

**Resident Curriculum  
PL-3  
Emergency Medicine**

**Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

**Patient Care: Goals and Objectives**

**Goal #1: EMS System for Children. Understand the basic principles and utilization of emergency medical services for children**

**Objectives:**

- #1. Describe the organization and utilization of emergency medical systems for children in one's local area, including.
- #2. Demonstrate the ability to activate and use the local EMS for children, including interhospital transport.

**Goal #2: Resuscitation and Stabilization (ED). Assess, resuscitate, and stabilize critically ill or injured children in the Emergency Department (ED) setting in a timely fashion.**

**Objectives:**

- #1. Rapidly recognize and assess emergent patients, such as those in respiratory failure or shock.
- #2. Using resuscitation drugs appropriately

**Goal #3: Common Signs and Symptoms (ED). Evaluate and manage common signs and symptoms in infants, children, and adolescents that present to the ED and urgent care center.**

**Objective:**

- #1. Evaluate and Stabilize patients with signs and symptoms that present in the ED (examples below).  
Dental: pain or trauma of mouth, jaw or tooth; tooth injury or loss  
Surgery/trauma: acute abdomen, burns, lacerations, trauma.

**Goal #4: Common Conditions (ED). Recognize and stabilize common illnesses and injuries that present emergently.**

**Objectives:**

**#1.** Evaluate and manage patients with common diagnoses that present in the ED setting (examples below):

1. Dermatology: acute drug reactions,
2. Ophthalmologic: corneal abrasion, conjunctivitis, infection, ocular foreign body, hyphema, trauma
3. Orthopedic: arthritis, common dislocations, discitis, fractures, gait disturbance, Osgood Slatter's Disease, overuse syndromes, osteomyelitis, septic arthritis, sprains, strains
4. Otolaryngologic: epistaxis, foreign body aspiration, peritonsillar or retropharyngeal abscess
5. Trauma/surgical: burns, closed head injury, dental injuries, intracranial hemorrhages (subdural, epidural, subarachnoid), skull fractures, soft tissue injury (including lacerations, abrasions, and contusions), major trauma to head or face, neck or spine, chest, abdomen, urogenital tract, major vessels or organs (with surgeon/trauma team)
6. Toxicants/environmental injuries: electrical injury, heat and cold injury,
7. ingestion/poisoning (unknown substance or common poisons: acetaminophen, antidepressants, benzodiazepines, carbon monoxide, cocaine, cough and cold medicines, digitoxin, drugs of abuse, hydrocarbons, iron, narcotics, neuroleptics),
8. smoke inhalation,
9. submersion injury/near drowning,
10. Psychiatric: combative patient, conversion reaction, depression, suicide attempt/ideation, panic attacks

**Goal #5: Diagnostic Testing (ED). Use common diagnostic tests and imaging studies appropriately in the ED setting.**

**Objectives:**

**#1.** Demonstrate understanding of common diagnostic tests and imaging studies used in the ED by being able to:

- #1.Explain the indications for and limitations of the study
- #2.Understand the benefits and disadvantages of family presence during procedures.
- #3.Know or be able to locate readily age-appropriate normal values for lab studies.
- #4.Apply knowledge of diagnostic test properties, including the use of sensitivity, specificity, positive predictive value, negative predictive value, likelihood ratios, and receiver operating characteristic curves, to assess the utility of tests in various clinical settings.
- #5.Discuss cost and utilization issues.
- #6.Interpret test results in the context of the care of the specific patient.
- #7.Discuss therapeutic options for correction of abnormalities

**#2.** Use appropriately the following laboratory studies when indicated for patients in the ED setting:

1. CBC with differential count, platelets, RBC indices
2. Bacterial, viral, and fungal cultures and rapid screens Serologic tests for infection (e.g., monospot, VDRL, hepatitis)
3. Blood chemistries: electrolytes, calcium, magnesium, phosphate, and glucose
4. Arterial, venous, and capillary blood gases
5. Renal function tests
6. Tests of hepatic function and damage
7. Drug levels and toxic screens
8. Gram stain
9. Wet mount
10. Urinalysis
11. CSF studies
12. Stool studies
13. Coagulation studies
14. Pregnancy test (urine, blood)
15. Other fluid studies (e.g., pleural fluid, joint aspiration fluid)

