**INSTRUCTOR MANUAL CHAPTER 1**

**An Overview of EHRclinic’s Practice Management and Electronic Health Record Software**

**LESSON PLANS**

**Class Preparation: Teaching Focus and Resources**

Chapter 1 explains the difference between practice management software functions and electronic health record (EHR) software functions. The advantages and disadvantages of an EHR are discussed. Standard EHR applications are described. The typical flow of information from appointment/registration through processing an insurance claim is explained. The use of Help features in software applications, including EHRclinic, is discussed.

**Learning Outcomes**

1.1 Describe Practice Management applications.

1.2 List the advantages and disadvantages of an electronic health record.

1.3 Describe EHR applications.

1.4 Chart the flow of information from registration through processing of the claim.

1.5 Use the Help feature in EHRclinic.

**Class Presentation**

**LO 1.1** Describe Practice Management applications.

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| --- | --- |
| Slide 1-6 | * Differentiate practice management software from electronic health record software |
| Slide 1-7 | * PM and EHR using a single database |
| Slide 1-8 | * Describe healthcare facilities, determination of lengths of visits, and insurance |
| Slide 1-9 | * Other terms used to describe practice management |
| Slide 1-10 | * Details the main applications of practice management software |
| Slide 1-11 | * Use of the Master Patient Index and Patient List |

**LO 1.2** List the advantages and disadvantages of an electronic health record.

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| --- | --- |
| Slide 1-12 | * Costs involved with EMR/EHR implementation |
| Slide 1-13 | * Advantages of using an EHR * List advantages and discuss each |
| Slide 1-14 | * Concerns about EHR implementation * Impact of implementation on providers and staff |
| Slide 1-15 | * Sharing of health information |
| Slide 1-16 | * Increasing popularity of electronic health records * Benefits to patients * Improved regulatory compliance * Global benefits |

**L.O. 1.3** Describe EHR applications.

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| --- | --- |
| Slide 1-17 | * Detail clinical information collected through EHR functionality |
| Slide 1-18 | * EHRclinic’s EHR applications and functionality * Clinical documentation * ePrescribing * Information exchange * Access to clinical support * Mobile EHR applications * Point of care dictation |

**LO 1.4** Chart the flow of information from registration through processing of the claim.

|  |  |
| --- | --- |
| Slide 1-19 | * Flow of information from making appointment/registering through preparing a plan of care |

**L.O. 1.5** Use the Help feature in EHRclinic.

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| --- | --- |
| Slide 1-16 | * Purpose of Help functions in software applications * How to access the Help feature in EHRclinic * Using the Help feature in EHRclinic |

**Teaching EHRclinic**

* Ensure students understand the key terms – suggest flash cards, Jeopardy game, etc.
* EHRclinic is both a PM and EHR software package.
* As a small group project, have students research other Practice Management/EHR software systems such as Meditech, McKesson, Epic, Medisoft, Allscripts or other EHR and/or practice management software. What do they have in common, what is different? If any have demonstration videos, show in class or have small groups report on each.
* Or, as a project, have students research PM and EHR vendors on the Internet or through use of professional journals (*Journal of AHIMA, Advance Magazine, For the Record,* etc). Have them write a synopsis of PM and/or EHR software for one or two.
* Compare paper systems to electronic systems. Show students a paper record and an electronic record (particularly if the college has the AHIMA VirtualLab or use Practice Fusion’s free EHR software).
* Have students discuss their experience with each system as a patient.
* Compare administrative (including demographic) to clinical information.
* Before covering the advantages and disadvantages, ask students to brainstorm each, then discuss.
* Have students discuss, from the viewpoints of both providers and patients, whether sharing health information between care providers and hospitals is a positive or a negative practice, based on what they have learned about an electronic health record thus far.
* Have students analyze the use of PMs and EHRs in their own career fields, including their role in its use as a health professional in that field.
* Discuss whether regulation is a necessity of electronic health record keeping.
* Of the various functions of an EHR, which is/are most beneficial, groundbreaking, timesaving, helpful to patient, helpful to staff.
* Discuss how the EHR will (or will not) improve patient care and patient outcomes.
* Complete the Check Your Understanding exercises as the text is covered.
* Assign SmartBook reading and LearnSmart modules to be completed as a homework assignment or during class time.
* Assign chapter review questions to be completed as a homework assignment or during class time (available in the Connect question bank or at the end of each chapter).
* Chapter test questions are available in Connect.

