.** Refunds, less an administrative fee of \$150, will be issued for all cancellations received two weeks before the start of the course. Refund requests must be received by email. No refund will be issued should cancellation occur less than two weeks before. "No shows" are subject to the full course fee and no refunds will be issued once the course has started.

Accreditation

The Harvard Medical School is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The Harvard Medical School designates this live activity for a maximum of 31.50 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ABIM Maintenance of Certification

Successful completion of this CME activity enables the participant to earn up to 31.50 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the number of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to the ACCME for the purpose of granting ABIM MOC points.

Nurse Practitioners and Registered Nurses

For the purpose of recertification, the American Academy of Nurse Practitioners Certification Board and American Nurses Credentialing Center accept *AMA PRA Category 1 Credit*[™] issued by organizations accredited by the ACCME. Please check with your individual state licensing board to ensure it accepts reciprocity with *AMA PRA Category 1 Credit*[™] for relicensure.

Physician Assistants

The National Commission on Certification of Physician Assistants (NCCPA) states that *AMA PRA Category 1 Credits*[™] are acceptable for continuing medical education requirements for recertification. Please check with your individual state licensing board to ensure it accepts reciprocity with *AMA PRA Category 1 Credit*[™] for relicensure.

Risk Management

This activity meets the criteria of the Massachusetts Board of Registration in Medicine for 11.00 credits of Risk Management Study. This includes .75 credits of Opioid Education and Pain Management Training and .75 credits of End-of-Life Care Studies. Please check with your individual state licensing board before claiming Risk Management Credits.

Canadian and European Accreditation

Please visit [CriticalMedBoston.com/Accreditation](https://www.criticalmedboston.com/Accreditation) for details.



Who Should Attend?

All health care professionals who are not trained as intensivists but whose clinical duties involve the care of critically ill patients, including:

- Anesthesiologists
- Cardiologists
- Critical care physicians
- Emergency medicine physicians
- Family practitioners
- Hospitalists and nocturnists
- Obstetricians-gynecologists
- PAs
- Surgeons
- Nurse practitioners
- Nurses
- Other health care professionals who are commonly involved in the care of critically ill patients in intensive care settings

Course Location

All sessions for this activity will be held at:

Hyatt Regency Boston
One Avenue de Lafayette
Boston, MA 02111
Tel: 617-912-1234

Accommodations and Travel

A limited number of discounted rooms have been reserved for course participants. To reserve online, please go to CriticalMedBoston.com/venue and use the dedicated reservation link. You may also call the hotel at 617-912-1234 or 800-233-1234 and request a discounted room. Please specify that you are attending the HMS Critical Care course to receive the reduced room rate of \$309.

Important to Note

- We urge you to make your reservations early!
- Discounted rooms are available on a first-come, first-served basis.
- The discounted rate is only available until Sept. 1 or until the block sells out, which typically happens before this date.

Please visit the course website for additional information on air travel and ground transportation.

Questions?

By phone: 617-384-8600, Monday-Friday, 9:00am - 5:00pm (ET)

By email: ceprograms@hms.harvard.edu.

CME activities accredited by Harvard Medical School are offered solely for educational purposes and do not constitute any form of certification of competency. Practitioners should always consult additional sources of information and exercise their best professional judgment before making clinical decisions of any kind.