**#3.** Use the following imaging or radiographic studies when indicated for patients in the ED setting:

1. Plain radiographs of chest, skull, extremity bones, abdomen, cervical spine
2. Other imaging techniques, such as CT, MRI, ultrasound, and nuclear scans (interpretation not expected)
3. Contrast or air enema for suspected intussusception or upper GI series for suspected malrotation

**#4.** Use the following screening and diagnostic studies when indicated for patients in the ED setting:

1. Electrocardiogram
2. Vision screening
3. Appropriate urgent use of echocardiography

**Goal #6: Monitoring and Therapeutic Modalities (ED). Understand how to use physiologic monitoring and special technology and treatment in the ED setting.**

**Objectives:**

**#1.** Demonstrate understanding of the monitoring techniques and special treatments commonly used in the ED by being able to:

1. Discuss indications, contraindications, and complications.
2. Demonstrate proper use of technique or treatment for children of varying ages.
3. Interpret results of monitoring based on method used, age, and clinical situation.

**#2.** Use appropriately the monitoring techniques used in the ED:

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations
2. Pulse oximetry

**#3.** Utilize appropriately the treatments and techniques used in the ED:

1. Universal precautions
2. Gastrointestinal decontamination for poisoning
3. Administration of nebulized medication
4. Injury, wound and burn care
5. Suturing and topical adhesive
6. Splinting
7. Oxygen delivery systems

**#4.** Demonstrate understanding of the following methods of anesthesia or pain management used in the ED:

1. Methods for recognizing and evaluating pain
2. Topical/local/regional anesthesia
3. ASA classification system
4. Procedural sedation
5. Rapid sequence intubation
6. Sedatives, non-narcotic and narcotic analgesics
7. Behavioral techniques and supportive care
8. Other non-pharmacologic methods of pain control (e.g., distraction techniques and humor therapy)

**Goal #7: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric**

**Competencies.****Objectives:**

1. Provide family-centered patient care that is development- and age-appropriate, compassionate, and effective for the treatment of health problems and the promotion of health.
2. Use a logical and appropriate clinical approach to the care of emergency patients, applying principles of evidence-based decision-making and problem-solving, and demonstrating the ability to prioritize. Perform accurate ED triage.
3. Demonstrate the ability to multi-task by providing simultaneous care to multiple patients, with varying levels of acuity and severity of illness.
4. Use appropriate timing of diagnostic and therapeutic interventions.
5. Adjust pace to ED patient acuity, volume and flow
6. Provide sensitive support to patients and families in the ED.
7. Provide sensitive support to critically ill patients and their families; arrange for ongoing support and/or preventive services if needed.
8. Be sensitive to the needs of families who use the ED for minor illness care (e.g., need for better orientation to the health care system, lack of community services or medical home)

**Goal #8: Technical and therapeutic procedures. Describe the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.**

**Objectives:**

1. Abscess: I & D of superficial abscesses
2. Bladder: catheterization
3. Burn: acute stabilization of major burn
4. Cardioversion/defibrillation
5. Cervical spine immobilization
6. Conjunctival swab
7. Endotracheal intubation
8. Endotracheal intubation: rapid sequence intubation
9. Ear: cerumen removal
10. Eye: contact lens removal
11. Eye: irrigation
12. Eye: eyelid eversion
13. Eye: patch
14. Eye: fluorescein eye exam
15. Foreign body removal (simple): nose
16. Foreign body removal (simple): ear
17. Foreign body removal (simple): conjunctiva
18. Foreign body removal (simple): subcutaneous
19. Foreign body removal (simple): vagina
20. Gastric lavage
21. Gastric tube placement (OG/NG)
22. Gastrostomy tube replacement
23. Gynecologic evaluation: postpubertal
24. Immobilization techniques for common fractures & sprains
25. Ingrown toe nail treatment
26. Inguinal hernia: simple reduction
27. Intravenous line placement
28. Lumbar puncture
29. Medication delivery: endotracheal
30. Medication delivery: IM/SC/ID