**Connect Video Resources:**

Student- and instructor-facing Connect, SmartBook, and LearnSmart video tutorials can be found at –

[http://www.mheducation.com/highered/health-professions-videos](https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.mheducation.com%2Fhighered%2Fhealth-professions-videos&data=01%7C01%7Cjanani.meenakshi%40mheducation.com%7Cfbf68b9648dc41cf0add08d425eaebf7%7Cf919b1efc0c347358fca0928ec39d8d5%7C1&sdata=M1pXt8xPs2LMdv1CPbKqIR7UtDEf0NqT1Qj%2FQZtEgbc%3D&reserved=0)

**ANSWER KEYS**

**Chapter 1**

**NOTE TO INSTRUCTORS: This chapter does not contain any EHRclinic exercises.**

**CHECK YOUR UNDERSTANDING ANSWER KEY**

LO 1.1:

1. **Answer:** Both.

**Learning Outcome:** 01.01

**Feedback:** EHRclinic functions as practice management software as well as an EHR. Demographic and billing data as well as clinical data are stored in EHRclinic.

1. **Answer:** Identifying information, ICD-10-CM codes, CPT codes, and insurance information.

**Learning Outcome:** 01.01

**Feedback:** Billing claim forms need to show patient and insurance company information and any applicable ICD-10-CM/PCS and CPT codes.

LO 1.2:

1. **Answer:** No; they both have some security issues, but an electronic system may actually be safer since it is possible to track the user ID of every record that is viewed, all entries, and anything printed from the record and by whom.

**Learning Outcome:** 01.02

**Feedback:** An electronic system is safer than a paper-based one.

1. **Answer:** Initial costs are higher with an electronic record because of the software is expensive due to the high cost of research and development and the cost of hardware. Long term, there are actually cost savings compared to the current paper/manual systems once training has taken place and staff members become more comfortable with the new processes.

**Learning Outcome:** 01.02

**Feedback:**  Startup costs are significantly higher with EHRs versus paper-based records because they require research and development by software companies, allocation of human resources for planning and training, and the additional costs of hardware and software.

LO 1.3:

1. **Answer:** point of care

**Learning Outcome:** 01.03

**Feedback:** Documentation that is done at the time the patient is being examined or at the time a procedure/service is being performed is known as point of care documentation

1. **Answer:** mobile

**Learning Outcome:** 01.03

**Feedback:**  Since Dr. Smith is not sitting at a desktop computer in her office and is instead using a mobile device (her phone), this is mobile technology.

3.a**. Answer:** EHR

**Learning Outcome:** 1.3

**Feedback:** Documentation of clinical findings is done in the electronic health record (EHR).

3.b. **Answer:** speech recognition technology

**Learning Outcome: 01.03**

**Feedback:** speech recognition technology is dictation software which allows providers to dictate their notes, without the need for a transcriptionist to transcribe every word; instead the transcriptionist or the provider him/herself becomes an editor to ensure accuracy of the documentation

3.c. **Answer:** Scheduling

**Learning Outcome:** 01.03

**Feedback:** Making appointments electronically, just as it was on paper, is known as scheduling.

3.d. **Answer:** EHR

**Learning Outcome:** 01.03

**Feedback:** Since drug allergies are clinical in nature, this is part of the electronic health record rather than the practice management application.

3.e. **Answer:** Speech recognition

**Learning Outcome:** 01.03

**Feedback:** The dictation application that can recognize words as they are being dictated and transcribe them in real time is known as Speech Recognition technology

LO 1.4:

1. **Answer:** appointment scheduling personnel make patient’s appointment; front desk checks-in the patient; nursing/clinical support sees patient; clinical staff/care provider examines patient; patient is processed at check-out desk; business office/billing processes charges

**Learning Outcome:** 01.04

**Feedback:** The flow of information begins with appointment scheduling, moves through front desk check-in, nursing/clinical support, care provider, and check-out, and finished with billing; the clinical staff and care provider are cycled back to as necessary.

