CHAPTER 2

Billing and Coding for Health Services

LEARNING OBJECTIVES

After studying this chapter, you should be able to do the following:

1. Describe the revenue cycle for healthcare firms.
2. Understand the role of coding information in healthcare organizations in claim generation.
3. Define the basic characteristics of charge masters.
4. Define the two major bill types used in healthcare firms.
5. Appreciate the role of claims editing in the bill submission process.

Real-World Scenario

Esther Martinez, the chief financial officer of LEP Medical Group, was concerned by the reduction in both gross and net revenue during the last 3 months. The revenue reduction was most pronounced in the outpatient arena and represented a 15% reduction from prior-year levels. Loss of this revenue had eroded LEP Medical Group's already thin operating margins, and the organization was now operating with losses.

Esther's first thought was that the volume of outpatient visits may be down from prior-year levels and perhaps had begun to trend down in general. She asked her lead financial analyst, Susan Kim, to report on comparative volumes for last year and this year. Susan's report showed that not only were total numbers of outpatient visits above last year, but they had been trending upward over the last few months. Furthermore, the increases in volumes appeared relatively uniform across all specialties, indicating a fairly universal increase in demand for services. Esther then directed Susan to review "revenue and usage" summaries for the current year and last year. A revenue and usage report would show the patient accounts, the payer, department (cost center), product line, and the specific charge codes that were charged to the accounts, along with the quantity of items billed, dollar amount billed, and associated Current Procedural Terminology (CPT)/Healthcare Common Procedure Coding System (HCPCS) codes, creating the ability to summarize at different levels.

After reviewing these summary reports, Susan reported back to Esther with some startling news. Volumes for several procedures in the medical group's "charge master" were well below prior-year levels. Specifically, the number of drug administration codes that are reported when an injectable or infusible drug is administered were well below prior-year levels at all sites, including their outpatient infusion center. This was surprising because the number of injectable and infusible drugs had actually increased.

Esther thought she had discovered the problem and reported back to her chief executive officer, Leslie Martin. However, Leslie responded to Esther that this would account for the loss in gross revenue, but she was

unsure how or if this would impact the net revenue—meaning, do we receive reimbursement for these services? Leslie believed that the professional revenue received for the drugs themselves would be inclusive of other related fees.

Esther said that this was a good point and she would do some additional research and report back to Leslie. Esther found that Medicare provides a separate professional fee payment for the drug administration procedure when performed in outpatient visits. The average loss for the undocumented procedure codes appeared to average about $50 per occurrence. Esther also found that many of their commercial payers on average paid a percentage of billed charge. Failure to report these procedures for these payers would result in lost net revenue. The only remaining task was to discover why charges for drug administration procedures for outpatient procedures were not being recorded and either conduct education to ensure the charges were being dropped or build rules in the electronic medical record system to drop the correct corresponding administration charges. **Table 2.1** shows the national average Medicare professional reimbursement for 2021 for drug administration.

Table 2.1 Medicare Coding and Payment Rates for Drug Administration Services under the Physician Fee Schedule

CPT Codes	Description	2020 Rate	2021 Rate
Hydration			
96360	Intravenous infusion, hydration; initial, 31 minutes to 1 hour.	$ 34.65	$ 36.29
96361	Intravenous infusion, hydration; each additional hour	13.71	13.96
Therapeutic, Prophylactic, and Diagnostic Infusions			
96365	Therapeutic, prophylactic, and diagnostic injections and infusions , initial, up to 1 hr	71.46	73.62
96366	Therapeutic, prophylactic, and diagnostic injections and infusions; each additional hour	22.01	22.33
96367	Therapeutic, prophylactic, and diagnostic injections and infusions; additional sequential infusion, each additional hour	31.40	32.10
96368	Therapeutic, prophylactic, and diagnostic injections and infusions, concurrent infustion	21.29	21.28
Chemotherapy and Complex Drug/Biologic Infusions			
96413	Chemotherapy administration, intravenous infusion; up to 1 hour, single or initial substance or drug	141.47	148.30
96415	Chemotherapy administration, intravenous infusion; each additional hour	30.68	31.40
96417	Chemotherapy intravenous; each additional sequential infusion (different substance/drug) up to 1 hour	68.57	71.88
96422	Chemotherapy, intra-arterial infusion technique up to 1 hour	172.87	180.05
96423	Chemotherapy, intra-arterial infusion technique; each additional hour	80.12	82.70
96416	Chemotherapy, initiation of prolonged intravenous infusion (>8 hrs) requiring portable/implantable pump	141.47	147.25

CPT Codes	Description	2020 Rate	2021 Rate
Injections			
96372	Therapeutic, prophylactic or diagnostic injection, subcutaneous or intramuscular	$ 14.44	$ 14.31
96377	Application of on-body injector	20.21	20.24
96401	Chemotherapy administration, subcutaneous or intramuscular; nonhormonal anti-neoplastic	79.76	82.35
96402	Chemotherapy administration, subcutaneous or intramuscular; hormonal anti-neoplastic	31.76	33.15
IV Push			
96374	Therapeutic, prophylactic or diagnostic intravenous push; single or initial substance or drug	40.06	41.87
96375	Therapeutic, prophylactic or diagnostic intravenous push, new substance/drug	16.60	17.10
96373	Therapeutic, prophylactic or diagnostic injection, intra-arterial	18.77	18.49
96409	Chemotherapy administration, intravenous push, single or initial substance/drug	109.35	113.40
96411	Intravenous push, each additional chemotherapy substance/drug	59.19	62.11
96420	Chemotherapy, intra-arterial, push technique	104.66	115.50
Other Chemotherapy Administration Codes			
96425	Chemotherapy initiation of prolonged intra-arterial infusion (>8 hrs) requiring use of a portable/implantable pump	184.42	192.96
96405	Chemotherapy intralesional, up to and including 7 lesions	84.81	87.58
96406	Chemotherapy intralesional, more than 7 lesions	129.58	136.08

Note: Rates included national rates, without any geographic adjustment included (GPCI). Actual payment rates will vary for individual providers based on the geographic location of the practice.
Abbreviations: CPT, Current Procedural Technology; IA, intra-arterial; IM, intramuscular; IV, intravenous; SC, subcutaneous
Data from Center for Medicare and Medicaid Services.

LEARNING OBJECTIVE 1

Describe the revenue cycle for healthcare firms.

Healthcare firms are, for the most part, business-oriented organizations. Although there are many that have a not-for-profit designation, their ultimate financial survival depends on a consistent and recurring flow of funds from the services they provide to patients. Without an adequate stream of revenue, these firms would be forced to cease operations, which in turn could have significant impact on the availability of care in the communities they serve. In this regard, healthcare firms are similar to most business entities that sell products or services in the economy. However, the reimbursement for the services provided is very different from other industries due to the third-party payer system and the complexity of reimbursement models that exist within the U.S. healthcare system.

Figure 2.1 depicts the stages involved in the revenue cycle for a healthcare firm. The critical stages in the revenue cycle for healthcare firms are

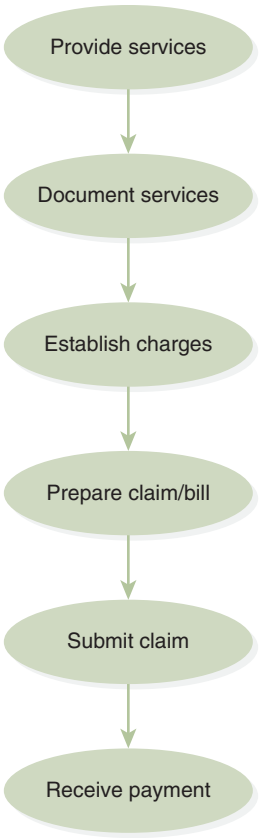


Figure 2.1 Revenue Cycle

the provision and documentation of services to the patient, the generation of charges for those services, the preparation of a bill or **claim**, the submission of the bill or claim to the respective payer, and the collection of payment.

A simple review of the six stages of the revenue cycle in Figure 2.1 hides the significant degree of complexity involved in revenue generation for healthcare providers. No other industry in our nation's economy experiences the same level of billing complexity that most healthcare firms face. Part of this complexity is related to the nature and importance of the services provided. Regulation is also a factor that further complicates documentation and billing for healthcare services. Finally, the existence of different payment methods and rates for multiple payers further complicates the revenue cycle for most healthcare firms. Payment complexity is addressed in Chapter 3.

LEARNING OBJECTIVE 2

Understand the role of coding information in healthcare organizations in claim generation.

Generating Healthcare Claims

Figure 2.2 provides more detail to the steps and processes involved in the actual generation of a healthcare bill or claim. The process and steps mirror those in Figure 2.1 except additional details unique to healthcare firms are included. The process often begins with the collection of information about the patient before the delivery of services in the patient registration function. Information about the patient, including address, date of birth, and insurance data, is collected to facilitate bill preparation after services are provided. Once services have been provided, data from that encounter(s) flow into two areas: medical documentation and charge capture.

Although the primary purpose of the data accumulated in the medical record may be related to clinical decision making, a substantial proportion of the information may also be linked to billing. It is imperative for both clinical decision making and billing that all services performed and products utilized (e.g., pharmaceuticals, implants, etc.) are documented on the patient's record. For example, the assignment of diagnosis and procedure codes within the medical record are based off of the complete documentation by physicians. These codes in turn determine the diagnosis-related group (DRG) for inpatient admissions for which hospitals typically are reimbursed. The physician's documentation also determines the codes they can bill for and receive reimbursement. Data in the medical record are also the primary source for documenting the provision of services. For example, if a patient's bill listed a series of drugs used by the patient but the medical record did not show those drugs as being used, the claim would not be supported. The primary linkage between the claim and the medical record is related to the documentation of specific services provided and their reporting in a series of clinical codes. We explore the categories of coding and their importance to billing shortly.

