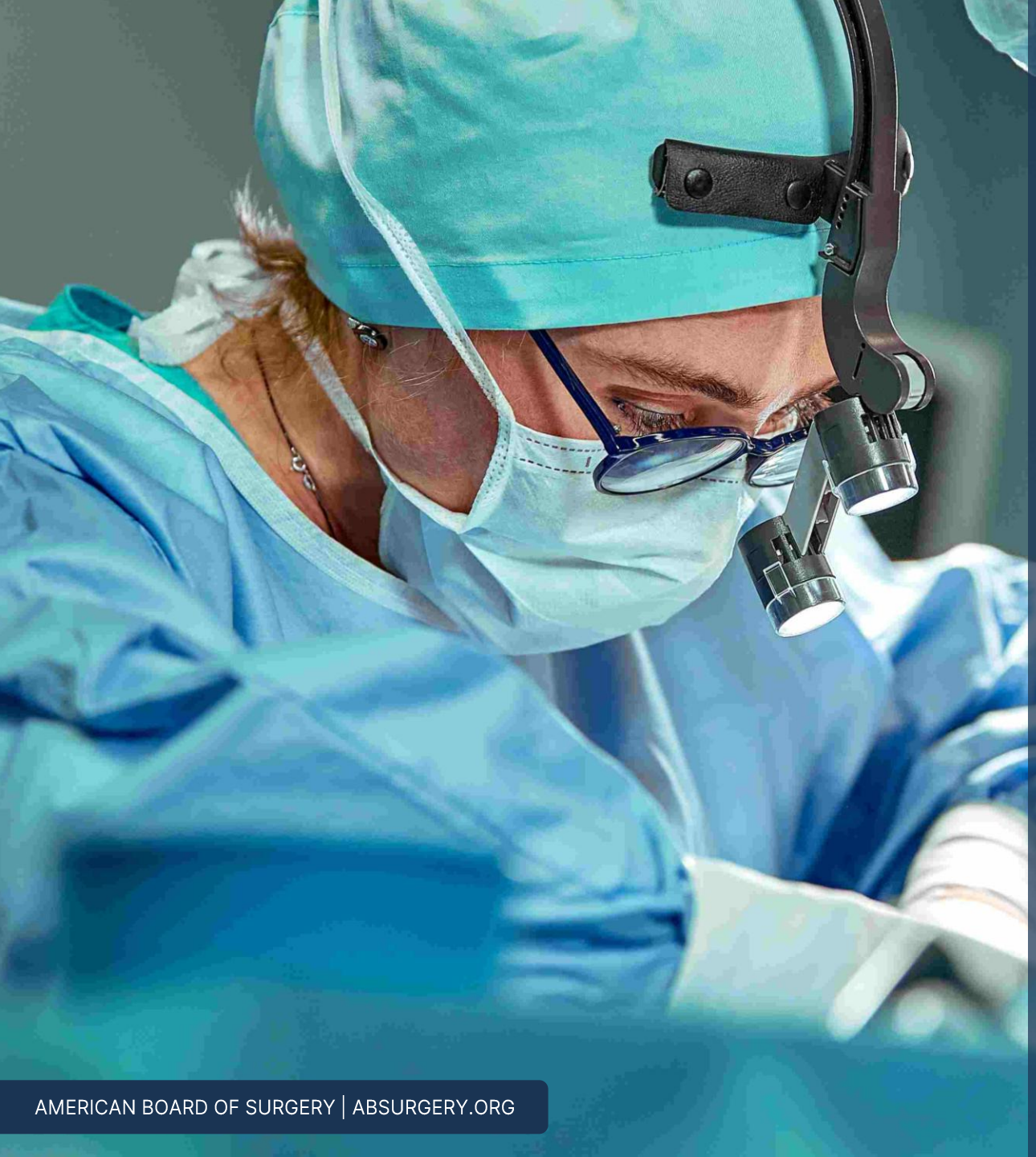
THE AMERICAN BOARD OF SURGERY

Surgical Critical Care EPAs: Here and Now!

AMY HILDRETH, M.D., KRISTA L KAUPS M.D., MSC, AND DEBORAH STEIN, M.D.
AMERICAN BOARD OF SURGERY

SCC PROGRAM DIRECTORS/FACULTY/FELLOWS/PROGRAM COORDINATORS | WEDNESDAY, OCTOBER 29, 2025



Mission Statement

The American Board of Surgery (ABS) serves patients, society, and the specialty of surgery by providing leadership in surgical education and practice. The ABS ensures excellence through:

- Building a diverse, equitable, and inclusive culture
- Rigorous evaluation and assessment
- Promoting the highest standards for professionalism, lifelong learning, and continuous certification of surgeons in practice

Vision Statement

Unify surgery in the pursuit of excellence in patient care.

Disclosures

- None. . .
- Except that we've been working on the SCC EPAs for several years and it would not have been possible without the commitment and support of the ABS – and the Trauma, Burns and Surgical Critical Care Board, the members of the Reactor Panel and Writing Groups.

Critical Care Board of Directors (Current and past)

- Deborah M. Stein, M.D. - Chair
- Nicole A. Stassen, M.D. - Vice Chair
- Suresh K. Agarwal, Jr., M.D.
- Saman Arbabi, M.D., M.P.H.
- Sharmila D. Dissanaike, M.D.
- Thomas K. Duncan, D.O.
- Jennifer M. Gurney, M.D.
- Amy N. Hildreth, M.D.
- Kenji Inaba, MD
- Aaron R. Jensen, M.D.
- Hee Soo Jung, M.D.
- Krista Kaups, MD
- Niels D. Martin, M.D.
- Abhijit S. Pathak, M.D.
- Tina Palmieri, MD
- David Spain, MD

Why are We Talking About This?