1. **Answer:** Only in cases where the provider ordered diagnostic procedures, such as x-rays or laboratory tests.

**Learning Outcome:** 01.04

**Feedback:** The clinical documentation process is only repeated if extra procedures were ordered for a patient.

LO 1.5:

1. **Answer:** Use the Help Feature; **f**rom the Help tab on the menu bar, accessible from any screen in the program.

**Learning Outcome:** 01.05

**Feedback:** You can access the Help feature from any screen in the EHRclinic program.

1. **Answer:** An employee may be new and unsure of him/herself; the person who is training or mentoring the new staff member may be busy with someone else; user’s guides should be accessed to learn more about the system’s functionality.

**Learning Outcome:** 01.05

**Feedback:** You should search for a topic or look it up in the User’s Guide any time you are unsure of a procedure or how the system works.

**END-OF-CHAPTER ANSWER KEY**

Matching:

1. **Answer:** i

**Learning Outcome:** 01.02

**Feedback:** Interoperability allows syncing of multiple, unrelated functions or systems.

1. **Answer:** h

**Learning Outcome:** 01.03

**Feedback:** An application, is computer software with a unique purpose, for instance practice management collects demographic, insurance, and other billing data; Microsoft Word is another example of another computer software application.

1. **Answer:** g

**Learning Outcome:** 01.03

**Feedback:** The person who performs specialized healthcare services is called a care provider. Physicians are care providers and may be a surgeon, an internist, a dermatologist, a family practitioner, etc.

1. **Answer:** j

**Learning Outcome:** 01.01

**Feedback:** A clearinghouse is used so that errors and inconsistencies in billing-related data on a claim are caught before making it to the insurance company.

1. **Answer:** b

**Learning Outcome:** 01.01

**Feedback:** Electronic submission allows an office to submit claims via a computer rather than using paper.

1. **Answer:** a

**Learning Outcome:** 01.01

**Feedback:** An encounter form is generated at the completion of an office visit, a portion of which details the patient’s diagnosis, procedures and services performed, and the charge for each procedure/service. Encounter form is also known as a Superbill or routing slip.

1. **Answer:** f

**Learning Outcome:** 01.03

**Feedback:** Point of care documentation that takes place during the time of care, not at a remote location or at a later time.

1. **Answer:** d

**Learning Outcome:** 01.01

**Feedback:** Specialized software that performs critical functions in a medical office is called practice management software.

1. **Answer:** c

**Learning Outcome:** 01.03

**Feedback:** Speech recognition technology digitally transcribes spoken words.

1. **Answer:** e

**Learning Outcome:** 01.01

**Feedback:** Demographics refer to documented patient information such as age, sex, and race.

Multiple Choice:

1. **Answer:** c

**Learning Outcome:** 01.01

**Feedback:** EMR software contains a clinical documentation component, while PM software does not, therefore it is more detailed and comprehensive.

1. **Answer:** d

**Learning Outcome:** 01.03

**Feedback:** EHRclinic integrates with each of the listed functions.

1. **Answer:** a

**Learning Outcome:** 01.01

**Feedback:** A patient is only entered into the patient list one time so that all of his/her medical history is available within one health record

1. **Answer:** a

**Learning Outcome:** 01.02

**Feedback:** Start-up costs are necessarily high due to the cost of software, hardware, provider and staff training, and loss of productivity. ,

1. **Answer:** c

**Learning Outcome:** 01.04

**Feedback:** At the time the patient is registered, he/she is asked to look over the demographic information and whether any changes need to be made.

1. **Answer:** b

**Learning Outcome:** 01.03

**Feedback:** Clinical documentation appears in the form of a progress note.

1. **Answer:** d

**Learning Outcome:** 01.01

**Feedback:** *Superbill* is another term for an encounter form.

1. **Answer:** a

**Learning Outcome:** 01.01

**Feedback:** The UB-04 form is used to bill inpatient claims; the CMS-1500 is used for outpatient claims submission.

1. **Answer:** a

**Learning Outcome:** 01.02

**Feedback:** Some medical professionals are worried that an electronic system of record-keeping will not be secure, so they are hesitant to adopt EHR systems.

