
part 1



INTRODUCTION TO COMPUTERS IN THE MEDICAL OFFICE

Chapter 1:

Introduction to Health Information Technology and Medical Billing

chapter 1

INTRODUCTION TO HEALTH INFORMATION TECHNOLOGY AND MEDICAL BILLING



key terms

accountable care organization (ACO)
adjudication
Affordable Care Act (ACA)
audit trail
clearinghouse
coding
Current Procedural Terminology (CPT®)
diagnosis
diagnosis code
documentation
electronic data interchange (EDI)
electronic health record (EHR)
electronic medical records (EMRs)
electronic prescribing
encounter form
explanation of benefits (EOB)
HCPCS
health information exchange (HIE)
health information technology (HIT)

learning outcomes

When you finish this chapter, you will be able to:

- 1.1** Explain why the use of technology in healthcare is increasing.
- 1.2** Describe the functions of practice management programs.
- 1.3** Identify the core functions of electronic health record programs.
- 1.4** List the step in the medical documentation and billing cycle that occurs before a patient encounter.
- 1.5** List the steps in the medical documentation and billing cycle that occur during a patient encounter.
- 1.6** List the steps in the medical documentation and billing cycle that occur after a patient encounter.
- 1.7** Discuss how the HIPAA Privacy Rule and Security Rule protect patient health information.
- 1.8** Explain how the Health Information Technology for Economic and Clinical Health (HITECH) Act and the Affordable Care Act (ACA) promote health information technology and explore new models of delivering healthcare.

1.1 THE INCREASING USE OF TECHNOLOGY IN HEALTHCARE

In the United States, healthcare is in a period of rapid change, as providers, patients, and payers struggle to find ways to improve the quality of care while lowering the cost of care. The United States far outspends other developed countries on healthcare, yet lags in key quality measures such as infant mortality and average life span.

But it is not just how much the United States spends on healthcare that is cause for concern; it is also how fast that amount is growing. For more than thirty years, healthcare costs have been growing two percent faster than the overall economy. If this rate of growth continues, healthcare will be about one-third of the entire economy by 2035—in other words, one out of every three dollars will be spent on healthcare.

Healthcare costs are rising for a number of reasons, but at the top of the list are the use of new medical technologies and the aging population. For example, until the late 1960s, the cost of caring for patients with coronary artery disease was low, in large part because few treatments were available. Since then, medical science has made major strides in diagnosing, treating, and preventing heart disease. Procedures and treatments such as coronary angiography, coronary bypass surgery, and the use of statins, or cholesterol-lowering drugs, have increased patient survival rates and also the cost of medical care.

Demographics also have a major effect on healthcare spending. In the United States, a significant demographic shift is under way, as members of the baby-boom generation (the large group of people born between 1946 and 1964) reach age sixty-five. Every day for the next fifteen to twenty years, approximately 10,000 Americans will turn sixty-five (see Figure 1-1). As the population ages, spending on healthcare rises.

In an effort to curb rising costs and improve quality, stakeholders in the healthcare field are turning to technology as they explore new ways of delivering and paying for healthcare services. Technology is being used to track patient treatments and outcomes, which leads to the development of quality standards. In turn, provider payments are being linked to the quality of care provided, not the quantity of services provided. Technology makes it possible for primary care providers and specialists to confer while looking at the same CT scan on a computer, even though they are miles apart. Whether in the hospital or in the clinic, care is being provided by a team of healthcare professionals who coordinate treatment and share responsibility for the patient's well-being. From the small-town doctor's office to the largest medical center, computers have replaced filing cabinets,

key terms continued

Health Information Technology for Economic and Clinical Health (HITECH) Act
Health Insurance Portability and Accountability Act of 1996 (HIPAA)
HIPAA Privacy Rule
HIPAA Security Rule
International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)
International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM)
meaningful use
medical documentation and billing cycle
National Health Information Network (NHIN)
National Provider Identifier (NPI)
patient-centered medical home (PCMH)
patient information form
personal health records (PHRs)
practice management programs (PMPs)
procedure
procedure code
protected health information (PHI)
regional extension centers (RECs)
remittance advice (RA)
revenue cycle management (RCM)

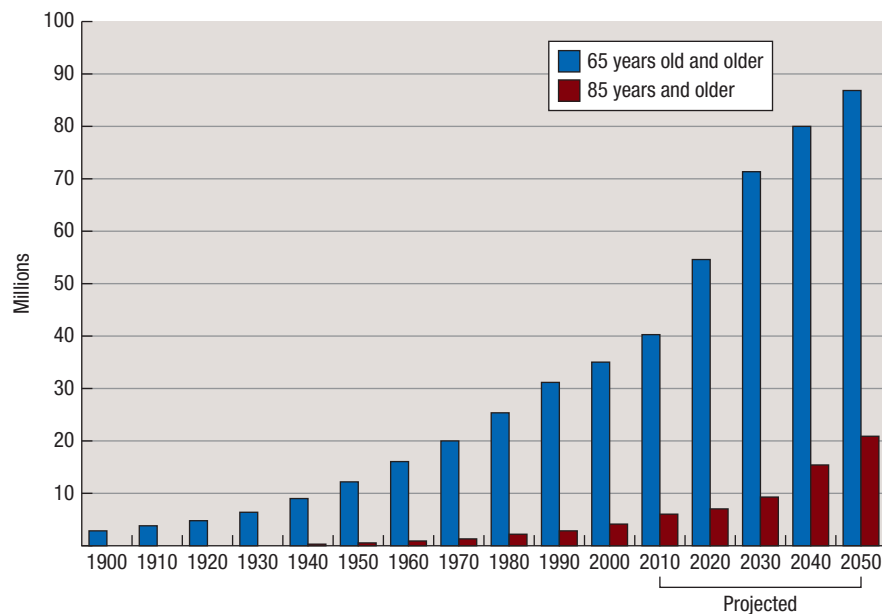


Figure 1-1 Number of Americans Age 65 and Older, 1900–2050

digital X-rays have replaced film X-rays, and electronic claims have replaced paper claims. The use of technology in healthcare is everywhere, from the bedside to the billing office.

The computer hardware, software, and networks that record, store, and manage patient healthcare information are referred to as **health information technology (HIT)**. Technology is used to perform clinical tasks such as recording vital signs or ordering medications; it is also used to perform administrative tasks such as scheduling appointments or creating insurance claims. As a result, everyone preparing for a career in a medical office must know how to use computer hardware and software.

health information technology (HIT) technology that is used to record, store, and manage patient healthcare information.

1.2 FUNCTIONS OF PRACTICE MANAGEMENT PROGRAMS

To receive payment for their services, physicians use software known as **practice management programs (PMPs)**. Practice management programs are the HIT applications that facilitate the day-to-day financial operations of a medical practice. The PMP is used to complete many of the daily administrative and financial tasks of a medical practice, including

practice management programs (PMPs) software programs that automate many of the administrative and financial tasks in a medical practice.

- Verifying insurance eligibility and benefits.
- Organizing patient and payer information.
- Generating and transmitting insurance claims.
- Monitoring the status of claims.

- Recording payments from payers.
- Generating patients' statements, posting payments, and updating accounts.
- Managing collections activities.
- Creating financial and productivity reports.

CREATING AND TRANSMITTING CLAIMS

One of the most important functions of a PMP is to create and transmit healthcare claims. To accomplish this, the PMP collects information from its various databases and creates a claim file. A *database* is simply an organized collection of information. The PMP databases include information about the patient, the provider, the health insurance plan, the facility, and more. In most cases, the claim file is sent to the insurance carrier electronically, using an Internet connection. The electronic transmission of the claim file replaces the previous method of processing claims, which required filling out paper claim forms and sending them in the mail. Since the PMP transmits claims electronically, physicians receive payment in less time than when performing the same tasks on paper. Figure 1-2 displays a claims screen from a PMP, with a batch of claims listed as "Ready To Send."

MONITORING CLAIM STATUS

Once the claim file has been transmitted to the health plan, the PMP is used to follow up on the status of claims. If the claim is not processed within the expected time frame, the PMP can send electronic messages to the health plan to find out the status of the claim. Monitoring claim status is necessary to ensure prompt payment of claims.

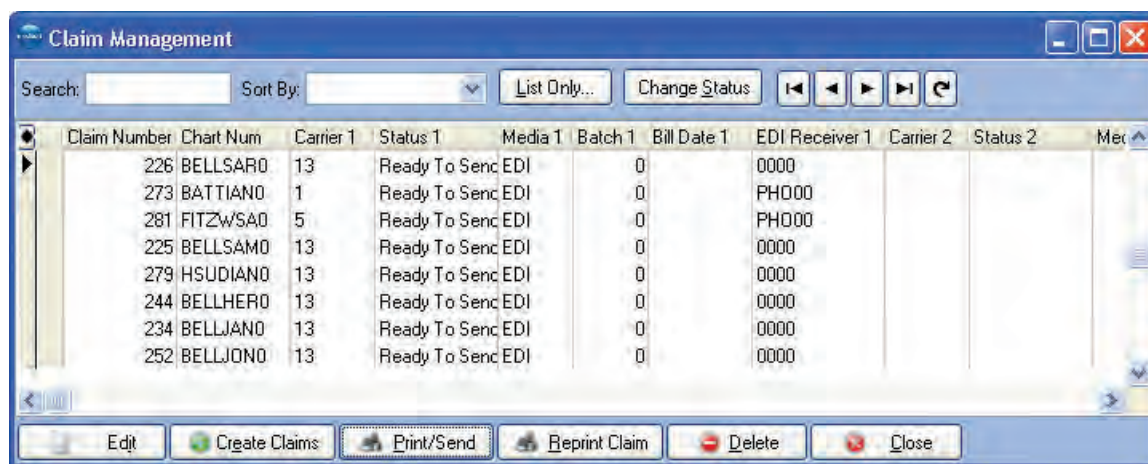


Figure 1-2 A Screen from a Practice Management Program Showing Claims Ready to Be Sent

RECEIVING AND PROCESSING PAYMENTS

When the health plan has processed the claim, the PMP receives a document that lists the amount that has been paid on each claim as well as the reasons for nonpayment or partial payment. After careful review to determine whether the payments are as expected, the payment information is entered in the PMP and applied to each patient's account. The payment from the health plan may be a check received by mail or an electronic payment that is sent directly to the practice's bank accounts.

1.3 FUNCTIONS OF ELECTRONIC HEALTH RECORD PROGRAMS

While practice management programs are the HIT applications that manage the financial operations of a medical practice, electronic health records are the HIT applications that store clinical data—the information about a patient's health entered by doctors, nurses, and other healthcare professionals. An **electronic health record (EHR)** is a computerized lifelong healthcare record for an individual that incorporates data from all sources that provide treatment for the individual.

electronic health record (EHR) a computerized lifelong healthcare record for an individual that incorporates data from all providers who treat the individual.

documentation a record of healthcare encounters between the provider and the patient.

Every time a patient is treated by a healthcare provider, a record of the encounter, known as **documentation**, is made. This chronological medical record, or chart, includes information that the patient provides, such as medical history, as well as the physician's assessment, diagnosis, and treatment plan. Records also contain laboratory test results, X-rays and other diagnostic images, a list of medications prescribed, and reports that indicate the results of operations and other medical procedures.

While patients' financial records have been computerized for over a decade, medical records, until recently, have been stored in paper charts. Today, physicians are converting paper charts to computerized records. Since the idea of computer-based medical records came about, they have been referred to by a number of different names. In the 1990s, they were known as electronic patient records (EPRs), computerized patient records (CPRs), and computerized medical records (CMRs). These terms gave way to the current names, which include electronic health records (EHRs), electronic medical records (EMRs), and personal health records (PHRs).

electronic medical records (EMRs) the computerized records of one physician's encounters with a patient over time.

Electronic medical records (EMRs) are computerized records of one physician's encounters with a patient over time. They serve as the physician's legal record of patient care. While EMRs may contain information from external sources including pharmacies and laboratories, the information in an EMR reflects treatment of a patient by a single physician.

