

## Electronic Health Record

**Course**  
*Health Science*

**Unit II**  
*Communication*

**Essential Question**  
*What is an electronic health record?*

**TEKS**  
*130.204 (c) 4A, 4B, 5A, 5B*

**Prior Student Learning**  
*Basic understanding of medical ethics*

**Estimated time**  
*1 ½ - 3 hours*

### **Rationale**

An Electronic Health Record (EHR) is an electronic version of a patient's medical history that is maintained by a provider over time. It may include all of the data relevant to that patient's care under a particular provider, including progress notes, problems, medications, vital signs, past medical history, immunizations and laboratory data.

### **Objectives**

Upon completion of this lesson, the student will be able to

- Define electronic health record
- Define personal health record
- Analyze the paper realm vs. the technology realm in health care
- Explain what is driving the move to personal health records and electronic medical records
- Define health information exchange (HIE) at the state and national levels
- Outline the basic HIPAA requirements for privacy and security, as well as breach notification

### **Engage**

Discuss the following:

- When you go to the doctor, ambulatory care clinic, etc. what kind of medical records do you observe?
- What happens when electronics go down like during a hurricane?

View video explaining Health Information Technology career opportunities:

[http://camrelay-stream.its.txstate.edu/users/sf36/HIT\\_Presentation\\_2\\_Flash\\_%28Large%29\\_-\\_20121119\\_04.13.07PM.html](http://camrelay-stream.its.txstate.edu/users/sf36/HIT_Presentation_2_Flash_%28Large%29_-_20121119_04.13.07PM.html)

### **Key Points**

- I. Paper Health Record – paper files kept in medical cabinets in a medical facility
- II. Medical Record – chronological written account of a patient's examination and treatment that includes medical history and complaints, physician's findings, results of tests and procedures, and medications
- III. Electronic Medical Record (EMR) -- a digital version of a paper chart in a medical facility which contains the medical and treatment history of the patients in one practice only

#### IV. Electronic Health Record (EHR) – a collection of electronic health information for a patient

- A. May include:
  - 1. Patient demographics
  - 2. Progress notes
  - 3. Problems
  - 4. Medications
  - 5. Vital signs
  - 6. Past medical history
  - 7. Immunizations
  - 8. Laboratory data
  - 9. Radiology reports
- B. Generated and maintained within an institution, such as a hospital, clinic, or physician office
- C. Contain information from all the clinicians involved in the patient's care
- D. The information moves with the patient to the specialist, the hospital, the nursing home, or to a different state.

#### V. Benefits and Challenges

- A. Benefits:
  - 1. Increases efficiencies; improves accuracy, availability, and productivity
  - 2. Saves time
  - 3. Saves space
  - 4. Prevents medical errors
- B. Challenges:
  - 1. Increases documentation time (slow system response, system crashes, multiple screens, etc.)
  - 2. Overuse of checkboxes and other automated documentation
  - 3. System crashes
  - 4. Complex to install

#### VI. Background: Legislation and Regulations

- A. The Health Information Technology for Economic and Clinical Health (HITECH) Act provides the U.S. Department of Health and Human Services (HHS) with the authority to establish programs to improve health care quality, safety, and efficiency through the promotion of health information technology (HIT), including electronic health records and private and secure electronic health information exchange.
- B. Under HITECH, eligible health care professionals and hospitals can qualify for Medicare and Medicaid incentive payments

when they adopt certified EHR technology and use it to achieve specified objectives.

## VII. About Privacy and Security

- A. Privacy and security are vital to a successful switch to electronic health records. People's health information is protected under a law called the Health Insurance Portability and Accountability Act (HIPAA). This law:
  - 1. Gives patients the right to see or get a copy of their health records
  - 2. Sets rules about who can look at and receive patient health information
- B. One security feature of electronic health records is that they include an audit trail that shows who has looked at them.
- C. The government is continuing to develop rules about the privacy and security of personal health information.
- D. HIPAA is the federal guideline that structures privacy and security across the nation. Some states may have added their own laws and regulations to the HIPAA regulations.

## VIII. Personal Health Records (PHR) – confidential, easy-to-use electronic tools that can help you manage your health information

- A. Include:
  - 1. Name, birth date, blood type and emergency contact
  - 2. Date of last physical
  - 3. Dates and results of tests and screenings
  - 4. Major illnesses and surgeries, with dates
  - 5. List of your medicines, dosages and how long you've taken them
  - 6. Allergies
  - 7. Chronic diseases
  - 8. History of illnesses in your family
- B. While some people keep this information in a folder or in a file cabinet, having it in electronic form means it can be shared easily with other people who need it.
- C. PHRs are offered by providers, health plans, and private companies. Some PHRs are offered for free.
- D. PHRs are secure – special permissions or passwords let you choose who can access your PHR so others can get your critical information quickly.