Data from the provision of services also flow directly to billing through the capture of charges. The posting of charges to a patient's account is usually accomplished through the issuance and collection of "charge slips" in a manual mode or through direct order entry or bar code readers in an automated system. With the proliferation of electronic medical record systems, the charges are dropped electronically, whether through manual "clicking" on the appropriate charge code, or through algorithms designed with the electronic medical record system to determine the appropriate charge (e.g., therapy-level charges). The

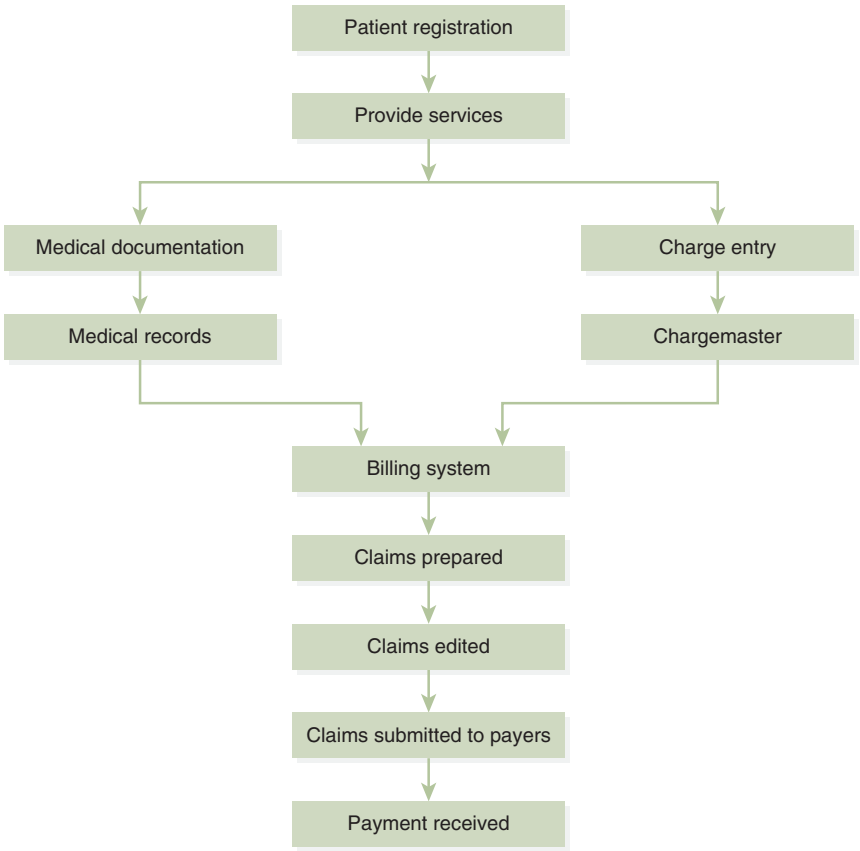


Figure 2.2 Detailed Revenue Cycle

critical link here is the firm's price list, often referred to as its "charge master" or **charge description master (CDM)**. The CDM is simply a list of all items for which the firm has established specific prices. In a hospital setting, it is not unusual to find more than 20,000 items on the charge master. In the physician or professional setting, the CDM has a set fee for each CPT code the physicians provide.

Information from the medical record and the charge master then flow into the actual claim. For most healthcare firms there are two basic categories of claims: the Uniform Bill 2004 (UB-04) and the Centers for Medicare and Medicaid Services (CMS) 1500. The UB-04 is the claim form used by most hospitals to report claims for both inpatient and outpatient services. The CMS-1500 is used primarily for physician and professional claims. **Appendix 2-A** provides samples of these two claim forms. The appropriate diagnosis and procedural codes (in ICD-10 [International Classification of Diseases, 10th edition]) are included on the claims, which in turn is then used by the payer to determine the DRG or other reimbursement based on agreed upon methods of reimbursement.

The final step before actual claim submission is claims editing. Although not all healthcare firms may perform this step, for many it is critical. During this editing process, several key areas are reviewed. First, does the claim have enough information to trigger payment by the patient's payer? For example, perhaps the claim is missing the patient's Social Security number or healthcare plan identification number. Second, does the claim meet logical standards and is it complete? For example, a claim may have a charge for laboratory panel but no charge for a blood draw to collect the sample. Editing is critical for accurate and timely payment by third-party payers. Now that we have a general overview of how the revenue cycle works to generate a claim to receive payment, we will discuss the various stages (Figure 2.2) in more detail.

Scheduling and Registration

In most cases, a patient or their representative provides a basic set of information regarding the patient before the actual delivery of services. In a physician's office, this may be done just before performance of medical services. For an elective hospital inpatient admission, it may be done a week or more before admission. In an emergency department, it may be done simultaneously as services are being provided.

A number of clinical and financial sets of information are collected at this point. From the financial perspective, three activities are especially important in the billing and collection process.

Perhaps the most important activity is *insurance eligibility verification*. If the patient has indicated they have third-party insurance coverage, it is important to have this coverage verified from the payer. The patient may also have secondary coverage from another health plan that may cover services their primary insurance provider does not cover. Verification of that coverage is also critical to accurate and timely billing. The critical piece of information to collect from the patient in this regard is their health plan identification number, which may sometimes be found through their Social Security number, group number, and other information based on the insurance plan. Queries to the health plan before service can validate the type of coverage provided by the health plan and the eligibility of the patient for the scheduled service. In today's environment, insurance verification is often done online either through the insurance company directly, or through an online service. Sometimes prior approval for elective services is required by the health plan before a claim can be submitted. This prior verification is often referred to as **prior authorization or precertification**. Many private insurers now require a form of authorization before services are provided to ensure reimbursement, often resulting in a denial if the authorization is not obtained prior to services being rendered. Retro authorizations can be obtained after the services are provided if it is deemed that the services were medical necessary. Information regarding coverage for large governmental programs such as Medicare and Medicaid is often not needed because the benefit structure is standardized. It is important, however, to verify the existence of current coverage.

The second activity in registration is often related to the computation of **copayment**, **coinsurance**, or **deductible** provisions that may be applicable for the patient. Once insurance coverage has been determined, it is usually possible to calculate the required amount that may still be due from the patient. The patient is responsible for a portion of the contracted rate to the provider. A copayment is a fixed dollar amount, e.g. $20 for a physician office visit. A coinsurance is a percentage of the agreed upon reimbursement, usually between 5% and 20%. A deductible is an out-of-pocket threshold that needs to be met before insurance coverage kicks in. With rising healthcare costs, we are seeing more people with high-deductible plans in order to have monthly premiums that are more affordable. For example, a Medicare patient without supplemental coverage may report to a hospital for a scheduled computed tomography (CT) scan. It is possible for the registration staff to calculate the amount of copayment due by the patient. The registration staff can then advise the patient regarding the amount of payment due and try to make arrangements for payment at the point of service. Medicare in general has an 80/20 rule where the patient is responsible for 20% of the reimbursement to the hospital, but not to exceed $1,556 in a year as of 2022.

The third activity in this registration process relates to **financial counseling**. Patients who have no coverage may be eligible for some discount through the healthcare firm's charity care policy. Any residual that may still be due can be discussed with the patient, and financing may be arranged before the point of service. It is also possible that an uninsured patient may be eligible for some governmental programs, especially Medicaid. Staff at the healthcare firm can advise the patient regarding eligibility and help them to complete the necessary documents required for coverage. It is important to note that the reasons for delays in payment to the provider are often the result of inaccurate information or inappropriate processes in the scheduling and registration phase. An example of a financial counseling arrangement would be a self-pay patient who could receive an 80% discount on gross charges and pay a monthly amount to pay off their medical bill over time.

Provide Services

As services are being provided to the patient, information is being recorded. Some of this information will require additional human interaction to generate an appropriate claim. This information will be reviewed and processed through the Medical Documentation and Health Information Management (HIM)/Medical Records phases of the revenue cycle. This information will eventually meet up with data that have been recorded electronically and do not require additional professional review (collected through charge entry and the charge master). Let's first discuss the areas that will require additional professional review.

Medical Documentation and HIM/Medical Records

Information regarding the services provided to the patient is recorded in the patient's medical record. Critical pieces of information contained in that record are used in the billing process and are communicated to the payers to trigger payment. The Health Insurance Portability and Accountability Act (HIPAA) of

1996 designated two specific coding systems to be used in reporting to both public and private payers:

1. International Classification of Diseases (ICD). As of October 1, 2015, version 10 is the edition used in the United States.
2. Healthcare Common Procedure Coding System (HCPCS)

HIPAA requires that two categories of information be reported to payers: diagnosis codes and procedure codes. The **ICD-10** has sets of codes that provide information for both diagnoses and procedures. For diagnosis codes, ICD-10-CM (Clinical Modification) is utilized, and for procedure codes, ICD-10-PCS (Procedure Coding System). ICD-10-CM is the U.S. clinical modification of the ICD-10 code set created by the World Health Organization. ICD-10-PCS is maintained and updated by CMS. This coding system is primarily used in the United States. The HCPCS provides information in the procedure area but does not provide information regarding diagnoses. HIPAA therefore requires that ICD-10 codes be used for diagnosis reporting for all healthcare providers, including hospitals and physicians. ICD-10 procedure codes are required for procedure reporting for hospital inpatients, whereas HCPCS codes are used for procedure reporting by hospitals for outpatient services and also by physicians (**Table 2.2**).

ICD-10-CM reflects a significant improvement over ICD-9-CM. ICD-10-CM is an expanded code set to include health-related conditions and offer a higher level of specificity by including separate codes for laterality and additional characters for greater detail. The number of available diagnosis codes expanded from over 13,000 to nearly 70,000 available codes with the 10th version. The ICD-10-CM code set can be three to seven characters in length, compared to ICD-9 diagnosis codes, which comprise three digits that may be followed by a decimal point with up to two additional digits. Each code in ICD-10-CM provides greater specificity at the sixth and seventh character levels. The hierarchical structure is similar, where the first three characters are the category of the codes and all codes with the same category have similar traits. For example, all ICD-10-CM codes that start with I50 (letter I followed by number 50) represent heart failure. Additional characters further specify the patient's exact condition. For example, I50.31 refers to acute diastolic (congestive) heart failure. **Table 2.3** provides a listing of the top 10 inpatient principal diagnoses codes reported to Medicare in FY 2018.