Electronic health records, on the other hand, can include information from the EMRs of a number of different physicians as well as from pharmacies, laboratories, hospitals, insurance carriers, and so on. Patients today use several providers to meet their healthcare needs, and each physician maintains a separate medical record for each patient. Unless the patient volunteers information, providers do not know whether the patient is being treated by another physician or what medications might have been prescribed. With an EHR, information is added to the record by healthcare professionals working in a variety of settings, and the record can be accessed by other professionals when needed.

Personal health records (PHRs) are private, secure electronic files that are created, maintained, and owned by the patient. The patient decides whether to share the contents with doctors or other healthcare professionals. PHRs typically include information on current medications and dosages, health insurance, immunizations, allergies, medical test results, past surgeries, family medical history, and more. Personal health records are usually created and stored on the Internet, but the files can easily be downloaded to a storage device such as a flash drive for portability.

personal health records (PHRs) private, secure electronic files that are created, maintained, and owned by the patient.

Table 1-1 highlights the differences among electronic health records, electronic medical records, and personal health records.

TABLE 1-1		Defining the Terms	
	Focus	Origin of Information	Access
EMR—Electronic Medical Record	A computerized version of a paper chart with additional capabilities, it documents episodes of illness or injury	Created and maintained by a single provider	<ul style="list-style-type: none"> • Able to import data from external sources • Cannot be accessed by other providers
EHR—Electronic Health Record	Broad focus on a patient's total health experience over the life span, rather than the documentation of episodes of illness or injury	Created and maintained by multiple providers and facilities	<ul style="list-style-type: none"> • Can be viewed by multiple providers and facilities, including primary care physicians, specialists, hospitals, pharmacies, and laboratory and radiology facilities • Information can be added to the record by any of these providers or facilities
PHR—Personal Health Record	A computerized record about an individual patient's health and healthcare, including medications, health insurance information, immunizations, allergies, medical test results, and family medical history	Created and maintained by the individual patient	<ul style="list-style-type: none"> • Able to import data from providers and facilities • If permission is granted, providers can access limited data

While paper and electronic health records serve many of the same purposes, the electronic record is much more than a computerized version of a paper record. The Institute of Medicine has suggested that an EHR should include eight core functions (*Key Capabilities of an Electronic Health Record System*, 2003), which are described below:

1. Health information and data elements
2. Results management
3. Order management
4. Decision support
5. Electronic communication and connectivity
6. Patient support
7. Administrative support
8. Reporting and population health

HEALTH INFORMATION AND DATA ELEMENTS

An electronic health record must contain information about patients that enables healthcare providers to diagnose and treat injuries and illnesses. This includes demographic information about the patient, such as address and phone numbers, as well as clinical information about the patient's past and present health concerns, such as

- Problem list
- Signs and symptoms
- Diagnoses
- Procedures
- Treatment plan
- Medication list
- Allergies
- Diagnostic test results
- Radiology results
- Health maintenance status
- Advance directives

Figure 1-3 shows a portion of a progress note in an EHR that lists symptoms, vital signs, and physical examination findings.

RESULTS MANAGEMENT

Providers must have access to current and past laboratory, radiology, and other test results performed by anyone involved in the treatment of the patient. These computerized results can be accessed by multiple

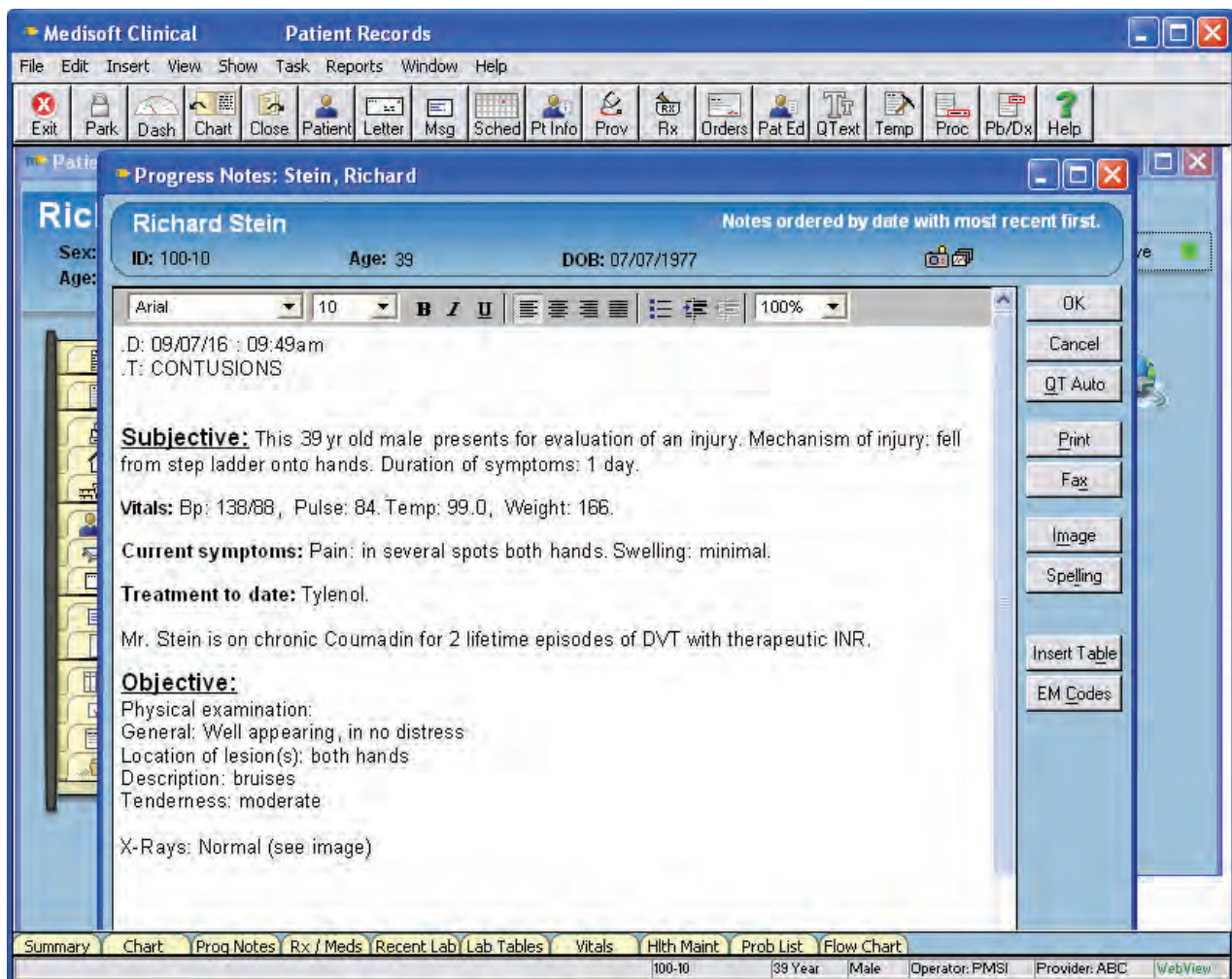


Figure 1-3 Physician Progress Note in an Electronic Health Record

providers when and where they are needed, which allows more prompt diagnosis and treatment decisions to be made.

ORDER MANAGEMENT

EHR programs must be able to send, receive, and store orders for medications, tests, and other services. Staff members in different offices and facilities can access the orders, which eliminates unnecessary delays and duplicate testing. A major component of order management is **electronic prescribing**—the use of computers and handheld devices to transmit prescriptions to pharmacies in digital format (see Figure 1-4).

electronic prescribing the use of computers and handheld devices to transmit prescriptions in digital format.

DECISION SUPPORT

As the practice of medicine becomes more complex, the amount of information available to physicians continues to grow. Hundreds of new studies are published on a daily basis. It is not possible for a

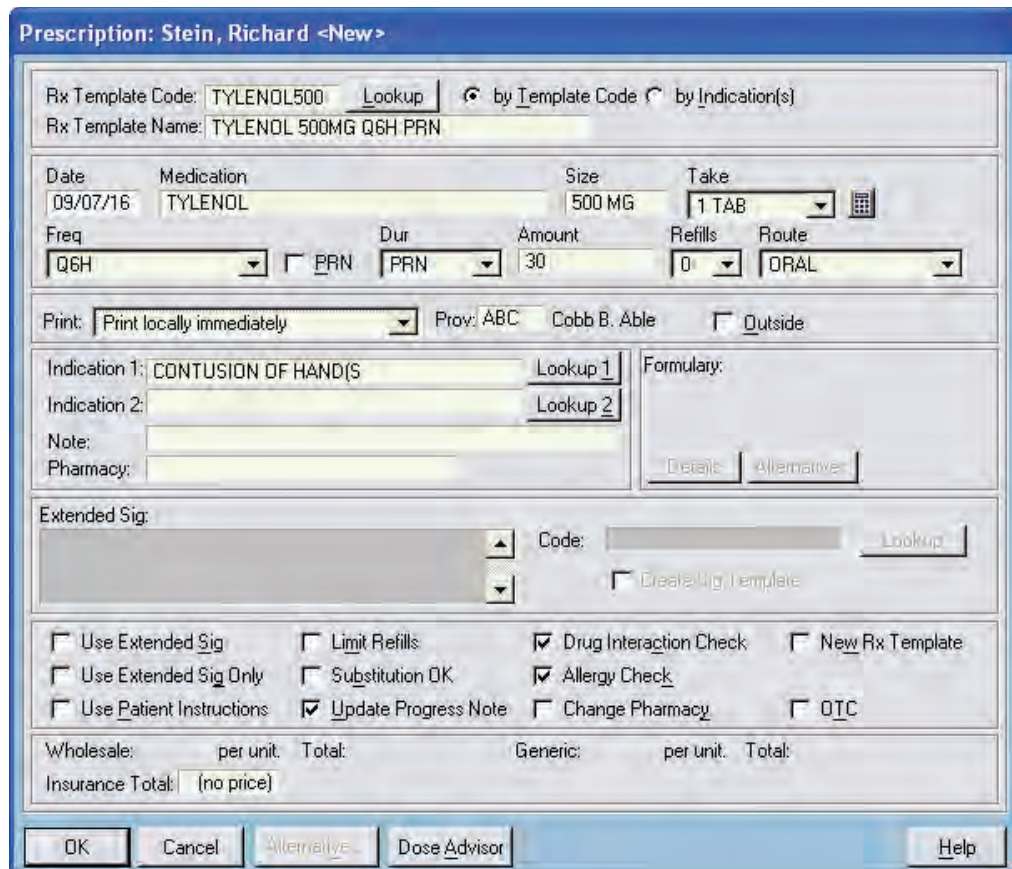


Figure 1-4 Electronic Prescribing in an Electronic Health Record

physician to remember all this information or to be aware of all the latest, most effective treatments.

Electronic health records give a physician who is examining a patient immediate access to the latest clinical research on diagnosis and treatment. The physician can also view the latest information on medications, including suggested doses, common side effects, and possible interactions.

In addition, electronic record systems provide a variety of alerts and reminders that physicians can use to improve a patient’s health. Physicians can, for example, see a list of all women over fifty years of age who have not had mammograms in the past year. If the physician chooses, these women will all receive letters reminding them that they are due for this preventive screening.

ELECTRONIC COMMUNICATION AND CONNECTIVITY

Today, a patient is typically treated by more than one provider in more than one facility. Physicians, nurses, medical assistants, referring

doctors, testing facilities, and hospitals all need to communicate with one another to provide the safest and most effective care to patients. Insurance plans also need information from the health record to process claims for reimbursement. Electronic health record systems offer a number of mechanisms to facilitate these communications.

PATIENT SUPPORT

Electronic health records offer patients access to appropriate educational materials on health topics, instructions for preparing for common medical tests, and the ability to report on home monitoring and testing to their physician.

ADMINISTRATIVE PROCESSES

The administrative processes in a physician's office also benefit from the use of EHRs. While most physician practices already use computers for billing and scheduling, an EHR streamlines the processes. In an office that uses a PMP and an EHR, some administrative tasks may be performed in either program.

