

Component I: Core

Module J: Electronic Health Records

Topic 1: Electronic Health Records (EHR) Overview

Statement of Purpose

To prepare the learner with knowledge of the Electronic Health Record in the form of an overview.

Student Learning Outcomes

Upon completion of this topic, the learner will be able to:

1. Spell and define the key terms.
2. Compare a Practice Management (PM) program and Electronic Health Record (EHR).
3. Discuss the government Health Information Technology (HIT) initiatives that have led to integrated PM/EHR programs.
4. Discuss the contents of EHRs in Ambulatory Care Settings.
5. List the advantages of the Electronic Health Record.
6. Describe Protected Health Information (PHI) and safeguards within the Electronic Health Record.

Terminology

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| 1. Advance Directive | 13. Health Information Technology (HIT) |
| 2. Ambulatory | 14. Health Information Technology for Economic and Clinical Health (HITECH) |
| 3. American Recovery and Reinvestment Act of 2009 (ARRA) | 15. Medical record |
| 4. Audit trails | 16. Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) |
| 5. Centers for Medicare and Medicaid Services (CMS) | 17. Notice of Privacy Practices (NPP) |
| 6. Decision support | 18. Protected Health Information (PHI) |
| 7. Efficiency | 19. Physician Quality Reporting Initiative (PQRI) |
| 8. Electronic communication and connectivity | 20. Quality |
| 9. Encounter | 21. Release of Information (ROI) |
| 10. Encryption | 22. Safety |
| 11. Electronic health Record (EHR) | 23. Treatment, Payment, and Health care operations (TPO) |
| 12. The Health Insurance Portability and Accountability Act (HIPAA) | |

References

1. Correa, C. (2011). *Getting Started in the Computerized Medical Office: Fundamentals and Practice* (2nd Ed.). Clifton Park, NY, Delmar Cengage Learning.
2. Garte, R. (2012). *Essentials of Electronic Health Records* (1st Ed.) Upper Saddle River, NJ: Pearson Prentice Hall.
3. Larsen, W. (2011). *Computerized Medical Office Procedures: A Worktext Using Medisoft v16* (3rd Ed.). Philadelphia, PA: Saunders Elsevier.
4. Sanderson, S. (2012). *Practice Management and EHR: A Total Patient Encounter for Medisoft Clinical* (1st Ed.). McGraw-Hill.

Content Outline/Theory Objectives	Suggested Learning Activities
<p>Objective 1 Spell and define key terms.</p> <ul style="list-style-type: none"> A. Review the terms listed in the terminology section. B. Spell the listed terms accurately. C. Pronounce the terms correctly. D. Use the terms in their proper context. 	<ul style="list-style-type: none"> A. Matching exercise. B. Administer vocabulary pre-test and post-test. C. Discuss learning gaps and plan for applying vocabulary.
<p>Objective 2 Compare a Practice Management (PM) program and Electronic Health Record (EHR).</p> <ul style="list-style-type: none"> A. Practice Management (PM) software performs administrative and financial functions <ul style="list-style-type: none"> 1. Scheduling patient appointments. 2. Billing patients for services. 3. Billing health plans/payers for services. 4. Receiving and recording payments from patients and insurance payers. 5. Managing collections. B. Electronic Health Record (EHR) software is a computerized lifelong health care record for an individual that incorporates data from all sources that provide treatment for the individual. This program makes it easier to: <ul style="list-style-type: none"> 1. Share patient information with all the health care professionals who treat the patient. 2. Use HIT with computers and electronic communication to manage medical information and its secure exchange. 3. Improve the quality of health care, prevent medical errors and reduce health care costs. 4. Have a completely seamless medical record and billing cycle. 	<ul style="list-style-type: none"> A. Lecture/Discussion B. Assigned Readings C. Assign "Which system is it?" Have students mark either PM or EHR.
<p>Objective 3 Discuss the government Health Information Technology (HIT) initiatives that have led to integrated PM/EHR programs.</p> <ul style="list-style-type: none"> A. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) <ul style="list-style-type: none"> 1. Protects patient's private health information. 2. Ensures health care coverage when workers change or lose jobs. 3. Uncovers fraud and abuse in the health care system. B. HIPAA requires technical specifications (standards) be followed for the exchange of administrative and financial health information on patients. C. The Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) provides financial incentives for 	<ul style="list-style-type: none"> A. Lecture/Discussion B. Assigned Readings