ICD-10-PCS codes are used to report hospital inpatient procedures. ICD-10-PCS codes are challenging, yet flexible. ICD-10-PCS codes each have a unique definition, and procedures are assigned to only one code, unlike ICD-9 procedure codes. The process of constructing procedure codes in ICD-10-PCS is logical and consistent. The ICD-10-PCS code set has expanded to always include seven characters, whereas the ICD-9 procedure codes could be three to four digits long with a decimal point placed after the second digit. To represent an open right heart catheterization (previously ICD-9 procedure code 37.21), one would consult section 4 (measurement and monitoring), body system A (physiological systems), root operation 0 (measurement), body part 2 (cardiac), approach 0 (open), function/device N (sampling and pressure), and qualifier 6 (right heart). The final code selection would be 4A020N6. **Table 2.4** shows a listing of the top 10 inpatient ICD-10 procedure codes performed on Medicare patients in 2021.

ICD-10 diagnosis and procedure codes are very important in the assignment of a DRG. DRG payment is widely used by many payers, especially Medicare. Coding therefore has a critical link to provider payment. **Table 2.5** provides a list of the top 10 DRGs reported by Medicare in fiscal year (FY) 2020.

Physicians and other clinical professionals use HCPCS codes for reporting both inpatient and outpatient procedures. HCPCS codes are also used by facilities for reporting outpatient procedures; however, they use ICD-10-PCS procedure codes for reporting inpatient procedures. There are two tiers used

Table 2.2 HIPAA-Designated Coding

	Inpatient		Outpatient	
Provider	**Diagnosis**	**Procedure**	**Diagnosis**	**Procedure**
Professional	ICD-10-CM	CPT/HCPCS	ICD-10-CM	CPT/HCPCS
Facility	ICD-10-CM	ICD–10-PCS	ICD-10-CM	CPT/HCPCS

Abbreviations: CPT, Current Procedural Technology; HCPCS, Healthcare Common Procedure Coding System; ICD-10-CM, International Classification of Diseases, 10th edition, Clinical Modification; ICD-10-PCS, International Classification of Diseases, 10th edition, Procedure Coding System

Table 2.3 2018 Primary Diagnosis Frequency

Rank	Principal Diagnosis	Frequency	Percentage of Total
All nonmaternal/nonneonatal stays		**27,833,500**	**100.0**
Top 20 diagnoses		**13,236,300**	**47.6**
1	Septicemia	2,218,800	8.0
2	Heart failure	1,135,900	4.1
3	Osteoarthritis	1,128,100	4.1
4	Pneumonia (except that caused by tuberculosis)	740,700	2.7
5	Diabetes mellitus with complication	678,600	2.4
6	Acute myocardial infarction	658,600	2.4
7	Cardiac dysrhythmias	620,000	2.2
8	Chronic obstructive pulmonary disease and bronchiectasis	569,600	2.0
9	Acute and unspecified renal failure	565,800	2.0
10	Cerebral infarction	533,400	1.9
11	Skin and subcutaneous tissue infections	529,600	1.9
12	Depressive disorders	525,000	1.9
13	Spondylopathies/spondyloarthropathy	519,600	1.9
14	Urinary tract infections	508,700	1.8
15	Respiratory failure; insufficiency; arrest	506,800	1.8
16	Schizophrenia spectrum and other psychotic disorders	399,900	1.4
17	Coronary atherosclerosis and other heart disease	358,900	1.3
18	Biliary tract disease	349,900	1.3
19	Fluid and electrolyte disorders	349,800	1.3
20	Complication of select surgical or medical care, injury, initial encounter*	338,800	1.2

*This includes complications, such as infection, for surgical or medical care other than those from cardiovascular, genitourinary, or internal orthopedic devices or from organ/tissue transplants.
Data from Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), National Inpatient Sample (NIS), 2018.

in HCPCS coding, Level I and Level II. Level I codes are referred to as CPT codes; these codes have been developed and maintained by the American Medical Association. Level I and CPT are used interchangeably to describe these sets of codes. Six main categories of CPT codes are currently used:

- Evaluation and Management (99201 to 99499)
- Anesthesia (01000 to 01999)
- Surgery (10021 to 69979)
- Radiology (70010 to 79999)
- Pathology and Laboratory (80047 to 89398)
- Medicine (90281 to 99607)

The five-digit CPT code may also contain a "modifier" that is a two-digit numeric or alphanumeric code that may provide additional information essential to process a claim. For example, modifier 95 is used to indicate that the service provided was done so virtually, i.e., a telehealth visit. **Table 2.6** provides a list of the top 20 CPT codes reported to Medicare in FY 2019 by all provider types, including institutional and professional providers.

Level II HCPCS codes were developed by CMS to report services, supplies, or procedures that were not present in the Level I (CPT) codes. There

Table 2.4 2021 Primary Procedure Frequency

Px1	Definition	Frequency	Percentage of Total
XW033E5	Introduction of Remdesivir Anti-infective into Peripheral Vein, Percutaneous Approach	395,021	3.0%
5A1D70Z	Performance of Urinary Filtration, Intermittent, Less than 6 Hours per Day	258,324	1.9%
30233N1	Transfusion of Nonautologous Red Blood Cells into Peripheral Vein, Percutaneous Approach	226,869	1.7%
02HV33Z	Insertion of Infusion Device into Superior Vena Cava, Percutaneous Approach	197,253	1.5%
5A09357	Assistance with Respiratory Ventilation, Less than 24 Consecutive Hours, Continuous Positive Airway Pressure	192,923	1.4%
4A023N7	Measurement of Cardiac Sampling and Pressure, Left Heart, Percutaneous Approach	172,602	1.3%

Courtesy of Cleverley & Associates.

Table 2.5 2020 Public Data: DRG Frequency

DRG	Definition	Frequency	Percentage of Total
871	Septicemia or severe sepsis without mechanical ventilation 96+ hours with major complication or comorbidity	947,833	7.6%
177	Respiratory infections & inflammations with major complication or comorbidity	772,583	6.2%
291	Heart failure & shock with major complication or comorbidity	537,059	4.3%
470	Major joint replacement or reattachment of lower extremity without major complication or comorbidity	217,327	1.8%
872	Septicemia or severe sepsis without mechanical ventilation 96+ hours without major complication or comorbidity	194,274	1.6%
378	Gastrointestinal hemorrhage with complication or comorbidity	167,773	1.4%
392	Esophagitis, gastrointestinal, & miscellaneous digestive disorders without major complication or comorbidity	161,382	1.3%
65	Intracranial hemorrhage or cerebral infarction with complication or comorbidity or tissue plasminogen activator in 24 hrs	158,057	1.3%
189	Pulmonary edema & respiratory failure	152,962	1.2%
683	Renal failure with complication or comorbidity	151,425	1.2%

Courtesy of Cleverley & Associates.

are two groups within the Level II HCPCS codes: permanent and temporary. Permanent codes are five-digit codes that begin with an alpha character. **Table 2.7** provides a list of the top 10 Level II permanent HCPCS codes billed to Medicare in FY 2021 for hospital outpatients.

Level II temporary HCPCS codes are used to meet a temporary need for a new code. These codes are also five-digit codes that begin with an alpha character. These codes can exist for a long time, but they may be replaced with a permanent code. **Table 2.8** provides a list of the top 10 Level II temporary

Table 2.6 2019 Public Data: CPT Frequency

HCPCS Code	HCPCS Definition	Frequency	Percentage of Total
99214	Established patient office or other outpatient visit, 30–39 minutes (level 4)	106,712,184	8.6%
99213	Established patient office or other outpatient visit, 20–29 minutes (level 3)	92,423,972	7.5%
97110	Therapy procedure using exercise to develop strength, endurance, range of motion and flexibility, each 15 minutes	60,169,391	4.9%
36415	Routine venipuncture	48,353,416	3.9%
99232	Subsequent Hospital Inpatient or Observation Care Services (level 2)	44,627,901	3.6%
97140	Manual therapy techniques, 1 or more regions, each 15 minutes (Mobilization/manipulation, manual lymphatic drainage, manual traction)	29,553,855	2.4%
85025	Complete Blood Count with differential	29,390,003	2.4%
80053	Comprehensive Metabolic Panel	29,134,190	2.4%
99233	Subsequent Hospital Inpatient or Observation Care Services (level 3)	24,528,779	2.0%
88305	Level IV—Surgical pathology, gross and microscopic examination	20,161,202	1.6%
97530	Therapeutic activity of rehabilitative techniques	20,047,600	1.6%
93010	Electrocardiogram (ECG), routine ECG with at least 12-leads; interpretation and report only	19,258,705	1.6%
17003	Destruction (e.g., laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), premalignant lesions (e.g., actinic keratoses)	19,185,352	1.5%
80061	Lipid panel	19,125,606	1.5%
97112	Neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and/or proprioception for sitting and/or standing activities.	18,006,777	1.5%
71045	X-ray examination chest 1 view	15,962,246	1.3%
83036	Hemoglobin A1C	15,189,337	1.2%
84443	Thyroid stimulating hormone laboratory test	15,101,077	1.2%
92014	Ophthalmological services, examination and evaluation	12,543,287	1.0%
93000	Routine electrocardiogram (ECG)	11,615,431	0.9%

HCPCS codes reported to Medicare in FY 2021 for hospital outpatients.

HCPCS/CPT codes have a significant effect on provider payment for both facilities and physicians. CPT codes are often linked to fee schedules for many physicians by a large number of payers, which makes coding by medical groups especially critical. CPT and Level II HCPCS codes are also used by Medicare to define payment for many hospital outpatient services in the ambulatory patient classification (APC) system.

LEARNING OBJECTIVE 3

Define the basic characteristics of charge masters.