REPORTING AND POPULATION HEALTH

Electronic health record programs also enhance reporting capabilities both for internal use and for external reporting requirements. This makes it easier for physician offices and healthcare organizations to comply with federal, state, and private reporting requirements.

Electronic health records contain a wealth of information related to particular diseases and treatments. This information, as long as it does not include any patient's identity, can be used to advance medical knowledge through research. In addition, EHRs can assist in detecting threats to the health of the general population, such as bioterrorism or an outbreak of a new disease. For example, the immediate reporting of suspicious diseases to public health authorities may help identify a new influenza strain and prevent its spread.

ADVANTAGES OF ELECTRONIC HEALTH RECORDS

Electronic health records offer a number of advantages when compared to paper record-keeping systems. The most frequently cited advantages are increased patient safety, improved quality of care, and greater efficiency.

Safety

There is growing evidence that electronic record keeping can reduce medical errors and improve patient safety. The factors that contribute to greater safety include the following:

- Medication and physician order errors due to illegible handwriting are eliminated.
- Providers receive instant electronic alerts about patient allergies and possible drug interactions.
- Physicians receive alerts when medications deemed unsafe have been pulled from the market.
- When that copies of the medical records are stored at a secure off-site location, they are not lost in the event of a natural disaster, such as a hurricane, or an intentional attack, such as a terrorist bombing.
- Information is communicated in a timely manner in the event of an act of bioterrorism or the widespread outbreak of disease.

Quality

Americans receive recommended medical care that is consistent with guidelines based on scientific knowledge only 55 percent of the time, and the percentage varies greatly depending on the condition (see Figure 1-5).

Electronic health records make it possible for providers to deliver more effective care to patients based on a complete picture of their past and present conditions. With EHRs, physicians have access to evidence-based guidelines for diagnosing and treating conditions and to the latest clinical research and best practice guidelines. *Evidence-based*

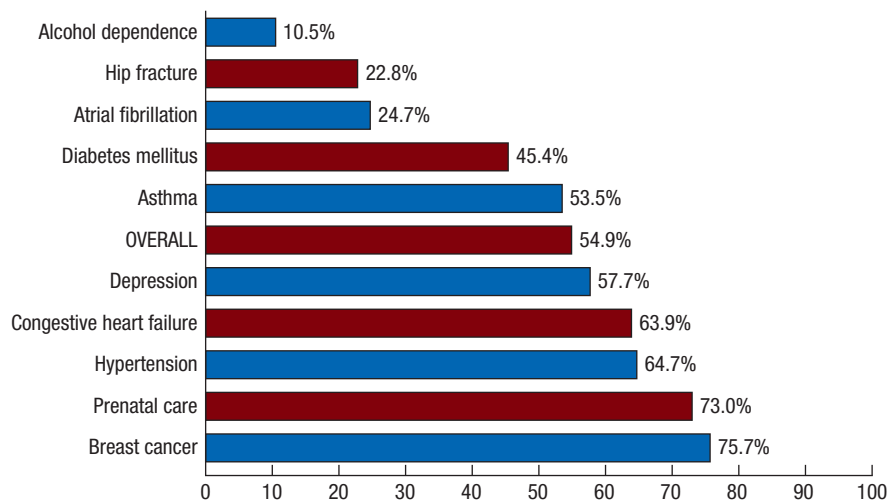


Figure 1-5 How Often Recommended Care Is Received, by Condition

medicine refers to the use of the latest and most accurate clinical research in medical decision making and patient care.

Electronic health records also enhance the quality of healthcare in the following ways:

- Patients are contacted with reminders about preventive care screenings.
- Patients suffering from chronic diseases, such as diabetes, are able to monitor their conditions at home and report results via the Internet, saving them numerous visits to the doctor.
- Healthcare consumers can review data about the quality and performance of providers and facilities when deciding where to obtain healthcare.

Efficiency

The retrieval of information from an EHR is immediate, which greatly improves efficiency and can be critical in emergency situations. Compared to sorting through papers in a folder, an electronic search saves critical time when vital patient information is needed.

Electronic health records also save valuable time for healthcare providers by reducing the time needed to enter information about patients. Currently, physicians spend almost 40 percent of their time writing progress notes. With EHRs, physicians are finished entering notes when the patient leaves the examination room or shortly after. Nurses and medical assistants record information directly into the computer, so there is no need to copy information to a paper chart.

In regard to the efficiency of healthcare, electronic health records also

- Improve the overall efficiency of the workflow in the physician practice or hospital.
- Speed the delivery of diagnostic test results to the physician and the patient through electronic transmission.
- Allow two or more people to work with a patient's record at the same time.
- Eliminate the need to search for a misplaced or lost patient chart.
- Permit physicians to review a summary of the patient's health information at a glance instead of flipping through pages.
- Reduce the time it takes to refill a prescription through electronic prescribing.

- Organize all information in one place, including in-house messages, telephone messages, requests for information, and referral letters.
- Enable physicians to receive payment for services more quickly because patient encounter information is automatically transferred to the billing software.

1.4 THE MEDICAL DOCUMENTATION AND BILLING CYCLE: PRE-ENCOUNTER

The increased use of electronic health records in the physician practice has resulted in changes in office workflow. In a medical office, a workflow must be in place that provides medical care to patients and collects payment for these services. While a physician practice's main focus is to care for patients, to provide this care, the practice must be successful from a business perspective. Practices incur a number of expenses on a recurring basis, such as salaries, supplies, utilities, insurance, and equipment leasing. To meet its expenses, a practice needs a steady flow of income, known as revenue. This income comes from billing and collecting for services provided to patients. To maintain a regular *cash flow*—the movement of monies into or out of a business—specific tasks must be completed on a regular schedule before, during, and after a patient visit.

medical documentation and billing cycle a ten-step process that results in timely payment for medical services.

The **medical documentation and billing cycle** consists of ten steps that are required to maintain accurate patient records and to receive timely payment for services. This cycle is illustrated in Figure 1-6. The inner circle represents the billing cycle; the outer circle contains the medical documentation cycle. As you can see in the illustration, the two cycles are interrelated. For example, during step 1, Preregistration, a new patient phones for an appointment. Both billing and clinical information must be collected during the phone call. From a billing perspective, the office wants to know whether the patient has insurance that will cover some or all of the cost of the visit, or whether the patient will pay for the visit. From a health or medical perspective, the staff wants to know the reason the person needs to see the doctor, known as the chief complaint. As the medical documentation and billing cycle continues, so does the interaction between the two types of information.

Table 1-2 lists the steps in the cycle, organized by when they occur: before the encounter, during the encounter, or after the encounter.

(*Note:* The steps in this cycle are based on an office using an electronic workflow—in other words, an integrated practice management program and electronic health record program. In offices that still use paper for one or more tasks in the workflow, the order of some steps may vary.)

Medical Documentation and Billing Cycle

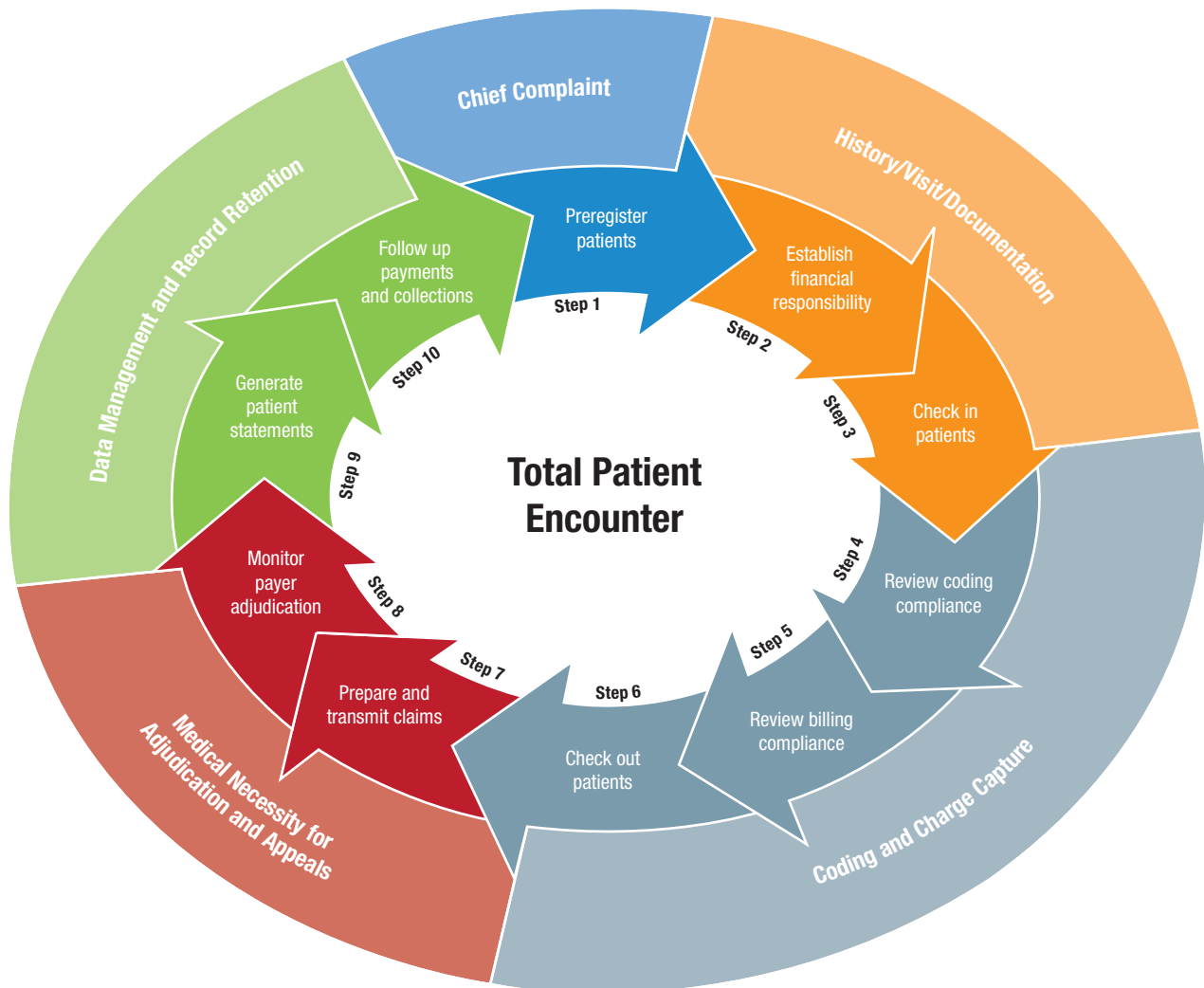


Figure 1-6 The Medical Documentation and Billing Cycle

TABLE 1-2 Steps in the Medical Documentation and Billing Cycle	
Before the encounter	Step 1: Preregister patients
During the encounter	Step 2: Establish financial responsibility Step 3: Check in patients Step 4: Review coding compliance Step 5: Review billing compliance Step 6: Check out patients
After the encounter	Step 7: Prepare and transmit claims Step 8: Monitor payer adjudication Step 9: Generate patient statements Step 10: Follow up payments and collections

STEP 1: PREREGISTER PATIENTS

The first step in the billing and reimbursement cycle is to gather information to preregister patients before their office visits. This information includes

- The patient's name.
- The patient's contact information; at the minimum, address and phone number.
- The patient's reason for the visit, such as a medical complaint or a need for an immunization.
- Whether the patient is new to the practice.

The information is obtained over the telephone or via the Internet, if the practice has a website.

1.5 THE MEDICAL DOCUMENTATION AND BILLING CYCLE: ENCOUNTER

STEP 2: ESTABLISH FINANCIAL RESPONSIBILITY

Many patients are covered by some type of health plan. It is important to determine whether the patient has insurance and, if so, to obtain the identification number, plan name, and name of the person who is the policyholder. Once the insurance information is obtained, the patient's current eligibility and benefits can be verified with the payer. This may be completed before the patient arrives at the office, or it may be completed the day of the encounter; in any case, it should be completed before the patient is examined by the physician. If the patient does not have insurance, it is important to establish the patient's planned method of payment.