PAPERS OF THE 133RD ASA ANNUAL MEETING

General Surgery Residency Inadequately Prepares Trainees for Fellowship

Results of a Survey of Fellowship Program Directors

Samer G. Mattar, MD, Adnan A. Alseidi, MD, FACS,† Daniel B. Jones, MD, FACS,‡ D. Rohan Jeyarajah, MD, FACS,§ Lee L. Swanstrom, MD, FACS,|| Ralph W. Aye, MD, FACS,¶ Steven D. Wexner, MD, FACS, FRCS, FRCS(Edin), PhD (Hon),** José M. Martinez, MD, FACS,†† Sharona B. Ross, MD, FACS,‡‡ Michael M. Awad, MD, FACS,§§ Morris E. Franklin, MD, FACS,|||| Maurice E. Arregui, MD, FACS,¶¶ Bruce D. Schirmer, MD, FACS,*** and Rebecca M. Minter, MD, FACS†††*

Ann Surg 2013

EDUCATION

Are General Surgery Residents Ready to Practice? A Survey of the American College of Surgeons Board of Governors and Young Fellows Association

Lena M Napolitano, MD, FACS, FCCP, FCCM, Mark Savarise, MD, FACS, Juan C Paramo, MD, FACS, Laurel C Soot, MD, FACS, S Rob Todd, MD, FACS, Jay Gregory, MD, FACS, Gary L Timmerman, MD, FACS, William G Cioffi, MD, FACS, Elisabeth Davis, PhD, Ajit K Sachdeva, MD, FRCSC, FACS

JACS 2014

DOCTOR AND PATIENT

Are Today's New Surgeons Unprepared?

By PAULINE W. CHEN, M.D. DECEMBER 12, 2013, 12:20 PM 159 Comments

iStock

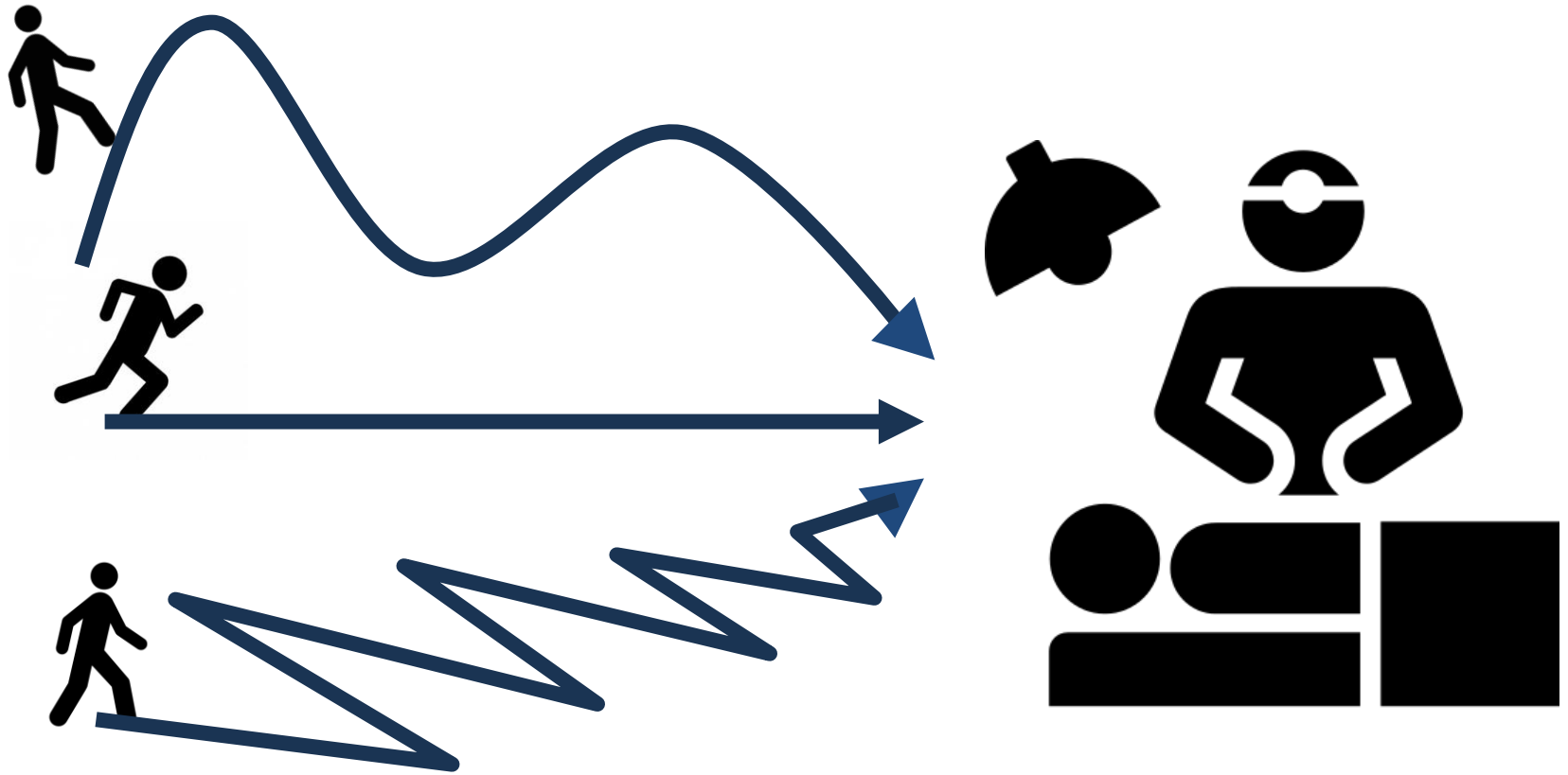
E-MAIL FACEBOOK TWITTER SAVE MORE

The surgeon had no prestigious named professorship, no N.I.H. grant and no plum administrative position in the hospital's hierarchy. But to the other surgeons-in-training and me, he was exactly who we wanted to be.

DOCTOR AND PATIENT
Dr. Pauline Chen on medical care.

