### Curricular Components for General Pediatrics EPA 1

<table>
<thead>
<tr>
<th>1: EPA Title</th>
<th>Provide consultation to other health care providers caring for children</th>
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</table>
| 2. Description of the activity | A key role for the pediatrician is to provide consultation to health care providers, specialists, sub-specialists, and health care agencies engaged in the care of children. The specific functions which define this EPA include:  
- Establishing and maintaining working relationships with the referring providers / agencies, marked by bi-directional communication.  
- Clarifying and focusing the clinical question to be addressed  
- Gathering essential information from referring physician, organization, or health agency, as well as the patient(s) and family.  
- Communicating findings and recommendations to the patient and family, and the source of the referral i.e., the requesting provider or health agency  
- Demonstrating content expertise in one’s area of pediatrics to provide consultation  
- Navigating the relationship with the patient/ family to be either supportive or directive (or some combination of the two) as needed over time. |
| 3. Judicious mapping to domains of competence | X_ Patient Care  
X_ Medical Knowledge  
___ Practice-based Learning and Improvement  
X_ Interpersonal & Communication Skills  
___ Professionalism  
___ Systems-based Practice  
___ Personal & Professional Development |
| 4. Competencies within each domain critical to entrustment decisions | PC 1: Gather information  
MK 1: Demonstrating knowledge  
MK 2: Practicing EBM  
ICS 1: Communicate with patients/families  
ICS 4: Working as a member of a health care team  
ICS 5: Consultative role |
| 5. Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely): | **Rationale:** Pediatricians can be considered specialists with content expertise in the health conditions of infants, children and adolescents. Depending on local resources and |

regulations, as well as a pediatrician’s scope of practice, they may be asked by healthcare providers or health agencies to provide judgment on health issues facing a single child, group of children, or population of children. Pediatricians must therefore demonstrate the requisite knowledge and communications skills to assess, document, and convey important findings, as well as maintain accessibility and accountability to fulfill the consultative role. They must also recognize their limitations and seek additional expertise from other specialists or subspecialists as necessary.

**Scope of Practice:** Family medicine physicians, general practitioners, other physicians (e.g., surgeons), mid-level providers, and children’s health or public health agencies may ask pediatricians to provide consultation. Before providing consultation, a pediatrician should consider whether or not he/she has the expertise to do so. If a pediatrician is unable to provide the consultation, they should suggest alternative specialty consultation and/or resources to the referring physician/agency. In providing consultation, pediatricians should be aware of any potential conflicts of interest and manage these accordingly.

**Areas in which pediatricians should generally be able to provide a complete consultation:**
- Newborn health issues not including critical care or surgical anomalies
- Common behavioral and developmental concerns and problems in infants and children
- Common mental health conditions of children and adolescents
- Interpretation of diagnostic tests based on age related normal values
- Interpretation of physical findings based on age related normal findings
- Management of common acute and chronic health conditions of children
- Recommendations on routine vaccination schedules or vaccine policies
- Recommendation on infection control procedures for daycare agencies and schools (Based on local practices and regulations)
- Recommendations for common health screenings (newborn screening, vision, hearing)
- Recommendations for community resources for children
- Performing the procedures of a pediatrician
- Initial discussions with first responders

**Areas in which pediatricians should generally seek additional consultation:**
- Critical care issues for neonates, infants, children and adolescents, including major trauma evaluations
- Complex or serious mental health conditions in children and adolescents, (examples: suicidal or homicidal behavior, mental health conditions not responding to usual therapies)
- Complex or rare health conditions requiring medical or surgical subspecialty expertise
- Complex gynecologic issues in adolescent females, as well as pregnancy

**Curricular components that support the functions of the EPA:**
Establishing and maintaining working relationships with the referring providers / agencies, marked by bi-directional communication.
- Maintains availability, approachability and professionalism.
- Uses clear and effective communication skills.
- Responds in a timely manner.

Clarifying and focusing the clinical question to be addressed
- Reaches agreement with the referral source on the nature and urgency of the problem.
- Self-assesses as to whether one has the requisite expertise to address the issue. If unable to meet needs, suggests other resources as appropriate.

Gathering essential information from referring physician, organization, or health agency, as well as the patient(s) and family.
- Assesses the patient/family’s understanding of the need for consultation, and clarifies this as needed.
- Provides an independent assessment and confirmation of findings and recommendations.
- Focuses data gathering on the question at hand, but does not ignore other critical information that may require additional evaluation / consultation.
- Demonstrates professional and patient-centered practices in working with patients and health agencies.

Communicating findings and recommendations to the patient and family, and the source of the referral i.e., the requesting provider or health agency.
- Based on level of urgency of the issue, communicates with referral source using agreed upon modality.
- Prepares a timely summary of the consultation and recommendations in agreed upon format (EHR, written report or recommendations), which addresses the specific questions to be answered.
- Informs patient and family of findings and how this will be communicated to referral source.

Demonstrating content expertise in one’s area of pediatrics to provide consultation
- Demonstrates many domains of competence during the consultation process, particularly medical knowledge, patient care, systems-based practice and professionalism.
- Stays within one’s scope of practice as the consultant.
- Recognizes limitations and makes suggestions for other specialists / resources when appropriate.

Navigating the relationship with the patient/ family to be either supportive or directive (or some combination of the two) as needed over time.
- Negotiates with the source of referral about the need for short-term or ongoing involvement in the care of the patient.
- Ensures that confidence and reputation of the source of referral is maintained and upheld.

Authors:

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Curricular Components for General Pediatrics EPA 2

<table>
<thead>
<tr>
<th>1: EPA Title</th>
<th>Provide recommended pediatric health screening</th>
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| 2. Description of the activity | Screening, which serves the purpose of early identification and treatment of populations of patients, is an important element of preventive health care. Foundational knowledge is critical, including knowledge of 1) available screening tests; 2) their status from a regulatory perspective (e.g. mandatory, recommended or voluntary); 3) their sensitivity, specificity, and positive and negative predictive values; 4) their cost/benefit ratio for patients and society; and 5) the risk/benefit ratio for the patient. The specific functions which define this EPA include:  
- Applying knowledge in selection and interpretation of screening tools and tests (e.g. screens for growth and development, special senses, and medical conditions)  
- Engaging patients and families in shared decision-making for those screening tests that are not mandated by state law  
- Educating patients and families about the implications of the results to their overall health and care plan |
| 3. Judicious mapping to domains of competence |  
- Patient Care  
- Medical Knowledge  
- Practice-based Learning and Improvement  
- Interpersonal & Communication Skills  
- Professionalism  
- Systems-based Practice  
- Personal & Professional Development |
| 4. Competencies within each domain critical to entrustment decisions | MK 1: Demonstrating knowledge  
PBLI 9: Educating others  
P 2: Demonstrating professional conduct  
SBP 3: Incorporating cost awareness into care  
PPD 8: Dealing with uncertainty |
| 5. Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely): | Rationale: A pediatrician must have a thorough understanding of the variety of screening tests and tools that are used in health maintenance visits. A national evidence-driven guideline is detailed in the Bright Futures/AAP Periodicity Schedule. |

Additionally, certain populations of at-risk children (e.g., patients with Down Syndrome) have separate recommended screenings. Finally, the pediatrician may utilize other health screens as required by their local or state agencies and different payor groups.

**Scope of Practice:** Recommended screening tests span the entire age range of pediatrics, starting with newborn metabolic screening to depression screening in young adulthood. Any pediatrician conducting health maintenance exams must have a thorough understanding of the recommended screenings outlined in the Bright Futures/AAP Periodicity Schedule. Additionally, for routine screening to be successful the pediatrician must ensure that his/her interprofessional staff is properly educated and protocols structured so that screening occurs in a timely manner, and that the results are reviewed and reported to patients. If there is an abnormal result the pediatrician must then initiate treatment and/or refer to the appropriate specialist. The pediatrician must be competent in discussing both the rationale and the results of screening to families. The pediatrician is ultimately accountable for all of these steps in the process.

**Curricular components that support the functions of the EPA:**

**Applying knowledge in selection and interpretation of screening tools and tests (e.g., screens for growth and development, special senses, and medical conditions)**

- Discusses the types of screening tools available and their proper utilization.
- Describes how certain biomechanical screening tests work (e.g., auditory brainstem response (ABR) and otoacoustic emissions).
- Applies the concepts of sensitivity, specificity and predictive values to screening.
- Determines the risk/benefit ratio of performing the screen for the patient and for society.
- Initiates further evaluation, treatment, or referral when a screening test is abnormal.

**Engaging patients and families in shared decision-making for those screening tests that are not mandated by state law**

- Determines the health literacy of the patient and family to facilitate shared decision-making.
- Engages in effective bi-directional communication with families and patients about prioritizing tests.
- Knows which screens are mandated or recommended by Bright Futures/AAP, local schools and governmental agencies, or payors.
- Educates patients and families about the value of screening tests. Elicits and discusses any patient questions.
- Explains to patients and families that some tests, although recommended,
may not be covered by their payor.

**Educating patients and families about the implications of the result to their overall health and care plan**

- In the case of a *normal* result, ensures the patient and family’s awareness and understanding of the implications of the result; and documents appropriately.
- In the case of an *abnormal* result, discusses with the patient and family and elicits questions. Determines the next step in evaluation and/or treatment, and refers to specialists or services as indicated. Documents the management plans and any discussions with the patient and family.
- Communicates in a sensitive manner the concept of uncertainty with screening test results, and the importance of ongoing monitoring or further testing if there are ongoing concerns despite a normal screen.

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Curricular Components for General Pediatrics EPA 3

<table>
<thead>
<tr>
<th>1. EPA Title</th>
<th>Care for the well newborn</th>
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<tbody>
<tr>
<td>2. Description of the activity</td>
<td>Care of the well newborn in the immediate perinatal period will occur predominantly in the newborn nursery. Scope of practice for this EPA includes well full-term and late pre-term infants. A pediatrician is also expected to manage the common problems that occur in these newborns. The specific functions which define this EPA include:</td>
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<td></td>
<td>• Performing a physical examination to look for normal variations, abnormal signs and congenital anomalies</td>
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<td></td>
<td>• Identifying and applying key evidence based guidelines for care of the newborn</td>
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<td></td>
<td>• Providing routine care, as well as addressing common problems that develop within the first 28 days of life</td>
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<td>• Using judgment to know when common problems can be handled at home, and arrange for discharge and follow-up</td>
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<td></td>
<td>• Assessing maternal/family readiness to care for the infant post discharge</td>
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<td>• Transitioning care to the community practitioner</td>
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<td></td>
<td>• Demonstrating confidence that puts new parents at ease</td>
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<tr>
<td>3. Judicious mapping to domains of competence</td>
<td><em>X</em> Patient Care</td>
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<tr>
<td></td>
<td><em>X</em> Medical Knowledge</td>
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<tr>
<td></td>
<td>___ Practice-based Learning and Improvement</td>
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<tr>
<td></td>
<td><em>X</em> Interpersonal &amp; Communication Skills</td>
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<td>___ Professionalism</td>
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<td>___ Systems-based Practice</td>
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<td><em>X</em> Personal &amp; Professional Development</td>
</tr>
<tr>
<td>4. Competencies within each domain critical to entrustment decisions</td>
<td>PC 3: Transferring care</td>
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<tr>
<td></td>
<td>PC 5: Performing complete physical exams</td>
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<tr>
<td></td>
<td>MK 2: Practicing EBM</td>
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<td></td>
<td>ICS 1: Communicating with patients/families</td>
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<td></td>
<td>PPD 7: Demonstrating self-confidence</td>
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<tr>
<td>5. Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely):</td>
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**Rationale:** Pediatricians must be able to anticipate and manage the health and medical needs of the normal term and late preterm newborn, as well as manage those newborn medical conditions that do not require an intensive care nursery prior to hospital discharge. They should also be able to manage those conditions that evolve or emerge at home during the neonatal time period.
**Scope of Practice:** This document is intended to address the scope of knowledge and skills of the generalist in a community practice with access to support from a neonatologist. As such it focuses on common problems that a generalist should manage with the understanding that the generalist will recognize his/her own limitations and seek additional assistance from a neonatologist as needed. Ideally, care from the generalist would begin during the perinatal period with a prenatal visit to the pediatrician to begin anticipatory guidance for parents, especially new parents. Care of the normal newborn begins at delivery and continues through the 28th day of life. The patient population includes both term newborns (37 weeks 0/7 days of gestation to 41 weeks 6/7 days) and late pre-term newborns (34 weeks 0/7 days through 36 weeks 6/7 days). Scope of practice will change with context and may include delivery room care. Those practicing in more rural areas may be called upon to resuscitate and stabilize premature infants < 34 weeks of age.