## IX. Health Information Exchange (HIE) -- The ability to exchange health information electronically is the foundation of efforts to improve health care quality and safety.

- A. HIE can provide:
  - 1. The connecting point for an organized, standardized process of data exchange across statewide, regional, and local initiatives
  - 2. The means to reduce duplication of services (resulting in lower health care costs)
  - 3. The means to reduce operational costs by automating many administrative tasks
  - 4. Governance and management of the data exchange process
- B. The Nationwide Health Information Network Exchange is a confederation of stakeholders at the forefront of health information exchange, including federal agencies; state, regional, and local health information organizations; integrated delivery networks, and private organizations. Through this mechanism, stakeholders are coming together to develop and implement standards, services, and policies that foster secure health information exchange over the Internet.
- C. The State Health Information Exchange Cooperative Agreement Program -- To build the capacity for EHR information exchange nationwide, the Office of the National Coordinator for Health Information Technology awards grants to states, eligible territories, and qualified state-designated entities to further develop governance, policies, technical services, business operations, and financing mechanisms.
  - 1. It funds states' efforts to rapidly build capacity for exchanging health information across the health care system both within and across states.
  - 2. The program is building on existing efforts to advance regional and state-level health information exchange while moving toward nationwide interoperability.

### **Activity**

- I. Create free online health record:  
The Veterans Health Information Systems and Technology Architecture (VistA): <http://www.ehealth.va.gov/VistA.asp>
- II. Locate, analyze, and evaluate a newspaper/journal article that is relevant to health information management. See Journal Review Guidelines.  
Comparison: pros & cons of EHR's (look at both sides of the issue)  
HIE's (EHR exchanges)
- III. Complete the PHR scavenger hunt activity.
- IV. Invite a health information management representative to speak to the class.

- V. Research the HIE organization and status within your local healthcare community. Compare and contrast this with one other area in the state.
- VI. Investigate the Office of Civil Rights (OCR) Breach website. Identify common themes and reasons given for breaches. Find a local organization that experienced a breach. Determine the best methods for preventing that type of breach.  
Department of Health and Human Services Office of Civil Rights Breach Notification:  
<http://www.hhs.gov/ocr/privacy/hipaa/administrative/breachnotificationrule/breachtool.html>

### **Assessment**

Writing Rubric

Teamwork Rubric

### **Materials**

Centers for Medicare and Medicaid Services: <http://www.cms.hhs.gov>

Medline Plus:

<http://www.nlm.nih.gov/medlineplus/personalhealthrecords.html> --

Personal Health Record Publication:

<http://www.medicare.gov/Publications/Pubs/pdf/11397.pdf>

Department of Health and Human Services Office of Civil Rights Breach Notification:

<http://www.hhs.gov/ocr/privacy/hipaa/administrative/breachnotificationrule/breachtool.html>

Healthit.gov: <http://www.healthit.gov/>

U.S. Department of Health and Human Services:

<http://www.healthit.gov/buzz-blog/electronic-health-and-medical-records/emr-vs-ehr-difference/>

HIE Texas: <http://hietexas.org/about-thsa/overview>

### **Accommodations for Learning Differences**

For reinforcement, the student will make flash cards of key terms.

For enrichment, the student will research and report on the rights of patients to their medical records and Patient's Bill of Rights. For more information, see <http://www.healthcare.gov/law/features/rights/bill-of-rights/index.html> .

### **National and State Education Standards**

National Health Science Standards

HLCO2.01 Communications

Health Care Workers will know the various methods of giving and obtaining

information. They will communicate effectively, both orally and in writing. Adjust communication to other's ability to understand. Apply the elements of communication using the sender-receiver model. Apply active listening skills using reflection, restatement and clarification techniques. Demonstrate courtesy to others including self-introduction. Interpret verbal and nonverbal behaviors to augment communication within the scope of practice.

### **TEKS**

130.204(c)(4)(A) identify and retrieve reportable information;  
130.204(c)(4)(B) report information according to facility policy;  
130.204(c)(5)(A) describe document formats; and  
130.204(c)(5)(B) compile and record data according to regulatory agency policy.