31. Medication delivery: inhaled
32. Medication delivery: IV
33. Medication delivery: rectal
34. Pulmonary function tests: peak flow meter
35. Reduction of nursemaid elbow
36. Reduction/splinting of simple dislocation
37. Sterile technique
38. Subungual hematoma: drainage
39. Suctioning: nares
40. Suctioning: oral pharynx
41. Suctioning: tracheostomy
42. Throat swab
43. Tooth: temporary reinsertion
44. Tracheostomy tube: replacement
45. Urethral swab
46. Venipuncture
47. Ventilation: bag-valve-mask
48. Ventilation support: initiation
49. Anesthesia/analgesia: digital blocks
50. Anesthesia/analgesia: local/topical
51. Anesthesia/analgesia: pain management
52. Wood's lamp examination of skin
53. Wound care and suturing of lacerations
54. Arterial puncture
55. Arthrocentesis

**Goal #9: Diagnostic and screening procedures.** Describe the following tests or procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice

**Objectives:**

- #1. ECG: emergency interpretation
- #2. Monitoring interpretation: cardiac
- #3. Monitoring interpretation: pulse oximetry
- #4. Monitoring interpretation: respiratory
- #5. Radiologic interpretation: abdominal ultrasound
- #6. Radiologic interpretation: abdominal X-ray
- #7. Radiologic interpretation: cervical spine X-ray
- #8. Radiologic interpretation: chest X-ray
- #9. Radiologic interpretation: CT of head
- #10. Radiologic interpretation: extremity X-ray
- #11. Radiologic interpretation: lateral neck X-ray
- #12. Radiologic interpretation: skeletal X-ray (incl. abuse)
- #13. Radiologic interpretation: sinus films
- #14. Vision screening

## Medical Knowledge

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

## **Medical Knowledge: Goals and Objectives**

**Goal #1: Resuscitation and Stabilization (ED). Assess, resuscitate, and stabilize critically ill or injured children in the Emergency Department (ED) setting in a timely fashion.**

**Objectives:**

- #1. Rapidly recognize and assess emergent patients, such as those in respiratory failure or shock.
- #2. Using resuscitation drugs appropriately

**Goal #2: Common Signs and Symptoms (ED). Evaluate and manage common signs and symptoms in infants, children, and adolescents that present to the ED and urgent care center.**

**Objectives:**

#1. Evaluate and Stabilize patients with signs and symptoms that present in the ED setting (examples below).

- Dental: pain or trauma of mouth, jaw or tooth; tooth injury or loss
- Surgery/trauma: acute abdomen, burns, lacerations, trauma.

**Goal #3: Common Conditions (ED). Recognize and stabilize common illnesses and injuries that present emergently.**

**Objectives:**

#1. Evaluate and manage patients with common diagnoses that present in the ED setting (examples below):

- 1.Dermatology: acute drug reactions,
- 2.Ophthalmologic: corneal abrasion, conjunctivitis, infection, ocular foreign body, hyphema, trauma
- 3.Orthopedic: arthritis, common dislocations, discitis, fractures, gait disturbance, Osgood Slatter's Disease, overuse syndromes, osteomyelitis, septic arthritis, sprains, strains
- 4.Otolaryngologic: epistaxis, foreign body aspiration, peritonsillar or retropharyngeal abscess
- 5.Trauma/surgical: burns, closed head injury, dental injuries, intracranial hemorrhages (subdural, epidural, subarachnoid), skull fractures, soft tissue injury (including lacerations, abrasions, and contusions), major trauma to head or face, neck or spine, chest, abdomen, urogenital tract, major vessels or organs (with surgeon/trauma team)
- 6.Toxicants/environmental injuries: electrical injury, heat and cold injury,
- 7.ingestion/poisoning (unknown substance or common poisons: acetaminophen, antidepressants, benzodiazepines, carbon monoxide, cocaine, cough and cold medicines, digitoxin, drugs of abuse, hydrocarbons, iron, narcotics, neuroleptics),
- 8.smoke inhalation,
- 9.submersion injury/near drowning,
10. Psychiatric: combative patient, conversion reaction, depression, suicide attempt/ideation, panic attacks.