**Curricular components that support the functions of the EPA:**

**Performing a physical examination to look for normal variations, abnormal signs and congenital anomalies**
- Determines the general state of the infant (“well” versus “sick” newborn).
- Distinguishes normal variations from abnormal findings.
- Interprets physical exam findings in the context of the maternal history and family history.
- Synthesizes clinical findings into a unified diagnosis where possible.

**Identifying and applying key evidence-based guidelines for care of the newborn**
- Develops an answerable clinical question.
- Searches the literature for evidence focusing on the highest grade evidence available.
- Interprets the evidence in light of its grade.
- Applies the evidence to the care of the patient given the particular context for that patient.

**Providing routine care, as well as addressing common problems that develop within the first 28 days of life.**

**Reviewing relevant medical history:**
- Incorporates relevant prenatal, perinatal and postnatal history into caring for the patient’s individual needs.

**Delivery Room Care:**
- Resuscitates and stabilizes newborns in distress (suctioning, oxygen use and bag-mask ventilation as needed).
- Performs an overall assessment that includes APGAR scores.
- Determines gestational age and plots growth.
Routine Care:
- Orders or administers Vitamin K and eye prophylaxis.
- Prescribes cord care
- Orders appropriate newborn screening tests.
- Orders appropriate immunizations.
- Manages feedings/fluids
- Prescribes measures to regulate temperature for newborns not capable of doing so.

Problems generally within the scope of general pediatric practice (based on prevalence and potential morbidity) where the role of the generalist is to recognize, evaluate and treat:
- Indirect hyperbilirubinemia
- Newborn complications of maternal diabetes (hypoglycemia, polycythemia, large for gestational age)
- Transient tachypnea of the newborn
- Murmurs due to heart conditions that do not affect cardiovascular stability
- Infants born to mothers with fever at the time of delivery
- Infants born to mothers with Group B strep not adequately treated
- Suspected sepsis
- Hypoglycemia
- Poor weight gain
- Neonatal abstinence syndrome

Problems that generally require consultation where the role of the generalist is to recognize, provide preliminary evaluation and refer. (This list depends greatly on context in which one practices. Those generalists practicing in areas where access to subspecialists is difficult will likely provide more of the care and may do so with telephone advice from a trusted subspecialist as needed):
- Direct hyperbilirubinemia (biliary atresia, etc.)
- Indirect hyperbilirubinemia that is not responding to phototherapy
- Early onset sepsis due to Group B streptococcus, gram negative bacteria, Listeria as well as other bacteria and viruses (e.g., HSV and Enteroviruses)
- Congenital infections (e.g., CMV)
- Infant born to an HIV positive mothers
- Meconium aspiration
- Tracheo-esophageal fistula
- Cyanosis due to respiratory compromise
- Cyanosis due to congenital heart disease
- Pathologic heart murmurs and conditions
- Necrotizing enterocolitis
- Abdominal wall defects (omphalocele, gastroschisis)
- Intestinal obstruction (malrotation with volvulus, Hirschprung Disease)
- Seizures
- Brachial plexus injuries
- Trisomy 21 and other genetic conditions

Using judgment to know when common problems can be handled at home and arrange for discharge and follow-up
- Seeks out resources, services, and necessary health professionals to assist with patient’s needs after discharge.
- Discusses and considers the home environment in making decisions about readiness for discharge.
- Addresses concerns parents may have regarding the newborn’s health and routine care.
- Gauges family’s understanding of health problems if they exist.
- Determines family acceptability of a visiting nurse to help with care if needed.

Assessing maternal/family readiness to care for the infant post discharge
- Interviews the parents/family about previous experience with newborn care.
- Gathers information on available support systems.
- Invites questions from the family.
- Includes family in a shared decision making process.
- Screens for maternal depression and refers as indicated.
- Determines and discusses family level of comfort for interval between hospital discharge and first follow-up visit.

Transitioning care to the community practitioner
- Provides written and verbal discharge instructions inviting questions from the family.
- Transmits information about the maternal, perinatal and postnatal course to the receiving pediatrician.

Demonstrating confidence that puts new parents at ease
- Assists parents in navigating uncertainties and complexities.
- Meets the emotional needs of new parents through reassurance and empathy.
- Acknowledges one’s limitations in knowledge and sets an agenda for fact finding and follow-up with parents.

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## Curricular Components for General Pediatrics EPA 4

<table>
<thead>
<tr>
<th>1. EPA Title</th>
<th>Manage patients with acute, common diagnoses in an ambulatory, emergency, or inpatient setting</th>
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<tbody>
<tr>
<td>2. Description of the activity</td>
<td>The ability to manage pediatric patients who present with common acute illnesses is a key activity of a pediatrician. The scope of practice includes well children and children with chronic underlying disease who present with an acute illness. The specific functions which define this EPA include:</td>
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<td>- Assessing the severity of illness and using judgment as to whether or not immediate or emergency actions, stabilization, or transfer to a higher acuity facility are necessary for treatment of urgent or life-threatening problems</td>
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<td>- Gathering essential information through history, physical examination and initial laboratory evaluation</td>
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<td>- Engaging in sound clinical reasoning that drives the development of an appropriate differential diagnosis to allow the indicated diagnostic tests to be performed</td>
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<td>- Knowing or acquiring knowledge of the evidence related to the primary problem and applying the evidence to the patient’s care in developing a diagnostic work-up and plans for management and follow-up</td>
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<td>- Placing the patient at the center of all management decisions to provide patient and family centered care by engaging in bidirectional communication with patients and families</td>
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<td>- Communicating and documenting the therapeutic plan and clinical reasoning in a manner that is transparent to all members of the health care team</td>
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<tr>
<td>3. Judicious mapping to domains of competence</td>
<td>Patient Care X</td>
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<td>Medical Knowledge X</td>
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<tr>
<td></td>
<td>Practice-based Learning and Improvement __</td>
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<td>Interpersonal &amp; Communication Skills X</td>
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<td>Professionalism ___</td>
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<td>Systems-based Practice ___</td>
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<td>Personal &amp; Professional Development ___</td>
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<td>4. Competencies within each domain critical to entrustment decisions</td>
<td>PC 1: Gathering information</td>
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<td>PC 5: Performing complete physical exams</td>
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<td>PC 6: Using optimal clinical judgment</td>
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<td>PC 7: Developing management plans</td>
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<td>MK 2: Practicing EBM</td>
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<td>ICS 1: Communicating with patients/families</td>
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<td>ICS 6: Maintaining medical records</td>
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### Attitudes Needed to Execute This EPA Safely:

**Rationale:** Pediatricians spend a large proportion of their time caring for patients with common acute problems. Pediatricians must be able to recognize and manage common acute pediatric problems, as well as provide counseling and education to patients and families.

**Scope of Practice:** This document is intended to address the scope of practice of a pediatrician with access to support from subspecialists and the ability to transfer patients to higher acuity facilities. It focuses on those common acute problems that a pediatrician would routinely identify and manage. Inherent in this scope of practice is the pediatrician’s recognition of his/her personal limitations in knowledge and skills, leading to referral or help-seeking from colleagues when problems become complicated or are beyond the limits of the generalist.

Common acute conditions occur in pediatric patients of all ages. The care of these patients occurs in a variety of settings: inpatient, outpatient clinic, urgent care centers, and the emergency department. The scope of practice will change with the type of setting a pediatrician works in. Some pediatricians may work in both inpatient and outpatient settings, including seeing patients in the emergency department. They may be called upon to resuscitate, stabilize, manage, or transfer patients as part of their scope of practice. Other pediatricians in office-based settings may have solely an outpatient practice, and they may rely on Emergency Medicine providers (emergency rooms) to provide care for sicker patients.

**Curricular Components That Support the Functions of the EPA:**

#### Assessing the Severity of Illness and Using Judgment as to Whether or Not Immediate or Emergency Actions, Stabilization, or Transfer to a Higher Acuity Facility Are Necessary for Treatment of Urgent or Life-Threatening Problems

- Recognizes when a child’s illness requires higher acuity care or exceeds the available level of expertise or resources.
- Initiates stabilization, resuscitation, and/or transfer of children, as appropriate. Depending on the practice site’s availability of medical equipment and medications, this could include (but is not limited to) suctioning, supplemental oxygen use, bag-mask ventilation, intubation, initiation of respiratory support, chest compressions, bedside blood glucose and blood gas testing, placement of an intravenous line, splinting, placement of a cervical collar, use of emergency medications/fluids (e.g. epinephrine, antibiotics, fluids, or cardioversion).
- If medical supplies are available, may perform urgent procedures as indicated (e.g. lumbar puncture).

#### Gathering Essential Information Through History, Physical Examination and Initial Laboratory Evaluation

- Determines the child’s severity of illness in context with the presenting complaints and decides whether a complete or problem-focused history and physical examination is appropriate.
- Interprets the history, physical exam, and laboratory findings (if obtained) in the context of the child’s medical history and problem list.
- Distinguishes normal variations from abnormal symptoms or findings.

Engaging in sound clinical reasoning that drives the development of an appropriate differential diagnosis to allow the indicated diagnostic tests to be performed
- Synthesizes the patient’s history and the physical examination into an appropriate differential diagnosis or unified diagnosis when possible.
- Uses judgment in ordering laboratory, radiologic, and ancillary tests to aid in diagnosis, and identify associated abnormal findings.
- Limits ordering tests in mildly ill children, if such tests are unlikely to aid in diagnosis, change management, or inform isolation or infection control decisions.
- Understands there is ambiguity in the etiology of some conditions; uses judgment in balancing the need (value) and desire to know the diagnosis with the cost and utility of tests.

Knowing or acquiring knowledge of the evidence related to the primary problem and applying the evidence to the patient’s care in developing a diagnostic work-up and plans for management and follow-up
- Develops an appropriate clinical question to search for evidence based guidance or recommendations (e.g., PICO format).
- Locates medical literature or national guidelines (e.g. AAP guidelines) that are pertinent to the question and applies/utilizes them to inform management plans.
- Initiates admission, subspecialty referral or transfer to higher level of care if needed.
- Assesses child’s home environment, family’s ability to care for the child, access to reliable transportation, and ability to obtain medications/medical equipment (insurance, ability to pay) in developing treatment, medication, and follow-up plans.
- Communicates with a specialist to develop a coordinated plan when evaluating patients with complex medical histories or underlying serious medical conditions that are managed by a specialist.
- Works within an interprofessional framework to arrange support services and equipment if needed (e.g. home health care, physical therapy, nebulizer, oxygen, wheelchair).

Placing the patient at the center of all management decisions to provide patient and family centered care by engaging in bidirectional communication with patients and families
- Uses medical interpreters for families with limited English proficiency, unless the pediatrician is fluent in the family’s language and qualified to interpret.
- Counsels and educates the patient/family regarding the condition (e.g. etiology, expected course, etc.).
- Engages in collaborative communication with the patient/family to formulate a management plan.
- Gauges patient and family’s understanding of the condition, treatment plan, and reasons to return for care.
• Elicits and discusses patient and family questions.

Communicating and documenting the therapeutic plan and clinical reasoning in a manner that is transparent to all members of the health care team
• Documents clinical encounters in the medical record in a timely fashion, including the assessment, diagnosis and management plan.
• Provides oral and/or written communication to the accepting physician for patients that are transferred to another facility, patients referred to consultants or allied health providers, or patients discharged from an emergency room or inpatient setting to a community provider.
• Ensures complete handoffs using a standardized template when patients are transitioning from one care provider to another such as occurs when physician coverage changes due to call shifts in the inpatient ward or emergency department.
• Provides oral and written discharge instructions, to include follow-up instructions, to patients and families at discharge or the end of the encounter.