<p>practitioners who use Electronic prescribing (e-prescribing) that allows a physician to:</p> <ol style="list-style-type: none"> 1. Send prescriptions to the patient's pharmacy. 2. Checks for drug interactions and allergies. 3. Eliminates prescription errors caused by illegible handwriting. <p>D. Physician Quality Reporting Initiative (PQRI) of 2006 gives bonuses to physicians when they use treatment plans and clinical guidelines that are based on scientific evidence.</p> <p>E. The American Recovery and Reinvestment Act of 2009 (ARRA) includes a health care provision called the Health Information Technology for Economic and Clinical Health (HITECH) Act</p> <ol style="list-style-type: none"> 1. Develops standards for health information to be exchanged electronically. 2. Creates incentives to facilitate adoption of electronic health records. 3. Generates improvements in quality of care and care coordination along with reduction in medical errors and duplication of care. 4. Strengthens federal privacy and security laws to protect patient's health information. <p>F. To be eligible to receive the HITECH incentive money, eligible providers must demonstrate meaningful use of this new technology</p> <ol style="list-style-type: none"> 1. Utilize the EHR to improve quality, efficiency and patient safety. 2. Meet a series of objectives consisting of a CORE set and MENU set. Physicians must meet 15 CORE and 5 MENU set for a minimum of 90 consecutive days. 	
<p>Objective 4 Discuss the contents of EHRs in Ambulatory Care Settings.</p> <p>A. Contents of medical records vary depending on the setting. Ambulatory care refers to treatment that is provided without admission to a hospital in a setting such as:</p> <ol style="list-style-type: none"> 1. Physician practices. 2. Hospital emergency departments. 3. Clinics for outpatients. <p>B. Physicians' office charts include eight data points</p> <ol style="list-style-type: none"> 1. Patient's name. 2. Encounter date and reason. 3. Appropriate history and physical examination. 4. Review of all tests that were ordered. 5. Diagnosis. 6. Plan of care or notes on procedures and treatments that were given. 7. Instructions or recommendations that were given 	<p>A. Lecture/Discussion B. Assigned Readings</p>

<p>to the patient.</p> <p>8. Signature of the provider who saw the patient.</p> <p>C. Additional information contained in the patient's medical record</p> <ol style="list-style-type: none"> 1. Demographics. 2. Insurance payer information. 3. HIPAA consent signed document. 4. Release of information signed document. 5. Scanned ID and insurance card. 6. Scanned Advance Directive. 7. Referral or consult letters. 8. Communication with the patient <ol style="list-style-type: none"> a. Telephone encounters. b. Faxes. c. Letters. d. Emails. 9. Prescriptions and refills given to patient. 10. Labs or x-rays including results. 11. Previous diagnoses, test results, health risks and progress (past medical history and review of systems). 12. Family history. 13. Social history. 14. Medical allergies. 15. Patient education. 16. Return appointment time frame if needed. 	
<p>Objective 5</p> <p>List the advantages of the Electronic Health Record.</p> <p>A. There is growing evidence that Electronic Health Records can reduce medical errors and improve patient safety. Some contributing factors include</p> <ol style="list-style-type: none"> 1. Orders are now legible. 2. Instant electronic alerts on patient allergies and possible drug interactions. 3. Alerts on unsafe medications. 4. Electronic backup copy of record. 5. Real time communication. <p>B. Quality improvement occurs with evidence-based guidelines for diagnosing, treating and research within the electronic health record. EHR's also enhance the quality of care</p> <ol style="list-style-type: none"> 1. Electronic reminders for preventative care. 2. Monitoring chronic conditions at home and report results via the Internet to physician. <p>C. Real time, immediate retrieval of information can greatly improve the efficiency of care, especially in an emergency situation.</p>	<p>A. Lecture/Discussion</p> <p>B. Assigned Readings</p> <p>C. Ask students what disadvantages there might be? Cost? Learning curve?</p>

Objective 6**Describe Protected Health Information (PHI) and safeguards within the Electronic Health Record.**

- A. PHI is defined as “individually identifiable health information that is transmitted or maintained by electronic media (such as over the Internet) or that is transmitted or maintained in other form or medium.” Covered entities must follow HIPAA regulations
 - 1. Notice of Privacy Practices (NPP).
 - 2. Acknowledgment of Receipt of Notice of Privacy Practices.
 - 3. Release of Information (ROI).
 - 4. Situations covered under Treatment, Payment and Health care operations (TPO).
 - 5. Rules that govern release of information to family members.
- B. The HITECH Act contains provisions
 - 1. Accounting of Disclosures allows the patient to see how their PHI was used.
 - 2. Restricting access to some PHI allows the patient to ask for non-release of information under certain terms of the above mentioned (TPO).
- C. Covered entities using the Electronic Health Record are required to put in place the following three safeguards:
 - 1. Administrative, training staff on security measures and implementing office policies and procedures to prevent, detect, contain and correct security violations.
 - 2. Physical, actual protection of the electronic system by use of reinforced doors, locks and identification badge readers in addition to maintaining appropriate control of how files are retained, stored or scheduled for destruction.
 - 3. Technical, policies and procedures used to protect electronic data and control access to it such as firewalls, intrusion detection systems, access control and antivirus software.
- D. Encryption is the process of converting data into an unreadable format before it is distributed. In order to read the message, the recipient must have a key that deciphers the information.
- E. Audit trails are records that show who has accessed a computer or a network and what operations were performed. Audit trails contain:
 - 1. Type of event.
 - 2. Date and time of occurrence.
 - 3. User ID associated with the event.
 - 4. Program, command or method used to initiate the event.
 - 5. Patient and data elements that were changed.

- A. Lecture/Discussion
- B. Assigned Readings
- C. Discuss what it means to release information for TPO without authorization.