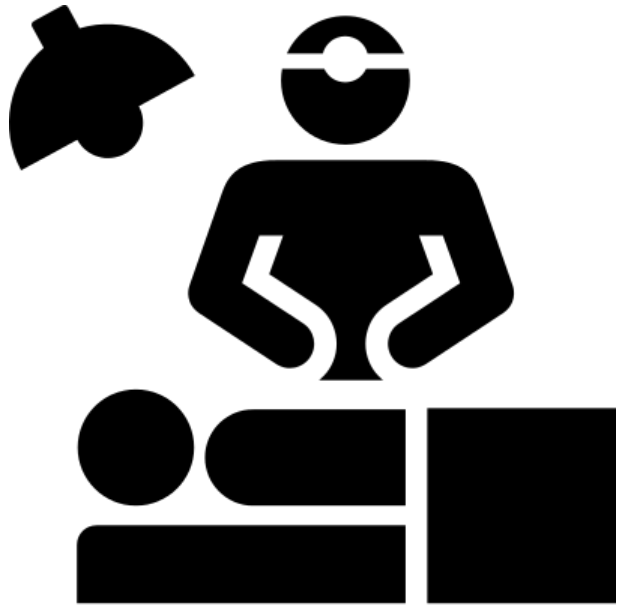
New York Times Dec 12, 2013

Current System



Fixed Time = Variable Outcome

Goal System



Fixed Outcome

Entrustable Professional Activities

Essential task of a “discipline” that an individual can be trusted to perform independently in a given context

Together, mass of critical elements that define a specialty

Shifts assessment focus from abstract and independent competencies to the work that must be done

SCC Fellow Competencies – ACGME Milestones

Medical Knowledge (3)

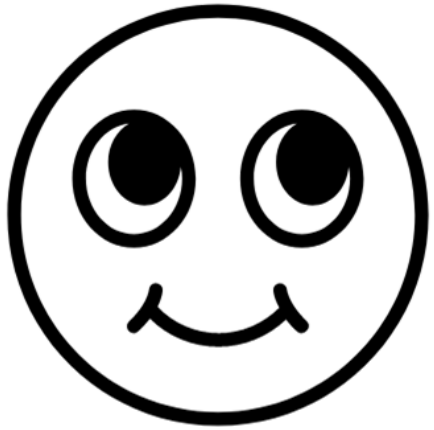
Interpersonal Communication Skills (3)

Systems-Based Practice (4)

Patient Care (10)

Professionalism (3)

Practice-Based Learning & Improvement (2)



ACGME Milestone:
Patient Care 1: Respiratory Failure

Requires direct supervision in basic management of patients with respiratory failure

Level 1

Manages patients with respiratory failure

Level 2

Initiates advanced ventilator techniques for patients with respiratory failure

Level 3

Independently manages patients with respiratory failure

Level 4

Is recognized as a resource regarding management of patients with respiratory failure

Level 5

Holistic View

Would you trust this learner to perform this task without supervision?