Examples of problems generally within the scope of pediatric practice (based on prevalence and potential morbidity) where the role of the generalist is to recognize, evaluate and treat (this list is not all inclusive):
• Abdominal pain
• Asthma exacerbation/wheezing
• Acute otitis media
• Adenopathy
• Allergic Disorders (allergic rhinitis, atopic dermatitis, contact dermatitis, drug rash, urticaria)
• Acute Behavioral problems (e.g. excessive crying, sleep disturbances)
• Constipation
• Cough
• Dehydration
• Diabetic ketoacidosis (uncomplicated and responsive to therapy)
• Diarrhea
• Febrile illnesses
• Febrile seizures
• Fever in a neonate
• Gastrointestinal infections
• Gastrointestinal reflux
• Headache
• Limp
• Medication adverse effects (e.g. Clostridium difficile infection, rash)
• Musculoskeletal pain
• Pharyngitis
• Rash
• Sexually transmitted infections
• Sinusitis
• Skin and soft tissue infections (e.g. boils, cellulitis, impetigo, scabies)
• Trauma- mild to moderate (e.g. concussion, strain, sprain, bite, sting)
• Upper and lower respiratory infections (e.g. bronchiolitis, pneumonia)
• Urinary tract infections
• Viral syndromes

Examples of problems that generally require consultation where the role of the generalist is to recognize, provide preliminary evaluation and refer. This list depends greatly on the context in which one practices. Those generalists practicing in areas where access to subspecialists is difficult will likely provide more of the care and may do so with telephone advice from a trusted subspecialist as needed (this list is not all inclusive):

• Acute abdomen (e.g. appendicitis)
• Anaphylaxis
• Child Abuse (physical/sexual)
• Complicated lacerations (e.g. laceration of vermillion border, laceration associated with tendon injury)
• Displaced fractures
• Foreign body aspiration
• Hernia
• Serious or life threatening infections (e.g. malaria, meningococcemia, neonatal HSV infection, pneumonia with empyema, osteomyelitis, septic arthritis, toxic shock syndrome)
• Ingestions
• Major trauma
• Meningitis (bacterial)
• Oncologic conditions
• Pyloric stenosis
• Renal insufficiency/failure (e.g. Hemolytic uremic syndrome, interstitial nephritis)
• Rheumatologic conditions (e.g. juvenile idiopathic arthritis)
• Severe asthma exacerbation
• Severe diabetic ketoacidosis
• Status epilepticus/recurrent seizures/afebrile seizures
• Suicidal ideation

Authors:

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### Curricular Components for General Pediatrics EPA 5

<table>
<thead>
<tr>
<th>1. EPA Title</th>
<th>Provide a medical home for well children of all ages</th>
</tr>
</thead>
</table>
| 2. Description of the activity | The medical home is a partnership between patient, family and primary care practice, nested in the patient’s community, that optimizes access to and coordination of care and resources. This activity requires the pediatrician to be a key facilitator and champion of patient and family centered care, working in collaboration with an interprofessional team. Provision of a medical home may emphasize different knowledge, skills, and/or attitudes for the following age groups (see below):  
  - Neonate  
  - Infant  
  - Toddler  
  - School-age child  
  - Adolescent  
  - Transitional (to adulthood)  
As a result, provision of the medical home to each of these age groups can be seen as a “nested” EPA within the broader context.  
The specific functions which define this EPA include:  
  - Demonstrating knowledge of normal physiology, epidemiology, development, and standards of practice for the major age groups including neonates, infants, toddlers, school-age children, adolescents, and individuals transitioning to adult care  
  - Establishing a highly effective therapeutic relationship with patients and families  
  - Identifying specific patient and family needs by implementing a comprehensive assessment of patient and family  
  - Addressing specific patient and family needs by identifying appropriate resources and accessing and coordinating them to ensure optimal patient care  
  - Optimizing the primary care of the patient by implementing quality standards befitting a medical home |
| 3. Judicious mapping to domains of competence | **X** Patient Care  
**_** Medical Knowledge  
**_** Practice-based Learning and Improvement  
**X** Interpersonal & Communication Skills  
**X** Professionalism  
**X** Systems-based Practice |

4. Competencies within each domain critical to entrustment decisions

- PC 4: Interviewing patients
- PC 10: Providing health maintenance
- ICS 1: Communicating with patients/families
- ICS 4: Working as a member of a health care team
- ICS 6: Maintaining medical records
- P 4: Demonstrating cultural competence
- SBP2: Coordinating care
- SBP7: Advocating for the promotion of health
- PPD7: Demonstrating self-confidence

5. Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely):

Rationale: Pediatricians must be able to provide a medical home for children of all ages. As such, the pediatrician must have the ability to address the varying needs of children of all ages, understanding the nuances of patient and family needs in the context of the community within which care occurs, exercising familiarity with available resources, and coordinating comprehensive and collaborative care.

Scope of Practice: Providing comprehensive care in a medical home is an expansive endeavor. Meeting the needs of a neonate varies greatly from those of an adolescent. The generalist must be able to distinguish between normal and abnormal patterns of growth, behavior and development, and individualize care with appropriate medical and community resource referrals. Beyond well-child care, the pediatrician must also identify patterns of acute and chronic conditions and manage these according to accepted standards of care, national guidelines, and/or evidence-based approaches. The pediatrician must understand the construct of comprehensive care as it applies to children of all ages, and have the ability to adapt to the specific needs of the individual and family. A medical home model executes this adaptation in the context of the community and resources available to the patient and family, and integrates services to create a network of care that is as extensive as necessary to meet the needs of the individual patient and family. The generalist must communicate, collaborate, and facilitate access to resources that meet these needs, and do so in a manner that is culturally sensitive and professional in nature.

Curricular components that support the functions of the EPA:

Demonstrating knowledge of normal physiology, epidemiology, and standards of practice for the major age groups including neonates, infants, toddlers, school-age children, adolescents, and individuals transitioning to adult care including:

- Normal patterns of growth and principles of growth curves
- Nutrition, dietary transitions, and indications for vitamin supplementation
- Normal motor, language, and cognitive developmental milestones
- Normal socio-emotional and behavioral health
- Immunization schedule, common side effects, and contraindications
• Age-appropriate screening per the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) guidelines.
• Anticipatory guidance around normal growth behavior and development, parenting and prevention as well as major causes of morbidity and mortality.

Establishing a highly effective therapeutic relationship with patients and families
• Demonstrates strong relationship building through listening, verbal narrative, and nonverbal communication skills.
• Demonstrates effective education and counseling of patients and families.
• Cultivates a partnership with the patient and family while respecting patient privacy and autonomy and maintaining appropriate professional boundaries.
• Demonstrates integrity, honesty, compassion, and empathy in one’s role and accepts responsibility for patient care including continuity of care.
• Demonstrates sensitivity and responsiveness to patients’ and colleagues’ gender, age, culture, disabilities, ethnicity, and sexual orientation.

Identifying specific patient and family needs by implementing a comprehensive assessment of patient and family
• Gathers a thorough, reliable, and efficient history and establishes a broad base of information about the patient that is appropriate for the scope of the visit.
• Completes an accurate, problem-directed, and properly sequenced physical exam that elicits even subtle findings.
• Judiciously and effectively uses diagnostic and therapeutic procedures and tests.
• Integrates medical facts and clinical data, weighing alternatives, understanding limitations of knowledge, and incorporating consideration of costs, risks and benefits.
• Demonstrates the ability to analyze and synthesize all the clinical/laboratory data and resource information in the context of the particular patient.
• Demonstrates appropriate reasoning and decisiveness while considering patient and family preferences.

Addressing specific patient and family needs by identifying appropriate resources and accessing and coordinating them to ensure optimal patient care
• Identifies and manages acute and chronic illnesses and understands when to involve subspecialists and community-based support services.
• Recognizes complex medical and social needs of a patient and family, and facilitates group communication (with all agencies, specialists, health professionals involved) to develop and monitor comprehensive care plans.
• Develops networks and cultivates information sources among professional colleagues in the institution and the local community and initiates referrals appropriately.
• Effects comprehensive patient care by coordinating a multidisciplinary approach with any identified necessary resources (e.g., educational, dental, psychological, developmental, and social).
- Communicates and collaborates with community resources, agencies, and health professionals to provide support and services for patient and families.
- Demonstrates clear, cogent, continuous communication as the primary care provider and health care team leader for multidisciplinary care.
- Demonstrates curiosity in exploring new ideas and seeks alternative solutions to problems in the context of the patient and family preferences, and the community setting and resources available.

### Optimizing the primary care of the patient by implementing quality standards befitting a medical home

- Effectively uses technology to seek out current information from published sources, computerized literature searches, and reputable web sites, in order to optimize patient care and guidance.
- Constantly evaluates own performance and incorporates feedback into improvement activities.
- Effectively uses systematic approaches to reduce errors and improve standard of care for patients.
- Exercises accountability and commitment by timely and accurate completion of medical records.
- Participates and assists in developing systems improvements leading to seamless collaboration and communication.

Authors:

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Curricular Components for General Pediatrics EPA 6

<table>
<thead>
<tr>
<th>1. EPA Title</th>
<th>Provide a medical home for patients with complex, chronic, or special health care needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Description of the activity</td>
<td>The medical home is a partnership between patient, family and primary care practice, nested in the patient’s community, that optimizes access to and coordination of care and resources. This activity requires the health care professional to be a key facilitator and champion of patient and family centered care, working in collaboration with an interprofessional team. Working knowledge of vulnerable populations is critical to this EPA. The activity often requires engagement with and coordination of multiple specialists and health care professionals. The activity also requires knowledge of and ability to access community resources. Entrustment to provide comprehensive care for medically complex children in a medical home may require different knowledge, skills, and attitudes for different age groups. As a result, entrustment decisions may require stratification by age group.</td>
</tr>
<tr>
<td>3. Judicious mapping to domains of competence</td>
<td></td>
</tr>
<tr>
<td><em>X</em> Patient Care</td>
<td></td>
</tr>
<tr>
<td>___ Medical Knowledge</td>
<td></td>
</tr>
<tr>
<td><em>X</em> Practice-based Learning and Improvement</td>
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<tr>
<td><em>X</em> Interpersonal &amp; Communication Skills</td>
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<tr>
<td>___ Professionalism</td>
<td></td>
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<td><em>X</em> Systems-based Practice</td>
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<tr>
<td>___ Personal &amp; Professional Development</td>
<td></td>
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<tr>
<td>4. Competencies within each domain critical to entrustment</td>
<td>PC 9: Counseling patients and families</td>
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<tr>
<td></td>
<td>PC 10: Providing health maintenance</td>
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<tr>
<td></td>
<td>PBLI 9: Educating others</td>
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<tr>
<td></td>
<td>ICS 1: Communicating with patients/families</td>
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</tbody>
</table>

5. Curricular Components Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely):

Rationale: Pediatricians must be able to care for children with special health care needs (CSHCN) defined as children who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who require health and health related services of a type or amount beyond that required by children generally.\(^1\) The most medically fragile of this group has also been designated as children with medical complexity (CMC).\(^2\) Providing a medical home is a key approach to care that promotes access to all of the services and community supports needed for each patient. Developing a partnership with families to provide the needed care and services is a critical component.

Scope of Practice: Providing comprehensive care in a medical home is an expansive endeavor. Caring for patients with complex, chronic and special health care needs involves pediatric patients in all age ranges from birth to adulthood. It also involves transitions to adult care for many CSHCN who need assistance with care coordination to adult specialists. The specific diagnoses that fall under this EPA are numerous and varied, but regardless of complexity or diagnosis, the expected abilities of a pediatrician will allow him/her to provide coordinated and effective care within a medical home. The generalist must communicate, collaborate, and facilitate access to resources that meet these needs, and do so in a manner that is culturally sensitive and professional in nature.