STEP 3: CHECK IN PATIENTS

When patients arrive in the office, they are asked to complete or update a **patient information form** that contains the personal, employment, and medical insurance data needed to collect payment for services. Most offices ask all patients to update this information periodically to ensure that it is current and accurate. This form, illustrated in Figure 1-7, becomes part of the patient's medical record and is updated when the patient reports a change, such as a new address or different medical insurance.

The patient information form requires the patient's signature or the signature of a parent or guardian if the patient is a minor, mentally incapacitated, or incompetent. The signature also indicates that the patient accepts responsibility for payment of all charges not paid by the health plan and authorizes the release of information required

patient information form a form that includes a patient's personal, employment, and insurance data needed to complete an insurance claim.

Patient				
Last Name	First Name	MI	Sex __ M __ F	Date of Birth / /
Address		City	State	Zip
Home Ph # ()	Cell Ph # ()	Marital Status		Student Status
Race __ American Indian or Alaskan Native __ Asian __ Black __ Caucasian __ Other __ Pacific Islander __ Declined		Ethnicity __ Hispanic __ Non-Hispanic __ Declined		Language
SS#	Email	Allergies		
Employment Status	Employer Name	Work Ph # ()	Primary Insurance ID#	
Employer Address		City	State	Zip
Referred By		Ph # of Referral ()		
Responsible Party (Complete this section if the person responsible for the bill is not the patient)				
Last Name	First Name	MI	Sex __ M __ F	Date of Birth / /
Address		City	State	Zip
Relation to Patient __ Spouse __ Parent __ Other		Employer Name	Work Phone # ()	
Spouse, or Parent (if minor):			Home Phone # ()	
Insurance (If you have multiple coverage, supply information from both carriers)				
Primary Carrier Name		Secondary Carrier Name		
Name of the Insured (Name on ID Card)		Name of the Insured (Name on ID Card)		
Patient's relationship to the insured __ Self __ Spouse __ Child		Patient's relationship to the insured __ Self __ Spouse __ Child		
Insured ID #		Insured ID #		
Group # or Company Name		Group # or Company Name		
Insurance Address		Insurance Address		
Phone #	Copay \$	Phone #	Copay \$	
	Deductible \$		Deductible \$	
Other Information				
Is patient's condition related to: __ Employment __ Auto Accident (if yes, state in which accident occurred: ___) __ Other Accident		Reason for visit:		
Date of Accident: / /		Date of First Symptom of Illness: / /		
Financial Agreement and Authorization for Treatment				
I authorize treatment and agree to pay all fees and charges for the person named above. I agree to pay all charges shown by statements, promptly upon their presentation, unless credit arrangements are agreed upon in writing.		I authorize payment directly to FAMILY CARE CENTER of insurance benefits otherwise payable to me. I hereby authorize the release of any medical information necessary in order to process a claim for payment in my behalf.		
Signed: _____		Date: _____		

Figure 1-7 Patient Information Form


to process an insurance claim. The signature also authorizes the health plan or government program to send payments directly to the provider rather than to the patient.

Verify Identity

During check-in, it is also common to photocopy or scan the patient's insurance identification card, front and back (see Figure 1-8), and a photo ID, such as a driver's license, to verify that the patient and the insured are in fact the same person.

Distribute Financial Policy and Privacy Policy

Whether they have insurance or not, all patients should be provided with a copy of the practice's financial policy. Patients covered by health plans must understand that they are responsible for payment of charges that are not paid by their health plans. The financial policy of a medical practice explains how the practice handles financial

Your Health Insurance 		PPO
Policy Number 345M678912	Office Visit Copay: \$25 Specialist: \$25 Emergency Room: \$100 Urgent Care: \$50 Rx: \$10/20/40	
Group Number 345678A	Network Coinsurance In: 90%/10% Out: 80%/20%	
Member Name SAMUEL N. SAMPLE		

Emergency admissions require notification within 48 hours. Failure to comply may result in reduced benefits.

Customer Service: 1-800-555-1234, TDD: 1-800-555-5678
M-F, 8:00 a.m. - 11:00 p.m. Eastern Standard Time

Provider Services: 1-800-555-8888, TDD: 1-800-555-7777
Submit Claims To:
PO Box 123
Any City, OH 60089-2222

This health plan is provided by Your Health Insurance. While coverage remains in force, members are entitled to the benefits under the terms and conditions of the plan. This card is for identification only and is not a guarantee of coverage. Deductibles and coinsurance may apply.

Figure 1-8 Sample Insurance Identification Card

matters. Also at this time, patients must be given the practice's notice of privacy practices and a privacy authorization form.

Collect Time-of-Service Payments

Patient coinsurance or copayments, as required under the policy of the patient's health plan, may be paid during check-in or checkout, depending on the medical practice's procedures. In addition, if a patient owes a balance from a previous visit, this amount also may be collected. Most practices accept checks, cash, and debit and credit cards for payment. Some practices also offer payment plans to patients.

STEP 4: REVIEW CODING COMPLIANCE

Once check-in activities have been completed, the patient is escorted to an examination room where the provider evaluates the patient's condition and develops a treatment plan. The visit must be carefully documented and must contain two very important pieces of information—the **diagnosis**, which is the physician's opinion of the nature of the patient's illness or injury, and the **procedures**, which are the services performed. Without this information, the physician will not receive payment from a health plan.

When diagnoses and procedures are reported to health plans, code numbers are used in place of descriptions. **Coding** is the process of translating a description of a diagnosis or procedure into a standardized code. Standardization allows information to be shared among physicians, office personnel, health plans, and so on, without losing the precise meaning.

The patient's primary condition, as well as any other conditions treated or addressed, is assigned a **diagnosis code** from the International Classification of Diseases. Until October 1, 2014, these codes are taken from the *International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)*. Beginning on October 1, 2013, the *International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM)* will be used for diagnosis coding.

Examples of ICD-10-CM Codes

- G44.021 chronic cluster headache, intractable
- J11.1 influenza with other respiratory manifestations

Similarly, each procedure the physician performs is assigned a **procedure code** that stands for the particular service, treatment, or test. This code is selected from the **Current Procedural Terminology (CPT®)**. A large group of codes covers the physician's evaluation and management of a patient's condition during office visits or visits at

diagnosis physician's opinion of the nature of the patient's illness or injury.

procedure medical treatment provided by a physician or other healthcare provider.

coding the process of translating a description of a diagnosis or procedure into a standardized code.

diagnosis code a standardized value that represents a patient's illness, signs, and symptoms.

ICD-9-CM abbreviated title of *International Classification of Diseases, Ninth Revision, Clinical Modification*, the source of the codes used for reporting diagnoses until October 1, 2014.

ICD-10-CM abbreviated title of *International Classification of Diseases, Tenth Revision, Clinical Modification*, which will be used beginning on October 1, 2014.

procedure code a code that identifies a medical service.

Current Procedural Terminology (CPT®) the standardized classification system for reporting medical procedures and services.

other locations, such as nursing homes. Other codes cover groups of specific procedures, such as surgery, pathology, and radiology.

Examples of CPT Codes

- 99460 initial hospital or birthing center care, per day for evaluation and management of normal newborn infant
- 27130 total hip replacement

HCPCS codes used for supplies, equipment, and services not included in the CPT codes.

HCPCS codes (pronounced *hick-picks*) are used for supplies, equipment, and services not included in the CPT codes. HCPCS stands for Healthcare Common Procedure Coding System.

Examples of HCPCS Codes

- E0114 crutches, underarm, other than wood, adjustable or fixed, pair, with pads, tips and handgrips
- A0130 non-emergency transportation: wheel-chair van

encounter form a list of the procedures and diagnoses for a patient's visit.

The diagnosis and procedure codes are recorded on an **encounter form**, also known as a superbill (see Figure 1-9). Traditionally, the encounter form has been a paper form. Offices that use integrated EHRs and PMPs use an electronic version of the form. Whether on paper or in electronic form, the codes on the encounter form must be recorded in the PMP, as they will be submitted to the health plan in the form of a claim.

STEP 5: REVIEW BILLING COMPLIANCE

To receive payment for services, medical practices bill numerous health plans and government payers. The provider's fees for services are listed on the medical practice's fee schedule. A *fee schedule* is a listing of standard charges for procedures. Each charge, or fee, is related to a specific procedure code. However, the fees listed on the master fee schedule are not necessarily the amount the provider will be paid. Instead, each of the health plans and government payers reimburses the practice according to its own negotiated or government-mandated fee schedule. Many providers enter into contracts with health plans that require a discount from standard fees. In addition, although there is a separate fee associated with each code, each code is not necessarily billable. Whether it can be billed depends on the payer's particular rules. Following these rules when preparing claims results in billing compliance.

STEP 6: CHECK OUT PATIENTS

Checkout is the last step that occurs while the patient is still in the office. The medical codes have been assigned and checked, and the amounts to be billed also have been verified according to the

ENCOUNTER FORM

DATE _____

TIME _____

PATIENT NAME _____

CHART # _____

OFFICE VISITS - SYMPTOMATIC NEW		
99201	OF--New Patient Minimal	
99202	OF--New Patient Low	
99203	OF--New Patient Detailed	
99204	OF--New Patient Moderate	
99205	OF--New Patient High	
ESTABLISHED		
99211	OF--Established Patient Minimal	
99212	OF--Established Patient Low	
99213	OF--Established Patient Detailed	
99214	OF--Established Patient Moderate	
99215	OF--Established Patient High	
PREVENTIVE VISITS NEW		
99381	Under 1 Year	
99382	1 - 4 Years	
99383	5 - 11 Years	
99384	12 - 17 Years	
99385	18 - 39 Years	
99386	40 - 64 Years	
99387	65 Years & Up	
ESTABLISHED		
99391	Under 1 Year	
99392	1 - 4 Years	
99393	5 - 11 Years	
99394	12 - 17 Years	
99395	18 - 39 Years	
99396	40 - 64 Years	
99397	65 Years & Up	
PROCEDURES		
12011	Simple suture--face--local anes.	
29125	App. of short arm splint; static	
29540	Strapping, ankle	
50390	Aspiration of renal cyst by needle	
71010	Chest x-ray, single view, frontal	

PROCEDURES		
71020	Chest x-ray, two views, frontal & lateral	
71030	Chest x-ray, complete, four views	
73070	Elbow x-ray, AP & lateral views	
73090	Forearm x-ray, AP & lateral views	
73100	Wrist x-ray, AP & lateral views	
73510	Hip x-ray, complete, two views	
73600	Ankle x-ray, AP & lateral views	
LABORATORY		
80048	Basic metabolic panel	
80050	General health panel	
80061	Lipid panel	
82270	Blood screening, occult; feces	
82947	Glucose screening--quantitative	
82951	Glucose tolerance test, three specimens	
83718	HDL cholesterol	
84478	Triglycerides test	
85007	Manual differential WBC	
85018	Hemoglobin	
85651	Erythrocyte sedimentation rate--non-auto	
86580	TB Mantoux test	
87040	Culture, bacterial; blood	
87076	Culture, anaerobic isolate	
87077	Bacterial culture, aerobic isolate	
87086	Urine culture and colony count	
87430	Strep test	
87880	Direct streptococcus screen	
INJECTIONS		
90471	Immunization administration	
90703	Tetanus injection	
96372	Injection	
92516	Facial nerve function studies	
93000	Electrocardiogram--ECG with interpretation	
93015	Treadmill stress test, with physician...	
96900	Ultraviolet light treatment	
99070	Supplies and materials provided	

FAMILY CARE CENTER
 286 Stephenson Blvd.
 Stephenson, OH 60089-1111
 614-555-0000

- | | |
|---|---|
| <input type="checkbox"/> DANA BANU, M.D. | <input type="checkbox"/> JESSICA RUDNER, M.D. |
| <input type="checkbox"/> ROBERT BEACH, M.D. | <input type="checkbox"/> JOHN RUDNER, M.D. |
| <input type="checkbox"/> PATRICIA MCGRATH, M.D. | <input type="checkbox"/> KATHERINE YAN, M.D. |

NOTES

REFERRING PHYSICIAN	NPI	AUTHORIZATION #
DIAGNOSIS		
PAYMENT AMOUNT		

Figure 1-9 Encounter Form

payers' rules. The charges for the visit are calculated, and payment for these types of charges is usually collected at the time of service:

- Previous balances
- Copayments or coinsurance
- Noncovered services
- Charges of nonparticipating providers
- Charges for self-pay patients
- Deductibles

A receipt is prepared for the payments made by the patient, and follow-up work is scheduled as ordered by the physician.