1. **Answer:** b

**Learning Outcome:** 01.03

**Feedback:** a patient’s plan of care is just one piece of clinical information collected in an EHR

1. **Answer:** c

**Learning Outcome:** 01.02

**Feedback:** Interoperability, the syncing of multiple, unrelated functions or systems, is not possible in a manual (paper) system

1. **Answer:** b

**Learning Outcome:** 01.05

**Feedback:** The Help feature is where EHRclinic’s User’s Guide can be accessed.

Short Answer:

1. **Answer:** Appointment scheduling; Front desk/Check-in; Nursing/Clinical support; Care provider; Check-out desk; Business office/billing.

**Learning Outcome:** 01.04

**Feedback:** The flow of information begins when a patient makes an appointment, progresses through check-in, nursing/clinical support, care provider, and check-out, and ends with the business office and billing.

1. **Answer:** Answers may vary, but points such as speed of data transfer, lower long-term costs, eliminating handwriting issues; ability to keep a comprehensive record of patient care and history, interoperability with other healthcare institutions and healthcare providers, and contributions to research and global health care should be listed.

**Learning Outcome:** 01.02

**Feedback:** There are many advantages to EHRs, such as lower long-term costs, the ability to keep a comprehensive record of patient care, and contributions to research and global health.

1. **Answer:** Answers may vary, but include points such as entering each patient seen into a master list (aka Master Patient Index), scheduling appointments, assigning ICD-10-CM/PCS and CPT codes, completing billing claim forms, and sending insurance claims to insurance carriers.

**Learning Outcome:** 01.01

**Feedback:** Practice management software is specially-designed software for use in a medical office to carry out the following applications: entering each patient seen into a master list, scheduling appointments, assigning ICD-10-CM/PCS and CPT codes, completing billing claim forms, and sending insurance claims to insurance carriers.

1. **Answer:** Patient scheduling/patient appears for care

**Learning Outcome:** 01.04

**Feedback:** The patient must schedule an appointment (or if an Urgent Care or Emergency Department visit, the patient appears for care) is the first step in the patient flow of information.

1. **Answer:** Because insurance/Medicare/Medicaid and even self-pay patients get billed separately for each visit or encounter.

**Learning Outcome:** 01.01

**Feedback:** A new bill for each encounter must be generated every time a patient comes into a healthcare facility.

1. **Answer:** iPhone, iPod touch, and iPad, android devices.

**Learning Outcome:** 01.03

**Feedback:** The iPhone, iPod touch, and iPad currently allow for mobile EHR accessibility.

1. **Answer:** Students’ responses will vary, but should include something similar to: Interoperability is the means of using a single database to perform different functions within the same system or with different systems from various locations being able to share information through a single exchange (such as an HIE); it integrates the flow of information.

**Learning Outcome:** 01.02

**Feedback:** Interoperability allows multiple unrelated systems to share information and perform different functions through a single database.

1. **Answer:** The process of submitting insurance claims for payment via practice management software; no paper is generated, submission is quick and accurate, it falls under Meaningful Use compliance, and many insurance carriers will no longer accept paper claim submissions.

**Learning Outcome:** 01.01

**Feedback:** Submitting claims via a computer, as opposed to mailing in paper forms, is quick, accurate.

1. **Answer:** Entering patients into a master list; appointment scheduling; code assignment; billing form completion; claim submission.

**Learning Outcome:** 01.01

**Feedback:** Typical practice management software allows healthcare professionals to enter patients into the master list, schedule appointments, assign codes, and perform billing functions.

1. **Answer:** Start patient tracking.