Curricular components that support the functions of the EPA:

Demonstrating knowledge of key community services and agencies, to facilitate appropriate referral of patients with identified needs, and skill to diagnose, refer as needed, counsel and provide health maintenance for medically complex patients

- Demonstrates knowledge of commonly seen types of diagnoses including but not limited to: asthma, autism spectrum disorder, developmentally delayed patients, children with genetic conditions, sickle cell disease, cerebral palsy, brain injury, rheumatologic conditions, congenital anomalies, oncology patients, children with significant mental health diagnoses and children with neural tube defects.
- Demonstrates knowledge of the types of medical technology that assist this population of medically complex patients. (This includes: nutrition support, venous access, transportation, and respiratory support.)
- Advocates for medically complex patients and families in regard to access to care, resources and facilitation of effective use and benefit from medical technology.

Facilitating patient and family centered care in a medical home model in order to emphasize collaboration with an interprofessional team that insures optimal care and empowerment of the patient/family
• Provides patients and families care within a medical home utilizing interactions that involve shared decision making, care coordination and support in a collaborative partnership.

• Demonstrates strong relationship building through listening, narrative, and nonverbal communication skills.

• Demonstrates effective education and counseling of patients and families.

• Integrates principles of care coordination in interactions with families and outside resources to optimize patient quality of life and positively impact health outcomes.

• Communicates diagnostic and treatment options in an effective manner with patients and families that assists with decision-making amidst uncertainty and lack of evidenced based information, particularly in rare disorders/conditions.

• Communicates effectively with families of CSHCN in a manner that takes into account the special issues that commonly arise in caring for complex medical conditions such as family autonomy, advance care plans, respite care, financial strategies/assistance, and decision-making amidst uncertainty.

Engaging in and orchestrating the care coordination of CSHCN with appropriate specialists and other healthcare professionals/agencies (physical therapists, occupational therapists, home health care, dieticians, social workers, psychologists, etc.)

• Provides comprehensive health maintenance and complex medical care through a multidisciplinary approach by partnering with other healthcare professionals, and services (physical therapy, occupational therapy, speech, dieticians, payors, respite care services).

• Fosters clear, bi-directional communication with all of the patient’s subspecialists, allied health professionals and health care related agencies to allow for optimal care coordination.

• Manages and coordinates care for technology dependent special needs children.

Authors:

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References:


### Curricular Components for General Pediatrics EPA 7

<table>
<thead>
<tr>
<th>1. EPA Title</th>
<th>Recognize, provide initial management and refer patients presenting with surgical problems</th>
</tr>
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</table>
| 2. Description of the activity | Pediatricians must work collaboratively with surgical specialists in the care of children with conditions where surgery is or may be indicated.  
The specific functions which define this EPA include:  
- Recognizing conditions where surgery is primarily indicated or is needed in conjunction with medical management  
- Providing initial management and/or stabilization  
- Making a referral and communicating directly to the pediatric or subspecialty surgeon  
- Assisting with pre- and post-operative medical care of the child (such as nutritional support, pain management, and medication dosing for the pediatric patient)  
- Providing continuity of care that insures mutual understanding of the diagnosis, management and follow-up needed |
| 3. Judicious mapping to domains of competence |  
| | X | Patient Care |  
| | ____ | Medical Knowledge |  
| | ____ | Practice-based Learning and Improvement |  
| X | Interpersonal & Communication Skills |  
| | ____ | Professionalism |  
| X | Systems-based Practice |  
| | ____ | Personal & Professional Development |  
| 4. Competencies within each domain critical to entrustment decisions | PC 3: Transferring care  
| | PC 6: Using optimal clinical judgment  
| | ICS 3: Communicating with health professionals  
| | SBP 2: Coordinating care |  
| 5. Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely) : |  
**Rationale:** Pediatricians must recognize when a patient requires surgical consultation and/or management. They should communicate effectively when referring a patient to the surgical team and provide initial treatment and stabilization during the referral process. Pediatricians should work collaboratively with surgeons to assist with the pre-operative and post-operative care of such patients, as well as providing continuity of care in the long term.  
**Scope of Practice:** Pediatricians may care for patients with surgical problems at all ages, from the immediate newborn period through adolescence. The generalist may encounter patients with surgical problems in a variety of clinical settings. Pediatricians must convey the degree of urgency of the surgical consult based on the severity of the illness and the nature of the problem. For elective consults in particular, the generalist needs to recognize appropriate timing and potentially advocate for a family and patient if this is not achieved. |
The generalist must recognize the limits of managing a potential surgical problem medically and know when to escalate the urgency of a consult within the limits of the resources and expertise available to them. However, it is beyond the scope of this document to consider all contexts in which the generalist may practice, but rather to address the knowledge and skills needed by the generalist who has access to surgical support.

**Curricular components that support the functions of the EPA:**

**Recognizing conditions where surgery is primarily indicated or is needed in conjunction with medical management**
- Recognizes acuity of presenting or developing problem to establish if surgical referral and intervention is elective or urgent.
- Prioritizes timing of surgical consult appropriately reflecting urgency of issue.
- Identifies need for consultation and the appropriate endpoints for successful medical management vs. need for surgical intervention.
- Monitors clinical exam to evaluate if medical management is no longer adequate.
- Obtains appropriate laboratory and imaging studies to monitor progression of illness.
- Discusses ongoing risks and benefits of continuing medical management vs. surgical intervention with surgical consultants, patient and family.

**Providing initial management and/or stabilization**
- Recognizes the patient who is severely ill and assess resources and expertise available to provide initial management.
- Initiates the call for additional resources as needed, for example calling an ambulance in an office practice.
- Stabilizes patient medically based on available resources, for example with antibiotics and blood products or fluids.
- Obtains appropriate imaging and laboratory studies for diagnostic clarity and pre-operative preparation.

**Making a referral and communicating directly to the pediatric or subspecialty surgeon**
- Delivers patient information to the surgical consultant in an effective and efficient fashion, allowing open communication by the receiver.
- Organizes presentation appropriately and delivers it succinctly.
- Utilizes appropriate mode of communication.
- Recognizes that handoff between settings is a professional responsibility.

**Assisting with pre- and post-operative medical care of the child (such as nutritional support, pain management, and medication dosing for the pediatric patient)**
- Recognizes impact of underlying chronic medical problems – e.g., asthma on the anesthetic and operative plan and determines medical clearance.
- Assists family with needs in the pre-operative period, ensuring that they understand basics of the procedure, risks, benefits and alternatives, medical clearance, typical recovery time needed, and restrictions (e.g. dietary, activity, etc. in the peri-operative period and beyond.)

- Manages transition to post-operative period, assisting in planning of discharge needs and answering questions.
- Manages other chronic conditions that may impact the surgical and anesthetic plan and provides consultation to the surgical team as needed.
- Assists surgeon as requested in preparing the patient for surgery with respect to laboratory studies, NPO status, and other pre-operative considerations around a more elective intervention.
- Assists surgeon as requested with post-operative issues such as pain control, nausea, fluid management, and nutrition.

Providing continuity of care that insures mutual understanding of the diagnosis, management and follow-up needed
- Facilitates family centered communication with consulting team.
- Coordinates plans of care between medical and surgical team, particularly with respect to discharge and follow up, including a written care plan and shared decision making throughout the process.

Authors:
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### Curricular Components for General Pediatrics EPA 8

<table>
<thead>
<tr>
<th>1. EPA Title</th>
<th>Facilitate the transition from pediatric to adult health care</th>
</tr>
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</table>
| 2. Description of the activity | All children must have an organized transition to adult healthcare. This is particularly true of children with complex or chronic medical conditions. This necessitates an accountability to these patients on the part of a pediatrician to insure a seamless transition process to adult medicine counterparts. The specific functions which define this EA include:  
- Developing a therapeutic relationship with patient and family which foundationally supports recognition and timing of transition to adult care  
- Assessing for transition readiness  
- Transition planning that includes establishing a care team with an adult primary care provider and medical home, adult subspecialists, as needed and community-based resources  
- Transferring care to adult health care providers, and coordinating assistance and ongoing support as needed |
| 3. Judicious mapping to domains of competence | _X_ Patient Care  
___ Medical Knowledge  
_X_ Practice-based Learning and Improvement  
_X_ Interpersonal & Communication Skills  
_X_ Professionalism  
_X_ Systems-based Practice  
_X_ Personal & Professional Development |
| 4. Competencies within each domain critical to entrustment decisions | PC 3: Transferring care  
PC 9: Counseling patients and families  
PBLI 9: Educating others  
ICS 3: Communicating with health professionals  
P 2: Professional Conduct  
SBP 2: Coordinating care  
PPD 1: Engaging in help-seeking behaviors |
| 5. Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely): |

**Rationale:** Transitioning patients to adult health care is becoming a more prevalent and intentional activity of pediatricians especially with advances in chronic disease management. With this activity comes requisite knowledge and skills around identifying when the needs of the patient exceed expertise of a pediatric primary care provider, and measuring the readiness of patient and family to transition to adult health care.

**Scope of Practice:** As patients age beyond adolescence, knowledge of illnesses and complications more typical of adults begin to gain importance and at a critical point, the

The pediatrician must make the decision to transition the patient to adult care. At this point, the pediatrician must exercise knowledge and skills that will facilitate a seamless transition. The transition will in some cases necessitate not only transfer of medical care to an adult primary care provider, but also include establishing connections with adult subspecialists and extension to community-based services that are designed to help a patient transition to more independence and self-care, as appropriate. The pediatrician must facilitate this transfer of care in a manner that is sensitive, timely, and comprehensive.

Curricular components that support the functions of the EPA:

**Developing a therapeutic relationship with patient and family which foundationally supports recognition and timing of transition to adult care**
- Demonstrates strong relationship building through listening, narrative, and nonverbal communication skills.
- Demonstrates effective education and counseling of patient and family.
- Cultivates a partnership with the patient and family while respecting patient privacy and autonomy and maintaining appropriate professional boundaries.
- Demonstrates integrity, honesty, compassion, and empathy in one’s role of accepting responsibility for patient care, including transition to adult care.
- Demonstrates sensitivity and responsiveness to patient’s gender, age, culture, disabilities, ethnicity, and sexual orientation.

**Assessing for transition readiness**
- Recognizes when patient needs, regardless of patient age, are moving beyond the scope of pediatric care, and one’s own knowledge and skills require assistance from adult provider(s).
- Ascertains patient and family’s level of understanding of medical needs including medications, care plan, and goals.
- Identifies and addresses concerns of patient and family regarding transition to adult provider(s).
- Develops shared goals with patient and family and updates them regularly starting in early adolescent years.
- Counsels and empowers the patient and family around self-care.
- Discusses the approach to transition to adult care and initiates the process.

**Transition planning that includes establishing a care team with an adult primary care provider and medical home, adult subspecialists, as needed and community-based resources**
- Develops and regularly updates transition plan, including readiness assessment findings, goals and prioritized actions, medical summary, and emergency care plan.
- Identifies and connects patient to adult primary care provider and medical home that is fitting for the patient’s medical needs.
- Prepares patient and family for any legal changes in decision-making, privacy and consent, and access to information.
• Identifies need for decision-making supports for youth with intellectual challenges and refers family to appropriate legal and social resources.
• Provides information for insurance, community-based resources, and self-care management.
• Plans optimal timing of transfer of care, weighing comfort of patient and family and ongoing health needs.
• Obtains consent for release of medical information.

**Transferring care to adult health care providers, and coordinating assistance and ongoing support as needed**

• Communicates effectively with adult primary care provider including transfer letter and updated care plan.
• Coordinates comprehensive medical care by effectively communicating and engaging with adult subspecialists and community-based resources as needed.
• Communicates details around transition of care to patient (and family), including updated medical summary and emergency care plan/contacts.
• Plans follow up contact with adult provider(s) to confirm successful transfer of care.

