

## Curricular Components Supporting EPA 4 for Pediatric Emergency Medicine

# Curricular Components That Support the Functions of EPA 4: Provide Patient Triage, Resuscitation, and Stabilization; Align Care Provided with Severity of Illness

- 1. Demonstrating leadership and oversight of the multidisciplinary resuscitative team
  - Supervises and leads members of the resuscitation team in their coordinated efforts for patient resuscitation and post-resuscitation care
  - Models established patient safety and crew/crisis resource management behaviors, including closed-loop communication and shared mental modeling
  - Requests and utilizes appropriate hospital resources in the delivery of resuscitative care
- 2. Initiating and implementing system response to mass casualty events and disaster management
  - Describes principles of providing emergency care in disasters, multi-casualty events, and mass gatherings
  - Applies principles of field triage in a disaster
  - Describes the purpose for regionalizing specialty-care hospitals, including pediatric trauma, burn, and critical care
  - Reviews indications for ground vs. air transport of ill/injured children
  - Summarizes the components of emergency medical services
  - Applies the principles of disaster and mass casualty management including preparedness, triage, mitigation, response, and recovery
  - Assesses available resources and demonstrates appropriate resource utilization in times of surge capacity or resource-limited situations
- 3. Prioritizing patient care based on the degree of illness and/or injury
  - Assesses and determines patient acuity
    - Critical patient with symptoms of life-threatening illness or injury with high probability of mortality if immediate intervention is not undertaken to prevent further airway, respiratory, hemodynamic, and/or neurologic instability
    - Emergent patient with symptoms of an illness or injury that may progress in severity or result in complications with a high probability of morbidity if treatment is not promptly initiated
    - Lower acuity patient with symptoms of an illness or injury that have a low probability of progression to more serious disease or development of complications
  - Utilizes a standard triage system to prioritize incoming ED patients and identify those who require immediate medical attention. Adjusts triage system to address resources available at time of triage
  - Aims to provide timely care for all patients as ED conditions allow
  - Prioritizes and implements the evaluation and management of multiple patients in the ED (manages interruptions and switches tasks as necessary) to optimize patient care

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- Integrates use of plans to address advanced directives and palliative care
- 4. Initiating immediate stabilization of critically ill and/or injured patients
  - Conducts a rapid and thorough primary and secondary survey of critically ill or injured patients
  - Recognizes signs and symptoms of respiratory or cardiopulmonary failure and arrest
  - Initiates immediate interventions for stabilization, including but not limited to airway, ventilatory, and hemodynamic support
  - Performs effective cardiopulmonary resuscitation (CPR) in efforts to achieve return of spontaneous circulation (ROSC) in patients with cardiopulmonary failure
- 5. Applying standardized algorithms to the care of critically ill and/or injured patients
  - Attains training and maintains certification in relevant advanced life support as per institutional policy
  - Applies life support algorithms to the care of critically ill and/or injured patients including administration of appropriate medications and performance of necessary procedures
- 6. Recognizing and treating patients with impending deterioration
  - Differentiates by age, etiologies of respiratory and circulatory failure and arrest for pediatric patients
  - Discusses pathophysiology of cardiogenic, hypovolemic, neurogenic, and distributive shock
  - Demonstrates knowledge of the pathophysiology related to progression from cardiopulmonary failure to arrest
  - Provides timely and appropriate treatment to patients with impending deterioration
- 7. Recognizes indications for cessation of resuscitative efforts
  - Recognizes signs of futility and ceases resuscitative efforts
  - Ceases resuscitative efforts when ROSC is not achieved after well-executed measures, including definitive airway management, effective chest compressions, intraosseous or intravenous access, and administration of necessary medications
  - Recognizes that prolonged resuscitation efforts without ROSC are usually futile unless other treatable problems exist (e.g., hypothermia, drug overdose, cardiac arrhythmias)
  - Does not begin resuscitative efforts in appropriate instances
- 8. Applying post-resuscitative care principles
  - Demonstrates understanding of goal-directed post-arrest management
  - Plans and implements anticipated pharmacologic interventions during post-arrest period
  - Plans and implements mechanical interventions during post-arrest period
  - Transports patient to appropriate inpatient unit for further care
  - Describes indications and procedures for transport to a higher-level facility and when indicated, arranges

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transport to outside facility

- Integrates use of plans to address issues such as bereavement measures, postmortem care, survivor follow-up, request for autopsy, and request for organ donation
- 9. Stabilizing and determining appropriate dispositions for adult patients in the pediatric ED
  - Applies principles of advanced life support to provide stabilizing measures for critically ill or injured adult patients
  - Manages precipitous deliveries
  - Transfers stabilized adult patients to facilities best suited to provide ongoing care
  - Recognizes signs of futility and ceases resuscitative efforts
  - Ceases resuscitative efforts when ROSC is not achieved after well-executed resuscitative measures
  - Does not initiate resuscitative efforts in appropriate instances

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#### References

- American Board of Pediatrics Subboard of Pediatric Emergency Medicine. Content Outline Pediatric
  Emergency Medicine Subspecialty In-training, Certification, and Maintenance of Certification Examinations.
  <a href="https://www.abp.org/content/content-outlines-subspecialties.">https://www.abp.org/content/content-outlines-subspecialties.</a>
- 2. American Board of Emergency Medicine Core Content Task Fore II. 2013 Model of the Clinical Practice of Emergency Medicine. <a href="https://www.abem.org/public/publications/em-model/reference.">https://www.abem.org/public/publications/em-model/reference.</a>
- 3. American Board of Emergency Medicine Initial Certification Task Force. KSAs and Standards 2015.
- 4. Hockberger R, La Duca A, Orr N, Reinhart M, and Sklar D. Creating the model of a clinical practice: the case of emergency medicine. *Acad Emerg Med.* 10(2) 2003. 161-168.
- 5. Fleisher & Ludwig's Textbook of Pediatric Emergency Medicine 7th edition. Wolters Kluwer 2016.



## **Curricular Components Supporting EPA 4 for Pediatric Emergency Medicine**

- 6. Pediatric Emergency Medicine 3<sup>rd</sup> edition. Strange, et al. McGraw-Hill 2009.
- 7. ACGME Program Requirements for Graduate Medical Education in Pediatric Emergency Medicine.
- 8. ACGME Program Requirements for Graduate Medical Education in Emergency Medicine.