Table 2.7 2021 Public Data: Level II (Permanent) Frequency

Level II (Perm)	Definition	Frequency	Percentage of Total
J1439	Injection, ferric carboxymaltose, 1 mg	69,182,672	6.20%
J2704	Injection, propofol, 10 mg	48,426,992	4.34%
J9271	Injection pembrolizumab	45,127,393	4.04%
J9299	Injection, nivolumab	29,723,676	2.66%
J0897	Denosumab injection	28,084,182	2.52%
G0463	Hospital outpatient clinic visit	25,099,322	2.25%
J1756	Iron sucrose injection	22,825,633	2.05%
J0878	Daptomycin injection	21,097,147	1.89%
A9585	Gadobutrol injection	18,168,762	2.0%
A9575	Injection gadoterate meglumi, 0.1 ml	17,745,723	2.0%
C9290	Injection, bupivacaine liposome	17,623,655	1.9%

Table 2.8 2021 Public Data: Level II (Temporary) Frequency

Level II (Temp)	Definition	Frequency	Percentage of Total
Q9967	Low osmolar contrast material, 300–399 mg/ml iodine concentration, per ml	108,035,237	61.7%
Q0138	Injection, ferumoxytol, for treatment of iron deficiency anemia, 1 mg (non-End Stage Renal Disease [ESRD] use)	19,400,753	11.1%
Q5101	Injection, filgrastim-sndz, biosimilar), 1 microgram	13,189,580	7.5%
Q5110	Filgrastim-aafi injection, for subcutaneous or intravenous use (Nivestym)	3,113,170	1.8%
Q5107	Inectionj mvasi 10 mg	3,057,190	1.7%
Q9966	Low osmolar contrast material, 200–299 mg/ml iodine concentration, per ml	3,014,316	1.7%
Q5106	Injection (non-ESRD use)	3,009,909	1.7%
Q5115	Injection, truxima 10 mg	2,338,281	1.3%
Q5119	Injection, ruxience, 10 mg	1,565,417	0.9%
Q5118	Injection, zirabev, 10 mg	1,478,419	0.8%

Courtesy of Cleverley & Associates.

Charge Entry and Charge Master

Performing actual medical services is the lifeblood of a healthcare firm's revenue cycle. Without the provision of services and documentation of those services, there is no revenue, but it is imperative that charges for those services are captured. A service that is performed but not billed does not produce revenue. The three greatest concerns in billing are the following:

- Capture of charges for services performed
- Incorrect billing
- Billing late charges

Charge capture is usually accomplished in one of two ways. Historically, many providers have used actual paper documents or charge slips to identify services performed.

However, with the implementation of the electronic health record (EHR), providers more frequently are applying charges to accounts through an order entry system. This method may involve direct entry of charges to the patient's account through a computer terminal. Scanning of bar codes may also be used.

Sometimes healthcare firms use a **charge panel** or **charge explosion** system to better organize charge entry for selective services. For example, a specific type of surgery may routinely require a standardized set of supplies. Rather than entering all of these supplies, one code may be used that then explodes into the list of supply codes used for that surgery. Lab charges are a common area where charge panels are utilized as well.

The key link between charge capture and the billing process is the **charge code** that is reflected in the order entry system or the charge slips and also represented on the firm's charge master (also known as CDM). There is a unique charge code for each service procedure, supply item, or drug in the CDM. The charge code itself is unique to the organization developing it. As a result, many thousands of items are present in the typical hospital charge master. However, other items, such as revenue code and CPT/HCPCS code (if applicable), are universally accepted and are the same across different organizations. Every charge master usually has the following six common elements:

- Charge code
- Item description
- Department number
- Charge/price
- Revenue code
- CPT/HCPCS code

Table 2.9 provides a sample of selected codes in a hospital's charge master. The first column in the charge master is the charge code or item code for the specific service or product to be billed. The second column provides a short description of the specific item code. For example, item code 3023001 is "Daily Care Fourth North." The third column is the *department number* and may reference a specific department within the firm that might also relate to their accounting system or general ledger and typically represents the department providing the service. The fourth column is the *current price* or standard price for the service or product. In some cases there may be multiple prices for a given code. For example, a hospital might price a laboratory procedure at one rate for inpatient care and at another for outpatient care. These differences may reflect differences in cost or competitive price pressure. Competition for outpatient laboratory procedures may be intense, and the hospital may believe that it must discount its price if it wants to maintain its market share for outpatient laboratory services

The charge master of physician practices can be much simpler in comparison to inpatient facility CDMs. There is no need to create a charge code, and revenue codes are not utilized for professional billing. The professional fee that physicians charge is based on CPT/HCPCS codes that each have a price associated with them. The price is often a considerable markup, or higher rate, compared to Medicare rates. The markup should be high enough to ensure capitalizing on the contracted and government reimbursement rates.

The fifth column is the revenue code. *Revenue codes* are a required field in any hospital claim that is submitted on a UB-04. Each revenue code represents a group of charge codes and revenue codes displayed on the hospital claim, while the charge codes themselves do not display on the claim given that charge codes are specific to the organization and have no meaning to a health insurance plan. If there are applicable HCPCS codes that are hard coded with the charge master, they would show up on the UB-04 with the revenue code. The current categories used have been mandated by CMS, and the current list is presented in **Table 2.10**. The last column included in many charge masters is the field for the HCPCS code.

In our sample charge master, not all entries have an HCPCS code. For example, the first two entries that relate to room and board charges do not have an HCPCS code. Also notice that surgery and anesthesia do not have HCPCS codes. For a great majority of their surgeries, most hospitals bill on a time/level basis. A trained coding professional from the HIM department assigns a CPT code or an ICD-10 procedure code to the procedure at a later point in time before billing. Where an HCPCS code is present in the charge master, less time is required in coding claims at the back end, but care needs to be taken that appropriate charge codes are used at charge entry. Utilizing the time/level billing approach with HIM assignment of appropriate procedure codes permits additional oversight for accuracy, as well as an efficiency for the maintenance of the charge master. Consider surgery where there are almost unlimited combinations of types of procedures and variable time. To have a unique line for each variation would literally explode the size of the charge master.

Table 2.9 Partial Charge Master File

Item Code	Item Description	Dept Num	Standard Price ($)	Revenue Code	HCPCS
3023001	DAILY CARE FOURTH NORTH	13030	665.50	111	
3120000	DAILY CARE ICU	13120	1,172.50	200	
4156159	MINERAL OIL 30 ML	13190	11.50	250	
4400206	SINGLE TOWEL	14430	2.25	270	
4440302	HEP C ANTIBODIES-0288	14440	53.50	300	86803
4470220	HAND XRAY-0183	14470	102.50	320	73130
4472538	C/T PELVIS W & W/O ENHANCEMENT	14302	1,069.75	350	72194
4416000	LASIK SURGERY—PER EYE	13190	2,105.25	360	66999
4416013	O.R. MINOR CHARGE—0.5 HOUR	13190	556.75	360	
4416014	O.R. MINOR CHARGE—1 HOUR	13190	770.75	360	
4416015	O.R. MINOR CHARGE—1.5 HOURS	13190	983.00	360	
4416016	O.R. MINOR CHARGE—2 HOURS	13190	1,197.25	360	
4416017	O.R. MINOR CHARGE—2.5 HOURS	13190	1,409.25	360	
4416018	O.R. MINOR CHARGE—3 HOURS	13190	1,622.25	360	
4520013	ANESTHESIA MINOR—0.5 HOUR	14520	110.25	370	
4520014	ANESTHESIA MINOR—1 HOUR	14520	151.25	370	
4520015	ANESTHESIA MINOR—1.5 HOURS	14520	192.75	370	
4520016	ANESTHESIA MINOR—2 HOURS	14520	233.00	370	
4520017	ANESTHESIA MINOR—2.5 HOURS	14520	274.75	370	
4520018	ANESTHESIA MINOR—3 HOURS	14520	317.00	370	
3167020	BLOOD TRANSFUSION	13160	303.25	391	36430
4532057	MASSAGE, 8 MINS	14532	21.00	420	97124
3050717	EVALUATION—OT	13050	130.00	430	97003
3160001	EMERG DEPT OBSERVATION 0–3 HRS	13160	241.25	450	99218
3160002	EMERG DEPT OBSERVATION 3–6 HRS	13160	406.00	450	99218
3160003	EMERG DEPT OBSERVATION 6–12 HRS	13160	492.00	450	99219
3160004	EMERG DEPT OBSERV. OVER 12 HRS	13160	592.75	450	99220
4465350	OUTPAT VISIT LEVEL 1 (NEW)	14465	78.50	510	99201
4465351	OUTPAT VISIT LEVEL 2 (NEW)	14465	92.25	510	99202
4465352	OUTPAT VISIT LEVEL 3 (NEW)	14465	112.50	510	99203
4465353	OUTPAT VISIT LEVEL 4 (NEW)	14465	159.75	510	99204
4465354	OUTPAT VISIT LEVEL 5 (NEW)	14465	209.00	510	99205

Direct coding of HCPCS codes into the charge master is referred to as **static coding** or "hard coding." When codes are left off the charge master and entered later by HIM personnel, the process is referred to as **dynamic coding** or "soft coding." Many ancillary procedures, such as laboratory or radiology procedures, can be coded statically; that is, HCPCS codes can be placed in the charge master.