1.6 THE MEDICAL DOCUMENTATION AND BILLING CYCLE: POST-ENCOUNTER

STEP 7: PREPARE AND TRANSMIT CLAIMS

Physician practices use practice management programs to prepare and transmit claims. The claim must contain information about the patient, the procedures the provider performed while the patient was in the office, the patient's diagnosis, and the date and location of the encounter. Health plans also require basic information about the provider who is treating the patient, including the provider's name and identification number. Beyond the basic information requirements that are common to all payers, there are differences in what information is required on an insurance claim. A payer lists the required information in a provider's manual that is available to the medical office. Provider manuals usually can be found on the payers' websites.

When patient and transaction information has been entered in the PMP and checked for accuracy, the software is used to create insurance claims. Once created, claims are transmitted directly to a health plan, or to a clearinghouse. A **clearinghouse** is a company that receives electronic claims from medical practices and forwards the claims to the appropriate health plans (see Figure 1-10).

When a clearinghouse receives a claim, it performs a series of reviews, known as *edits*, checking to see that all necessary information is included in the claim file. It checks for missing data and obvious errors, such as procedures performed on a date earlier than the patient's date of birth. After the basic edit is complete, a report is sent from the clearinghouse to the practice. This report lists problems that need to be corrected before the claim can be sent to the health plan. Ensuring "clean" claims before transmission greatly reduces the number of claim rejections and speeds

clearinghouse a company that receives claims from a provider, prepares them for processing, and transmits them to the payers in the required format.

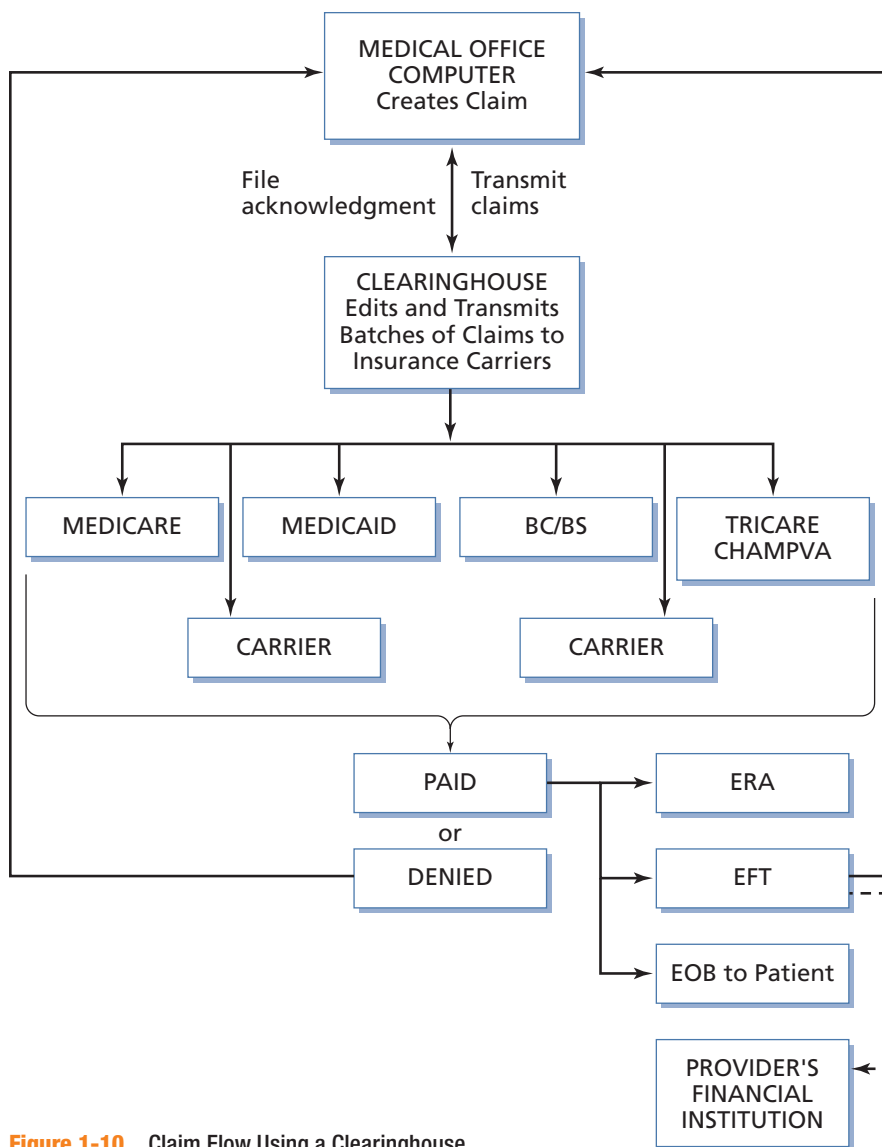


Figure 1-10 Claim Flow Using a Clearinghouse

payment. Once the claims are sent from the clearinghouse to the payer, another report is sent that lists whether each claim was accepted or rejected by the payer.

STEP 8: MONITOR PAYER ADJUDICATION

When the payer receives the claim, it goes through a series of steps designed to determine whether the claim should be paid, a process called **adjudication**. Claims may be paid in full, partially paid, or denied. When the payer has completed the adjudication process, a remittance advice is sent to the practice. The **remittance advice (RA)** lists the transactions included on the claims and the amount paid and, if appropriate, provides an explanation of why certain charges were not paid in full or were denied entirely (see Figure 1-11). An RA may be paper, or it may be electronic, in which case it is called an

adjudication series of steps that determine whether a claim should be paid.

remittance advice (RA) a document that lists the amount that has been paid on each claim as well as the reasons for nonpayment or partial payment.

EAST OHIO PPO
10 CENTRAL AVENUE
HALEVILLE, OH 60890-2222

PROVIDER REMITTANCE

FAMILY CARE CENTER
 285 STEPHENSON BLVD.
 STEPHENSON, OH 60089-1111

PAGE: 1 OF 1
 DATE: 11/11/2016
 ID NUMBER: 4679323

PROVIDER: PATRICIA MCGRATH, M.D.

PATIENT: BROOKS LAWANA CLAIM: 234567890

FROM DATE	THRU DATE	PROC CODE	UNITS	AMOUNT BILLED	AMOUNT ALLOWED	DEDUCT	COPAY/ COINS	PROV PAID	REASON CODE
10/28/16	10/28/16	99212	1	54.00	48.60	.00	20.00	28.60	
10/28/16	10/28/16	73600	1	96.00	86.40	.00	.00	86.40	
CLAIM TOTALS				150.00	135.00	.00	20.00	115.00	

PATIENT: HSU DIANE CLAIM: 345678901

FROM DATE	THRU DATE	PROC CODE	UNITS	AMOUNT BILLED	AMOUNT ALLOWED	DEDUCT	COPAY/ COINS	PROV PAID	REASON CODE
10/28/16	10/28/16	99213	1	72.00	64.80	.00	20.00	44.80	
10/28/16	10/28/16	80048	1	50.00	45.00	.00	.00	45.00	
CLAIM TOTALS				122.00	109.80	.00	20.00	89.80	

PROVIDER: DANA BANU, M.D.

PATIENT: PATEL RAJI CLAIM: 567890123

FROM DATE	THRU DATE	PROC CODE	UNITS	AMOUNT BILLED	AMOUNT ALLOWED	DEDUCT	COPAY/ COINS	PROV PAID	REASON CODE
10/28/16	10/28/16	99212	1	54.00	48.60	.00	20.00	28.60	
CLAIM TOTALS				54.00	48.60	.00	20.00	28.60	

PATIENT: SYZMANSKI MICHAEL CLAIM: 678901234

FROM DATE	THRU DATE	PROC CODE	UNITS	AMOUNT BILLED	AMOUNT ALLOWED	DEDUCT	COPAY/ COINS	PROV PAID	REASON CODE
10/28/16	10/28/16	99212	1	54.00	48.60	.00	20.00	28.60	
CLAIM TOTALS				54.00	48.60	.00	20.00	28.60	

PAYMENT SUMMARY			TOTAL ALL CLAIMS			EFT INFORMATION	
TOTAL AMOUNT PAID	262.00		AMOUNT CHARGED	380.00	NUMBER	4679323	
PRIOR CREDIT BALANCE	.00		AMOUNT ALLOWED	342.00	DATE	11/11/16	
CURRENT CREDIT DEFERRED	.00		DEDUCTIBLE	.00	AMOUNT	262.00	
PRIOR CREDIT APPLIED	.00		COPAY	.00			
NEW CREDIT BALANCE	.00		COINSURANCE	80.00			
NET DISBURSED	262.00						

STATUS CODES:
 A - APPROVED AJ - ADJUSTMENT IP - IN PROCESS R - REJECTED V - VOID

Figure 1-11 Remittance Advice



electronic remittance advice (ERA). A copy of the RA, referred to as an **explanation of benefits (EOB)**, is sent to the patient.

Payment itself may be in the form of a paper check, or it may be an electronic payment sent directly to the practice's bank account, via a transmission called *electronic funds transfer (EFT)*. Electronic funds transfer improves the practice's cash flow by shortening the time it takes for the payment to be deposited into the practice's bank account.

When the RA arrives at the provider's office, it is reviewed for accuracy by a member of the billing staff, such as a medical insurance specialist, who compares each payment and explanation with the claim to check that

- All procedures that were listed on the claim also appear on the payment transaction.
- Any unpaid charges are explained.
- The codes on the payment transactions match those on the claim.
- The payment listed for each procedure is as expected.

If any discrepancies are found, a request for a review of the claim is filed with the payer. If no issues are discovered, the amount of the payment is recorded in the PMP. Depending on the rules of the health plan, the patient may be billed for an outstanding balance. In other circumstances, an adjustment is made and the patient is not billed. Occasionally, an overpayment may be received, and a refund check is issued by the medical practice to the payer.

explanation of benefits (EOB) paper document from a payer that shows how the amount of a benefit was determined.

STEP 9: GENERATE PATIENT STATEMENTS

If charges are billed to the patient, a statement is created and sent to the patient. The statement lists the services performed and the remaining balance that is the responsibility of the patient. Some practices send statements electronically, but the majority still create and mail paper documents. Most medical practices have a regular schedule, referred to as a billing cycle, for sending statements to patients. For example, some practices bill half the patients on the fifteenth of the month and the other half on the thirtieth.

STEP 10: FOLLOW UP PAYMENTS AND COLLECTIONS

In a medical office, the billing staff regularly review reports that list the outstanding balances owed to the practice by insurance companies and by patients. These reports alert the staff to accounts that require action to collect the amount due. Overdue accounts require diligent follow-up to maintain the practice's

revenue cycle management (RCM) managing the activities associated with a patient encounter to ensure that the provider receives full payment for services.

cash flow. A collection process is often started when patient payments are later than permitted under the practice's financial policy. Insurance claims that are not paid in a timely manner also require follow-up to determine the reason for the nonpayment and to resubmit or appeal as appropriate. Managing the activities associated with a patient encounter to ensure that the provider receives full payment for services is known as **revenue cycle management (RCM)**.

1.7 THE IMPACT OF LEGISLATION: HIPAA

To protect consumers' health, both the federal and state governments pass laws that affect the medical services offered to patients. To protect the privacy of patients' health information, additional laws cover the way healthcare plans and providers exchange this information as they conduct business. The increased use of information technology in healthcare creates an increased need for privacy. Anyone working in the healthcare field must know how to protect patients' personal health information, how to respond to requests for this information from other parties, and how to safeguard the electronic exchange of information on behalf of patients.