**Goal #4: Diagnostic Testing (ED). Use common diagnostic tests and imaging studies appropriately in the ED setting.**

**Objectives:**

#1. Demonstrate understanding of common diagnostic tests and imaging studies used in the ED by being able to:

- 1.Explain the indications for and limitations of the study
2. Understand the benefits and disadvantages of family presence during procedures.
3. Know or be able to locate readily age-appropriate normal values for lab studies.

4. Apply knowledge of diagnostic test properties, including the use of sensitivity, specificity, positive predictive value, negative predictive value, likelihood ratios, and receiver operating characteristic curves, to assess the utility of tests in various clinical settings.
5. Discuss cost and utilization issues.
6. Interpret test results in the context of the care of the specific patient.
7. Discuss therapeutic options for correction of abnormalities

#2. Use appropriately the following laboratory studies when indicated for patients in the ED setting:

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3. Blood chemistries: electrolytes, calcium, magnesium, phosphate, and glucose
4. Arterial, venous, and capillary blood gases
5. Renal function tests
6. Tests of hepatic function and damage
7. Drug levels and toxic screens
8. Gram stain
9. Wet mount
10. Urinalysis
11. CSF studies
12. Stool studies
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14. Pregnancy test (urine, blood)
15. Other fluid studies (e.g., pleural fluid, joint aspiration fluid)

#3. Use the following imaging or radiographic studies when indicated for patients in the ED setting:

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3. Contrast or air enema for suspected intussusception or upper GI series for suspected malrotation

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**Objectives:**

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- Discuss indications, contraindications, and complications.
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#2. Use appropriately the monitoring techniques used in the ED:

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations
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**#3.** Utilize appropriately the treatments and techniques used in the ED:

1. Universal precautions
2. Gastrointestinal decontamination for poisoning
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4. Procedural sedation
5. Rapid sequence intubation
6. Sedatives, non-narcotic and narcotic analgesics
7. Behavioral techniques and supportive care
8. Other non-pharmacologic methods of pain control (e.g., distraction techniques and humor therapy)

**Goal #6: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.]**

**Objectives:**

1. Understand the scope of established and evolving biomedical, clinical, epidemiological and social-behavioral knowledge needed by a pediatrician; demonstrate the ability to acquire, critically interpret and apply this knowledge in patient care.
2. Demonstrate a commitment to acquiring the base of knowledge needed for the care of patients in the ED
3. Demonstrate the ability to efficiently access medical information, evaluate it critically and apply it to pediatric care in the ED.

**Goal #7: Technical and therapeutic procedures.** Describe the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.

**Objectives:**

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2. Bladder: catheterization
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- 30.Medication delivery: IM/SC/ID
- 31.Medication delivery: inhaled
- 32.Medication delivery: IV
- 33.Medication delivery: rectal
- 34.Pulmonary function tests: peak flow meter
- 35.Reduction of nursemaid elbow
- 36.Reduction/splinting of simple dislocation
- 37.Sterile technique
- 38.Subungual hematoma: drainage
- 39.Suctioning: nares
- 40.Suctioning: oral pharynx
- 41.Suctioning: tracheostomy
- 42.Throat swab
- 43.Tooth: temporary reinsertion
- 44.Tracheostomy tube: replacement
- 45.Urethral swab
- 46.Venipuncture
- 47.Ventilation: bag-valve-mask
- 48.Ventilation support: initiation
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- #13. Radiologic interpretation: sinus films
- #14. Vision screening

## **Practice- Based Learning and Improvement**

The competency of Practice- Based Learning and Improvement includes:

- analyze practice experience and perform practice-based improvement activities using a systematic methodology
- locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- obtain and use information about their own population of patients and the larger population from which their patients are drawn
- apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- use information technology to manage information, access on-line medical information; and support their own education
- facilitate the learning of students and other health care professionals

## **Practice- Based Learning and Improvement :Goals and Objectives**

**Goal #1: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.**

### **Objectives:**

1. Demonstrate knowledge, skills and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve one's patient care practice.
2. Use scientific methods and evidence to investigate, evaluate and improve patient care in ED
3. Identify personal learning needs, systematically organize relevant information resources for future reference, and plan for continuing acquisition of knowledge and skills.

