EPA 11: Manage Information from a Variety of Sources for Both Learning and Application to Patient Care

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

Judicious Mapping to Domains of Competence

___ Patient Care
X Medical Knowledge
X Practice-Based Learning and Improvement
___ Interpersonal & Communication Skills
Entrustable Professional Activities
EPA 11 for General Pediatrics

Competencies Within Each Domain Critical to Entrustment Decisions

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Context for the EPA

**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

1. 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

2. 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

3. 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

4. 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

5. 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

6. 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
7. 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

8. 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

9. 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

Curricular Components Authors
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