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References:


### Curricular Components for General Pediatrics EPA 9

<table>
<thead>
<tr>
<th>1. EPA Title</th>
<th>Assess and manage patients with common behavior/mental health problems</th>
</tr>
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</table>
| 2. Description of the activity | Mental health and behavioral issues are central to pediatric practice. Care of patients with behavioral and mental health problems requires that the pediatrician engage with the family. The specific functions which define this EPA include:  
- Identifying and managing common behavioral and mental health issues, (e.g., low mood, inattention and impulsivity, disruptive behavior and aggression, anxiety, learning difficulty, substance use, and social-emotional issues in young children), including the initiation and monitoring of treatment effects for psychosocial interventions and when indicated for certain disorders (ADHD, depression, anxiety), pharmacotherapy  
- Referring and co-managing patients with the appropriate specialist(s) when indicated to match the patient’s needs, including pharmacotherapy (e.g., cognitive behavior therapist (CBT) for depression, specialist in trauma focused CBT for post-traumatic stress disorder, child psychiatrist for assistance in medication management)  
- Knowing the mental health resources available to patients in one’s community and utilizing the appropriate resources for each patient’s needs  
- Knowing the role of each member of the interprofessional team and coordinating and monitoring care provided outside one’s practice (e.g., mental health professionals, community social services, support groups, early intervention and school personnel) to optimize patient care  
- Providing care that is sensitive to the developmental stage of the patient and the cultural context of the patient and family around issues of mental health |
| 3. Judicious mapping to domains of competence | X Patient Care  
X Medical Knowledge  
___ Practice-based Learning and Improvement  
X Interpersonal & Communication Skills  
X Professionalism  
X Systems-based Practice  
___ Personal & Professional Development |
| 4. Competencies within each domain | PC 4: Interviewing patients  
PC 7: Developing management plans |

critical to entrustment decisions

| PC 9: Counseling patients and families |
| MK 1: Demonstrating knowledge |
| ICS 3: Communicating with health professionals |
| P 4: Demonstrating cultural competence |
| SBP 2: Coordinating care |

5. Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely):

**Rationale:** Pediatricians must be able to assess behavioral wellness and address prevention as well as anticipate, identify, and manage the behavioral and mental health needs of patients through young adulthood, recognizing when further consultation from a mental or behavioral health specialist is needed.

**Scope of Practice:** Pediatricians must be prepared to conduct an initial behavioral developmental assessment of children presenting for scheduled well child care or acute concerns. Assessment of such patients begins in infancy and extends through young adulthood. Focusing on behavioral wellness and prevention of behavioral and mental health problems should be a routine part of anticipatory guidance throughout the entirety of the lifespan from infancy to young adulthood. It is important to distinguish common developmentally appropriate behaviors from behavioral mental health concerns. Scope of practice includes the expectation that a pediatrician should be familiar with the diagnostic criteria for common behavioral and mental health diagnoses, including the use of appropriate and validated screening instruments to assess for behavioral or mental health concerns. In addition, a pediatrician should skillfully interview patients and families to assess for common behavioral concerns requiring intervention and possible pharmacotherapy. A pediatrician should know when to reassure caregivers, when to conduct additional evaluation, and when to seek consultation from a specialist. The coordination of an interprofessional team is essential to ensure inclusion of additional professionals including mental health specialists, school and community resources, and support groups. A pediatrician must also provide culturally competent care relevant to a family’s background, experience, and the developmental stage of the patient. This document is intended to address the scope of knowledge and skills of the generalist in a primary care practice to manage behavioral and mental health concerns. As such, it focuses on common problems a generalist would manage with the assumption that the pediatrician will recognize his/her own limitations and seek prompt assistance from the appropriate subspecialist or allied health professional as needed.

**Curricular components that support the functions of the EPA:**

Identifying and managing common behavioral and mental health issues, (e.g., low mood, inattention and impulsivity, disruptive behavior and aggression, anxiety, learning difficulty, substance use, and social-emotional issues in young children), including the initiation and monitoring of treatment effects for psychosocial interventions and when indicated for certain disorders (ADHD, depression, anxiety), pharmacotherapy

- Performs an initial behavioral and mental health assessment for patients presenting for scheduled well visits or acute concerns and utilizes validated
instruments to assist in identifying patients with behavioral concerns or mental health diagnoses.

- Identifies the findings associated with common behavioral and mental health issues.
- Distinguishes normal variants from presentation of abnormal behavior and development.
- Initiates appropriate management of common behavioral issues (above), including parental reassurance, education, and evidence-based psychosocial interventions appropriate to the practice setting.
- Initiates pharmacotherapy when indicated for uncomplicated ADHD, anxiety, and depressive disorders.
- Monitors the therapeutic effect and side effects of therapy to make adjustments or changes when indicated.

Problems generally within the scope of pediatric practice (based on prevalence and potential morbidity) where the role of the generalist is to recognize, evaluate and initiate treatment

- Common behavioral issues (eg. bedtime refusal and frequent awakening, separation anxiety, colic, temper tantrums, head banging, delayed toilet training, abnormal feeding patterns, self-exploration and masturbation, aggressive behavior, etc)
- Attention Deficit Disorder with or without Hyperactivity
- Depression or Dysthymia
- Anxiety Disorders
- Autism
- Normal adolescent developmental issues and conflict
- Substance use in adolescents

Referring and co-managing patients with the appropriate specialist(s) when indicated to match the patient’s needs, including pharmacotherapy (e.g., cognitive behavior therapist (CBT) for depression, specialist in trauma focused CBT for post-traumatic stress disorder, child psychiatrist for assistance in medication management)

- Identifies patients who require additional diagnoses, management, and referral to professionals specializing in behavior, development, or mental health.
- Communicates effectively to ensure appropriate and timely transfer of information to consulting professionals.
- Utilizes recommendations and information from behavioral and mental health professionals to effectively co-manage needs of patients.
- Recognizes imminent safety concerns for the patient or others and knows the process for initiating emergent referral when indicated. This includes effectively communicating with accepting providers to ensure safe and efficient transfer of care.

Problems that generally require consultation where the role of the generalist is to recognize, provide preliminary evaluation and refer to and co-manage with the appropriate specialist(s) and allied health professionals. This list depends greatly on context in which
one practices. Those generalists practicing in areas where access to subspecialists is difficult will likely provide more of the care and may do so with advice from a trusted specialist or allied health professional as needed.

- Suicidal/homicidal intent or behavior
- Any condition associated with severe functional impairment
- Co-occurring mental illness and substance use
- Oppositional Defiant Disorder
- Conduct Disorder
- Antisocial behavior/delinquency
- Eating Disorders
- Post-traumatic Stress Disorder
- Obsessive-Compulsive Disorder
- Bipolar Disorder
- Conversion Disorders
- Adjustment Disorders
- Somatic Symptom Disorder
- Substance Abuse Disorders
- Psychotic Disorders
- Maternal Depression

Knowing the mental health resources available to patients in one’s community and utilizing the appropriate resources for each patient’s needs
- Identifies appropriate resources in the community based on patient and family needs and accessibility.
- Provides patients and families with information and linkages to community resources (eg. schools, faith-based organizations, private practice, etc).

Knowing the role of each member of the interprofessional team and coordinating and monitoring care provided outside one’s practice (e.g., mental health professionals, community social services, support groups, early intervention and school personnel) to optimize patient care
- Identifies resources within a patient’s educational setting (i.e. school) to support coordinated therapies for behavior management or mental health diagnoses.
- Recognizes the expertise of specialists within the healthcare and community setting that best align with patient and family needs.
- Coordinates exchange of information with community resources following guidelines to ensure patient privacy when appropriate.
- Adheres to agreed upon treatment plans and recommendations of interprofessional providers to facilitate optimal patient outcomes.

Providing care that is sensitive to the developmental stage of the patient and the cultural context of the patient and family around issues of behavior and mental health
- Interviews patients and caregivers about previous experience with mental health diagnoses and services.
• Includes patients and caregivers in a shared decision making process to be an active part of assessment and management when appropriate.
• Determines patient and caregiver level of understanding regarding assessment and treatment plans (eg. understanding the chronicity of many mental health disorders).
• Recognizes the importance and relevance of cultural and familial factors in the individualized experiences of behavioral and mental health issues.

Authors:

Kenya McNeal Trice (lead), Anna Kuo, Ann Burke and the General Pediatrics EPA Curricular Elements workgroup, Marsha Anderson, Michael Barone, Sharon Calaman, Jerry Larrabee, Sue Poynter
### Curricular Components for General Pediatrics EPA 10

<table>
<thead>
<tr>
<th>1. EPA Title</th>
<th>Resuscitate, initiate stabilization of the patient and then triage to align care with severity of illness</th>
</tr>
</thead>
</table>
| 2. Description of the activity | Managing patients with acute and severe illness is a core activity of a pediatrician. The specific functions which define this EPA include:  
  - Recognizing the severely ill patient requiring resuscitation  
  - Patient care skills reflecting the ability to prioritize and act in rapid sequence, including an assessment, targeted history and physical and initiation of emergency treatment  
  - Resuscitation of a patient with acute decompensation and potential impending systemic failure requires initiation of medical therapy as well as prescribing or performing invasive procedures. These activities will vary by settings, resources and the expertise of the practitioner/team.  
  - Demonstrating effective communication skills in managing a severely ill patient  
  - Embracing the importance of and engaging in reflection after resuscitation  
  - Knowing when to seek help  
  - Transitioning care to another provider after initial stabilization |
| 3. Judicious mapping to domains of competence | _X_  Patient Care  
___  Medical Knowledge  
___  Practice-based Learning and Improvement  
_ X_  Interpersonal & Communication Skills  
_ X_  Professionalism  
_ X_  Systems-based Practice  
_ X_  Personal & Professional Development |
| 4. Competencies within each domain critical to entrustment decisions | PC 2: Organizing prioritizing responsibilities  
PC 8: Performing procedures  
ICS 4: Working as a member of a health care team  
P 2: Demonstrating professional conduct  
SBP 5: Working in interprofessional teams  
PPD 1: Engaging in help-seeking  
PPD 2: Using healthy coping mechanisms |

5. Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely):

**Rationale:** A pediatrician must be able to distinguish between severely ill and unstable patients who require rapid intervention from those with an acute illness but are otherwise...
Scope of Practice: Any pediatrician must be prepared to evaluate children with an acute illness who may be severely ill. It is critical for the generalist to recognize the patient who is at risk for further decompensation and deterioration without urgent intervention, such as resuscitation, fluid therapy and/or oxygen. The pediatrician should recognize the need for assistance from colleagues in emergency medicine or critical care medicine during the care of such patients. These decisions will be impacted by the resources and expertise available to the pediatrician as they triage the patient. Care of such patients can range from the newborn period through young adulthood. Generalists may care for children in a variety of practice settings: the ambulatory office, the urgent care clinic, the hospital or the emergency department. Generalists practicing in more rural areas with delayed access to critical care resources may need greater procedural skills to care for such children. The variety of contexts in which a generalist may practice is beyond the scope of this document. This document is intended to address the scope of knowledge and skills of the generalist in a community practice with access to support from a pediatric emergency medicine or critical care physician.

Curricular components that support the functions of the EPA:

Recognizing the severely ill patient requiring resuscitation
- Identifies signs of severely ill children, such as stridor, acute respiratory failure, shock, severe hypertension, altered mental status, 6th nerve palsy with potential increased intracranial pressure, etc.
- Distinguishes between respiratory distress and failure, utilizing vital signs, clinical exam and supporting tests such as a blood gas.
- Distinguishes between compensated and uncompensated shock.
- Assesses resources available to aid in stabilization.

Patient care skills reflecting the ability to prioritize and act in rapid sequence, including an assessment, targeted history and physical and initiation of emergency treatment
- Conducts an assessment of circulation, airway, and breathing in a complete and timely fashion.
- Identifies abnormal findings, particularly vital signs in an age appropriate context.
- Utilizes information from circulation, airway and breathing assessment to initiate and prioritize therapy.
- Initiates appropriate emergency therapy, based on available resources and expertise. This could include things such as oxygen, fluids, basic and advanced life support for example, as well as other therapies as indicated and available.

Resuscitation of a patient with acute decompensation and potential impending systemic failure requires initiation of medical therapy as well as prescribing or performing invasive procedures. These activities will vary by settings, resources and the expertise of the practitioner/team.
- Manages airway compromise (support with oxygen, medications, bag valve ventilation, and request for an advanced airway as appropriate).
• Provides respiratory support for respiratory distress and failure (support with oxygen, medications, non-invasive positive pressure, and prescription of initiation of mechanical ventilation as appropriate).
• Resuscitates patients in shock (administer volume, antibiotics, and recognize need for vasoactive medications and secure vascular access whether IO or prescribing central access).
• Intervenes in cases of potential neurologic compromise (administrers anti-seizure medications as indicated, imaging studies, airway management, and consultation with critical care and neurosurgery).
• Orders appropriate diagnostic studies as indicated.