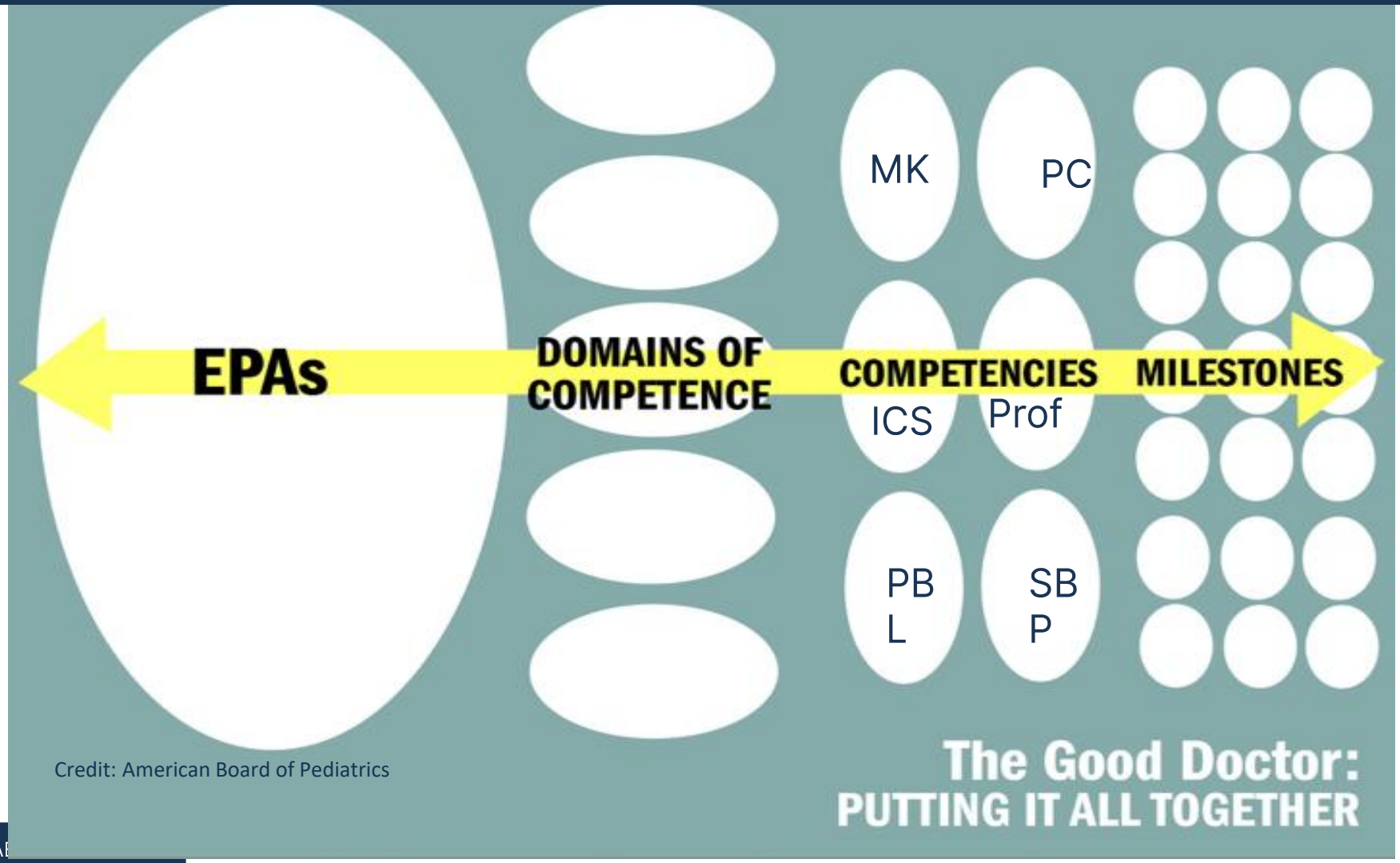
We Already Do This

We Already Do This

Not documented

No standardized behavior descriptions

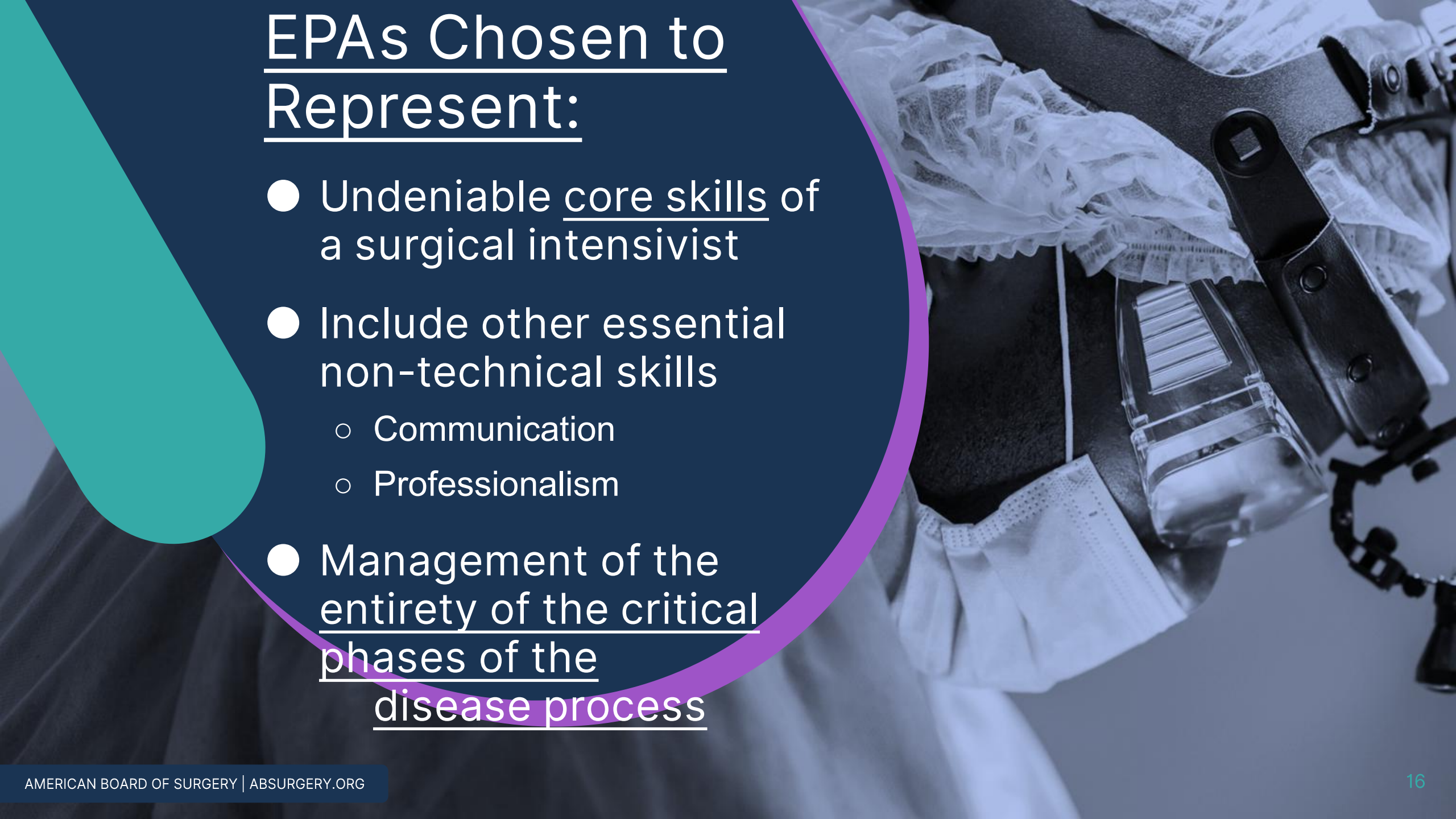
Integrating Competencies / Milestones / EPAs



Credit: American Board of Pediatrics

EPAs Chosen to Represent:

- Undeniable core skills of a surgical intensivist
- Include other essential non-technical skills
  - Communication
  - Professionalism
- Management of the entirety of the critical phases of the disease process



EPA Language Quiz

EPAs represent:

Assessment Tool

Assessment Framework

OPRS

Mini-CEX

OSATS

Zwisch

EPA Micro-Assessment

The Promise of EPAs

- Provide an assessment framework that makes sense to faculty & fellows
- Facilitate CCC processes
- Help overcome barriers to feedback
- Kickstart teaching
- Floor versus ceiling

So what's unique about SCC EPAS? And how were they developed?

Specialty EPAs

EPAS BY SPECIALTY

Beginning with general surgery, the ABS has begun development and implementation of EPAs for all specialties

General Surgery

There are 18 core EPAs for the evaluation of general surgery residents.

EPAs for General Surgery

Vascular Surgery

There are 15 core EPAs for the evaluation of vascular surgery trainees.

EPAs for Vascular Surgery

Pediatric Surgery

There are 20 core EPAs for the evaluation of pediatric surgery trainees.

EPAs for Pediatric Surgery

Complex General Surgical Oncology

There are 12 core EPAs for the evaluation of complex general surgical oncology trainees.