Table 2.10 Revenue Code Categories

	Accommodation Revenue Codes
010X	All-Inclusive Rate
011X	R&B—Private (Medical or General)
012X	R&B—Semiprivate (2 Beds) (Medical or General)
013X	Semiprivate (3 and 4 Beds)
014X	Private (Deluxe)
015X	R&B—Ward (Medical or General)
016X	Other R&B
017X	Nursery
018X	LOA
019X	Subacute Care
020X	Intensive Care
021X	Coronary Care
	Ancillary Services Revenue Codes
022X	Special Charges
023X	Incremental Nursing Care Rate
024X	All-Inclusive Ancillary
025X	Pharmacy (See also 063X, an extension of 025X)
026X	IV Therapy
027X	Medical/Surgical Supplies and Devices (See also 062X, an extension of 027X)
028X	Oncology
029X	DME (Other than Renal)
030X	Laboratory
031X	Laboratory Pathological
032X	Radiology—Diagnostic
033X	Radiology—Therapeutic and/or Chemotherapy Administration
034X	Nuclear Medicine
035X	Computed Tomographic (CT) Scans
036X	Operating Room Services
037X	Anesthesia
038X	Blood and Blood Products
039X	Blood and Blood Component Administration, Processing and Storage
040X	Other Imaging Services
041X	Respiratory Services
042X	Physical Therapy
043X	Occupational Therapy
044X	Speech-Language Pathology
045X	Emergency Room
046X	Pulmonary Function
047X	Audiology
048X	Cardiology
049X	Ambulatory Surgical Care
050X	Outpatient Services
051X	Clinic
052X	Freestanding Clinic
053X	Osteopathic Services
054X	Ambulance
055X	Skilled Nursing
056X	Home Health—Medical Social Services
057X	Home Health—Home Health Aide
058X	Home Health—Other Visits
059X	Home Health—Units of Service
060X	Home Health—Oxygen
061X	Magnetic Resonance Technology (MRT)
062X	Medical/Surgical Supplies (Extension of 027X)
063X	Pharmacy (Extension of 025X)
064X	Home IV Therapy Services
065X	Hospice Service
066X	Respite Care
067X	Outpatient Special Residence Charges
068X	Trauma Response
069X	Pre-hospice/Palliative Care Services
070X	Cast Room
071X	Recovery Room
072X	Labor Room/Delivery
073X	EKG/ECG (Electrocardiogram)
074X	EEG (Electroencephalogram)
075X	Gastrointestinal Services
076X	Treatment or Observation Room

077X	Preventive Care Services
078X	Telemedicine
079X	Extra-Corporeal Shock Wave Therapy
080X	Inpatient Renal Dialysis
081X	Acquisition of Body Components
082X	Hemodialysis—Outpatient or Home
083X	Peritoneal Dialysis—Outpatient or Horne
084X	CAPD—Outpatient or Home
085X	CCPD—Outpatient or Home
086X	Magnetoencephalography (MEG)
087X	Reserved for Dialysis
088X	Miscellaneous Dialysis
089X	Reserved
090X	Behavioral Health Treatments/Services (See also 091X, an extension of 090X)
091X	Behavioral Health Treatments/Services (Extension of 090X)
092X	Other Diagnostic Services
093X	Medical Rehabilitation Day Program
094X	Other Therapeutic Services
095X	Other Therapeutic Services—Extension of 094X
096X	Professional Fees (See also 097X and 098X)
097X	Professional Fees (Extension of 096X)
098X	Professional Fees (Extension of 096X and 097X)
099X	Patient Convenience Items
100X	Behavioral Health Accommodations
101X–209X	Reserved
210X	Alternative Therapy Services
211X–300X	Reserved
310X	Adult Care
311X–999X	Reserved

In contrast, many surgery codes are dynamically coded, and HIM staff will assign the appropriate HCPCS code after the procedure based on documented and authenticated medical record information. Generally, when additional information is required to determine the appropriate HCPCS code, it will be soft coded.

Contracted Rates and Price Transparency

While healthcare organizations must maintain their charge masters (CDMs) and comply with all related Medicare requirements, new requirements from the CMS also require inpatient facilities to share their contracted rates for certain services as well. The CMS has implemented the 2021 Hospital Price Transparency Final. The Price Transparency Final Rule requires hospitals to submit a machine-readable file including the prices they have negotiated with insurance companies for a minimum of 300 different coded shoppable services, or services that can be scheduled or planned by a healthcare consumer in advance, including 70 specific shoppable services selected by CMS. In addition to submitting a data file with their pricing information, hospitals also must post their negotiated prices online in a consumer-friendly format or create and post an online price estimator tool for consumers (i.e., potential patients) to utilize to estimate prices themselves. The Price Transparency Final Rule is further explored in Chapter 6.

The new CMS requirement is the first formal effort to publicize insurance contracted rates (prices) in a public forum. Although CMS does make its policies and reimbursement rates public information and hospitals publish their CDMs with general charge information online, insurance companies and hospitals have not previously shared their negotiated rates in the past. The industry has been greatly impacted by this lack of transparency, which has created an environment in which providers (hospital and physicians) have negotiated contracts with commercial insurance companies without knowledge of other providers' reimbursement rates from those same insurance companies.

The CMS Price Transparency Rule represents a meaningful change in the policy landscape in which both for-profit and not-for-profit hospitals are being held accountable for sharing their pricing information and providing consumers with clear, expected costs in a manner similar to other industries. There will be further scrutiny of hospital prices with the onset of the hospital price transparency requirements where hospitals must make their prices and eventually their reimbursement rates public information on what CMS has deemed as outpatient shoppable services. **Table 2.11** provides the list of shoppable services required for compliance with CMS hospital price transparency requirements.

Table 2.11 List of Shoppable Services Hospitals Are Required to Provide Contracted Rates for under CMS Price Transparency

Specified Shoppable Service	CPT/HCPCS Code/MSDRG
Evaluation and Management Services	
Psychotherapy, 30 min	90832
Psychotherapy, 45 min	90834
Psychotherapy, 60 min	90837
Family psychotherapy, not including patient, 50 min	90846
Family psychotherapy, including patient, 50 min	90847
Group psychotherapy	90853
New patient office or other outpatient visit, typically 30 min	99203
New patient office of other outpatient visit, typically 45 min	99204
New patient office of other outpatient visit, typically 60 min	99205
Patient office consultation, typically 40 min	99243
Patient office consultation, typically 60 min	99244
Initial new patient preventive medicine evaluation (18–39 years)	99385
Initial new patient preventive medicine evaluation (40–64 years)	99386
Laboratory and Pathology Services	
Basic metabolic panel	80048
Blood test, comprehensive group of blood chemicals	80053
Obstetric blood test panel	80055
Blood test, lipids (cholesterol and triglycerides)	80061
Kidney function panel test	80069
Liver function blood test panel	80076
Manual urinalysis test with examination using microscope	81000 or 81001
Automated urinalysis test	81002 or 81003
PSA (prostate specific antigen)	84153–84154
Blood test, thyroid stimulating hormone (TSH)	84443
Complete blood cell count, with differential white blood cells,automated	85025
Complete blood count, automated	85027
Blood test, clotting time	85610
Coagulation assessment blood test	85730
Radiology Services	
CT scan, head or brain, without contrast	70450
MRI scan of brain before and after contrast	70553
X-Ray, lower back, minimum four views	72110
MRI scan of lower spinal canal	72148
CT scan, pelvis, with contrast	72193

Specified Shoppable Service	CPT/HCPCS Code/MSDRG
MRI scan of leg joint	73721
CT scan of abdomen and pelvis with contrast	74177
Ultrasound of abdomen	76700
Abdominal ultrasound of pregnant uterus (greater or equal to 14 weeks 0 days) single or first fetus	76805
Ultrasound pelvis through vagina	76830
Mammography of one breast	77065
Mammography of both breasts	77066
Mammography, screening, bilateral	77067
Medicine and Surgery Services	
Cardiac valve and other major cardiothoracic procedures with cardiac catheterization with major complications or comorbidities	216
Spinal fusion except cervical without major comorbid conditions or complications (MCC)	460
Major joint replacement or reattachment of lower extremity without major comorbid conditions or complications (MCC)	470
Cervical spinal fusion without comorbid conditions (CC) or major comorbid conditions or complications (MCC)	473
Uterine and adnexa procedures for nonmalignancy without comorbid conditions (CC) or major comorbid conditions or complications (MCC)	743
Removal of one or more breast growth, open procedure	19120
Shaving of shoulder bone using an endoscope	29826
Removal of one knee cartilage using an endoscope	29881
Removal of tonsils and adenoid glands patient younger than age 12	42820
Diagnostic examination of esophagus, stomach, and/or upper small bowel using an endoscope	43235
Biopsy of the esophagus, stomach, and/or upper small bowel using an endoscope	43239
Diagnostic examination of large bowel using an endoscope	45378
Biopsy of large bowel using an endoscope	45380
Removal of polyps or growths of large bowel using an endoscope	45385
Ultrasound examination of lower large bowel using an endoscope	45391
Removal of gallbladder using an endoscope	47562
Repair of groin hernia patient age 5 years or older	49505
Biopsy of prostate gland	55700
Surgical removal of prostate and surrounding lymph nodes using an endoscope	55866
Routine obstetric care for vaginal delivery, including pre- and postdelivery care	59400
Routine obstetric care for cesarean delivery, including pre- and postdelivery care	59510
Routine obstetric care for vaginal delivery after prior cesarean delivery including pre- and post-delivery care	59610
Injection of substance into spinal canal of lower back or sacrum using imaging guidance	62322–62323

(*continues*)

Table 2.11 List of Shoppable Services Hospitals are Required to Provide Contracted Rates for Under CMS Price Transparency (*continued*)

Specified Shoppable Service	CPT/HCPCS Code/MSDRG
Injections of anesthetic and/or steroid drug into lower or sacral spine nerve root using imaging guidance	64483
Removal of recurring cataract in lens capsule using laser	66821
Removal of cataract with insertion of lens	66984
Electrocardiogram, routine, with interpretation and report	93000
Insertion of catheter into left heart for diagnosis	93452
Sleep study	95810
Physical therapy, therapeutic exercise	97110

LEARNING OBJECTIVE 4

Define the two major bill types used in healthcare firms.

Billing and Claims Preparation

For most healthcare providers, medical claims fall into one of two types: CMS-1500 or CMS-1450 (UB-04). Noninstitutional providers or suppliers use the CMS-1500 form to submit claims to Medicare and many other payers. Institutional providers use the CMS-1450 or UB-04 (now universally referred to as the UB-04) to submit claims to Medicare and most other payers. Sample copies of both a CMS-1500 and a UB-04 are shown in Appendix 2.A.