Health Insurance Portability and Accountability Act of 1996 (HIPAA) federal act that set forth guidelines for standardizing the electronic data interchange of administrative and financial transactions, exposing fraud and abuse in government programs, and protecting the security and privacy of health information.

In 1996, Congress passed the **Health Insurance Portability and Accountability Act of 1996 (HIPAA)**. The legislation was designed to

- Ensure the portability of insurance coverage when employees move from job to job.
- Increase accountability and decrease fraud and abuse in healthcare.
- Improve the efficiency of healthcare transactions and mandate standards for health information.
- Ensure the security and privacy of health information.

While almost all health plans must abide by HIPAA legislation, a small number of plans are exempt, such as workers' compensation plans and certain self-administered, self-funded group plans with less than fifty participants.

One section of the legislation, known as HIPAA Administrative Simplification, focuses on mandating nationwide standards for health information and protecting its security and privacy. This legislation contains a number of rules, including the

- HIPAA Electronic Transaction and Code Sets standards
- HIPAA Privacy Rule
- HIPAA Security Rule
- Final Enforcement Rule

HIPAA ELECTRONIC TRANSACTION AND CODE SETS STANDARDS

HIPAA legislation seeks to reduce administrative costs and to minimize complexities in the healthcare industry by requiring the use of standardized electronic formats for the transmission of administrative and financial data. The HIPAA Electronic Transaction and Code Sets standards describe a particular electronic format that providers and health plans must use to send and receive healthcare transactions. The Centers for Medicare and Medicaid Services (CMS) is responsible for enforcing the Electronic Transaction and Code Sets standards.

The electronic transmission of data—called **electronic data interchange (EDI)**—involves sending information from computer to computer. In the past, many different EDI systems were used in healthcare, requiring a confusing array of software programs be used to decipher electronic messages. To address this situation, the HIPAA legislation standardized EDI formats and requires practices working with electronic transactions to use them to send and receive data. The formats are based on EDI standards called ASC X12 (the initials of the national committee that developed them).

electronic data interchange (EDI) the exchange of routine business transactions from one computer to another using publicly available communications protocols.

In 2012, a new version of the standards required to submit electronic transactions went into effect. The ASC X12 Version 4010A standards, which have been in place since 2002, were replaced by the ASC X12 Version 5010 standards. The new standards are required to accommodate ICD-10-CM, and also to provide improvements to a number of electronic transactions.

The HIPAA standards cover electronic transactions that are frequently exchanged between medical offices and health plans and that contain patient-identifiable health-related administrative information, including health claims, health plan eligibility, payments for care and health plan premiums, claim status, and others. The most common required electronic formats are listed in Table 1-3.

Most physician practices are required to use the HIPAA-standard electronic claim format called *X12 837 Health Care Claim*, or *837P* for short. This claim is called the professional claim because it is used to bill for a physician's services. A hospital's claim is called an institutional claim, and there are also HIPAA dental claims and drug claims. Exempt practices use the *CMS-1500 (08/05)* paper claim, which is the mandated paper claim form until October 2013, when a new version (02/12) will be required.

In addition to standards for electronic transactions for claims, the Administrative Simplification legislation establishes standard medical code sets for use in healthcare transactions. For

TABLE 1-3	HIPAA Required Electronic Formats
X12 270/271 Health Care Eligibility Benefit Inquiry and Response	Questions and answers about whether patients' health plans cover planned treatments and procedures
X12 276/277 Health Care Claim Status Request and Response	Questions and answers between providers—such as medical offices and hospitals—and payers about claims that are due to be paid
X12 278 Health Care Services Review—Request for Review and Response	Questions and answers between patients, or providers on their behalf, and managed care organizations for approval to see medical specialists
X12 835 Claims Payment and Remittance Advice	The payment and RA are sent from the payer to the provider; the payment may be sent electronically from the payer directly to the provider's bank
X12 837 Health Care Claim or Encounter	Data about the billing provider who requests payment, the patient, the diagnoses, and the procedures sent by a provider to a payer

example, ICD-9-CM (ICD-10-CM, beginning October 1, 2014) codes are required for diagnoses and CPT codes are mandated for procedures.

HIPAA legislation also requires the use of a national standard identifier for all healthcare providers. The **National Provider Identifier (NPI)** is a ten-position identifier consisting of all numbers. The numbers do not contain any information about healthcare providers, such as the state in which they practice or their provider type or specialization.

HIPAA PRIVACY REQUIREMENTS

As part of the Administrative Simplification provisions, the **HIPAA Privacy Rule** protects individually identifiable health information. Health information is information about a patient's past, present, or future physical or mental health or payment for healthcare. If this information can be used to find out the person's identification, it is referred to as **protected health information (PHI)**. Except for treatment, payment, and healthcare operations (TPO), the Privacy Rule limits the release of protected health information without the patient's consent. The acquisition, access, use, or disclosure of unsecured PHI in a manner not permitted under the HIPAA Privacy Rule is known as a *breach*.

The HIPAA Privacy Rule must be followed by all covered entities—health plans, healthcare clearinghouses, and healthcare

National Provider Identifier (NPI) a standard identifier for healthcare providers consisting of ten numbers.

HIPAA Privacy Rule regulations for protecting individually identifiable information about a patient's health and payment for healthcare that is created or received by a healthcare provider.

protected health information (PHI) information about a patient's health or payment for healthcare that can be used to identify the person.

providers—and their business associates. The rules mandate that a covered entity must

- Adopt a set of privacy practices that are appropriate for its healthcare services.
- Notify patients about their privacy rights and how their information can be used or disclosed.
- Train employees so that they understand the privacy practices.
- Appoint a staff member to be the privacy official responsible for seeing that the privacy practices are adopted and followed.
- Secure patient records containing individually identifiable health information so that they are not readily available to those who do not need them.

Under the HIPAA Privacy Rule, medical practices must have a written Notice of Privacy Practices (see Figure 1-12). This document describes the medical office's system for using and disclosing PHI. It also establishes the office's privacy complaint procedures, explains that disclosure is limited to the minimum necessary information, and discusses how consent for other types of information release is obtained. Medical practices are required to display the Notice of Privacy Practices in a prominent place in the office. The office must make a good-faith effort to obtain a patient's written acknowledgment of having received and read the Notice of Privacy Practices in the form of a signed Acknowledgment of Receipt of Notice of Privacy Practices (see Figure 1-13).

HIPAA SECURITY REQUIREMENTS

The **HIPAA Security Rule** outlines safeguards to protect the confidentiality, integrity, and availability of health information that is stored on a computer system or transmitted across computer networks, including the Internet. While the HIPAA Privacy Rule applies to all forms of protected health information, whether electronic, paper, or oral, the HIPAA Security Rule covers only PHI that is created, received, maintained, or transmitted in electronic form. The security standards are divided into three categories: administrative, physical, and technical safeguards.

Administrative safeguards are administrative policies and procedures designed to protect electronic health information. The management of security is assigned to one individual, who conducts an assessment of the current level of data security. Once that assessment is complete, security policies and procedures are developed or modified to meet current needs. Security training is provided to educate staff members about the policies and to raise awareness of security and privacy issues.

HIPAA Security Rule regulations outlining the minimum administrative, technical, and physical safeguards required to prevent unauthorized access to protected healthcare information.

NOTICE OF PRIVACY PRACTICES

OUR COMMITMENT TO YOUR PRIVACY

Our practice is dedicated to maintaining the privacy of your protected health information (PHI). In conducting our business, we will create records regarding you and the treatment and services we provide to you. We are required by law to maintain the confidentiality of health information that identifies you. We also are required by law to provide you with this notice of our legal duties and the privacy practices that we maintain in our practice concerning your PHI. By federal and state law, we must follow the terms of the notice of privacy practices that we have in effect at the time.

We realize that these laws are complicated, but we must provide you with the following important information:

- How we may use and disclose your PHI
- Your privacy rights in your PHI
- Our obligations concerning the use and disclosure of your PHI

The terms of this notice apply to all records containing your PHI that are created or retained by our practice. We reserve the right to revise or amend this Notice of Privacy Practices. Any revision or amendment to this notice will be effective for all of your records that our practice has created or maintained in the past, and for any of your records that we may create or maintain in the future. Our practice will post a copy of our current Notice in our offices in a visible location at all times, and you may request a copy of our most current Notice at any time.

WE MAY USE AND DISCLOSE YOUR PROTECTED HEALTH INFORMATION (PHI) IN THE FOLLOWING WAYS:

The following categories describe the different ways in which we may use and disclose your PHI.

1. **Treatment.** Our practice may use your PHI to treat you. For example, we may ask you to have laboratory tests (such as blood or urine tests), and we may use the results to help us reach a diagnosis. We might use your PHI in order to write a prescription for you, or we might disclose your PHI to a pharmacy when we order a prescription for you. Many of the people who work for our practice — including, but not limited to, our doctors and nurses — may use or disclose your PHI in order to treat you or to assist others in your treatment. Additionally, we may disclose your PHI to others who may assist in your care, such as your spouse, children or parents. Finally, we may also disclose your PHI to other health care providers for purposes related to your treatment.
2. **Payment.** Our practice may use and disclose your PHI in order to bill and collect payment for the services and items you may receive from us. For example, we may contact your health insurer to certify that you are eligible for benefits (and for what range of benefits), and we may provide your insurer with details regarding your treatment to determine if your insurer will cover, or pay for, your treatment. We also may use and disclose your PHI to obtain payment from third parties that may be responsible for such costs, such as family members. Also, we may use your PHI to bill you directly for services and items. We may disclose your PHI to other health care providers and entities to assist in their billing and collection efforts.

Figure 1-12 Excerpt from a Notice of Privacy Practices

Acknowledgment of Receipt of Privacy Practices Notice

PART A: The Patient.

Name: _____

Address: _____

Telephone: _____ E-mail: _____

Patient Number: _____ Social Security Number: _____

PART B: Acknowledgment of Receipt of Privacy Practices Notice.

I, _____, acknowledge that I have received a Notice of Privacy Practices.

Signature: _____ Date: _____

If a personal representative signs this authorization on behalf of the individual, complete the following:

Personal Representative's Name: _____

Relationship to Individual: _____

PART C: Good-Faith Effort to Obtain Acknowledgment of Receipt.

Describe your good-faith effort to obtain the individual's signature on this form: _____

Describe the reason why the individual would not sign this form. _____

SIGNATURE.

I attest that the above information is correct.

Signature: _____ Date: _____

Print Name: _____ Title: _____

Include this acknowledgment of receipt in the individual's records.

Figure 1-13 Acknowledgment of Receipt of Privacy Practices Form

Physical safeguards are the mechanisms required to protect electronic systems, equipment, and data from threats, environmental hazards, and unauthorized intrusion. Threats include computer hackers, disgruntled employees, and angry patients. Health information stored on computers can be at risk from physical threats and environmental hazards, such as unplanned system outages or floods. To protect data, medical practices create regular backups of computerized information on a daily basis. The backup files are stored at a remote physical location to minimize the likelihood of data loss in a large-scale disaster.

Technical safeguards are the automated processes used to protect data and control access to data. Access to information is granted on an as-needed basis. For example, the individual responsible for scheduling may not need access to billing data. Examples of technical safeguards include computer passwords, antivirus and firewall software, and secure transmission systems for sending patient data from one computer to another.

audit trail a report that traces who has accessed electronic information, when information was accessed, and whether any information was changed.

As an additional security measure, computer programs can keep track of data entry and create an **audit trail**—a report that shows who has accessed information and when. When new data are entered or existing data are changed, a log records the time and date of the entry as well as the name of the computer operator. The practice manager reviews the log on a regular basis to detect irregularities.

STATE REGULATION

In addition to the federal government, states also regulate the health-care industry. State laws contain a patchwork of privacy protections and protections related to information security. State commissioners of insurance investigate consumer complaints about the quality of healthcare, while state laws ensure the solvency of insurance companies and managed care organizations, so that they will be able to pay claims. States may restrict price increases on premiums and other charges to patients, require that policies include a guaranteed renewal provision, and control the situations in which an insurer can cancel a patient's coverage.