EPAs for Complex General Surgical Oncology

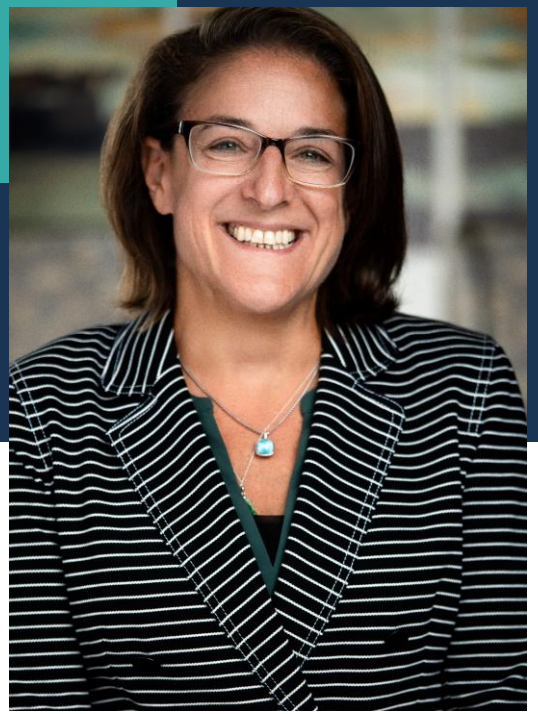
Surgical Critical Care

There are 9 core and 4 optional EPAs for the evaluation of surgical critical care trainees.

EPAs for Surgical Critical Care

A Long Leadup...

SCC EPA Leads



Deborah M. Stein, M.D.
TBSCCB Chair

Amy N. Hildreth, M.D.
TBSCCB Director

Krista L. Kaups, M.D.
TBSCCB Past-Chair

EPA Development

1 TBSCCB as Scope Council

EPA Scope Council

- Kimberly Davis MD
- Thomas Duncan DO
- Amy Hildreth MD
- Kenji Inaba MD
- Aaron Jenson MD
- Krista Kaups MD
- Niels Martin MD
- Steven Moran MD
- Tina Palmieri MD
- David Spain MD
- Nicole Stassen MD
- Deb Stein, MD

EPA Development

1. TBSCCB as Scope Council
2. Delphi Process for EPA Selection

EPA Selection Process

TBSCCB Board Members independently generated lists of essential tasks of SCC

Lists aggregated to yield 27 potential EPAs

Modified Delphi approach and further discussion

”Lumping” versus “splitting” approach

9 core and 4 optional EPAs

EPAs Chosen to Represent:

Undeniable core skills of a surgical intensivist

Include other essential non-technical skills
e.g., communication, professionalism

Management of the entirety of the disease process

SCC Entry Requirement

GS	Anesthesiology	Emergency Medicine	OB/GYN
NS	Vascular Surgery	Orthopedic Surgery	Plastic Surgery
ENT	Urology	Thoracic Surgery	

Special Populations

PEDIATRIC

BURNS

Unique Considerations with SCC EPAS

Condensed time frame

Learners with diverse educational backgrounds

EPAs cannot focus on surgical management

Optional EPAs for specific practice areas

Surgical Critical Care EPAs

Core:

1. Hemorrhage
2. End of life and provision of palliative care
3. Shock or cardiovascular failure
4. Hepatic dysfunction and liver failure
5. Septic patient
6. Respiratory failure
7. Neurologic dysfunction/delirium/encephalopathy or brain injury
8. Renal failure
9. Nutritional needs of the critically ill patient

Optional:

1. Critically ill child
2. Critically ill older patient
3. Thermal injury
4. Extracorporeal life support (ECLS)

Scan to read all 13 EPAs and their descriptions

EPA Development

1. TBSCCB as Scope Council
2. Delphi Process for EPA Selection
3. Diverse Reactor Panel and Writing Group Chosen

Choosing Reactor Panel and Writing Group

Open call for nominations

Demographic information including practice type/location collected

Groups selected to ensure diversity of all types

Reactor Panel

- Lourdes Castenon MD
- Christine Cocanour MD
- Rajan Gupta MD
- Daniel Haase MD
- James Harrington MD
- Jennifer L. Hartwell MD
- Gregory J Jurkovich MD
- Kumash Patel MD
- Carol Schermer MD
- Esther Teo MD
- Robert J. Winchell MD