Most claims in today's environment are submitted in an electronic format. Usually, claims are submitted directly to the payer or indirectly to a clearinghouse where the claims are grouped and then sent to the appropriate payer. The HIPAA administrative simplification provisions direct the Secretary of Health and Human Services to adopt standards for administrative transactions, code sets, and identifiers as well as standards for protecting the security and privacy of health data. After October 16, 2003, all providers who were not small providers (institutional organizations with fewer than 25 full-time employees or physicians with fewer than 10 full-time employees) had to send all claims electronically via electronic data interchange (EDI) in the HIPAA format.

The electronic format required under HIPAA is 837I ("I" stands for institutional, also known as hospital-based claims) for the UB-04 and 837P ("P" stands for professional, also known as provider-based claims) for the CMS-1500. These formats specify both the nature of data exchange and the required data fields. There have been a few additional data elements included in the 837I and 837P protocols that were not in the current CMS-1500 and UB-04 claim forms.

Two primary payment grouping algorithms are DRGs and APCs, both of which are used by Medicare for hospital payment and also many commercial payers. Both DRGs and APCs are assigned based on data in the UB-04. A DRG is often assigned depending on values found in the UB-04 for ICD-10-PCS procedure codes and ICD-10-CM diagnosis codes. Surgical procedures require an ICD-10-PCS procedure code and may also require an ICD-10-CM diagnosis code. A medical DRG requires one or more ICD-10-CM diagnosis codes. Note that in the UB-04 form in Appendix 2-A, there are spaces allowed for up to 25 diagnosis and 25 procedure codes. Many diagnosis and procedure codes may group to more than one DRG. The diagnosis codes are sequenced starting with primary (main reason for the admission/visit) and secondary ranked in order of relevance to the admission. This sequencing provides prioritization and structure to organizing the complexities of admission with multiple comorbidities. Although not required, the ICD-10 PCS codes could be ranked in order by complexity or resource intensiveness or in order of being performed. A complete review of the DRG title is necessary to understand the correct DRG assignment. To illustrate this concept, let's examine the following related DRGs:

- DRG 689 Kidney and Urinary Tract Infections with Major Complications or Comorbidities (MCC)

- DRG 690 Kidney and Urinary Tract Infections without Major Complications or Comorbidities (MCC)

Both of these DRGs have a common set of diagnosis codes, one of which must be present to assign a patient to one of these DRGs. ICD-10-CM N39.0 (Urinary tract infection, site not specified) is one of a list of diagnosis codes that would qualify. If the patient did not present with any complications or comorbidities, they would be grouped to MS-DRG 690, which carries a lower weight and payment. Examples of common complications or comorbidities would be specific types of congestive heart failure, certain diabetes conditions, and specific anemia cases. If the patient did present with a complication or comorbidity approved by Medicare, then the patient would receive the higher weighted MS-DRG assignment (MS-DRG 689), which would provide greater reimbursement for the hospital. A list of MS-DRG weights can be found in Appendix 3.A.

In 2000, Medicare payment for hospital outpatient services shifted to APC payment. Each APC is related to one or more HCPCS/CPT codes. HCPCS/CPT codes are grouped by similarity of service into buckets of APC codes with the same reimbursement. The assignment of HCPCS/CPT codes is presented in the UB-04 claim form in field locator (FL) #44, HCPCS/Rates. For many inpatient claims, there may be no HCPCS/CPT codes presented. The sample claim in Appendix 2.A is for an inpatient claim, and no HCPCS codes are presented. Items are aggregated at the revenue code level. For example, all laboratory procedures are grouped under Revenue Code 300. Outpatient claims, however, show detailed procedures, and HCPCS/CPT codes will be present. For example, APC 5493 (Level 3 Intraocular Procedures) may be assigned if one of the following CPT codes is present: 65770 (Revise cornea with implant) or 67027 (Implant eye drug system). The key point to remember is that for an APC to be assigned, an HCPCS code must be present. Multiple HCPCS codes may map to one APC code, but any given HCPCS code maps to one and only one APC.

LEARNING OBJECTIVE 5

Appreciate the role of claims editing in the bill submission process.

Claims Editing

Both providers and payers use claims editing software to detect possible errors in claim submission. From the provider's perspective, they are interested in two major objectives. First, they want to ensure they receive the maximum payment for the medical services delivered to their patients. Second, providers want to shorten the amount of time from claim submission to actual payment. Payers have a similar set of incentives except they are reversed. Payers do not want to make payment in an amount that is greater than the amount of their obligation, and payers also would like to delay payment for as long as possible without violating state payment laws or contract discount terms.

Most large providers use some type of automated software for editing claims that are to be submitted to payers. These software packages check for a large number of possible errors. First, the software determines whether the requisite information for submitting a "clean claim" is present in the claim, such as the correct spelling of the patient's name and the presence of the Social Security or healthcare plan identification, diagnosis and procedure codes, and the date of service, as well as many other possible conditions. The second set of conditions that are often tested deal with the internal validity of the claim. Is the procedure consistent with the sex of the patient? Was there an injection procedure included in the claim but no injectable drug listed? Many of these edit checks may be internally developed, but a large number of them may also be related to uniform claim edits developed by Medicare.

CMS developed the National Correct Coding Initiative (NCCI) to promote national correct coding methodologies and to control improper coding that leads to inappropriate payment of Part B health insurance claims. The coding policies developed are based on coding conventions defined in the American Medical Association's CPT codes, national and local policies and edits, coding guidelines developed by national societies, analysis of standard medical and surgical practice, and review of correct coding practice. CMS has designated a series of specific edit checks that are used in determining hospital outpatient claim status. These edit checks are referred to as outpatient code edits (OCE), and at the time of this writing include 98 specific edit checks.

The OCE uses claim-level and line item–level information in the editing process. The claim-level information includes such data elements as "from" and "through" dates, ICD-10-CM diagnosis codes, type of bill, age, sex, and so on. The line-level information includes such data elements as HCPCS code with up to two modifiers, revenue code, and service units.

Each OCE results in one of six different dispositions. The dispositions help to ensure that all FI/MACs (Fiscal Intermediary/Medicare Administrative Contractors) are following similar procedures. There are four claim-level dispositions:

- Rejection: Claim must be corrected and resubmitted.
- Denial: Claim cannot be resubmitted but can be appealed.
- Return to provider: Problems must be corrected and claim resubmitted.
- Suspension: Claim requires further information before it can be processed.

There are two line item–level dispositions:

- Rejection: Claim is processed, but line item is rejected and can be resubmitted later.
- Denial: Claim is processed, but line item is rejected and cannot be resubmitted.

American National Standards Institute (ANSI) has created a condensed standardized list of X12 Claim Adjustment Reason Codes to be utilized to standardize the reasons for rejections and denials. When the claim is set back to the provider, it will apply the applicable ANSI codes. This standardized list of codes condenses what once was thousands of custom codes and messages used by various health plans to fewer than 200 codes. A list of these codes can be found in **Appendix 2.B.**" sentence with "A list of the X12 Claim Adjustment Reason Codes can be found at https://x12.org/codes/claim-adjustment-reason-codes.

The NCCI edits, a subset of the OCE, identify pairs of services that normally should not be billed by the same physician for the same patient on the same day. The NCCI includes two types of edits:

- Comprehensive/component edits identify code pairs that should not be billed together because one service inherently includes the other.
- Mutually exclusive edits identify code pairs that, for clinical reasons, are unlikely to be performed on the same patient on the same day. For example, a mutually exclusive edit might identify two different types of testing that yield equivalent results.

This area of coding edits is very complex but extremely important to the provider's ultimate payment. Sometimes the code edits appear to be inconsistent. For example, OCE edit #43 specifies that when a blood transfusion procedure code is present in the claim but there was no related blood product present, the claim is returned to the provider. There is no related OCE to detect the reverse situation, however. A blood product may be present but no transfusion procedure included. In this situation Medicare pays for the blood product, but the provider loses payment for the transfusion procedure. This is an example of an edit that is most likely added to many hospital claims editing programs.

Claim Payment

Everything we have described so far provides context for the complexities that healthcare providers face in documenting and charging for patient services. However, just because the patient claim has exited the facility does not necessarily mean the provider will be paid, paid in full, or paid quickly. In order to receive payment, providers must submit claims in a timely manner (Medicare requires claims be submitted no later than 12 months from the date of service, while most private insurers require it within 90 days) and address any challenges and questions that payers may pose. During this time, unpaid balances are sitting in the accounts receivable category, and it is common for it to take 30–45 days or longer before payment is received. In these situations, claims are often sent back to HIM and other administrative staff to address concerns, and potentially resubmit claims, prior to payments being made. While obtaining payment for services can be protracted and challenging, providers that manage the coding and billing process well are better positioned to receive timely payments.

Summary

Accurate billing and coding are essential to a healthcare firm's financial survival. This is a very complex area that requires the input of billing and coding professionals. In many healthcare firms, the billing and coding functions may report to the chief financial officer because of their integral relation to revenue generation. Failure to capture all charges associated with a patient encounter can result in significant lost revenue. Some estimates of lost charges run as high as 5% of total charges. Given the relatively low margins for most healthcare firms, this could be a catastrophic loss.

Most claims are submitted electronically to payers and must now be consistent with HIPAA provisions that govern electronic data interchange submissions. Healthcare claims are unique in many respects, but coding is an area of special importance. In most other business settings, a bill simply lists the items purchased or services rendered. In healthcare firms, the charge codes describing the services or products must be related to standard procedure codes and supplemented with diagnosis codes to document the legitimacy of the services. These codes can and do have a major role in not only the amount of payment received, but also the timeliness of that payment. Claims editing software is widely used by healthcare providers to ensure the accuracy of their claims before submission.