Demonstrating effective communication skills in managing a severely ill patient
• Works effectively as a team leader in caring for a child with acute deterioration.
• Communicates effectively with team members to create a shared mental model.
• Communicates with family members in an empathetic and clear manner consistent with their level of health literacy.
• Asks for help in a timely, effective fashion.

Embracing the importance of and engaging in reflection after resuscitation
• Recognizes need and conducts debriefing with staff to improve performance and facilitate coping with the stress of a severely ill child.
• Utilizes information from debriefing to promote staff well-being and coping with stress, as well as for performance and quality improvement.

Knowing when to seek help
• Assesses one’s resources and recognizes when further assistance is needed, such as consultation with a critical care physician or transfer to another facility.
• Requests help in a timely fashion recognizing the limitations of oneself, one’s team and one’s practice environment.
• Utilizes existing algorithm to deal with patient emergencies in the given practice setting.
• Develops awareness of the plan for emergencies in one’s setting as appropriate.
• Assesses urgency of definitive medical care after initial stabilization and the proper disposition of such a patient based on resources.

Transitioning care to another provider after initial stabilization
• Delivers appropriate handoff to receiving institution.
• Answers questions from family and addresses their emotional needs.
• Ensures that records necessary for care of the child are transferred.

Authors:
Sharon Calaman (lead), Marsha Anderson, Kenya McNeal Trice, Sue Poynter and the General Pediatrics EPA Curricular Elements workgroup, Michael Barone, Ann Burke, Anna Kuo, Jerry Larrabee

Curricular Components for General Pediatrics EPA 11

<table>
<thead>
<tr>
<th>1. EPA Title</th>
<th>Manage information from a variety of sources for both learning and application to patient care</th>
</tr>
</thead>
</table>
| 2. Description of the activity | The rapid expansion of information and technology requires physicians to develop expertise in accessing and managing information. The specific functions which define this EPA include:  
- Evaluating the quality of the information retrieved for informing patient care practice or one’s own professional development (e.g. EHR, social networks, the internet, journal articles)  
- Accessing relevant information in a timely manner to facilitate patient care in the clinical setting  
- Performing queries or searches of appropriate data resources to facilitate timely retrieval of relevant information  
- Filtering data gathered by importance based on parameters such as reliability of the source, validity of the data and immediate usefulness for decision-making  
- Interpreting and applying information in the context of clinical practice or one’s own professional development (e.g. the context of an individual patient or population of patients for whom one is caring, or the context of one’s own professional formation)  
- Storing and managing information in a manner that optimizes retrieval and ensures protection of patient information  
- Maintaining accountability for advancing knowledge and remaining up to date with information pertinent to one’s practice  
- Recognizing and managing the ambiguity often inherent in data itself or its interpretation  
- Developing and maintaining proficiency with technology to facilitate patient care |
| 3. Judicious mapping to domains of competence | Patient Care  
- X Medical Knowledge  
- X Practice-based Learning and Improvement  
- ___ Interpersonal & Communication Skills  
- ___ Professionalism  
- ___ Systems-based Practice  
- X Personal & Professional Development |
| 4. Competencies within each domain | MK 2: Practicing EBM  
PBLI 1: Identifying gaps |
5. Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely):

**Rationale:** Pediatricians are required to access and manage information in a timely manner to facilitate safe and effective patient care. This skill includes the ability to assess the accuracy and quality of sources and interpret them to ensure effective care and communication with patients, caregivers, and other providers. Pediatricians are also expected to participate in continued personal and professional development to ensure awareness of emerging information and technology relevant to scope of practice and improving patient outcomes.

**Scope of Practice:** A pediatrician must demonstrate a level of expertise in accessing and interpreting accurate information relevant to diagnosis and management of pediatric patients from birth to young adulthood. Expertise includes identifying valid resources in a timely manner and applying information in a context necessary to provide knowledgeable and skilled patient care or promote continued professional development. Identifying gaps in knowledge and recognizing limits within one’s scope of practice are vital to guiding learning activities and setting experience-specific goals for professional development. A pediatrician should be able to frame a clinical question that is answerable within the medical literature. In addition, a pediatrician must recognize when clinical ambiguity is present and utilize evidence-based resources to support decision-making in the setting of uncertainty. Performing queries of applicable resources and medical literature is essential to retaining familiarity with current patient care guidelines and practices. As information technology continues to advance, pediatricians are responsible for maintaining the skills necessary to assess the quality, reliably retrieve, and store data in compliance with protecting patient privacy.

**Curricular components that support the functions of the EPA:**

- Evaluating the quality of the information retrieved for informing patient care practice or one’s own professional development (e.g. EHR, social networks, the internet, journal articles)
  - Interprets information retrieved from peer-reviewed sources.
  - Recognizes when conflicts of interest exist from a source of information.
  - Recognizes the validity hierarchy for study design and study type based on inherent strengths and limitations of different study designs within medical literature.
  - Prioritizes the use of evidence-based information or practice guidelines.

- Accessing relevant information in a timely manner to facilitate patient care in the clinical setting
  - Ensures access to appropriate tools and/or technology necessary to retrieve
information that enables patient care and minimizes delay in care or referral.

- Maintains awareness of appropriate resources relevant to one’s clinical practice.
- Utilizes information within the scope of practice and recognizes when to request assistance and consultation.

Performing queries or searches of appropriate data resources to facilitate timely retrieval of relevant information

- Identifies resources pertinent to one’s clinical practice and professional development.
- Knows relevant terminology and search strategies for querying databases and health records to access information.
- Maintains competence or seeks searching information efficiently within the electronic health record relevant to one’s practice to minimize delays in patient care.

Filtering data gathered by importance based on parameters such as reliability of the source, validity of the data and immediate usefulness for decision-making

- Identifies and prioritizes information obtained that is evidence-based with valid references.
- Utilizes information and data sources most relevant to an individual patient and/or patient populations.

Interpreting and applying information in the context of clinical practice or one’s own professional development (e.g. the context of an individual patient or population of patients for whom one is caring, or the context of one’s own professional formation)

- Applies resources most relevant to one’s own practice and professional development.
- Recognizes the diversity of patient clinical experiences and applies information in means most relevant to an individual patient or population.
- Communicates information effectively to facilitate understanding amongst patients, caregivers, colleagues and consultants.

Storing and managing information in a manner that optimizes retrieval and ensures protection of patient information

- Manages protected health information in compliance with institutional or practice policies.
- Secures documents and electronic information containing patient identifiers within standards compliant with safeguarding protected health information.
- Creates a system for organizing, categorizing and linking information for efficient retrieval.

Maintaining accountability for advancing knowledge and remaining up to date with information pertinent to one’s practice

- Identifies knowledge gaps or deficiencies in skills requiring additional resources or professional development.
- Identifies personal and professional development activities and resources to
maintain competence within scope of practice.

- Recognizes unique or emerging characteristics within one’s patient population that require additional knowledge or skill acquisition (e.g. practice in urban or rural settings, military families, mental health, immigrant communities, children with complex and chronic medical conditions, etc.).
- Recognizes the importance of life-long learning to stay up to date in one’s area of practice.

**Recognizing and managing the ambiguity often inherent in data itself or its interpretation**

- Utilizes appropriate resources in the context of clinical uncertainty.
- Demonstrates ability to weigh and interpret conflicting or ambiguous information or expert consensus opinion to inform practice habits and patient care.

**Developing and maintaining proficiency with technology to facilitate patient care**

- Identifies skills needed to effectively utilize information technology.
- Applies knowledge and skills gained in relevant training and professional development opportunities to maintain/advance proficiency in the use of information technology for learning and patient care.

Authors:

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Curricular Components for General Pediatrics EPA 12

<table>
<thead>
<tr>
<th>1. EPA Title</th>
<th>Refer patients who require consultation</th>
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</thead>
<tbody>
<tr>
<td>2. Description of the activity</td>
<td>Referring patients for consultation for issues outside the scope of the pediatrician’s knowledge and skills is critical to performance in practice. The specific functions which define this EPA include: • Making appropriate decisions to refer based on knowledge of referral guidelines • Making the referral and ensuring its completion • Appropriately providing post-referral patient care, coordination, and follow-up</td>
</tr>
<tr>
<td>3. Judicious mapping to domains of competence</td>
<td><em>X</em> Patient Care <em>X</em> Medical Knowledge ___ Practice-based Learning and Improvement <em>X</em> Interpersonal &amp; Communication Skills ___ Professionalism ___ Systems-based Practice <em>X</em> Personal &amp; Professional Development</td>
</tr>
<tr>
<td>4. Competencies within each domain critical to entrustment decisions</td>
<td>PC 6: Using optimal clinical judgment PC 9: Counseling patients and families MK 1: Demonstrating knowledge ICS 1: Communicating with patients/families PPD-1: Engaging in help-seeking behaviors PPD 8: Dealing with uncertainty</td>
</tr>
<tr>
<td>5. Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely):</td>
<td><strong>Rationale:</strong> Pediatricians must be able to anticipate, diagnose, and manage the health and medical needs of a broad spectrum of patients. Additionally, pediatricians must understand their own limitations in the context of their clinical practice and recognize those medical conditions that require further consultation and referral. <strong>Scope of Practice:</strong> The scope of practice for this EPA includes patients of all ages from newborn to young adulthood. A generalist is expected to manage the common problems that occur in these patients, but certain conditions will require consultation with a specialist or health care agency. Appropriate referral of patients for issues outside of the scope of expertise is part of the pediatrician’s responsibility to patients and families. <strong>Curricular components that support the function of the EPA:</strong></td>
</tr>
</tbody>
</table>
Making appropriate decisions to refer based on knowledge of referral guidelines
- Applies medical knowledge to reach preliminary problem identification.
- Recognizes limitations and accesses information such as guidelines, expert opinion, and evidence in the literature.
- Discusses the reason for referral with family/patient, shares the diagnostic and/or therapeutic goals of the referral, and addresses any concerns.
- Exercises proper judgment regarding decision to refer by applying all relevant gathered data, evidence, and family/patient considerations.

Making the referral and ensuring its completion
- Determines acuity of patient and decides on the urgency of the referral.
- Performs the appropriate pre-referral assessment: laboratory tests, imaging, etc.
- Recognizes and assists in managing the logistics of the referral: how patient will make an appointment, access to specialty given identified urgency, insurance issues, etc.
- Clarifies understanding and agreement of plan with the family, including the reason for referral, expected time frame, logistics, and roles for family/patients, referring provider, and consultant.
- Communicates with the consultant, using appropriate method of communication (phone, written referral, etc.) based on urgency of consultation, and provides a clear referral request containing the key information necessary.

 Appropriately providing post-referral patient care, coordination, and follow-up
- Reviews consultant report, or follows-up with consultant in the absence of a report, with the goal of identifying any next steps for patient care, including clarification of findings, procedures performed, recommendations, and/or ongoing management issues.
- Provides ongoing patient care as needed and refers back to specialist for indicated follow-up and/or complications.
- Collaborates with family regarding referral process and results.

Authors:

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References:

Curricular Components for General Pediatrics EPA 13

| 1. EPA Title | Contribute to the fiscally sound, equitable and collaborative management of a healthcare workplace |
| 2. Description of the activity | The ability to function as a contributing member of a pediatric workplace, whether generalist or subspecialist, is a core activity for today’s pediatrician, and particularly critical due to the complexities of the US health care system. The specific functions which define this EPA include:  
  - Utilizing a working knowledge of current healthcare payment systems and billing requirements relevant to practice  
  - Engaging and working with the interprofessional practice team to improve processes to deliver efficient and fiscally sound healthcare to children  
  - Demonstrating an awareness of financial practices that affect the workplace |
| 3. Judicious mapping of domains of competence | ___ Patient Care  
___ Medical Knowledge  
___ Practice-based Learning and Improvement  
_X_ Interpersonal & Communication Skills  
_X_ Professionalism  
_X_ Systems-based Practice  
___ Personal & Professional Development |
| 4. Competencies within each domain critical to entrustment decisions | ICS 6: Maintaining medical records  
P 2: Demonstrating professional conduct  
SBP 1: Working in care delivery settings and systems  
SBP 3: Incorporating cost awareness into care  
SBP 5: Working in interprofessional teams  
SBP 6: Identifying system errors |
| 5. Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely): | Rationale: Pediatricians are dedicated to the health and well being of children. Providing the setting for a clinical practice, and providing the resources for patients and families, requires skill and careful attention toward managing a workplace that is financially viable. Pediatricians, as all medical professionals, are guided by putting the interests of patients above their own personal interests in many cases. There must be balance in principles of doing what is ethically right for patients and building the assets and revenue of a clinical practice.  
Scope of Practice: Pediatricians must have knowledge and ability to function in a multitude of healthcare settings from a financial and billing standpoint. Practitioners must keep up to date with the regulations of documentation, billing levels, patient rights |

and federal regulations that are ever present and ever changing. Further, pediatricians in any system must be conscientious and aware of the implications of practice processes on the health of patients and the financial well-being of the healthcare workplace.