Writing Group

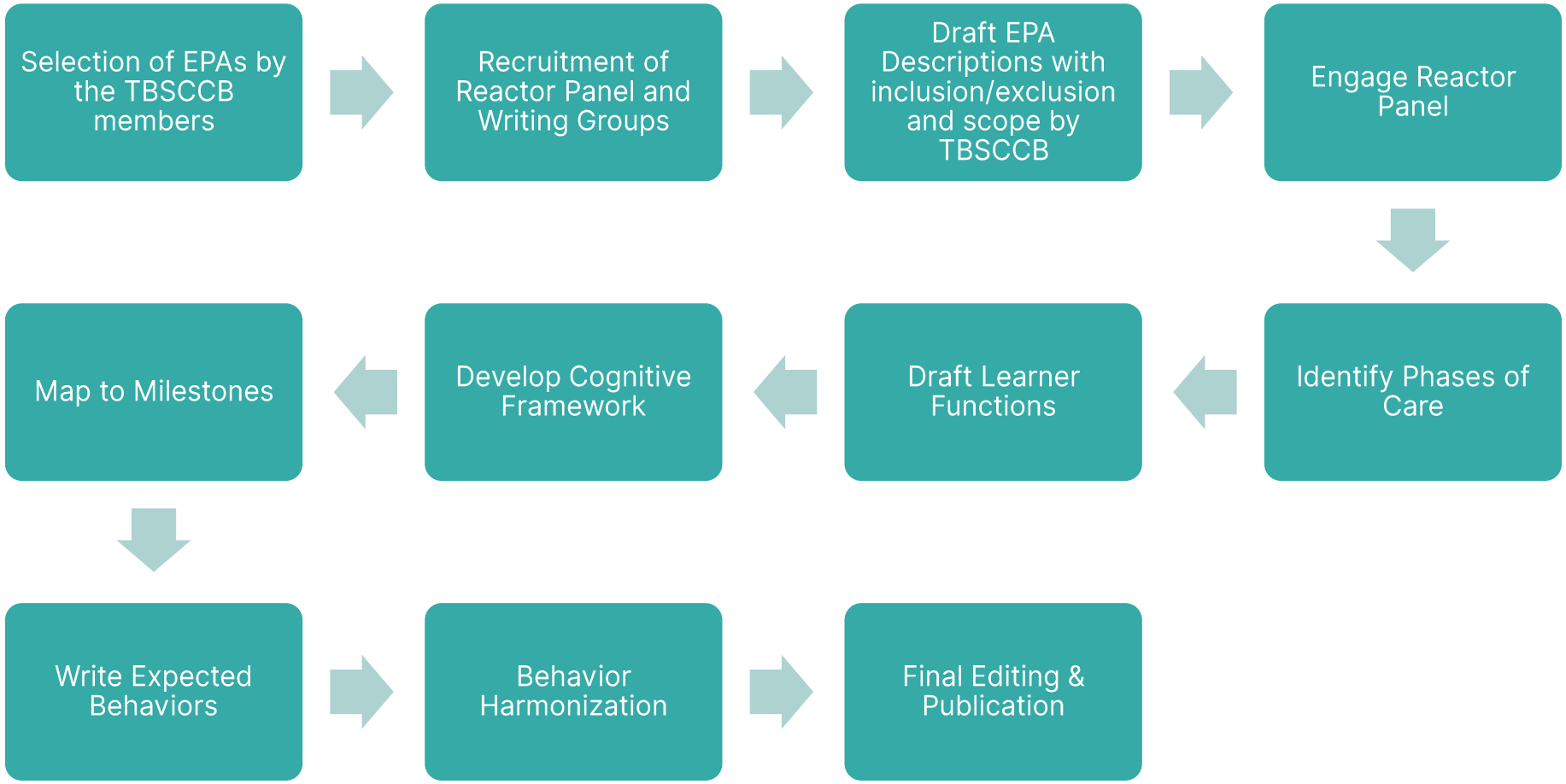
- John V. Agapian MD
- Alia Aunchman MD
- Stephanie Bonne MD
- Saskya Byerly MD
- Stacy L Coulthard MD
- Choyin Yvonne Chung MD
- Ihab Elhassan MD
- Rondi Beth Gelbard MD
- Mira Ghneim MD
- Sriharsha Gummadi MD
- Diane Haddad MD
- Jason Hoth MD
- Obeid Ilahi MD
- Randeep Jawa MD
- Hee Soo Jung MD
- Jordan M. Kirsch MD
- Whitney Taylor Martin MD
- Mayur Narayan MD
- Eden Nohra MD
- Patience Ofori-Darkwa MD
- Joseph Posluszny MD
- Anamaria Robles MD
- Stephanie Scott MD
- Anaar Siletz MD
- Sawyer Smith MD
- Jill Streams MD
- Stephanie Streit MD
- John Tierney MD
- Cassandra White MD

EPA Development

1. TBSCCB as Scope Council
2. Delphi Process for EPA Selection
3. Diverse Reactor Panel and Writing Group Chosen
4. Writing Groups Meet in Person


EXIT

EPA Development Process



Phases of Care

GS		
Preoperative	Intraoperative	Postoperative

SCC		
Resuscitation	Ongoing Management	Transitions of Care

Complexity

All ICU patients are “complex”

Ascending patient complexity built into conceptual model progressing from limited participation to practice ready

EPA Behavior Documents

- Behaviors are linked to the milestones
- Milestones have been mapped to ensure congruency across a single EPA and across all EPAs

THE AMERICAN BOARD OF SURGERY

Evaluation & Management of a Patient with Respiratory Failure

Level	Resuscitation	Ongoing Management	Transition of Care
1 **Limited Participation** Demonstrates limited critical care knowledge and skills **Framework:** What a learner directly out of residency should know Performs ICU procedures on straightforward patients but requires supervision/direction for more complex patients/procedures Requires continuous direct supervision by the attending for patient management	• Describes basic modes of noninvasive ventilation and requires assistance with patient selection • With prompting, initiates interventions for airway management and respiratory support in a patient with impending respiratory failure (eg, HFNC) • Demonstrates understanding of basic modes of invasive mechanical ventilation but needs assistance to initiate it • Demonstrates limited familiarity with airway adjuncts for oxygenation/ventilation in a high-risk patient (eg, oral airway, nasal trumpet, bag valve mask) • Recognizes the potential for respiratory deterioration in a trauma patient with injuries such as rib fracture, pulmonary contusion, or inhalation injury • Recognizes immediately life-threatening respiratory conditions, such as tension pneumothorax, aspiration, and airway obstruction • Performs procedural interventions such as chest drainage procedures and bronchoscopy with direction	• Recognizes evidence-based guidelines in respiratory care practice • Identifies basic ventilator alarms (eg, high peak pressures, low tidal volume) • Interprets ventilator waveforms in the care of a mechanically ventilated patient with guidance • Recognizes the contribution of chronic respiratory conditions to acute respiratory failure (eg, COPD) • Demonstrates understanding of indications for bronchoscopy • Identifies when a patient is failing conventional management techniques • Diagnoses respiratory infections and initiates antimicrobial therapy tailored to individual risk factors • Identifies readiness for ventilator weaning but needs assistance to implement specific strategies	• With assistance, identifies a patient physiologically ready for ventilatory weaning and extubation • Identifies the benefit of tracheostomy in a patient on long-term ventilation • Identifies the limitations of institutional respiratory support capabilities with prompting (eg, ECLS) • Recognizes the need for and initiates a goals-of-care conversation
2 **Direct Supervision**	• Selects noninvasive respiratory support modalities for a patient likely to benefit from them	• Incorporates evidence-based guidelines into clinical practice	• Recognizes indicators of success and failure of ventilatory weaning and extubation

EPA Behavior Documents

- Assessor is given the framework with which the trainee can be assessed and the level to which the trainee must perform to reach a specific entrustment level

