HEALTHCARE SYSTEMS: SUPPORTING AND ADVANCING CHILD HEALTH

HEALTH INFORMATION SYSTEMS

INTRODUCTION

Health information systems encompass the range of technology in health care used to acquire, store, deliver and analyze medical data. In the hospital environment, this technology is one of the most important components to the delivery of high-quality and safe care. In particular, healthcare provider order entry, has been shown to reduce medical errors, while systems that display recently completed laboratory testing may decrease redundant testing. Despite these benefits, hospitals have been slow to adopt these technologies. The Institute of Medicine and the Department of Health and Human Services have recognized this fact and have begun serious efforts to improve the adoption of electronic medical information systems in all health care environments. Pediatric hospitalists use these systems for clinical care, education, quality improvement efforts and research and can assist with assessing and implementing systems

KNOWLEDGE

Pediatric hospitalists should be able to:

- Compare and contrast the varied health information systems used to manage medical information across different hospital settings, especially with regard to the differences between adult and pediatric needs.
- Describe the importance of proper storage and retrieval of protected health information.
- Discuss the impact of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule on health information systems security.
- Explain the value of clinical decision support in rendering patient care.
- Compare and contrast the influence of electronic health information on practice management, clinical decision-making, quality improvement projects and performance of research.
- Identify at least one improvement in patient safety that can be realized with institution of an electronic medical record.
- Describe how hospital policies and procedures impact information systems operations, and that in turn delivery of health care to children influences these policies, procedures, and systems.
- Describe the basic organization of the information technology department.
- Describe resources that can be accessed to address questions about information systems such as a hospital "HELP" desk, vendor support lines, or online access to other healthcare providers who use the system.
- Delineate how staff dedicated to information technology support quality and safety efforts and data retrieval.
- List information resources and tools available to support life-long learning.
- Discuss the importance of pediatric hospitalists in creating, modifying, and evaluating changes to health information systems.
- Describe the unique needs of children in regard to information technology, and the importance of careful design and implementation of health information systems in hospitals and clinics that care for children.

SKILLS

Pediatric hospitalists should be able to:

- Demonstrate proficiency with foundational computer skills (email, literature searching, downloading and uploading files.) and common computer applications (word processing, spreadsheet use, and presentation software) as well as the local provider order entry system.
- Skillfully access and use web-based educational resources for continuing education and enrichment of trainee learning experiences.
- Effectively and efficiently utilize local health information systems for clinical care, education, and performance of projects as appropriate within the context of the local system.
- Assist in creation of order sets and documentation templates.
- Assess the value of rules and alerts and assist with editing these as appropriate.

ATTITUDES

Pediatric hospitalists should be able to:
- Be accountable for working to ensure the successful functioning of health information systems.
- Advocate for the proper alignment of health information systems choices with clinical needs.
- Effectively communicate with information systems managers.
- Respect patient confidentiality by using the security-directed features of information systems.

SYSTEMS ORGANIZATION AND IMPROVEMENT

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

- Participate in appropriate hospital committees and assist with information technology solutions to address causes of unsafe care.
- Work with hospital administrators and the Medical Staff to integrate new technologies to the practice of medicine (such as telemedicine, medical decision making, computerized medical records, electronic information networks and others).
- Seek opportunities to improve the role of information technology in managing costs, quality improvement efforts, and research, if applicable.