Curricular components that support the functions of the EPA:

**Utilizing a working knowledge of current healthcare payment systems and billing requirements relevant to practice**
- Develops familiarity with public and private payer systems and understands a local payer mix.
- Documents appropriately, completely and in a timely manner to serve the needs of the patient; as well as complying with billing and proper coding of diagnoses (ICD) and procedures (CPT).
- Integrates principles of population health, local payment systems/climate and needs of children in the community.
- Practices timely and compliant bill submission.

**Engaging and working with the interprofessional practice team to improve processes to deliver efficient and fiscally sound healthcare to children**
- Identifies opportunities to participate in process improvement that benefits patients, such as streamlining documentation, patient scheduling and access, and office efficiency.
- Demonstrates accountability to patients and colleagues within the team practice, and outside agencies, consultants and healthcare systems.
- Facilitates access to resources and effectively utilizes them within the system to assist patients, through support services, durable medical equipment, and appropriate referrals, etc.
- Practices with cost conscientiousness and communicates with the team to clearly define goals of the healthcare workplace, facets that need improvement, and rationale. Maintains awareness of financial considerations while optimizing care of children.
- Maximizes high value care for patients and families. Stays mindful of the costs to the families and works within the system to minimize unnecessary expense to families.

**Demonstrating an awareness of financial practices that affect the workplace**
- Knows how timely and compliant billing affects the health of the practice.
- Knows basic systems upon which provider compensation is based (i.e value-based) and has an awareness of provider productivity measurements, such as RVUs (Relative Value Units) relevant to one’s practice.
- Communicates with healthcare systems to learn about costs and coverage of medications covered to help patients.
- Manages employees/ancillary personnel by leading and modeling patient-centered care, providing feedback to employees, and managing interpersonal relationships amongst the team.
Authors:


## Curricular Components for General Pediatrics EPA 14

<table>
<thead>
<tr>
<th>1. EPA Title</th>
<th>Apply public health principles and quality improvement methods to improve population health</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Description of the activity</td>
<td>All physicians engaged in the clinical practice of pediatrics should promote wellness, optimal health behaviors, and injury prevention within populations. Populations can be defined by practice setting, socio-demographic characteristics, geographic region, and/or medical conditions or risk factors. The specific functions which define this EPA include:</td>
</tr>
<tr>
<td></td>
<td>- Recognizing one’s professional responsibility to populations, communities, and society at large</td>
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<td></td>
<td>- Demonstrating ability to identify populations at risk</td>
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<td></td>
<td>- Applying knowledge of epidemiology and statistical analysis to interpret data, including risk benefit and cost benefit analyses</td>
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<td></td>
<td>- Collaborating with others in the development and/or implementation of projects aimed at improving health or healthcare systems</td>
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<tr>
<td></td>
<td>- Utilizing resources (e.g.: EHR, patient registries, databases) to advance quality improvement and population health</td>
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<tr>
<td>3. Judicious mapping to domains of competence</td>
<td></td>
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<tr>
<td></td>
<td>___ Patient Care</td>
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<td></td>
<td>___ Medical Knowledge</td>
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<tr>
<td></td>
<td><em>X</em> Practice-based Learning and Improvement</td>
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<tr>
<td></td>
<td>___ Interpersonal &amp; Communication Skills</td>
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<tr>
<td></td>
<td><em>X</em> Professionalism</td>
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<tr>
<td></td>
<td><em>X</em> Systems-based Practice</td>
</tr>
<tr>
<td></td>
<td>___ Personal &amp; Professional Development</td>
</tr>
<tr>
<td>4. Competencies within each domain critical to entrustment decisions</td>
<td>PBLI 4: Analyzing practice</td>
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<tr>
<td></td>
<td>PBLI 7: Using information technology</td>
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<td></td>
<td>P4: Demonstrating cultural competence</td>
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<td></td>
<td>SBP 3: Incorporating cost awareness into care</td>
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<td></td>
<td>SBP 4: Advocating for quality care</td>
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<td></td>
<td>SBP 5: Working in interprofessional teams</td>
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<td></td>
<td>SBP 6: Identifying system errors</td>
</tr>
<tr>
<td></td>
<td>SBP 7: Advocating for the promotion of health</td>
</tr>
</tbody>
</table>
5. **Curricular components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely):**

**Rationale:** Pediatricians and pediatric subspecialists are well trained to care for individual patient and family needs. As members of the community of physicians, they also have an obligation to contribute to, and in some cases lead, the health initiatives done on behalf of populations of patients. These populations can include individuals with shared socio-demographic characteristics, geography, medical conditions, or risk factors. Knowledge and skill in the principles of public health (including basic epidemiological concepts) as well as an awareness of performance improvement strategies, will equip the pediatrician and pediatric subspecialist to identify populations at risk, improve screening or care, and/or enhance healthcare delivery to populations.

**Scope of Practice:** All physicians engaged in the clinical practice of pediatrics should promote wellness, optimal health behaviors, and injury prevention. Some physicians who care for children will engage in research to improve public health or health care systems, but many will not. Nevertheless, pediatricians and pediatric subspecialists should be able to interpret data to identify populations at risk and apply basic epidemiological principles to critically appraise potential interventions (e.g., risk/benefit). Pediatricians and pediatric subspecialists should collaborate with or lead others when appropriate (e.g., parent groups, disease-oriented nonprofit organizations, community leaders, health professionals, health care administrators) to improve patient care, access to care, and/or healthcare delivery for patients and populations. Finally, pediatricians and pediatric subspecialists should see their engagement in population health as part of their professional commitment to the health and well-being of children.

**Curricular components that support the functions of the EPA:**

**Recognizing one’s professional responsibility to populations, communities, and society at large**
- Seeks and identifies ways to more effectively treat conditions, prevent disease, and promote the health of groups of patients.
- Engages in life-long learning and other activities which focus on performance improvement.
- Identifies and supports advocacy activities for children, through actions such as participation in activities and/or referral of patients to programs as appropriate.
- Recognizes health needs of the community and/or populations served, including unique cultural or healthcare needs of certain populations.
- Reports systems errors or reportable diagnoses through the identified mechanisms, committees, or agencies, etc.

**Demonstrating ability to identify populations at risk**
- Demonstrates awareness of the obligation and importance to improve the health of populations, particularly in areas of socioeconomic and/or racial/ethnic disparities.
- Recognizes critical variations in practice that have led to, or could lead to patient harm
• Appraises literature with an understanding of generalizability and relevance to patient populations.

Applying knowledge of epidemiology and statistical analysis to interpret data, including risk-benefit and cost-benefit analyses
• Knows basic epidemiological and statistical concepts to interpret basic population data or critically evaluate the medical literature (e.g.: sensitivity, specificity, positive predictive value, negative predictive value, normal distribution, mean, median, p-value).
• Appraises the medical literature with an awareness of how to evaluate different study types to determine relevance and potential application to one’s patient population (e.g.: articles about therapy, prognosis, disease screening, diagnostic testing; observational studies vs. randomized controlled trials).
• Understands the risk/benefit and cost/benefit basis for practice guidelines and high value care recommendations.
• Practices in a risk-benefit and cost-conscious manner, balancing the needs of the individual patient with the importance of resource allocation, and the disadvantages of overdiagnosis and overtreatment of patients or groups of patients.

Collaborating with others in the development and/or implementation of projects aimed at improving health or healthcare systems
• Maintains approachability and openness to discuss opportunities to improve practice.
• Recognizes and values the input and expertise of others, such as colleagues, parent groups, community leaders, other health professionals, and health care administrators, in identifying and executing solutions to problems.
• Works to maintain a safe environment to discuss systems errors and potential solutions.
• Understands and engages in quality improvement strategies such as Plan, Do, Study, Act.
• Collaborates as a member of interprofessional healthcare team in efforts to improve population health.

Utilizing resources (e.g.: EHR, patient registries, databases) to advance quality improvement and population health
• Understands that information captured in digital format can be used to identify populations at risk and health promotion opportunities
• Maintains accurate reporting and records in digital repositories such that proper surveillance of patients and populations may occur
• Works with others such as administrators and IT specialists to leverage the power of databases to improve patient care and population health
Authors:

### Curricular Components for General Pediatrics EPA 15

<table>
<thead>
<tr>
<th></th>
<th>EPA Title</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Lead an interprofessional health care team</td>
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</table>

<table>
<thead>
<tr>
<th>2. Description of the activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>A prerequisite for entrustment to <em>lead</em> an interprofessional health care team is entrustment to <em>collaborate</em> as a member of an interprofessional team, a Core EPA for Entering Residency.</td>
</tr>
</tbody>
</table>

Practicing pediatricians must often serve in the role of leader of an interprofessional health care team caring for individuals or populations of patients.

The specific functions that define this EPA include:

- Establishing a shared vision, goals, expectations, and outcome measures
- Engaging other team members in a way that utilizes their specific roles and capabilities, eliciting and valuing the perspective and contributions of others
- Demonstrating situation awareness by:
  - Monitoring individual team members’ performance to enable oversight and management of current and evolving situations
  - Balancing autonomy and supervision of team members by assigning/delegating unsupervised work to team members that aligns with their knowledge, skills, and attitudes (KSA) and supervising work of team members that is designed to expand their KSA
- Monitoring team performance and providing feedback
- Recognizing and managing the social cues, emotional responses as well as the personal and professional needs of team members
- Role modeling as the team leader
- Teaching to the needs of the team members, including patients and families

<table>
<thead>
<tr>
<th>3. Judicious mapping to domains of competence</th>
</tr>
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<tbody>
<tr>
<td>X Patient Care</td>
</tr>
<tr>
<td>Medical Knowledge</td>
</tr>
<tr>
<td>X Practice-based Learning and Improvement</td>
</tr>
<tr>
<td>X Interpersonal &amp; Communication Skills</td>
</tr>
<tr>
<td>___ Professionalism</td>
</tr>
<tr>
<td>X Systems-based Practice</td>
</tr>
<tr>
<td>X Personal &amp; Professional Development</td>
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<tr>
<th>4. Competencies within each domain critical</th>
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<td>PBLI 8: Developing teaching skills</td>
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to entrustment
decisions

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<th>ICS 2</th>
<th>Demonstrating insight into emotion</th>
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<td>Working as a member of a health care team</td>
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<td>SBP 5</td>
<td>Working in interprofessional teams</td>
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<td>PPD 4</td>
<td>Adjusting to change</td>
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<tr>
<td>PPD 6</td>
<td>Provide leadership to improve care</td>
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Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely):

**Rationale:** Pediatricians must be able to collaborate and communicate effectively to successfully lead an interprofessional healthcare team to improve patient outcomes.

**Scope of Practice:** In every area of practice, there are teams of healthcare professionals that often require leadership by a pediatrician. Quality patient care and safety occurs most effectively in the context of the interprofessional team model. The team leader should serve as a role model for others in clarifying roles and expectations, demonstrating respect for all team members, establishing open lines of communication, facilitating the sharing of knowledge based on areas of expertise, and providing feedback to team members on their performance.

Curricular components that support the functions of the EPA:

**Establishing a shared vision, goals, expectations, and outcome measures**
- Understands the broader connectivity of the different professions and their complementary nature.
- Clarifies roles, goals, expectations and outcomes measures and enables team members to perform optimally.
- Allows team members to routinely engage in decision-making and sets expectations for others to take ownership in care.
- Creates a foundation of open communication and consensus-building within the team.