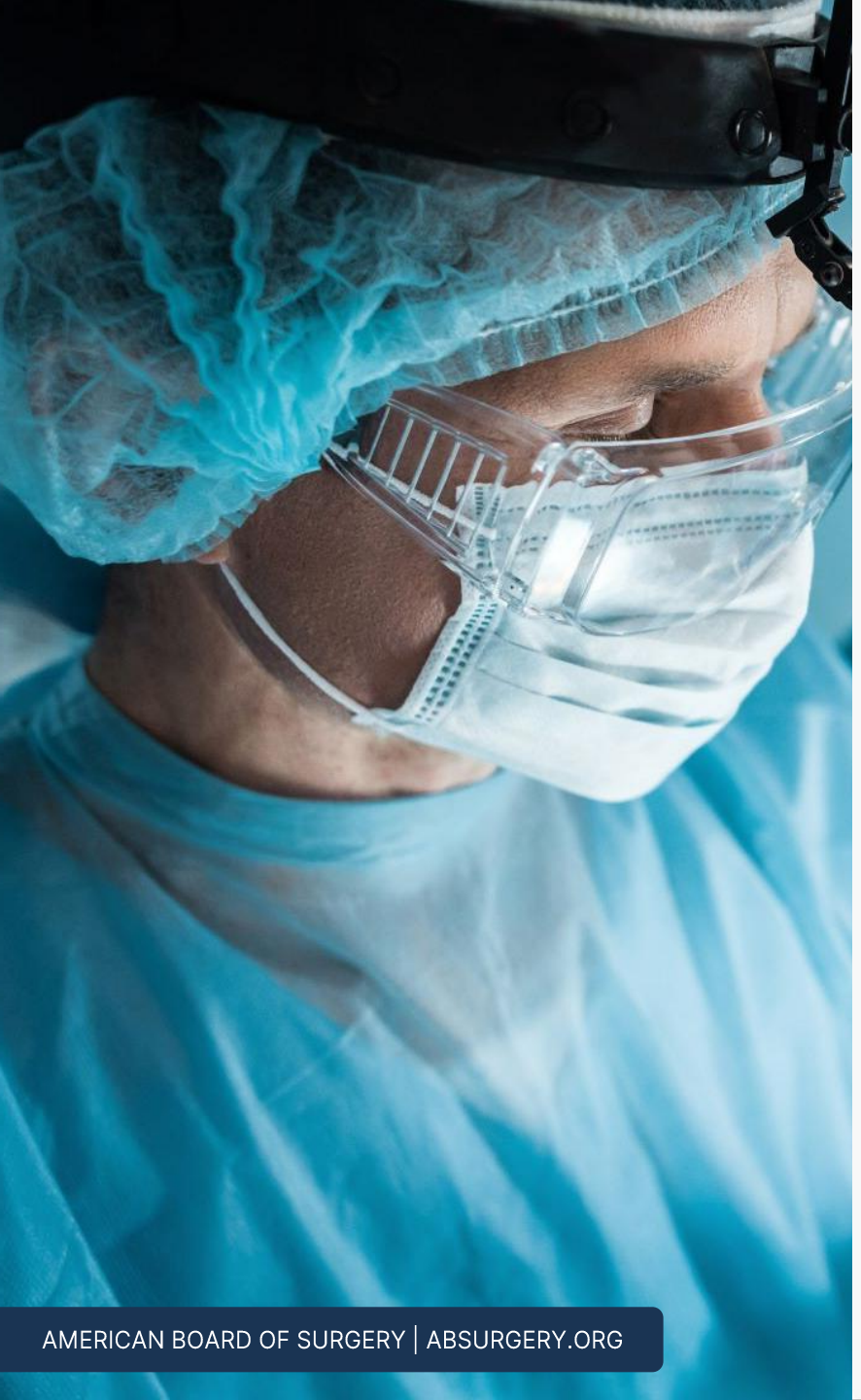
THE AMERICAN BOARD OF SURGERY

Evaluation & Management of a Patient with Respiratory Failure

Level	Resuscitation	Ongoing Management	Transition of Care
	cricothyroidotomy in a complex and high-risk patient		
4 **Practice Ready** Independently manages complex critical illnesses and leads a critical care team **Framework:** Demonstrates an attending-level fund of knowledge Independently performs and supervises procedures The attending is available at the request of the learner but is not routinely needed for common or complex critical illness.	• Implements strategies to address a patient for whom noninvasive ventilation has failed • Initiates harm-mitigating strategies (eg, noninvasive management, low tidal volume ventilation, fluid status optimization) to prevent respiratory decompensation • Implements advanced strategies to address a patient for whom conventional invasive ventilation (eg, prone positioning, ECLS) has failed • Anticipates the difficult airway and manages it with advanced techniques • Adjusts appropriate support therapies (analgesia, noninvasive pulmonary support) and customizes them to the response of a complex trauma patient at risk for deterioration with injuries such as rib fracture, pulmonary contusion, or inhalation injury • Independently assesses and definitively manages immediately life-threatening respiratory conditions (eg, tension pneumothorax, aspiration, airway obstruction) • Leads the team in a procedural intervention in a complex or high-risk	• Incorporates evidence-based guidelines for management of acute respiratory failure and uses available clinical decision support tools in a complex patient • Manages ventilator dyssynchrony using pharmacologic adjuncts and ventilator adjustments in a complex patient • Interprets ventilator waveforms and adjusts ventilator settings as indicated in the care of a complex, mechanically ventilated patient • Mitigates respiratory comorbidities in a complex patient (eg, breath stacking in a patient with COPD) • Supervises therapeutic and diagnostic bronchoscopy for high-risk conditions such as inhalational injury when indicated • Addresses challenges that arise with advanced lung rescue therapies in the face of worsening respiratory failure • Manages respiratory infections in a complex patient • Develops and implements a weaning strategy in even a highly complex patient	• Initiates weaning from advanced respiratory support modalities (eg, drop and stretch) • Considers timing of tracheostomy, incorporating the context of a complex patient's physiology, such as a patient on anticoagulation or with recent neck surgery • Refers a patient who would benefit from advanced interventions (eg, ECLS) • Leads culturally competent multidisciplinary conversations with a patient/caregiver(s) regarding goals of care

The Promise of EPAs

- Provide an assessment framework that makes sense to faculty & fellows
- Facilitate CCC processes
- Help overcome barriers to feedback
- Kickstart teaching



EPA Assessment

Faculty

Hetal Karecha

Trainee

Rupp Hanna

Activity Date

Sep 2, 2025

Activity Brief Description

Name the procedure type or surgical task

Please no PHI (e.g. MRN, patient name or initialis).