## **Systems Based Practice**

The competency of System Based Practice includes:

- understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice
- know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
- practice cost-effective health care and resource allocation that does not compromise quality of care
- advocate for quality patient care and assist patients in dealing with system complexities
  
- know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance

## **Systems Based Practice :Goals and Objectives**

**Goal #1: EMS System for Children. Understand the basic principles and utilization of emergency medical services for children**

**Objectives:**

- #1. Describe the organization and utilization of emergency medical systems for children in one's local area, including.
- #2. Demonstrate the ability to activate and use the local EMS for children, including interhospital transport.

**Goal #2: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.**

**Objectives:**

- #1. Understand how to practice high-quality health care and advocate for patients within the context of the health care system.
- #2. Demonstrate sensitivity to the costs of care in the ED setting and take steps to minimize costs without compromising quality
- #3. Recognize and advocate for families who need assistance to deal with system complexities. Recognize one's limits and those of the system; take steps to avoid medical errors.

## Professionalism

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

## Professionalism :Goals and Objectives

**Goal #1: Resuscitation and Stabilization (ED). Assess, resuscitate, and stabilize critically ill or injured children in the Emergency Department (ED) setting in a timely fashion.**

**Objectives:**

- #1. Rapidly recognize and assess emergent patients, such as those in respiratory failure or shock.
- #2. Using resuscitation drugs appropriately

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- 1.Dermatology: acute drug reactions,
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- 5.Trauma/surgical: burns, closed head injury, dental injuries, intracranial hemorrhages (subdural, epidural, subarachnoid), skull fractures, soft tissue injury (including lacerations, abrasions, and contusions), major trauma to head or face, neck or spine, chest, abdomen, urogenital tract, major vessels or organs (with surgeon/trauma team)
- 6.Toxicants/environmental injuries: electrical injury, heat and cold injury,
- 7.ingestion/poisoning (unknown substance or common poisons: acetaminophen, antidepressants, benzodiazepines, carbon monoxide, cocaine, cough and cold medicines, digitoxin, drugs of abuse, hydrocarbons, iron, narcotics, neuroleptics),
- 8.smoke inhalation,
- 9.submersion injury/near drowning,
10. Psychiatric: combative patient, conversion reaction, depression, suicide attempt/ideation, panic attacks.

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**Objectives:**

**#1.** Demonstrate understanding of common diagnostic tests and imaging studies used in the ED by being able to:

- #1.Explain the indications for and limitations of the study
- #2.Understand the benefits and disadvantages of family presence during procedures.
- #3.Know or be able to locate readily age-appropriate normal values for lab studies.
- #4.Apply knowledge of diagnostic test properties, including the use of sensitivity, specificity, positive predictive value, negative predictive value, likelihood ratios, and receiver operating characteristic curves, to assess the utility of tests in various clinical settings.
- #5.Discuss cost and utilization issues.
- #6.Interpret test results in the context of the care of the specific patient.
- #7.Discuss therapeutic options for correction of abnormalities

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3. Blood chemistries: electrolytes, calcium, magnesium, phosphate, and glucose
4. Arterial, venous, and capillary blood gases
5. Renal function tests
6. Tests of hepatic function and damage
7. Drug levels and toxic screens
8. Gram stain
9. Wet mount
10. Urinalysis
11. CSF studies
12. Stool studies
13. Coagulation studies
14. Pregnancy test (urine, blood)
15. Other fluid studies (e.g., pleural fluid, joint aspiration fluid)

**#3.** Use the following imaging or radiographic studies when indicated for patients in the ED setting:

1. Plain radiographs of chest, skull, extremity bones, abdomen, cervical spine
2. Other imaging techniques, such as CT, MRI, ultrasound, and nuclear scans (interpretation not expected)
3. Contrast or air enema for suspected intussusception or upper GI series for suspected malrotation

**#4.** Use the following screening and diagnostic studies when indicated for patients in the ED setting:

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3. Appropriate urgent use of echocardiography

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**Objectives:**

**#1.** Demonstrate understanding of the monitoring techniques and special treatments commonly used in the ED by being able to:

1. Discuss indications, contraindications, and complications.
2. Demonstrate proper use of technique or treatment for children of varying ages.
3. Interpret results of monitoring based on method used, age, and clinical situation.