Assignments

1. A hospital submitting an outpatient claim would use a UB-04 claim form. What source of coding information is used to report diagnosis codes? What source of coding information is used to report procedures?
2. Elective procedures often require prior approval from the patient's insurance company. What is this approval process often called?
3. From what types of coding systems are the following codes derived?
   - H00.11, Chalazion right upper eyelid
   - 0D160ZA, Open gastric bypass surgery to jejunum
   - 69090, Ear piercing
   - G0283, Electrical stimulation
4. Including an HCPCS/CPT code directly in the charge master is called what?
5. Many DRGs are in "families" that differ by severity. There are three levels of severity: (1) MCC—Major Complication/Comorbidity, which reflects the highest level of severity; (2) CC—Complication/Comorbidity, which is the next level of severity; and (3) Non-CC—Non-Complication/Comorbidity, which does not significantly affect severity of illness and resource use. The DRG that has the MCC is usually paid at a higher rate. What can cause a DRG without MCC to be changed to a DRG with MCC?
6. A payer may delay or deny payment because of inaccurate or missing information in a submitted claim. Many contracts require payment within a specified period of time (e.g., 30 days) from submission of a "clean claim." How can providers of healthcare services avoid submitting claims that may be rejected?
7. The Medicare intermediary has returned a claim to a hospital because of OCE violation #1: invalid diagnosis code. This would imply that the procedure performed is not supported by the diagnosis code. What action can the provider take to get this claim paid?
8. What are some reasons why documentation is critical?
9. What claim form utilizes revenue codes, and what is their importance?
10. Why is important to conduct insurance eligibility verification when registering a patient?
11. What type of claim file would be used to electronically submit hospital claims completed on UB-04 forms?

Solutions and Answers

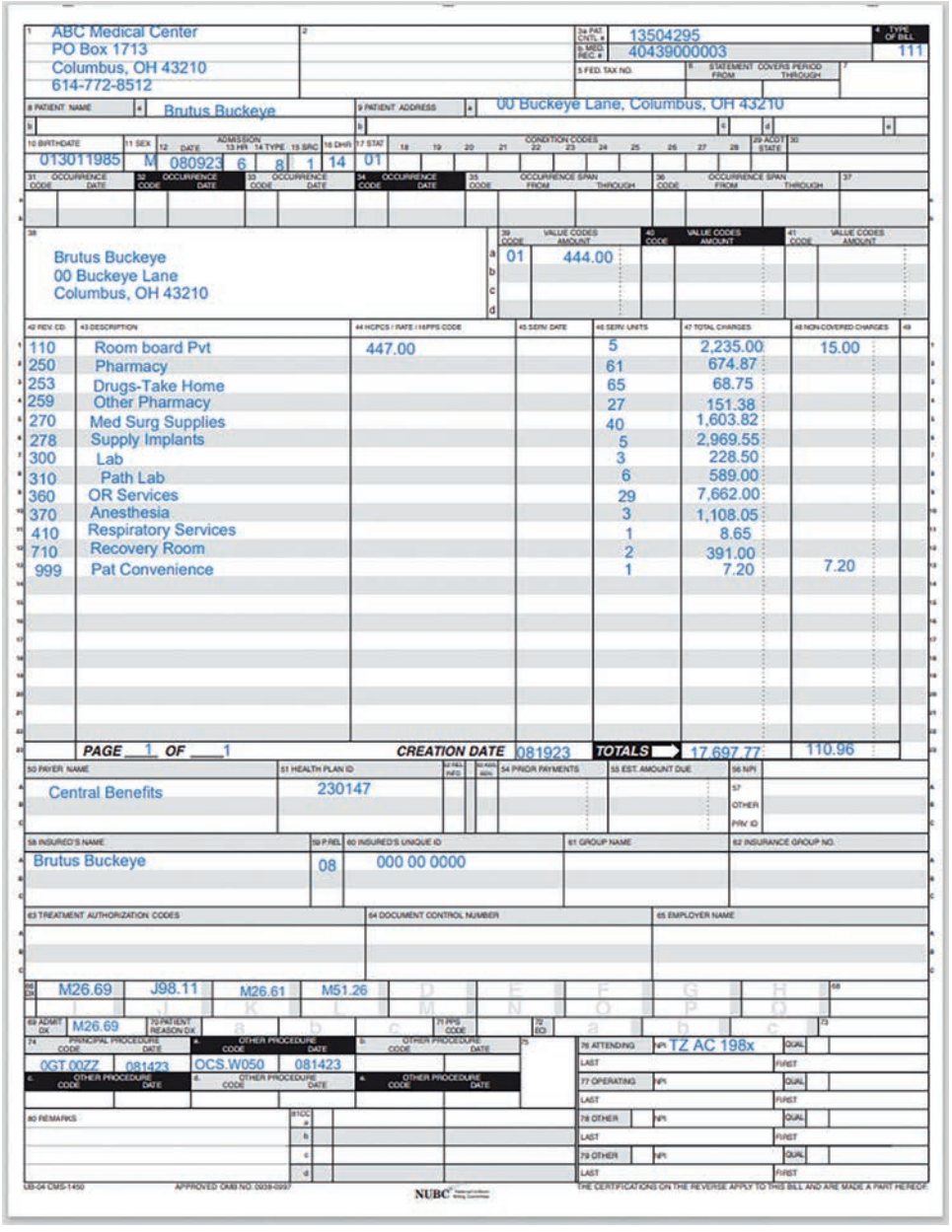
1. ICD-10 diagnosis codes are used to report diagnosis information on a UB-04 for both hospital inpatient and outpatient claims. HCPCS codes are used to report procedure codes for hospital outpatient claims.
2. This approval process prior to services being provided is known as precertification or prior authorization.
3. H00.11 (ICD-10-CM Diagnosis Code), 0D160ZA (ICD-10-PCS Procedure Code), 69090 (Level I HCPCS/CPT Code), G0238 (Level II HCPCS Code).
4. The practice of including an HCPCS/CPT code directly in the charge master is known as static coding.
5. Although a number of factors may lead to the designation of "with MCC," the presence of additional diagnosis codes that reflect the severity of the patient's health status (such as urinary tract infection, kidney failure, or sepsis) can often change the coding to a "with MCC" designation. This illustrates the importance of good physician documentation in the medical record and accurate transcription from the medical record to the claim form.
6. Insurance of clean claim submission often starts at registration. Accurate collection of patient and related insurance information is critical in the claims submission process. Claims editing software can also check for issues that may result in claims denial before submission.
7. Because this is an OCE violation where the claim is returned to the provider, the provider can correct the diagnosis code and resubmit for payment. Ideally, a well-configured claims editing system meeting all NCCI requirements would have caught this problem before submission.
8. It is imperative for both clinical decision making and billing that all services performed and products utilized (e.g., pharmaceuticals, implants, etc.) are documented on the patient's record. Reimbursement is driven first by the assignment of diagnosis and procedure codes within the medical record, which are based off of the complete documentation by physicians. These codes play a key role in assigning a DRG for inpatient admissions

for which hospitals typically are reimbursed. The physician's documentation also determines the codes they can bill for and receive reimbursement. Data in the medical record are also the primary source for documenting the provision of services. Medical record documentation is necessary for sage patient care and for substantiating patient claims.

9. Revenue codes are a required field in any hospital claim submitted on a UB-04 (or CMS 1450) form. Revenue codes each represent a group of charge codes and display on the claim. Facilities can map their charge codes and services listed on their charge master to universally accepted revenue codes. Revenue codes are important because they are a nationally recognized code set that hospitals can use to indicate services provided instead of submitting a claim with the hospital's own proprietary charge codes included.
10. For patients with third-party insurance coverage, it is important to have this coverage verified from the payer prior to providing services for several reasons. Verification of primary as well as any secondary insurance coverage is critical to accurate and timely billing. Receiving confirmation of eligibility from the health plan before the service is provided can validate the type of coverage provided by the health plan and the eligibility of the patient for the scheduled service. This process can also help staff determine if prior authorization or precertification is required for the service being provided.
11. An 837I file is utilized to submit claims for hospitals, also known as institutional providers. The information on the UB-04 forms for many patients can be transmitted electronically via electronic data interchange to health insurance plans using the 837I file format.

APPENDIX 2.A

Sample UB-04 Form and Sample CMS-1500 Form



1 ABC Medical Center
PO Box 1713
Columbus, OH 43210
614-772-8512

2a PAT CNTL # 13504295
b MED REC # 40439000003
4 TYPE OF BILL 111
5 FED. TAX NO.
6 STATEMENT COVERS PERIOD FROM THROUGH

8 PATIENT NAME a Brutus Buckeye
9 PATIENT ADDRESS a 00 Buckeye Lane, Columbus, OH 43210

10 BIRTHDATE 013011985
11 SEX M
12 DATE ADMISSION 080923
13 HR 6
14 TYPE 8
15 SRC 1
16 DHR 14
17 STAT 01
18 19 20 21 CONDITION CODES 22 23 24 25 26 27 28
29 ACDT STATE
30

31 OCCURRENCE CODE DATE
32 OCCURRENCE CODE DATE
33 OCCURRENCE CODE DATE
34 OCCURRENCE CODE DATE
35 OCCURRENCE SPAN CODE FROM THROUGH
36 OCCURRENCE SPAN CODE FROM THROUGH
37

38
Brutus Buckeye
00 Buckeye Lane
Columbus, OH 43210

39 VALUE CODES CODE AMOUNT
a 01 444.00
b
c
d
40 VALUE CODES CODE AMOUNT
41 VALUE CODES CODE AMOUNT

42 REV. CD.	43 DESCRIPTION	44 HCPCS / RATE / HIPPS CODE	45 SERV. DATE	46 SERV. UNITS	47 TOTAL CHARGES	48 NON-COVERED CHARGES	49
110	Room board Pvt	447.00		5	2,235.00	15.00	
250	Pharmacy			61	674.87		
253	Drugs-Take Home			65	68.75		
259	Other Pharmacy			27	151.38		
270	Med Surg Supplies			40	1,603.82		
278	Supply Implants			5	2,969.55		
300	Lab			3	228.50		
310	Path Lab			6	589.00		
360	OR Services			29	7,662.00		
370	Anesthesia			3	1,108.05		
410	Respiratory Services			1	8.65		
710	Recovery Room			2	391.00		
999	Pat Convenience			1	7.20	7.20	
	PAGE 1 OF 1		CREATION DATE 081923	TOTALS	17,697.77	110.96	