Activity description is NOT for comments, guidance, or feedback.

Assessment Type

Respiratory Failure

Evaluation & Management of a Patient with Respiratory Failure

Entrustment Scale

Resuscitation Details

Not Obs.	Limited	Direct	Indirect	Ready

Ongoing Management Details

Not Obs.	Limited	Direct	Indirect	Ready

Transition of Care Details

Not Obs.	Limited	Direct	Indirect	Ready

Feedback

Add actionable feedback and advice for the learner

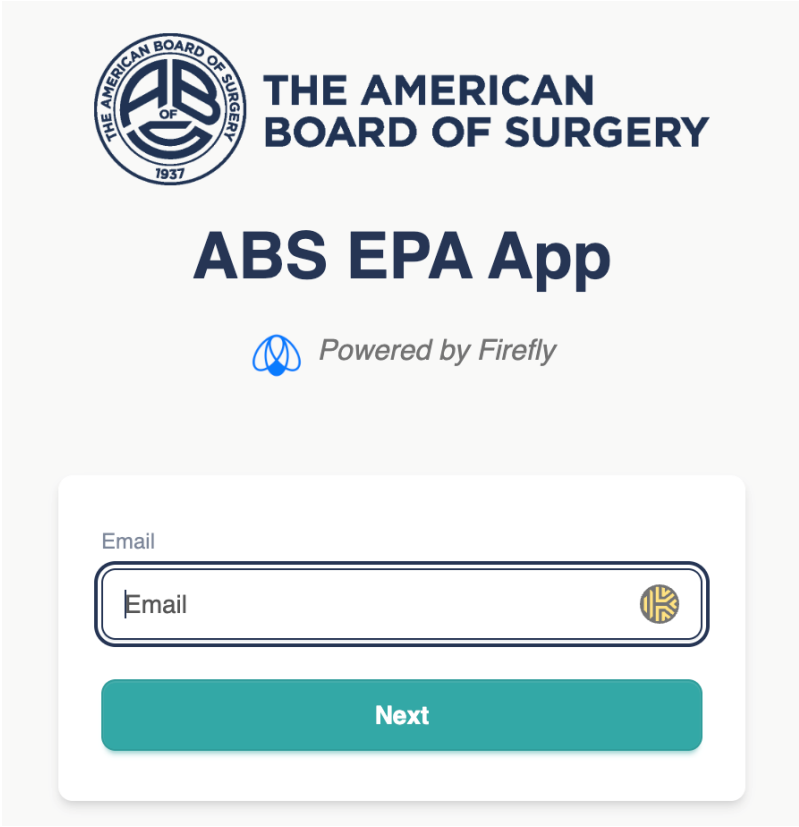
Please no PHI.

Submit

EPA Microassessments

Implementation

- Email notification to PD/PM
  - Batch input faculty and fellows
  - OR faculty can self-register
- Epas.fireflylab.org
- Year of Progressive Engagement
  - Every program will use EPAs
- SCC first to have completed set of EPAs



Since August 1st:

Out of 166 SCC programs, 112 have at least one active user

506 microassessments submitted so far!

Specialty

Surgical Critical Care

Rank	Specialty	Program	Assessments	Last
1	Surgical Critical Care	Carilion / Virginia Tech - Critical Care	68	10/26/2025
2	Surgical Critical Care	Emory - Critical Care	65	10/26/2025
3	Surgical Critical Care	U Maryland - Critical Care	30	10/23/2025
4	Surgical Critical Care	U Texas SW - Dallas - Critical Care	30	10/20/2025
5	Surgical Critical Care	Hofstra/Northwell - Critical Care	27	10/15/2025
6	Surgical Critical Care	U Pennsylvania - Critical Care	24	10/9/2025
7	Surgical Critical Care	Orlando Health - Critical Care	23	10/5/2025
8	Surgical Critical Care	Beth Israel Deaconess - Critical Care	21	10/23/2025
9	Surgical Critical Care	Test - Critical Care	21	9/21/2025
10	Surgical Critical Care	Wake Forest - Critical Care	19	10/11/2025

Implementation

Dashboard available November 1

Feedback to programs begins in January 2026

Data-driven approach to entrustablility

Program Dashboard

Test - Critical Care

Entrustment

22 Assessments

0 Self-Asmts

5 Faculty

2 Trainees

Your User Dashboard

9 Assessments

Test - Critical Care

Entrustment

EPA Type

Cardiovascular Failure

First Name	Last Name	PGY	Resuscitation	Ongoing Management	Transition of Care	Asmts	Last
Test	SCC Fellow2	7	Indirect	Direct	Limited	3	9/21/2025

Faculty Analytics

From Date mm/dd/yyyy

To Date mm/dd/yyyy

Faculty Leaderboard

Rank	Faculty	Assessments Completed	# Comments	# Trainees	Last EPA
1	Hetal Karecha	10	7	2	9/21/2025
2	Jonathan Jesneck	9	6	2	9/21/2025
3	Thomas Duncan	3	3	1	9/9/2025
4	Karen Brasel	0	0	0	
5	Alyson Maloney	0	0	0	

From Date

mm/dd/yyyy

To Date

mm/dd/yyyy

Trainee Leaderboard For Receiving Assessments

Rank	Trainee	Assessments	# Comments	# Faculty	Last EPA
1	Test SCC-Fellow	13	10	3	9/21/2025
2	Test SCC Fellow2	9	6	2	9/21/2025

Trainee Leaderboard For Self-Assessments

Rank	Trainee	Assessments	# Comments	# Faculty	Last Self-EPA
1	Test SCC-Fellow	0	0	0	
2	Test SCC Fellow2	0	0	0	

Thank you to ABS Staff!

- Karen Brasel, MD- Vice President, ABS
- Hetal Kakrecha- Staff Liaison, Trauma, Burns and Surgical Critical Care Board
- Aly Maloney- ABS Director of Communications

THE AMERICAN BOARD OF SURGERY

Thank You!

Questions?

Additional Resources

SCC EPAs and Descriptions

SCC EPA Website Page

ABS EPA Resources