1.8 THE IMPACT OF LEGISLATION: HITECH AND ACA

In addition to passing legislation that protects the privacy of health information, the federal government also passes laws that attempt to improve the quality of care provided and control the costs associated with government-funded healthcare. The federal government is the largest payer for healthcare, with almost 102 million beneficiaries—or one in three Americans. In 2009 and 2010, Congress approved two major pieces of legislation that affect healthcare: the Health Information Technology for Economic and Clinical Health (HITECH) Act and the Patient Protection and Affordable Care Act (Affordable Care Act or ACA).

Health Information Technology for Economic and Clinical Health (HITECH) Act part of the American Recovery and Reinvestment Act of 2009 that provides financial incentives to physicians and hospitals to adopt EHRs and strengthens HIPAA privacy and security regulations.

HEALTH INFORMATION TECHNOLOGY FOR ECONOMIC AND CLINICAL HEALTH ACT (2009)

The **Health Information Technology for Economic and Clinical Health Act (2009)**, part of the American Recovery and Reinvestment Act (ARRA), allocated billions of dollars to encourage physicians and hospitals to use health information technology to improve the

quality and efficiency of care provided to patients. Specifically, the legislation advances the use of health information technology by

- Requiring the government to develop standards for health information to be exchanged electronically and to use health information to improve the quality and coordination of care.
- Investing \$20 billion in health information technology infrastructure and Medicare and Medicaid incentives to facilitate the adoption of electronic health records.
- Strengthening federal privacy and security laws to protect patients' health information.

Meaningful Use

The portion of the HITECH Act that has received the most attention is the provision that provides financial incentives to physicians, hospitals, and other healthcare providers. Under the HITECH Act, physicians who adopt and use approved EHRs are eligible for annual payments of up to \$44,000 from Medicare and Medicaid. Physicians who derive at least 30 percent or more of their income from Medicaid are eligible for up to \$64,000, and doctors who practice in underserved areas are eligible for an extra 10 percent from Medicare.

To be eligible for the financial incentives, providers must do more than simply purchase EHRs; they must demonstrate meaningful use of the technology. **Meaningful use** is the utilization of certified EHR technology to improve quality, efficiency, and patient safety in the healthcare system. Incentives for achieving meaningful use are divided into three stages. The government has specified a series of objectives that determine whether meaningful use requirements have been met. In stage 1 (2011–2012), these objectives consist of a core set and a menu set. The objectives differ for physicians and hospitals. Physicians must meet fifteen core objectives and five out of ten objectives from the menu set. The objectives for stage 1 are listed in Table 1-4.

meaningful use the utilization of certified EHR technology to improve quality, efficiency, and patient safety in the healthcare system.

The HITECH Act's Impact on Privacy and Security

Recognizing that existing HIPAA laws did not provide adequate protection in an increasingly electronic healthcare environment, the HITECH Act also increased protection for patients' privacy by implementing new breach notification requirements, higher monetary penalties for HIPAA violations, and greater enforcement of the Privacy and Security Rules.

To prevent breaches of health information, the HITECH Act requires patients' protected health information to be made secure by using specified technologies and methods that will make the PHI "unable, unreadable, or indecipherable to unauthorized individuals." If a breach of unsecured health information occurs, HITECH requires healthcare providers, health plans, and other entities covered by HIPAA to notify patients, the federal government, and the media of

TABLE 1-4 Meaningful Use Core and Menu Objectives (Stage 1)

Core Objectives	Menu Set
Implement computerized physician order entry (CPOE)	Implement drug-formulary checks
Perform drug-drug and drug-allergy interaction checks	Incorporate clinical lab test results as structured data
Generate and transmit permissible prescriptions electronically	Generate lists of patients by specific conditions
Record patient demographics	Send reminders to patients per patient preference for preventive/follow-up care
Maintain up-to-date problem list of current and active diagnoses	Provide patients with timely electronic access to their health information
Maintain active medication list	Use certified EHR technology to identify patient-specific education resources and provide to patient, if appropriate
Maintain active medication allergy list	Perform medication reconciliation
Record and chart vital signs	Provide summary of care record for each transition of care/referral
Record smoking status for patients thirteen years or older	Submit electronic data to immunization registries/systems
Implement one clinical decision support rule and ability to track compliance with rule	Provide electronic syndromic surveillance data to public health agencies
Calculate and transmit Centers for Medicare and Medicaid Services quality measure	
Provide patients with an electronic copy of their health information, upon request	
Provide clinical summaries for patients for each office visit	
Exchange key clinical information among providers of care and patient-authorized entities electronically	
Protect electronic health information	

the breach. The Act also calls for stiffer penalties for privacy and security violations.

Under HITECH, the Office for Civil Rights is required to conduct audits to ensure compliance with HIPAA rules. Previously, audits were permissible but not required. An audit is a formal examination or review undertaken to determine whether a healthcare organization's staff members comply with regulations.

Regional Extension Centers

Even with government financial incentives, successful implementation of EHRs is not expected to be quick or easy. Small practices, where most primary care is delivered, may lack the expertise and resources required to purchase, install, and use the new technology. Recognizing the challenges associated with implementing HIT, the HITECH Act called for the creation of **regional extension centers (RECs)**. Patterned after the agriculture extension service the government created almost a century ago, the RECs offer information, guidance, training, and support services to providers who are in the process of making the transition to an EHR system.

regional extension centers (RECs) centers that offer information, guidance, training, and support services to providers transitioning to an EHR system.

Health Information Exchange

To meet meaningful use criteria, providers must be able to exchange clinical information outside the organization. One of the ways that providers share information is through the use of local, state, and regional health information networks. A **health information exchange (HIE)** enables the sharing of health-related information among provider organizations according to nationally recognized standards. Examples of the use of an HIE include sharing patient records with physicians outside the physician's own medical group, transmitting prescriptions to pharmacies, and ordering tests from an outside lab. The goal of an HIE is to facilitate access to clinical information for the purpose of providing quality care to patients.

health information exchange (HIE) a network that enables the sharing of health-related information among provider organizations according to nationally recognized standards.

The **National Health Information Network (NHIN)** is a key component of the government's HIT strategy that will provide a common platform for health information exchange across the country. The NHIN is a set of standards, services, and policies that enable the secure exchange of health information over the Internet. To build a national network of interoperable health records, HIE networks must be developed at the local, state, and regional levels. In 2009, a number of hospitals, state health information exchanges, and other health-care networks, including the Department of Veterans Affairs, Kaiser Permanente, and the Utah Health Information Network, among others, began a trial implementation. At the beginning of 2012, approximately thirty-five groups had joined the trial, which is now known as the *Nationwide Health Information Network Exchange*.

National Health Information Network (NHIN) a common platform for health information exchange across the country.

PATIENT PROTECTION AND AFFORDABLE CARE ACT (2010)

In March 2010, Congress passed the Patient Protection and Affordable Care Act, which was amended by enactment of the Health Care and Education Reconciliation Act of 2010. Together, these acts are known as the **Affordable Care Act (ACA)**. Among other things, the laws include a number of provisions designed to increase access to healthcare, improve the quality of healthcare, and explore new models of delivering and paying for healthcare. These models focus on encouraging the coordination of care among physicians, hospitals,

Affordable Care Act (ACA) federal legislation passed in 2010 that includes a number of provisions designed to increase access to healthcare, improve the quality of healthcare, and explore new models of delivering and paying for healthcare.

and other providers and providing additional support to primary care practices.

Encouraging Coordination of Care

To encourage cooperation among healthcare providers, the government is providing incentives to foster the formation and operation of accountable care organizations. An **accountable care organization (ACO)** is a network of doctors and hospitals that shares responsibility for managing the quality and cost of care provided to a group of patients. A network could include primary care physicians, specialists, hospitals, home healthcare providers, and others. By making this group of providers jointly accountable for the health of their patients, the program provides incentives to coordinate care in a way that improves quality and saves money by avoiding unnecessary tests and procedures.

accountable care organization (ACO) a network of doctors and hospitals that shares responsibility for managing the quality and cost of care provided to a group of patients.

Strengthening Primary Care

In addition to efforts aimed at coordinating care among providers, the ACA also focused on methods of strengthening primary care. When primary care practices have the resources to better coordinate care; engage patients in their care plan; and provide appropriate, timely preventive care, many patients remain healthier and avoid hospitalization. The **patient-centered medical home (PCMH)** is a model of primary care that provides comprehensive and timely care to patients, while emphasizing teamwork and patient involvement. Figure 1-14 lists the core features of a PCMH.

patient-centered medical home (PCMH) a model of primary care that provides comprehensive and timely care to patients, while emphasizing teamwork and patient involvement.

Core Features of a Patient-Centered Medical Home

Personal Physicians—patients have an ongoing relationship with a physician overseeing and facilitating their healthcare.

Clinician Directed Medical Practice—a team of healthcare professionals, led by the personal physician, who collectively take responsibility for ongoing patient care.

Whole Person Orientation—the personal physician sees that all of the patient's healthcare needs are managed, not just conditions directly related to the personal physician's medical specialty, making referrals when necessary.

Coordinated/Integrated Care—care is coordinated and integrated across the healthcare system, including the patient's community hospital, home health agency, nursing home, etc. Care is monitored and tracked via electronic health records and other forms of health information exchange.

Quality and Safety—using evidence-based medicine and clinical decision-support tools, personal physicians actively engage patients with information about their conditions and options for care.

Enhanced Access—medical homes offer access to features such as nontraditional office hours and multiple communication channels, such as telephone, e-mail, web messaging, and others, to ensure patients have access to the support they need.

Payment—physicians are recognized for the added value of the services they provide, which exceed the typical physician-patient relationship.

Figure 1-14 Core Features of a Patient-Centered Medical Home

LOOKING AHEAD TO YOUR CAREER

You have begun your journey toward a successful career in the healthcare field. In this chapter, you've learned about the step-by-step medical billing cycle and the national initiatives that are designed to improve healthcare delivery. Each of the chapters that follow helps to build a knowledge of billing procedures and hands-on practice using physician practice software. Medical office administrative positions are varied, offering a range of types of job duties and opportunities for advancement. To help you think about what roles and responsibilities might be right for *you*, this section in each chapter describes a position that relates to that chapter's learning outcomes. The position may be entry-level, or a step up on the career ladder. Note that all jobs require a working knowledge of Windows-based software applications, such as Microsoft Word. In many instances, offices are also looking for employees who are proficient in a second language.

Thinking About Your Healthcare Career

1. How would you describe your computer skills? If you need to gain additional skills, how would you go about it?
2. Are you fluent in a second language? Have you ever considered learning a language?