**#2.** Use appropriately the monitoring techniques used in the ED:

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations
2. Pulse oximetry

**#3.** Utilize appropriately the treatments and techniques used in the ED:

1. Universal precautions
2. Gastrointestinal decontamination for poisoning
3. Administration of nebulized medication
4. Injury, wound and burn care
5. Suturing and topical adhesive
6. Splinting
7. Oxygen delivery systems

**#4.** Demonstrate understanding of the following methods of anesthesia or pain management used in the ED:

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4. Procedural sedation
5. Rapid sequence intubation
6. Sedatives, non-narcotic and narcotic analgesics
7. Behavioral techniques and supportive care
8. Other non-pharmacologic methods of pain control (e.g., distraction techniques and humor therapy)

**Goal #6: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.**

**Objectives:**

#1. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.

#2. Demonstrate a commitment to professionalism despite the pace and stress of the ED setting.

#3. Adhere to ethical and legal principles, and be sensitive to diversity. Identify and describe potential ethical dilemmas that one may encounter in the ED (e.g., such as resuscitation of patients with little hope of recovery; treatment of disabled patients; providing confidential care to mature minors [pregnancy termination, STDs, substance abuse]; foregoing life-sustaining treatment; identifying and referring organ donors).

#4. Discuss key principles and identify resources for information about legal issues of importance to practice in the ED (e.g., emergency care for indigent patients; laws regarding inter-hospital patient transfer; consent-to-treat issues in the emergency treatment of minors; rights of parents to refuse treatment and legal options of providers; reporting of child abuse and neglect; death reports; and obligations of physicians in the ED to facilitate follow-up care).

## **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group

## **Interpersonal and Communication Skills: Goals and Objectives**

**Goal #1: Resuscitation and Stabilization (ED). Assess, resuscitate, and stabilize critically ill or injured children in the Emergency Department (ED) setting in a timely fashion.**

**Objectives:**

#1. Rapidly recognize and assess emergent patients, such as those in respiratory failure or shock.

#2. Using resuscitation drugs appropriately

**Goal #2: Common Signs and Symptoms (ED). Evaluate and manage common signs and symptoms in infants, children, and adolescents that present to the ED and urgent care center.**

**Objective:**

#1. Evaluate and Stabilize patients with signs and symptoms that present in the ED setting (examples below).

- Dental: pain or trauma of mouth, jaw or tooth; tooth injury or loss
- Surgery/trauma: acute abdomen, burns, lacerations, trauma.

**Goal #3: Common Conditions (ED). Recognize and stabilize common illnesses and injuries that present emergently.**

**Objectives:**

#1. Evaluate and manage patients with common diagnoses that present in the ED setting (examples below):

1. Dermatology: acute drug reactions,
2. Ophthalmologic: corneal abrasion, conjunctivitis, infection, ocular foreign body, hyphema, trauma
3. Orthopedic: arthritis, common dislocations, discitis, fractures, gait disturbance, Osgood Slatter's Disease, overuse syndromes, osteomyelitis, septic arthritis, sprains, strains
4. Otolaryngologic: epistaxis, foreign body aspiration, peritonsillar or retropharyngeal abscess
5. Trauma/surgical: burns, closed head injury, dental injuries, intracranial hemorrhages (subdural, epidural, subarachnoid), skull fractures, soft tissue injury (including lacerations, abrasions, and contusions), major trauma to head or face, neck or spine, chest, abdomen, urogenital tract, major vessels or organs (with surgeon/trauma team)
6. Toxicants/environmental injuries: electrical injury, heat and cold injury,
7. Ingestion/poisoning (unknown substance or common poisons: acetaminophen, antidepressants, benzodiazepines, carbon monoxide, cocaine, cough and cold medicines, digitoxin, drugs of abuse, hydrocarbons, iron, narcotics, neuroleptics),
8. Smoke inhalation,
9. Submersion injury/near drowning,
10. Psychiatric: combative patient, conversion reaction, depression, suicide attempt/ideation, panic attacks.