50 PAYER NAME A Central Benefits
51 HEALTH PLAN ID 230147
52 REL INFO
53 ASG BEN
54 PRIOR PAYMENTS
55 EST. AMOUNT DUE
56 NPI
57 OTHER PRV ID

58 INSURED'S NAME A Brutus Buckeye
59 P REL 08
60 INSURED'S UNIQUE ID 000 00 0000
61 GROUP NAME
62 INSURANCE GROUP NO.

63 TREATMENT AUTHORIZATION CODES
64 DOCUMENT CONTROL NUMBER
65 EMPLOYER NAME

67 M26.69 J98.11 M26.61 M51.26
I J K L M N O P Q
68

69 ADMIT DX M26.69
70 PATIENT REASON DX a b c
71 PPS CODE
72 ECI a b c
73

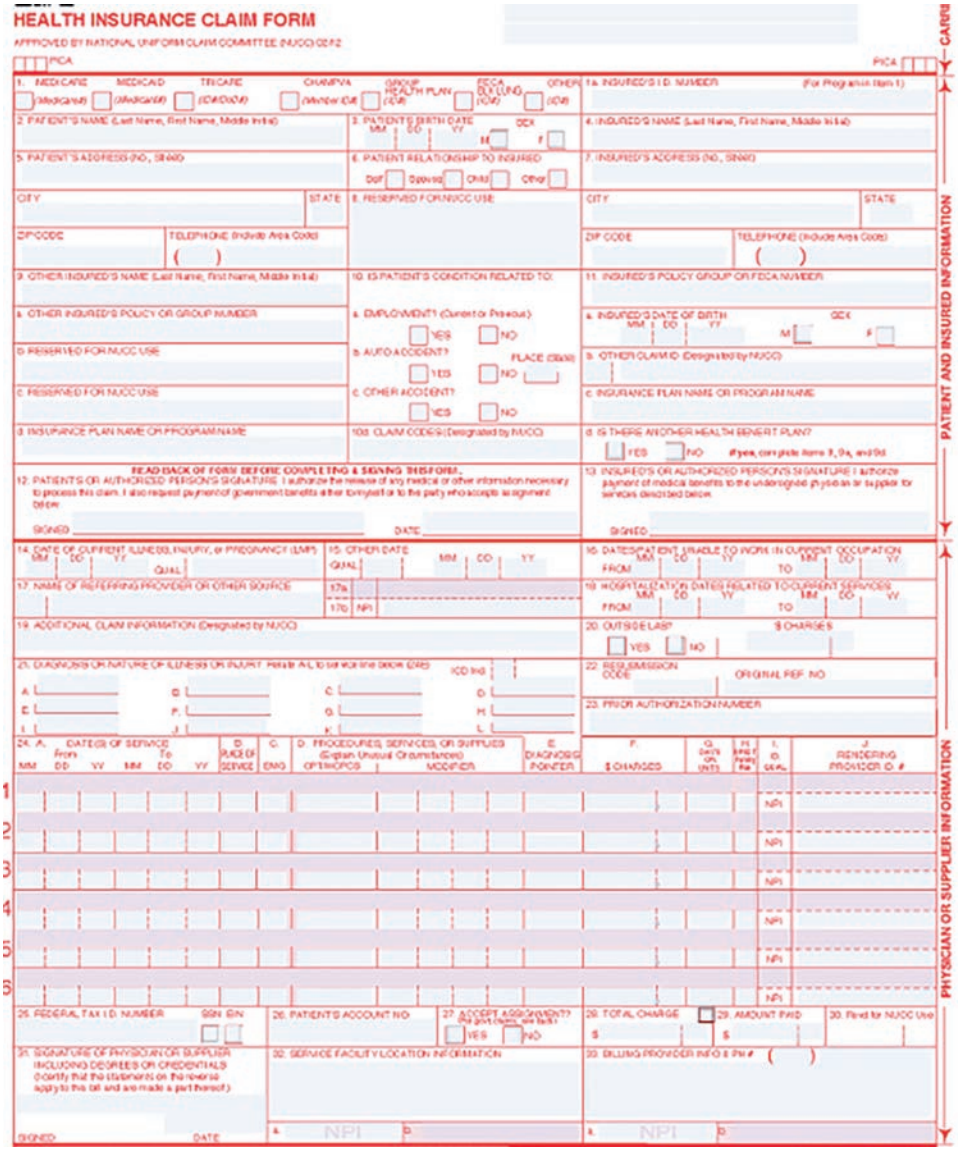
74 PRINCIPAL PROCEDURE CODE DATE 0GT.00ZZ 081423
a. OTHER PROCEDURE CODE DATE OCS.W050 081423
b. OTHER PROCEDURE CODE DATE
c. OTHER PROCEDURE CODE DATE
d. OTHER PROCEDURE CODE DATE
e. OTHER PROCEDURE CODE DATE
75

76 ATTENDING NPI TZ AC 198x QUAL LAST FIRST
77 OPERATING NPI QUAL LAST FIRST
78 OTHER NPI QUAL LAST FIRST
79 OTHER NPI QUAL LAST FIRST

80 REMARKS
81CC a b c d

UB-04 CMS-1450 APPROVED OMB NO. 0938-0997
NUBC
THE CERTIFICATIONS ON THE REVERSE APPLY TO THIS BILL AND ARE MADE A PART HEREOF.

Centers for Medicare and Medicaid Services



HEALTH INSURANCE CLAIM FORM

APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE (NUCC) 02/12

PICA

1. MEDICARE (Medicare#) MEDICAID (Medicaid#) TRICARE (ID/DoD#) CHAMPVA (Member ID#) GROUP HEALTH PLAN (ID#) FECA BLK LUNG (ID#) OTHER (ID#)

1a. INSURED'S I.D. NUMBER (For Program in Item 1)

2. PATIENT'S NAME (Last Name, First Name, Middle Initial)

3. PATIENT'S BIRTH DATE MM DD YY SEX M F

4. INSURED'S NAME (Last Name, First Name, Middle Initial)

5. PATIENT'S ADDRESS (No., Street)

6. PATIENT RELATIONSHIP TO INSURED Self Spouse Child Other

7. INSURED'S ADDRESS (No., Street)

CITY STATE

8. RESERVED FOR NUCC USE

CITY STATE

ZIP CODE TELEPHONE (Include Area Code) ( )

ZIP CODE TELEPHONE (Include Area Code) ( )

9. OTHER INSURED'S NAME (Last Name, First Name, Middle Initial)

10. IS PATIENT'S CONDITION RELATED TO:

11. INSURED'S POLICY GROUP OR FECA NUMBER

a. OTHER INSURED'S POLICY OR GROUP NUMBER

a. EMPLOYMENT? (Current or Previous) YES NO

a. INSURED'S DATE OF BIRTH MM DD YY SEX M F

b. RESERVED FOR NUCC USE

b. AUTO ACCIDENT? YES NO PLACE (State)

b. OTHER CLAIM ID (Designated by NUCC)

c. RESERVED FOR NUCC USE

c. OTHER ACCIDENT? YES NO

c. INSURANCE PLAN NAME OR PROGRAM NAME

d. INSURANCE PLAN NAME OR PROGRAM NAME

10d. CLAIM CODES (Designated by NUCC)

d. IS THERE ANOTHER HEALTH BENEFIT PLAN? YES NO If yes, complete items 9, 9a, and 9d.

READ BACK OF FORM BEFORE COMPLETING & SIGNING THIS FORM.

12. PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE I authorize the release of any medical or other information necessary to process this claim. I also request payment of government benefits either to myself or to the party who accepts assignment below.

SIGNED DATE

13. INSURED'S OR AUTHORIZED PERSON'S SIGNATURE I authorize payment of medical benefits to the undersigned physician or supplier for services described below.

SIGNED

14. DATE OF CURRENT ILLNESS, INJURY, or PREGNANCY (LMP) MM DD YY QUAL

15. OTHER DATE QUAL MM DD YY

16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION MM DD YY FROM TO

17. NAME OF REFERRING PROVIDER OR OTHER SOURCE

17a

17b NPI

18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES MM DD YY FROM TO

19. ADDITIONAL CLAIM INFORMATION (Designated by NUCC)

20. OUTSIDE LAB? YES NO $ CHARGES

21. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY (Relate A-L to service line below (24E)) ICD Ind.

A. B. C. D. E. F. G. H. I. J. K. L.

22. RESUBMISSION CODE ORIGINAL REF. NO.

23. PRIOR AUTHORIZATION NUMBER

24. A. DATE(S) OF SERVICE From MM DD YY	To MM DD YY	B. PLACE OF SERVICE	C. EMG	D. PROCEDURES, SERVICES, OR SUPPLIES (Explain Unusual Circumstances) CPT/HCPCS	MODIFIER	E. DIAGNOSIS POINTER	F. $ CHARGES	G. DAYS OR UNITS	H. EPSDT Family Plan	I. ID. QUAL.	J. RENDERING PROVIDER ID. #
1										NPI	
2										NPI	
3										NPI	
4										NPI	
5										NPI	
6										NPI	

25. FEDERAL TAX I.D. NUMBER SSN EIN

26. PATIENT'S ACCOUNT NO.

27. ACCEPT ASSIGNMENT? (For govt. claims, see back) YES NO

28. TOTAL CHARGE $

29. AMOUNT PAID $

30. Rsvd for NUCC Use

31. SIGNATURE OF PHYSICIAN OR SUPPLIER INCLUDING DEGREES OR CREDENTIALS (I certify that the statements on the reverse apply to this bill and are made a part thereof.)

SIGNED DATE

32. SERVICE FACILITY LOCATION INFORMATION

a. NPI b.

33. BILLING PROVIDER INFO & PH # ( )

a. NPI b.

PATIENT AND INSURED INFORMATION

PHYSICIAN OR SUPPLIER INFORMATION

Centers for Medicare and Medicaid Services