IJCRT.ORG

ISSN: 2320-2882



## INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

# **OVERVIEW OF MEDICAL CODING**

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*Abstract:* Medical coding is the conversion of procedures, healthcare diagnoses, medical services, and equipment into medical alphanumeric codes. International Classification of Diseases (ICD) codes represent a patient's injury or sickness. Current Procedure Terminology (CPT) codes, which relate to functions and services the healthcare provider performed on or for the patient. HCPCS level II are used to code health care equipment & supplies. Every code has its own set of rules and guidelines. Code should be placed in a particular order. Medical biller will bill for service provided on the basis of the codes report. Making even a negligible mistake may lead to significant time lost tracking down the source of mistakes, and serious delays in payments.

*Objective*: To determine the medical coding & billing errors and management among medical coders and billers.

*Methodology*: In this study literature review and qualitative telephonic interview method is used to identify the medical coding & billing errors and to know its management. Relevant article for the review of literature was selected by setting includes, using key words. A telephonic interview of 30 medical coders and billers was done to add on errors and management. Consent was taken before proceeding to the interview. Results: This paper found major medical coding errors could be due to insufficient documentation, incorrect coding, appending incorrect modifiers, coding rules and guidelines, medical coder background, physician's attributes, lack of knowledge on medical terminology & anatomy, etc. Regular audit, linking data base to easy data capture, utilizing computer assisted coding, using tools like encoder, ICD 10 data, training of medical coder/physician on- coding and billing, medical terminology, anatomy, proper & complete documentation, checking National Correct Coding Initiative (NCCI) edits for multiple coding, developing clinical documentation improvement team, etc. will help to reduce the error.

#### INTRODUCTION

The process of converting medical diagnoses, procedures, medical services, and equipment into universal medical alphanumeric codes is known as medical coding. Medical record documentation, such as transcriptions of physician's notes, laboratory and radiologic results, and so on, is used to generate diagnoses and procedure codes. Medical coding professionals assist in ensuring that the codes are accurately applied during the medical billing process, which includes abstracting information from paperwork, assigning the relevant codes, and preparing a claim to be paid by insurance companies.

Medical coding happens every time you see a healthcare provider. The healthcare provider reviews your complaint and medical history, makes an expert assessment of what's wrong and how to treat you, and documents your visit. That documentation is not only the patient's ongoing record; it's how the healthcare provider gets paid.

Medical coding is the process of application of universal alphanumeric codes to the healthcare services rendered i.e., medical diagnosis, procedures, services, and equipment provided. A patient's medical record i.e., documents such as physician's notes, laboratory reports, and services lists, are used by a medical coder to ascribe the diagnosis and procedure codes. The process of medical coding involves abstraction of the medical information from the available documentation, assigning the right diagnosis & procedure codes, and enabling the process of creation of a claim to be submitted to payers. The diagnoses and procedure codes are taken from medical record documentation, such as transcription of physician's notes, laboratory and radiologic results, etc. Medical coding professionals help ensure the codes are applied correctly during the medical billing process, which includes abstracting the information from documentation, assigning the appropriate codes, and creating a claim to be paid by insurance carriers.

#### **AIM & OBJECTIVES**

- To demonstrate a clearer understanding of the career exploration process and how their own skills and interests match up to a chosen major/career path.
- To investigate work tasks, settings, salary, job outlook and resources corresponding to careers they are considering.
- To assist in learning about job opportunities in their intended career path.
- To develop life-long skills use to seek jobs, internships, apply to graduate school and make career changes.
- To increase the clarity about career path and future plans.

## JOB PROFILE

Medical codes tell the complete story of a patient's encounter with a physician and must be as specific as possible for reimbursement toward rendered services. A medical coding specialist, also known as a medical coder, knows how to create that story. This data management professional transforms healthcare diagnoses, procedures, medical services, and equipment into universal medical alphanumeric codes, which are applied during the medical billing process. They are skilled at extracting precise information from documentation, test results, and reports, and assigning the appropriate codes to create a claim that will be paid by insurance carriers.

- Manage the program for high-quality, timely coding of diagnoses and procedures for inpatient and outpatient accounts, using ICD-10, CPT-4, and HCPCS coding classification systems, to meet billing system requirements
- Work closely with physicians, technicians, insurance companies, and other integral parties to uncover and discuss coding analysis
  results
- Develop, modify, and execute company policies and procedures that affect.