**Goal #4: Diagnostic Testing (ED). Use common diagnostic tests and imaging studies appropriately in the ED setting.**

**Objectives:**

#1. Demonstrate understanding of common diagnostic tests and imaging studies used in the ED by being able to:

- #1. Explain the indications for and limitations of the study
- #2. Understand the benefits and disadvantages of family presence during procedures.
- #3. Know or be able to locate readily age-appropriate normal values for lab studies.
- #4. Apply knowledge of diagnostic test properties, including the use of sensitivity, specificity, positive predictive value, negative predictive value, likelihood ratios, and receiver operating characteristic curves, to assess the utility of tests in various clinical settings.
- #5. Discuss cost and utilization issues.
- #6. Interpret test results in the context of the care of the specific patient.
- #7. Discuss therapeutic options for correction of abnormalities

**#2. Use appropriately the following laboratory studies when indicated for patients in the ED setting:**

1. CBC with differential count, platelets, RBC indices
2. Bacterial, viral, and fungal cultures and rapid screens Serologic tests for infection (e.g., monospot, VDRL, hepatitis)
3. Blood chemistries: electrolytes, calcium, magnesium, phosphate, and glucose
4. Arterial, venous, and capillary blood gases
5. Renal function tests
6. Tests of hepatic function and damage
7. Drug levels and toxic screens
8. Gram stain
9. Wet mount
10. Urinalysis
11. CSF studies
12. Stool studies
13. Coagulation studies
14. Pregnancy test (urine, blood)
15. Other fluid studies (e.g., pleural fluid, joint aspiration fluid)

**#3.** Use the following imaging or radiographic studies when indicated for patients in the ED setting

1. Plain radiographs of chest, skull, extremity bones, abdomen, cervical spine
2. Other imaging techniques, such as CT, MRI, ultrasound, and nuclear scans (interpretation not expected)
3. Contrast or air enema for suspected intussusception or upper GI series for suspected malrotation

**#4.** Use the following screening and diagnostic studies when indicated for patients in the ED setting:

1. Electrocardiogram
2. Vision screening
3. Appropriate urgent use of echocardiography

**Goal #5: Monitoring and Therapeutic Modalities (ED). Understand how to use physiologic monitoring and special technology and treatment in the ED setting.**

**Objectives:**

**#1.** Demonstrate understanding of the monitoring techniques and special treatments commonly used in the ED by being able to:

1. Discuss indications, contraindications, and complications.
2. Demonstrate proper use of technique or treatment for children of varying ages.
3. Interpret results of monitoring based on method used, age, and clinical situation.

**#2.** Use appropriately the monitoring techniques used in the ED:

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations
2. Pulse oximetry

**#3.** Utilize appropriately the treatments and techniques used in the ED:

1. Universal precautions
2. Gastrointestinal decontamination for poisoning
3. Administration of nebulized medication
4. Injury, wound and burn care
5. Suturing and topical adhesive
6. Splinting
7. Oxygen delivery systems

**#4.** Demonstrate understanding of the following methods of anesthesia or pain management used in the ED:

1. Methods for recognizing and evaluating pain
2. Topical/local/regional anesthesia
3. ASA classification system
4. Procedural sedation
5. Rapid sequence intubation
6. Sedatives, non-narcotic and narcotic analgesics
7. Behavioral techniques and supportive care
8. Other non-pharmacologic methods of pain control (e.g., distraction techniques and humor therapy)



**Goal #6: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.**

**Objectives:**

- #1. Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates
- #2. Provide effective patient education, including reassurance, for a condition(s) commonly seen in the ED.
- #3. Participate effectively as part of an interdisciplinary team in the ED to create and sustain information exchange, including communication with the primary care physician.
- #4. Provide case-based teaching related to clinical situations encountered in ED (for students, colleagues, other professionals and/or laypersons). Maintain accurate, timely and legally appropriate medical records in the ED and urgent care settings