### **Texas College and Career Readiness Standards**

#### **English Language Arts**

II. B. Understand new vocabulary and concepts and use them accurately in reading, writing and speaking.

III. B. Develop effective speaking styles for both group and one on one situations.

IV. A. Apply listening skills as an individual and as a member of a group in a variety of settings.

#### **Science**

I. A. 1. Utilize skepticism, logic and professional ethics in science.

#### **Social Studies**

I. F. 1. Use a variety of research and analytical tools to explore questions or issues thoroughly and fairly.

I. F. 2. Analyze ethical issues in historical, cultural, and social contexts.

#### **Cross-Disciplinary**

I. C. 1. Analyze a situation to identify a problem to be solved.

I. C. 3. Collect evidence and data systematically and directly relate to solving a problem.

## **Journal Review Guidelines**

1. Journal: (Write the name of the journal and underline the title.)
2. Date: (Write the date of the journal. Journal articles must be less than two years old.)
3. Main Idea: (In your own words, write one complete sentence – subject and verb – that describes the main idea of the entire article.)
4. Supporting Details: (Copy two sentences, exactly as they appear in the article that supports the main idea. Place quotation marks around each sentence. Highlight the two sentences in the article.)
5. Fact: (Copy one factual sentence exactly as it appears in the article. Place quotation marks around the sentence. Highlight the sentence in the article.)
6. Non-fact /Opinion: (Copy one non-factual sentence exactly as it appears in the article. Place quotation marks around the sentence. Highlight the sentence in the article.)
7. Generalization: (In your own words, describe the conclusion(s) you reached using complete sentences. This must be something that is not stated directly in the article, but something that you were led to believe after reading the article.)
8. Health Emphasis: (In a complete sentence, describe how the article relates to health care.)
9. Occupations/Agencies: (In a complete sentence, identify the agencies and occupations in the article.)
10. Relationship to Health Science: (In a complete sentence, list any units of study that relate to the article.)

## **Personal Health Record Scavenger Hunt**

**Answer the following questions:**

1. Define a Personal Health Record (PHR).
2. What is a medical record?
3. Why should you keep a PHR?
4. Define AHIMA.
5. Can my parents view my health record?
6. What information is normally included in a PHR?
7. How do you create a PHR?



8. Is my health information private and secure in a PHR?

9. What is Health Information Management (HIM)?

10. What is HIPAA?

## **KEY - Personal Health Record Scavenger Hunt**

**Answer the following questions:**

**1. Define a Personal Health Record (PHR).**

Confidential, easy-to-use electronic tools that can help you manage your health information

**2. What is a medical record?**

A chronological written account of a patient's examination and treatment that includes medical history and complaints, physician's findings, results of tests and procedures, and medications

**3. Why should you keep a PHR?**

Answers may vary

**4. What does AHIMA mean?**

American Health Information Management Association

**5. Can my parents view my health record?**

Yes, generally parents do have access to their minor children's health record.

**6. What information is normally included in a PHR?**

Name, birth date, blood type and emergency contact  
Date of last physical  
Dates and results of tests and screenings  
Major illnesses and surgeries, with dates  
List of your medicines, dosages and how long you've taken them  
Allergies  
Chronic diseases  
History of illnesses in your family

**7. How do you create a PHR?**

PHRs are offered by providers, health plans, and private companies. Some PHRs are offered for free.

**8. Is my health information private and secure in a PHR?**

Yes—special permissions or passwords let you choose who can access your PHR so others can get your critical information quickly.

**9. What is Health Information Management (HIM)?**

The study of the principles and practices of acquiring, analyzing, and protecting digital and traditional medical information vital to providing quality patient care

**10. What is HIPAA?**

HIPAA is the federal guideline that structures privacy and security across the nation.

# Writing Rubric

Student: \_\_\_\_\_ Date: \_\_\_\_\_

Scoring criteria	4. Excellent	3. Good	2. Needs Some Improvement	1. Needs Much Improvement	N/A
The writing has all required parts from introduction to conclusion in smooth transition.					
The writing is interesting, supportive, and complete.					
The writing demonstrates that the writer comprehends the writing process.					
Accurate spelling, grammar, punctuation.					
Content of paragraphs emphasizes appropriate points.					
The writer shows an understanding of sentence structure, paragraphing, and punctuation.					
All sources and references are clearly and accurately documented.					

NOTE: N/A represents a response to the performance which is "not appropriate."