HEALTHCARE SYSTEMS: SUPPORTING AND ADVANCING CHILD HEALTH

EDUCATION

INTRODUCTION

Pediatric hospitalists can serve many roles in education, from educating hospital staff, trainees (medical students, residents, and fellows), community clinicians and organizations and colleagues, to investing in self-education. Many hospitalists derive their academic identity from their pivotal role in teaching trainees or ancillary staff on the hospital wards and in directing training programs. Training future hospitalists and directing continuing medical education programs to enable current hospitalists to update their knowledge and skills are educational opportunities which are emerging as core competencies for the field are defined. Competencies listed below should be addressed in the context of the specific learner-educator environment.

KNOWLEDGE

Pediatric hospitalists should be able to:

- Discuss how the principles of adult learning theory, such as those listed below, can be used in leading daily learning activities.
 - o Assessment of learning needs
 - o Case-based approach building on the learner's previous experiences or encounters
 - $_{\odot}$ Reflection
 - o Recognition of the "teachable moment"
 - Active learning
 - $_{\odot}$ Provide an effective learning environment
 - Self-directed learning
 - $_{\odot}$ Modeling
 - _o Establish learning goals
- Describe one's own preferred teaching and learning style and discuss how this may affect learners with different learning styles.
- Identify the steps involved in designing a learning activity, curriculum or program which include:
 - Conduct a needs assessment to determine learner needs
 - o Write competency-based goals and objectives based upon learner needs to define what is to be accomplished.
 - ^o Define and secure resources (personnel, readings, handouts, computer programs, and time)
 - o Actively involve learners in attaining competencies
 - Evaluate the learners' attainment of competencies
 - o Evaluate the effectiveness of the activity, curriculum or program
- Define competencies, performance indicators, goals and objectives, and explain their role in the evaluation of physicians.
- Describe the pediatric competencies currently required by regulatory agencies such as the Accreditation
- Council for Graduate Medical Education (ACGME) and the American Board of Pediatrics (ABP). Explain why a continuum of competencies throughout a professional career is required, and illustrate the benefits and challenges of this expectation.
- Give illustrative examples of resident performance that fall within each of the six mandated ACGME competency domains: patient care, medical knowledge, practice-based learning and improvement, interpersonal skills and communications, professionalism, and systems-based practice.
- List specific examples of how pediatric hospitalists can educate to each of the six core competencies, attending to the role on the ward and in the larger healthcare system.
- Explain how learners benefit from knowing their learning goals at the start of an educational experience.
- Compare the strengths and weaknesses of the following evaluation methods: oral exams, written tests, global evaluations, direct observations with checklists, and multi-source (360 degree) evaluations.
- Compare and contrast formative feedback with summative evaluation.
- Describe the typical effects of evaluation on the motivation and learning priorities of both medical students and residents.
- Identify how key concepts of evidence-based medicine literature review should be used to create a plan of evaluation and management for patients.
- List resources and activities for continuous learning to maintain current knowledge and skills.

SKILLS

Pediatric hospitalists should be able to:

- Orient trainees to inpatient ward rotation expectations, including learning goals and objectives, patient care and team responsibilities, systems, policies and procedures for the rotation.
- Identify the educational objectives and the learner's educational needs in various settings. Use this information to direct selection of content and teaching methods.
- Demonstrate efficient and flexible use of time when teaching, adapting the mix of teaching and independent learning activities to optimize use of the time available.
- Develop a repertoire of teaching and supervision methods that enhance a learner's knowledge base, clinical skills, and attitudes/behaviors, including:
 - Bedside teaching
 - o Teaching during work rounds
 - o Lectures or case-based discussions using multimedia presentation methods
 - Teaching a specific skill or procedure
 - o Affirm competency when learner masters a skill
 - o Role modeling for learners, with articulation of thought process
 - o Written instruction
- Provide frequent, effective feedback based upon direct observation of trainee's clinical, communication, and technical skills and professionalism.
- Teach effectively in large group settings, such as hospital or community setting conferences.
- Teach effectively in small groups using a case-based format.
 - o Use different types of questioning (broadening, justifying, hypothetical, and alternative)
 - o Address learning needs of trainees of different levels of experience
- Teach patients and the family/caregiver about the diagnosis, planned investigation, management plan and prognosis in an interactive, family centered manner.

ATTITUDES

Pediatric hospitalists should be able to:

- Promote a climate of continuous learning by acknowledging one's own knowledge gaps and prompting learners to teach each other.
- Model effective and empathetic communication with patients and the family/caregiver when educating.
- Encourage trainees to be self-directed and to learn independently.
- Model professional behavior by being prompt, prepared, available, and approachable in educational efforts.
- Build and maintain teamwork by providing reinforcing as well as corrective feedback.

SYSTEMS ORGANIZATION AND IMPROVEMENT

In order to improve efficiency and quality within their organizations, pediatric hospitalists should:

- Partner with training programs to create, maintain, and implement inpatient hospital medicine education.
- Work with hospital administrators to maintain adequate trainee supervision to ensure patient safety, while encouraging development of autonomous practice.
- Through educational efforts, promote quality improvement, patient safety, cost effective care, evidence based medicine and effective communication around inpatient pediatric care.
- Integrate and explain the rationale behind established clinical pathways and prompt trainees to use them consistently.
- Address the balance of teaching and patient care responsibilities with hospital administration and training program directors to maximize the effectiveness of both.
- Collaborate with hospital administration to ensure adequate teaching facilities.