Learning Objectives

1. Assess cardiac emergencies, heart failure and unstable arrhythmias
2. Categorize different types of shock, describe the pathophysiologic mechanism behind each and formulate appropriate treatment strategies
3. Demonstrate evidence-based utilization of blood transfusions in the ICU
4. Characterize best practices for sedation management in the ICU
5. Evaluate and treat commonly encountered infections
6. Discuss best practices for delirium
7. Recall treatment options for critically ill patients with pulmonary emboli
8. Recognize and manage common toxicology emergencies
9. Recognize post-intensive care syndrome
10. Review the basic principles of mechanical ventilation and describe indications for non-invasive ventilation, high-flow nasal cannula and invasive ventilation
11. Summarize the appropriate steps for ultrasound-guided cannulation of the internal jugular vein
12. Diagnose and treat commonly encountered electrolyte abnormalities
13. Rapidly assess causes and determine appropriate initial treatment for patients in cardiopulmonary arrest and identify best practices for post-arrest treatment
14. Describe the indications and procedure for appropriate targeted temperature management after cardiac arrest
15. Review sepsis management and identify best practices for sepsis management in 2020
16. Practice common critical care procedures, including vascular access procedures
17. Summarize the new IDSA guidelines for treatment of community-acquired pneumonia
18. Use point-of-care ultrasound and interpret findings

Day 1: Wednesday, September 23

ADVANCED TRAINING (OPTIONAL SESSION)**

7:00am - 8:30am

Troubleshooting the Ventilator: A Hands-On Live Ventilator Demonstration to Move Your Knowledge from Plateau to Peak

Breakfast Provided

7:00am - 8:30am

General Registration and Continental Breakfast

8:30am - 8:35am

Transition

8:35am - 8:45am

Welcome from the Course Directors

8:45am - 9:25am

Case-Based Approach to Shock and Vasopressors

9:25am - 9:35am

Burning Clinical Question: Is It Safe to Run Vasopressors Peripherally?*

9:35am - 9:40am

Stretch

9:40am - 10:10am

Advancements in Advanced Cardiac Life Support

10:10am - 10:20am

Burning Clinical Question: Too Hot? Too Cold? Just Right? How to Approach Therapeutic Hypothermia in 2020*

10:20am - 11:00am

Management of Heart Failure for the General Intensivist

11:00am - 11:20am

Refreshment Break and Stretch

11:20am - 12:00pm

Mechanical Ventilation Made Easy: An Interactive Ventilator Demonstration

12:00pm - 12:05pm

Stretch

12:05pm - 12:45pm

Transfer of the Critically Ill Patient: A Case-Based Panel Discussion

ADVANCED TRAINING (OPTIONAL SESSION)**

12:45pm - 2:45pm

Critical Care Procedures: Hands-On Workshop
Lunch Provided

1:45pm - 2:45pm

How Intensivists Think: Critical-Thinking Strategies to Minimize Cognitive Errors in the ICU*

2:45pm - 2:50pm

Transition

2:50pm - 3:30pm

Hot-off-the-Presses: Emerging Critical Care Topics from 2020

3:30pm - 3:40pm

Burning Clinical Question: Should I Give Stress-Dose Steroids for Shock?*

3:40pm - 4:00pm

Refreshment Break and Stretch

4:00pm - 4:30pm

Best Practices for Using Non-invasive Ventilation in the ICU

4:30pm - 5:00pm

ECMO in 2020: Where Are We Now?

5:00pm - 5:05pm

Stretch

5:05pm - 5:15pm

Burning Clinical Question: What's Pneu in Pneumonia?: Update on IDSA Guideline Definitions*

5:15pm - 5:55pm

Did I Do That?: A Case-Based Discussion on Iatrogenic Illness

Day 2: Thursday, September 24

ADVANCED TRAINING (OPTIONAL SESSION)**

7:00am - 8:30am

Troubleshooting the Ventilator: A Hands-On Live Ventilator Demonstration to Move Your Knowledge from Plateau to Peak
Breakfast Provided