**Learning Outcome:** 01.04

**Feedback:** Once a patient has completed their check-in process, the electronic tracking of the patient begins.

Applying Your Knowledge:

1. **Answer:** You might stress the benefits of moving to an electronic system, and ensure your colleagues that EHRs will \*not\* put them out of a job. Something like “You know, moving to EHRs will help us see more patients in a given day, provide them with better care, since we have their whole medical history at our fingertips EHRclinic, and access the latest research and clinical information about their conditions. Also, since we will be spending less time doing paperwork, you can have more interaction with the “human side” of the patients, which is why most of us went into health care in the first place! And who knows – once these EHRs really get up and running, and we are spending less on storage and materials, we might even get a raise!”

**Learning Outcome:** 01.02

**Feedback:** Moving to an electronic system will actually improve the jobs of healthcare professionals and will free staff members up to interact with patients and research healthcare trends and research.

1. **Answer:** (Answers may vary, but should be similar to this.) An electronic health record improves patient care by improving the level of detail of clinical documentation of the care provider and clinical staff. In addition, it allows clinicians to utilize data to improve care through access to studies and data through clinical decision support sites; allows for the exchange of pertinent health information between providers in a timely manner; takes up far less physical space than filing cabinets/units; less chance of lost records; legibility is no longer an issue; and coding, billing, tracking of claims is more efficient since the health record and billing records share pertinent information.

**Learning Outcome:** 01.01; 01.02; 01.03; 01.05

**Feedback:** An electronic health record improves patient care by improving the level of detail of clinical documentation of the care provider. In addition, it allows clinicians to utilize data to improve care through access to studies and data through clinical decision support sites; allows for the exchange of pertinent health information between providers in a timely manner; takes up far less physical space than filing cabinets/units; less chance of lost records; legibility is no longer an issue; and coding, billing, tracking of claims is more efficient since the health record and billing records share pertinent information.

**3. Answer:** Denise will get checked in by the receptionist, which will start her patient tracking. After any copay is collected, she will be sent to an exam room. A medical assistant or nurse will do an initial review of why she is there as well as taking vital signs and asking other history-type questions, then the provider will come in to conduct the exam. Once the provider has finished and entered the data into Denise’s EMR, Denise will proceed to the check-out desk for final instructions. Then, her Superbill will be sent to the billing office for claims processing, and Denise will receive her insurance information (whether the claim was paid and/or how much of it) directly from her insurance company. The office will also receive the same as well as payment, if the services were covered.

**Learning Outcome:** 01.04

**Feedback:** Denise will be guided through the proper patient flow, from check-in to her insurance company finalizing payment of her services.

**4. Answer:** Physicians can access the patient’s entire medical record to see if anything like this has happened in the past, or any prior medical history that might lead to her abdominal pain. In addition, doctors can use the clinical/research sections of the EHR to investigate clinical decision support information regarding potential risk factors, tests that should be ordered, etc.

**Learning Outcome:** 01.02; 01.03

**Feedback:** Since EHRs contain a patient’s entire health record, physicians can reference past history for the patient, and may use the clinical research functions of the EHR to investigate similar patient cases.

**5. Answer:** In a paper-based office, MA’s (or nurses) and receptionists will spend a large part of time writing reports, filing charts, and double-checking data. They may also spend a large part of time on the phone with pharmacies, patients, and insurance companies. Physicians will spend time writing out prescription requests and diagnostic test recommendations, and speaking with patients about health care information. In an electronic office, filing and report writing is drastically reduced, as all of the information is catalogued in the practice management database. ePrescribing eliminates the need for a paper script, so physicians can see more patients in a day. Also, a patient can be provided with a printout of any health information they might want/need, so they can read it at home at their leisure and have time to process the information.

**Learning Outcome:** 01.01; 01.02; 01.03

**Feedback:** In a paper-based office, much time is spent on documentation and patient education, while the electronic office is more efficient and orderly due to the automation of many tasks.

**6. Answer:** You could offer to help them with issues they are finding with the software; ask your supervisor if it would be alright to do some quick training sessions; and discuss all of the ways an electronic office will make your coworkers’ lives easier in the long run.

**Learning Outcome:** 01.01; 01.02; 01.03; 01.04; 01.05

**Feedback:** Remaining positive and ensuring that your coworkers feel supported are the most important keys to easing their struggles.