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chapter 1 summary

LEARNING OUTCOMES/ PAGE REFERENCES	CONCEPTS TO REVIEW
<p>1.1 Explain why the use of technology in healthcare is increasing. Pages 3–4</p>	<ul style="list-style-type: none"> – Healthcare costs are rising, in part due to new treatments and an aging population. – At the same time, the quality of healthcare lags that of other developed countries. – The increasing use of technology in healthcare is viewed as one way to lower costs and improve quality.
<p>1.2 Describe the functions of practice management programs. Pages 4–6</p>	<ul style="list-style-type: none"> – Verifying insurance eligibility and benefits. – Organizing patient and payer information. – Generating and transmitting insurance claims. – Monitoring the status of claims. – Recording payments from payers. – Generating patients’ statements, posting payments, and updating accounts. – Managing collections activities. – Creating financial and productivity reports.
<p>1.3 Identify the core functions of electronic health record programs. Pages 6–14</p>	<ul style="list-style-type: none"> – Health information and data elements. – Results management. – Order management. – Decision support. – Electronic communication and connectivity. – Patient support. – Administrative processes. – Population reporting and management.
<p>1.4 List the step in the medical documentation and billing cycle that occurs before a patient encounter. Pages 14–16</p>	<ul style="list-style-type: none"> – Step 1: Preregister patients
<p>1.5 List the steps in the medical documentation and billing cycle that occur during a patient encounter. Pages 16–22</p>	<ul style="list-style-type: none"> – Step 2: Establish financial responsibility – Step 3: Check in patients – Step 4: Review coding compliance – Step 5: Review billing compliance – Step 6: Check out patients

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chapter 1 summary

LEARNING OUTCOMES/ PAGE REFERENCES	CONCEPTS TO REVIEW
<p>1.6</p> <p>List the steps in the medical documentation and billing cycle that occur after a patient encounter. Pages 22–26</p>	<ul style="list-style-type: none"> – Step 7: Prepare and transmit claims – Step 8: Monitor payer adjudication – Step 9: Generate patient statements – Step 10: Follow up payments and collections
<p>1.7</p> <p>Discuss how the HIPAA Privacy Rule and Security Rule protect patient health information. Pages 26–32</p>	<ul style="list-style-type: none"> – The HIPAA Privacy Rule regulates the use and disclosure of patients’ protected health information (PHI). To release PHI for other than treatment, payment, or healthcare operations, an authorization must be signed by the patient. The authorization document must be in plain language and have a description of the information to be used, who can disclose it and for what purpose, who will receive it, an authorization date, and the patient’s signature. – The HIPAA Security Rule requires covered entities to establish three types of safeguards to protect the confidentiality, integrity, and availability of electronic PHI: administrative safeguards (office policies and procedures designed to protect PHI); physical safeguards (mechanisms to protect electronic systems, equipment, and data from threats, environmental hazards, and unauthorized intrusion); and technical safeguards (the technology and related policies and procedures used to protect electronic data and control access to it, such as firewalls and antivirus software).
<p>1.8</p> <p>Explain how the Health Information Technology for Economic and Clinical Health (HITECH) Act and the Affordable Care Act (ACA) promote health information technology and explore new models of delivering healthcare. Pages 32–36</p>	<ul style="list-style-type: none"> – The Health Information Technology for Economic and Clinical Health (HITECH) Act allocated billions of dollars to be used to encourage physicians and hospitals to use health information technology to improve the quality and efficiency of care provided to patients. It also requires the government to develop standards for the electronic exchange of health information. – The Affordable Care Act (ACA) explores new models of delivering and paying for healthcare, while rewarding providers who coordinate care, keep costs down, and provide quality care.

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chapter 1 review

USING TERMINOLOGY

Match the terms on the left with the definitions on the right.

- | | |
|---|--|
| _____ 1. [LO 1.6] adjudication | a. A comprehensive record of health information that is created and maintained by an individual over time. |
| _____ 2. [LO 1.6] clearinghouse | b. An organization that receives claims from a provider, checks and prepares them for processing, and transmits them to insurance carriers in a standardized format. |
| _____ 3. [LO 1.3] documentation | c. A computerized lifelong healthcare record for an individual that incorporates data from all providers who treat the individual. |
| _____ 4. [LO 1.3] electronic health record (EHR) | d. A document that lists the amount that has been paid on each claim as well as the reasons for nonpayment or partial payment. |
| _____ 5. [LO 1.5] encounter form | e. A list of the procedures and diagnoses for a patient's visit. |
| _____ 6. [LO 1.8] health information exchange (HIE) | f. The utilization of certified EHR technology to improve quality, efficiency, and patient safety in the healthcare system. |
| _____ 7. [LO 1.1] health information technology (HIT) | g. A ten-step process that results in timely payment for medical services. |
| _____ 8. [LO 1.8] meaningful use | h. Health information technology applications that facilitate the day-to-day financial operations of a medical practice. |
| _____ 9. [LO 1.4] medical documentation and billing cycle | i. Information about a patient's health or payment for healthcare that can be used to identify the person. |
| _____ 10. [LO 1.8] patient-centered medical home (PCMH) | j. A model of primary care that provides comprehensive and timely care to patients, while emphasizing teamwork and patient involvement. |
| _____ 11. [LO 1.3] personal health record (PHR) | |
| _____ 12. [LO 1.2] practice management program (PMP) | |
| _____ 13. [LO 1.7] protected health information (PHI) | |
| _____ 14. [LO 1.6] remittance advice (RA) | |
| _____ 15. [LO 1.6] revenue cycle management (RCM) | |



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- k.** Series of steps that determine whether a claim should be paid.
- l.** A record of healthcare encounters between the physician and the patient, created by the provider.
- m.** A network that enables the sharing of health-related information among provider organizations according to nationally recognized standards.
- n.** Technology that is used to record, store, and manage patient healthcare information.
- o.** The process of managing the activities associated with a patient encounter to ensure that the provider receives full payment for services.

CHECKING YOUR UNDERSTANDING


Choose the best answer.

- 1.** [LO 1.5] A patient information form contains information such as name, address, employer, and
 - a. a procedure code.
 - b. insurance coverage information.
 - c. charges for procedures performed.
- 2.** [LO 1.5] Information about a patient's medical procedures that is needed to create an insurance claim is found on the
 - a. remittance advice.
 - b. encounter form.
 - c. patient information form.
- 3.** [LO 1.3] Electronic health records are used to record data such as physicians' reports of examinations, surgical procedures, tests results, and
 - a. billing codes.
 - b. X-rays.
 - c. insurance claims.
- 4.** [LO 1.7] Many medical offices assign _____
to individuals who have access to computer data as a security measure.
 - a. identification numbers
 - b. private offices
 - c. passwords

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5. [LO 1.8] A network of doctors and hospitals that shares responsibility for managing the quality and cost of care provided to a group of patients is known as
 - a. a health information exchange.
 - b. an accountable care organization.
 - c. a health information network.
6. [LO 1.6] Managing the activities associated with a patient's encounter to ensure that the provider receives full payment for services is known as
 - a. electronic data interchange.
 - b. accounting cycle.
 - c. revenue cycle management.
7. [LO 1.1] The increasing number of treatments available for medical conditions, combined with _____, is contributing to rising health-care costs.
 - a. the increased emphasis on primary care
 - b. the aging population
 - c. the use of electronic prescribing
8. [LO 1.2] Practice management programs can be used to verify insurance eligibility, create and transmit insurance claims, and
 - a. order lab tests.
 - b. create reports.
 - c. record vital signs.
9. [LO 1.4] During preregistration, it is important to obtain the patient's name and contact information, the reason for the visit, and
 - a. whether the patient is new to the practice.
 - b. the names and ages of all household members.
 - c. the medical history of the patient's immediate family.
10. [LO 1.6] Claims are subjected to a series of reviews, or _____, before being transmitted to a payer.
 - a. status reports
 - b. adjudications
 - c. edits

 Enhance your learning by completing these exercises and more at <http://connect.mcgraw-hill.com>

APPLYING YOUR KNOWLEDGE

Answer the questions below in the space provided.

- 1.1.** [LO 1.1–1.3] Now that you understand the functions of practice management programs and electronic health records, explain why many in the healthcare field believe these programs can trim costs and improve quality.

- 1.2.** [LO 1.4–1.6] List the ten steps in the medical billing cycle. Next to each step, note whether a practice management program, electronic health record program, or both would be used to accomplish the tasks in each step. Use PMP for practice management, EHR for electronic health record, and PMP/EHR to indicate that both programs are used.

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THINKING ABOUT IT

Answer the questions below in the space provided.

- 1.1.** [LO 1.5] Why is it important to verify a patient's insurance before the office visit?

- 1.2.** [LO 1.5] Why is it necessary to collect estimated payments from patients during check-in?

- 1.3.** [LO 1.3, 1.5, 1.6] Why does a medical insurance specialist need to learn about electronic health records?



STOP! Before you proceed on your CiMO adventure, read these important tips. You need to make sure you have access to Medisoft® Advanced Version 17 and the related “CiMO8e” Student Data file!

Be sure to download a copy of the “McGraw-Hill Guide to Success for CiMO, 8e” from the Information Center of the book’s website at www.mhhe.com/cimo8e for much more detail on the items mentioned on the next three pages.

With this 8th edition of CiMO, there are multiple options to access Medisoft. Students, please be sure to check with your instructor for the option you will use in your class.

Option 1: Install the Medisoft Program from a CD and Download the Student Data File.

The Student Data File contains the medical practice, physicians, and patients required to complete the exercises in Chapters 2–14.

a) If you are using a computer at your school [Instructor Edition CD]

Medisoft will most likely already be installed on the computer, so you don’t need to install the program. You do still need to download and install the Student Data File (see page 45).

b) If you are working on your own computer [Student At-Home Edition CD]

You will need to purchase the Student At-Home Medisoft CD and install the program on your computer. You also need to download and install the Student Data File (see page 45).

Option 2: Complete the Exercises Through Connect Plus.

Connect Plus is McGraw-Hill’s online assignment and assessment solution. No installation or downloads are needed with this option! In this option, the Student Data File is built into the Medisoft exercises in Connect Plus.

To use this option, students will need to make sure they are registered into their instructor’s section in Connect Plus.

NEED HELP?

Contact McGraw-Hill’s Customer Experience Group (CXG). Visit the CXG website at www.mhhe.com/support. Browse our FAQs (Frequently Asked Questions) and product documentation, and/or contact a CXG representative. CXG is available Sunday through Friday.

Instructions for Option 1: Install the Medisoft Program from a CD and Download the Student Data File.

a) If you are using a computer at your school [Instructor Edition CD]

STEP 1: Determine whether Medisoft Advanced Version 17 is installed on your school's computer. (If it is already installed, skip to Step 3.) To find out if it is installed:

1. Click the Start button, select All Programs, and look for the Medisoft folder. If you find a Medisoft folder, click Medisoft Advanced to launch the program. Once the program is open, determine which version of Medisoft is installed. Click Help on the menu bar and then click About Medisoft. Look in the window that appears, which lists the version number of the program.



2. If you see Version 17, skip to Step 3.

STEP 2: Install Medisoft Version 17 if it is not already on your school computer.

Students, please check with your instructor before proceeding.

1. To install the software from the CD, go to the "Guide" at www.mhhe.com/cimo8e for instructions.

STEP 3: Check to see if the "CiMO8e" Student Data File is installed. To find out if it is installed:

1. Start Medisoft Advanced Version 17 by double-clicking the desktop icon. Look at the title bar that contains the words "Medisoft Advanced." If the "CiMO8e" Student Data File has already been installed, you should see the "CiMO8e" to the right of "Medisoft Advanced".



2. If you see CiMO8e, close the program and go to Chapter 2! If not, proceed to Step 4.

STEP 4: Install the "CiMO8e" Student Data File if your computer does not have it.

1. Go to www.mhhe.com/cimo8e and click on the Student Edition link.
2. Click on the link for the Medisoft Student Resources page.
3. Look at the relevant chapter in the "Guide" to walk you through downloading the zip file to your computer with the Student Data File installer.
4. **Warning:** Make sure you do not have the Medisoft program open on your computer when you install the Student Data File.

b) If you are working on your own computer [Student At-Home Edition CD]

To purchase a copy of this optional version, check with your instructor first.

STEP 1: To install the software from the CD, go to the "Guide" at www.mhhe.com/cimo8e for instructions.

STEP 2: To install the "CiMO8e" Student Data File, refer back to Step 4 on page 45.

Instructions for Option 2: Complete the Exercises Through Connect Plus.

STEP 1: Make sure you have your Connect Plus access code, either through the card that came with your book or via online.

STEP 2: Get the specific URL for this Connect Plus course from your instructor and register yourself in that section.

STEP 3: Read the relevant chapters of the “McGraw-Hill Guide to Success for CiMO, 8e” to make sure your settings are ready to complete the exercises and to get an understanding of how the different modes of the simulated exercises work. The different modes are:

- Demo Mode—watch a demonstration of the exercise.
- Practice Mode—try the exercise yourself with guidance.
- Test Mode—complete the exercise on your own.
- Assessment Mode—answer three to four conceptual questions about the exercise you just completed.

Remember, no downloading or installation of files is needed with this option. This refers to both the Medisoft software and the Student Data File, which are already part of Connect Plus.

NEED HELP?

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