7:30am - 8:30am

Continental Breakfast

8:30am - 8:35am

Transition

8:35am - 8:45am

Introduction and Overview

8:45am - 9:25am

Best Practices for ICU Sedation in 2020

9:25am - 9:35am

Burning Clinical Question: How Can I Communicate with My Intubated Patient?*

9:35am - 9:40am

Stretch

9:40am - 10:10am

Vasopressors 102: The "New" Kids on the Block

10:10am - 10:40am

A Case-Based Approach to Common Arrhythmias in the ICU

10:40am - 10:50am

Burning Clinical Question: Does My Patient Have Abdominal Compartment Syndrome?*

10:50am - 11:10am

Refreshment Break and Stretch

11:10am - 11:50am

Getting Comfortable with Comfort-Focused Care*

11:50am - 12:00pm

Burning Clinical Question: What Is Post-Intensive Care Syndrome?*

12:00pm - 12:05pm

Stretch

12:05pm - 12:45pm

Red Alert!: Management of Hemorrhagic Shock and Anticoagulant Reversal*

12:45pm - 1:45pm

Lunch Break

ADVANCED TRAINING (OPTIONAL SESSION)**

12:45pm - 2:45pm

Critical Care Procedures: Hands-On Workshop
Lunch Provided

*Qualifies for Risk Management Credits

** Additional fees apply for advanced hands-on training.
See last page for more information.

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1:45pm - 2:45pm
Management of Chronic Respiratory Failure in the ICU and Beyond

2:45pm - 2:50pm
Transition

2:50pm - 3:30pm
A Case-Based Approach to Altered Mental Status

3:30pm - 3:40pm
Burning Clinical Question: Should I Transfuse This Patient with Anemia?*

3:40pm - 4:00pm
Refreshment Break and Stretch

4:00pm - 4:30pm
Management of Pleural Disease in the ICU

4:30pm - 5:00pm
Physiology and Function of High-Flow Nasal Cannula

5:00pm - 5:05pm
Stretch

5:05pm - 5:15pm
Burning Clinical Question: How Do I Manage This Acute Airway Bleed?*

5:15pm - 5:55pm
Updates in the Management of Massive and Submassive PE

Day 3: Friday, September 25

ADVANCED TRAINING (OPTIONAL SESSION)**

7:00am - 8:30am
Troubleshooting the Ventilator: A Hands-On Live Ventilator Demonstration to Move Your Knowledge from Plateau to Peak*
Breakfast Provided

7:30am - 8:30am
Continental Breakfast

8:30am - 8:35am
Transition

8:35am - 8:45am
Introduction and Overview

8:45am - 9:25am
Toxicology Cases: What the Intensivist Must Know in 2020*

9:25am - 9:35am
Burning Clinical Question: HD or CRRT?*

9:35am - 9:40am
Stretch

9:40am - 10:10am
Acid Base in Your Face: A Case-Based Approach to Acid-Base Disorders in the ICU

10:10am - 10:40am
Approach to Electrolyte Abnormalities in the ICU

10:40am - 10:50am
Burning Clinical Question: SubQ or Drip? How to Manage Hyperglycemia in the ICU*

10:50am - 11:10am
Refreshment Break and Stretch

11:10am - 11:20am
Burning Clinical Question: Can I Give Hypertonic Saline to My Patient?*

11:20am - 12:00pm
Help! I Can't Oxygenate My Patient!: A Case-Based Approach to Refractory Hypoxemia*

12:00pm - 12:05pm
Stretch

12:05pm - 12:45pm
Before the Trach: Practical Strategies for Liberation from Mechanical Ventilation*

12:45pm - 1:45pm
Lunch Break

ADVANCED TRAINING (OPTIONAL SESSION)**

12:45pm - 2:45pm
Critical Care Procedures: Hands-On Workshop
Lunch Provided

1:45pm - 2:45pm
Bringing Joy to Work: A Multidisciplinary Approach to Reducing Burnout in Your ICU*

2:45pm - 2:50pm
Transition

2:50pm - 3:30pm
Oncologic Emergencies for the General Intensivist*

3:30pm - 3:40pm
Burning Clinical Question: Does My Patient Need DVT Prophylaxis?*