**Engaging other team members in a way that utilizes their specific roles and capabilities, eliciting and valuing the perspective and contributions of others**
- Seeks and demonstrates awareness of the unique contributions (knowledge, skills, and attitudes) of other healthcare professionals on the team and seeks their input for appropriate issues.
- Determines the optimal strategies for interaction and coordination among teammates to best achieve the team goals.
- Recognizes that quality patient care occurs most often in the context of the interprofessional team.
- Offers coaching and performance improvement as needed.
- Adapts and shifts roles and responsibilities as needed to achieve team goals.
- Makes measured decisions is the absence of consensus.
Demonstrating situation awareness
- Monitors individual team member’s performance to enable oversight and management of current and evolving situations.
- Balances autonomy and supervision of team members by delegating work to team members that aligns with their KSA and supervising work of team members that is designed to expand their KSA.

Monitoring team performance and providing feedback
- Initiates problem-solving techniques and frequently provides feedback to other team members.
- Acknowledges accountability for the outcomes of the team's work.
- Engages in closed loop communication to ensure the correct message is understood by all team members.

Recognizing and managing the social cues, emotional responses as well as the personal and professional needs of team members
- Anticipates team members’ individual needs.
- Proactively assists team members coping with stress and change.
- Actively seeks feedback and initiates adaptations to help the team function more effectively in changing environments.

Role modeling as the team leader
- Serves as a role model for others in leading an interprofessional team in their work.
- Allows goals of the team to supersede any personal goals, resulting in the ability to assume the role of leader or follower, as needed.

Teaching to the needs of the team members, including patients and families
- Advocates effectively for the team with faculty, staff, families, patients, and others.
- Educates and interacts with patients and families in a way that satisfies them (i.e. patient/family-centered), in addition to being learner-centered in the education of team members.

Authors:

Curricular Components for General Pediatrics EPA 16

<table>
<thead>
<tr>
<th>1. EPA Title</th>
<th>Facilitate handovers to another healthcare provider either within or across settings</th>
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</table>
| 2. Description of the activity | As the healthcare system has increased in complexity, we have seen a commensurate increase in the number of handovers both within settings (e.g., hospital ER-to-floor and floor-to-ICU) and between settings (e.g., home-to-hospital and hospital-to-rehabilitation facility). Transitions of care are extremely vulnerable to error. This EPA is thus critical to our ability to optimize patient safety. Functions of the health care provider handing over the care of a patient include:  
  • Engaging in bidirectional communication of plans and conveying family and patient preferences.  
  • Preparing for a handover by reviewing the medical record and updating the written tool (if applicable) to avoid errors of omission  
  • Communicating situation awareness, illness severity, patient summary, action planning, and contingency planning to other health care providers, using a standardized template to improve reliability of the information transfer.  
Functions of the healthcare professional receiving a handover and accepting responsibility for the patient include:  
  • Summarizing the information heard, asking questions when needed to clarify information and to fill any perceived gaps  
  • Asking questions when needed for clarifying information and to fill any perceived gaps  
  • Restating key action items to ensure understanding  
  • Providing feedback to the individual initiating the handover on any problems/errors that occurred, including inaccurate information transmission. |
| 3. Judicious mapping to domains of competence | X_ Patient Care  
 ___ Medical Knowledge  
 X_ Practice-based Learning and Improvement  
 X_ Interpersonal & Communication Skills  
 ___ Professionalism  
 ___ Systems-based Practice  
 ___ Personal & Professional Development |
| 4. Competencies within each domain critical to entrustment | PC 2: Organizing prioritizing responsibilities  
 PC 3: Transferring care  
 PBLI 5: Incorporating feedback into practice  
 PBLI 7: Using information technology |
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<th>decisions</th>
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<td>ICS 3: Communicating with health professionals</td>
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<td>ICS 6: Maintaining medical records</td>
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5. Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely):

**Rationale:** Pediatricians/Pediatric Subspecialists participate in multiple types of handovers. There are handovers within settings (e.g. hospital ER-to-floor and floor-to-ICU) and between settings (e.g. home-to-hospital and hospital-to-rehabilitation facility). In addition, there are increased shift changes and transitions of care requiring handover between providers. Pediatricians must be able to effectively provide and receive a patient handover.

**Scope of Practice:** In every area of practice, there are transitions of care among providers due to shift changes. In addition, there are transitions of care due to changes of patient status that result in movement from outpatient settings to and from inpatient settings, and from subspecialty care to and from primary care. There are transitions of care within settings in the healthcare system as well, from the operating room to the general inpatient unit, for example. All pediatricians need to be skilled at patient handovers.

Transitions of care are a period of extreme vulnerability for a patient. Medical errors are commonly linked to communication failures. Inherent in this scope of practice, the pediatrician needs to appreciate the importance of effective handovers for patient safety. The pediatrician needs to be skilled at both delivering an effective handover and effectively receiving a handover in both inpatient and outpatient settings.

**Curricular components that support the functions of the EPA:**

**Functions of the health care provider handing over the care of a patient:**

- **Engaging in bidirectional communication of plans and conveying family and patient preferences**
  - Integrates the expectations of the patients, families, and caregivers to ensure consistency of the plan.
  - Encourages the receiver to ask clarifying questions.
  - Promotes a shared mental model of the patient and plan of care at the time of transition.

- **Preparing for a handover by reviewing the medical record and updating the written tool (if applicable) to avoid errors of omission**
  - Demonstrates effective use of a standardized written or computer based template to prioritize and organize information for handover.
  - Ensures document efficiently and effectively supports the transfer of information.
  - Appropriately updates document with new information added, while removing information that is no longer relevant.
Communicating situation awareness, illness severity, a patient summary, action planning, and contingency planning to other health care providers, using a standardized template to improve reliability of the information transfer

- Follows a template to eliminate omissions of data.
- Modifies template as needed based on patient acuity or needs of the receiver (for example, delivering the patient summary by systems in an intensive care unit, but by problems for an outpatient setting).
- Demonstrates the ability to assign illness severity, recognizing differences in patient acuity level by setting.
- Utilizes a concise patient summary within the template to create a shared mental model about the patient, a description of pertinent events and course to date, and an up to date assessment and plan for the patient’s diagnoses and problems.
- Develops a discrete action list with clear instructions with respect to timeline, priority, and the person responsible for completion.
- Communicates clear contingency plans in an “if...then...” fashion that promotes situation awareness and a shared mental model of patient care.

Functions of the healthcare professional receiving a handover and accepting responsibility for the patient include:

Summarizing the information heard, asking questions when needed to clarify information and to fill any perceived gaps
- Delivers a synthesis of the handover, not a repetition of the complete handover, to confirm a shared mental model of the information communicated.
- Takes ownership for ensuring understanding of the information provided.

Asking questions when needed for clarifying information and to fill any perceived gaps
- Asks clarifying questions as needed to ensure accurate transfer of complete patient information without ambiguity and to correct any erroneous information delivered.
- Ensures that there are no miscommunications or errors of omission.

Restating key action items to ensure understanding
- Clarifies timelines for key action items.
- Ensures that contingency plans, for the patient, are established and understood.

Providing feedback to the individual initiating the handover on any problems/errors that occurred, including inaccurate information transmission
- Corrects written tool as appropriate if errors are noted.
- Engages in a post-shift dialog with the handover provider to provide feedback when a problem/error, resulting from a gap in the handover information, occurs during a shift.

Authors:
Curricular Components for General Pediatrics EPA 17

<table>
<thead>
<tr>
<th>1. EPA Title</th>
<th>Demonstrate the ability to effectively perform the common procedures of the general pediatrician</th>
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| 2. Description of the activity | All pediatricians should be able to perform the common procedures of the specialty. Pediatric training programs typically emphasize the following procedures: bag and mask ventilation, bladder catheterization, administering IM and SC injections such as immunizations, I&D of an abscess, lumbar puncture, neonatal endotracheal intubation, placement of intravenous, reduction of simple dislocations, repair of a simple laceration, simple removal of a foreign body, temporary splinting of a fracture, umbilical venous catheter placement. Depending on the clinical setting, individual expertise, and availability of resources, additional procedures such as circumcision or non-neonatal intubation may also be performed. The specific functions which define this EPA include:  
- Knowing and understanding the clinical indications for procedures  
- Demonstrating the ability to perform the psychomotor skills necessary to safely and effectively perform the procedure  
- Engaging in post-procedure management |
| 3. Judicious mapping to domains of competence | Patient Care X  
Medical Knowledge X  
Practice-based Learning and Improvement ___  
Interpersonal & Communication Skills X  
Professionalism ___  
Systems-based Practice ___  
Personal & Professional Development X |
| 4. Competencies within each domain critical to entrustment decisions | PC 8: Performing procedures  
PC 9: Counseling patients and families  
MK 1: Demonstrating knowledge  
ICS 2: Demonstrating insight into emotion  
ICS 6: Maintaining medical records  
PPD 7: Demonstrating self-confidence |
| 5. Curricular Components that support the functions of the EPA (knowledge, skills and attitudes needed to execute this EPA safely): |  
Rationale: Pediatricians should be able to effectively perform all medical, diagnostic, and therapeutic procedures considered essential for the area of practice. |
Scope of Practice: Pediatricians should be able to competently perform common medical, diagnostic, and therapeutic procedures across an age spectrum of pediatric patients, and relevant to general practice. This includes being able to describe the steps in the procedure, indications and contraindications of the procedure, potential complications, pain management, post-procedure care, and interpretation of applicable results. The performance of procedures in practice sites will vary depending on the skill of the individual practitioner, available resources, and the clinical setting. Pediatricians should receive ongoing hands-on and/or simulated training to maintain competence in performing procedures that are important for their clinical practice setting.

Curricular components that support the functions of the EPA:

Knowing and understanding the clinical indications for procedures
- Describes anatomy and physiology involved in procedure.
- Lists indications and benefits.
- Recognizes contraindications and risks.
- Obtains informed consent.
- Manages pain and helping to prepare patient.
- Handles specimens obtained appropriately.

Demonstrating the ability to perform the psychomotor skills necessary to safely and effectively perform the procedure
- Monitors patient’s vital signs and pain throughout the procedure.
- Performs procedure successfully without supervision.
- Installs confidence in patient/family and team during the procedure.
- Recognizes emotional reactions of patient/family and helps them cope.

Engaging in post-procedure management
- Anticipates complications and manages them effectively.
- Manages post-procedure pain adequately.
- Interprets results accurately.
- Communicates results to patient and family.
- Documents a procedure note in the medical record.

Procedures performed by most general pediatricians
Pediatricians should demonstrate their understanding of the steps involved in the following procedures, including indications, contraindications, complications, pain management, post-procedure care. Pediatricians should also be capable of performing the following procedures independently at the completion of residency. Ongoing ability to perform procedures will depend on clinical setting and personal skill level (providers in areas where certain procedures are not commonly performed may not maintain skill levels appropriate to do some procedures):
- Bag-mask ventilation
- Bladder catheterization
### Subcutaneous and intramuscular injections (immunizations, medications, etc.)
- Incision and drainage of an abscess
- Lumbar puncture
- Neonatal endotracheal intubation
- Peripheral intravenous catheter placement
- Reduction of simple subluxation
- Simple laceration repair
- Simple removal of foreign body
- Temporary splinting of fracture
- Umbilical venous catheter placement
- Venipuncture
- Procedures considered essential for basic resuscitation, e.g. intravenous line placement, chest compressions/CPR

### Procedures for which general pediatricians typically consult others for help.
Pediatricians should demonstrate their understanding of the steps involved in the following procedures, including indications, contraindications, complications, pain management, post-procedure care. Pediatricians need not be capable of performing the following procedures independently:

- Arterial line placement
- Arterial puncture
- Chest tube placement
- Circumcision
- Endotracheal intubation of non-neonates
- Thoracentesis

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**Authors:**

Sue Poynter (lead), Sharon Calaman, Kenya McNeal Trice, Michael Barone and the General Pediatrics EPA Curricular Elements workgroup, Marsha Anderson, Ann Burke, Anna Kuo, Jerry Larrabee