3:40pm - 4:00pm
Refreshment Break and Stretch

4:00pm - 4:30pm
Acute Liver Failure*

4:30pm - 5:00pm
Managing Sepsis in 2020: Has Anything Really Changed?*

5:00pm - 5:05pm
Stretch

5:05pm - 5:15pm
Burning Clinical Question: Should This Patient with CAP Get Steroids?*

5:15pm - 5:55pm
Point-of-Care Ultrasound: A Live Patient Demonstration of What the Intensivist Must Know

Day 4: Saturday, September 26

ADVANCED TRAINING (OPTIONAL SESSION)**

8:00am - 12:00pm
Ultrasound 101: A Hands-On Workshop for Novices
Breakfast Provided

12:00pm - 1:00pm
Lunch Break

ADVANCED TRAINING (OPTIONAL SESSION)**

1:00pm - 5:00pm
Ultrasound 101: A Hands-On Workshop for Novices
Refreshments Provided

Program changes/substitutions may be made without notice.

To view the most up-to-date version of the course program, please visit the course website.

REGISTER NOW: [CriticalMedBoston.com](https://www.criticalmedboston.com)

ADVANCED HANDS-ON TRAINING (OPTIONAL SESSIONS)**

Learners of all levels are welcome, as individual instruction is tailored to the needs of the learner by highly skilled and experienced teachers.

ADVANCED TRAINING

Troubleshooting the Ventilator:

A Hands-On Live Ventilator Demonstration to Move Your Knowledge from Plateau to Peak
(3 sessions available – 10 participants per group)

This is a hands-on ventilator workshop where learners can build upon the principles of mechanical ventilation "at the bedside." Small groups of learners will be individually instructed by expert faculty including physicians and respiratory therapists. You will work through real patient cases, using high-fidelity test lungs and a ventilator, with a focus on patient-ventilator interactions, ventilator troubleshooting and pearls for ventilator waveform analysis. **Registration is limited due to the hands-on nature of this workshop.**



ADVANCED TRAINING

Critical Care Procedures:

Hands-On Workshop

(3 sessions available – 8 participants per group)

In this workshop you will receive individualized high-yield instruction in common critical care vascular access procedures. You will have the opportunity learn or refresh your knowledge of vascular ultrasound basics with ample time allocated to practice central venous catheterizations at multiple sites (internal jugular, subclavian, femoral), peripheral IV insertions, arterial line placements, and intraosseous line placements. Our faculty are experienced critical care practitioners and trained educators who are excited to teach novices new skills, refresh skills for those who haven't done procedures in a while, and provide troubleshooting tips and tricks for those who do a lot of procedures. This will be an active hands-on session. **Registration is limited to maximize instructor-to-learner ratios.**

ADVANCED TRAINING

Ultrasound 101:

A Hands-On Workshop for Novices

(2 sessions available – 5 participants per group)

This hands-on ultrasound course will provide ultrasound novices with knowledge and essential skills to evaluate decompensating patients in the ICU. Groups are small to facilitate one-on-one attention from faculty as learners practice image acquisition and interpretation on live models. You will practice basic cardiac echo for point-of-care evaluation to determine cardiac function, right heart strain, tamponade and volume assessments, as well as basic pleural ultrasound skills to detect a pneumothorax, pleural effusion and pulmonary edema. You will walk away with improved comfort and confidence to start using the ultrasound in the ICU. **This is a beginner course designed for those with little to no ultrasound experience.**



REGISTER NOW: [CriticalMedBoston.com](https://www.criticalmedboston.com)



HARVARD MEDICAL SCHOOL

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Principles of Critical Care Medicine for Non-Intensive Care Specialists

Master the skills you need to
practice modern critical care
medicine by customizing your
learning experience.

Sept. 23–26, 2020

This special program provides education for
practitioners who care for critically ill patients

Early registration is advised

ADVANCED TRAINING

- Troubleshooting the ventilator
- Hands-on practice of ultrasound-guided vascular access and IO placement
- Individualized thoracic ultrasound and echocardiography training on live patient models



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