#### JOB RESPONSIBILITIES

- Retrieve and collect physician background info from various resources for reporting.
- Analyze medical malpractice claims by identifying issues, events, diagnoses, and procedures that resulted in the action.
- Prepare summaries and assign the appropriate codes that apply.
- Review claims to formulate a synopsis of facts and collaborate with claims examiners regarding the synopsis as needed.
- Make corrections to draft reports sent for physician review and submit approved reports to management in a timely fashion.
- Interact with claims staff, attorneys, and physicians regarding reports on an as needed basis immediate operations and may also have organization-wide impact
- Analyze issues where understanding situations or data, requires in-depth knowledge of organizational objectives
- Implement strategic policies, while selecting methods and evaluation criteria for obtaining accurate results.

#### MEDICAL CODING PROCESS

#### 1. Pre-Sales Requirements Analysis :

Client Requirements Analysis involves specialties covered, required turnaround time, type of files, report requirements, and formats to be followed.

#### 2. Receipt of Files from client :

We receive scanned clinical information or patient charts from the client through an FTP site.

#### 3. Download and Allocation of Files :

These files are downloaded by our Medical Coding Team and allocated to the appropriate Pre-Coders and Coders.

#### 4. Pre-Coding :

After the files are downloaded and allocated to the appropriate team, the Pre-Coders enter details such as Place of Service, Physician's Name and any price modifiers.

#### 5. Coding :

Procedural and Diagnostic Coding done by Certified Coders (CPC) using references such as ICD-10-CM, LMRP, CPT Assistant, HCPCS Level II

#### 6. Uploading of Completed Files :

They coding team also checks the compatibility of diagnosis with the procedure code. On successful completion of Coding, the files are uploaded to our FTP site

#### 7. Quality Evaluation :

The coded files are forwarded to the client from our FTP site. These files are checked for quality by the client.

#### 8. Client Feedback :

On receiving feedback from clients, we work towards improving and refining the process in order to provide the most accurate and reliable services.

#### TECHNICAL& LOGICAL SKILLS REQUIRED FOR MEDICAL CODING

- 1. Educational qualification
- 2. Knowledge of clinical anatomy
- 3. Attention to detail
- 4. Communication Skills
- 5. Ability to adapt to new technologies

#### 1. Educational qualification:

A life science background makes it easier to understand the human system and decipher the medical terminologies more easily. This basic qualification makes it easier to analyze and understand medical records essential for accurate coding. Several academies also offer coding courses to help learn the basics and understand the various coding standards.

#### 2. Knowledge of clinical anatomy:

Although a medical coding role doesn't require one to work with needles and patients' treatments, coders still need extensive knowledge about medical terms. It is essential for coders to have an in-depth understanding of anatomy, physiology, pharmacology, and diseases, like any healthcare practitioner. Sound knowledge in clinical anatomy will enable medical coders to better understand the clinical documentation and different tests of any particular health condition and then apply the right ICD and CPT guidelines and codes.

#### 3. Attention to detail:

Allocating improper alphanumeric codes to even one diagnostic medical procedure can be a real problem for health professionals and patients. Attention to detail lays a strong foundation in medical coding and is a critical quality or skill set for every medical coder. It is an essential quality that enables coders to capture relevant details in medical documents, reduce the error rates and also maintain quality. It is also about billing correctly and ensuring successful treatment outcomes.

#### 4. Communication Skills:

Although the duties of medical coders do not involve dealing with patients, excellent communication skills are necessary for their success. Coders might have to get in touch with providers or clients on any regular day to discuss important details. Therefore, maintaining a professional tone in one's accent and listening intently to what others say is essential. Along with this, one should also focus on non-verbal communication. Writing good reports and preparing grammatically correct memos can give one an added advantage.

#### 5. Ability to adapt to new technologies

Medical coders are required to operate across multiple technologies and platforms. Organizational needs are different, so individual software programs will vary. Successful coders need proficiency in a variety of technologies such as Microsoft Office, ICD-10-CM & CPT navigation tools, Healthcare systems for billing and coding, Document management software

#### **CERTIFICATION COURSES FOR MEDICAL CODING**

#### 1. Certified Medical Coder (CMC):

CMC is an 18-hour course developed by PMI that includes 1,080 minutes of medical coder training and an exam. You receive a physical course manual, digital course materials and access to the proctored certification exam. The class teaches you everything you need to know about ICD-10-CM, CPT, HCPCS and advanced coding terminology to get started in the medical coding field. The course and certification exam is the only one that PMI offers and encompasses all of your medical coding learning into one course and certification.

#### 2. Certified Coding Associate (CCA):

The CCA certification provides qualified coders with the credentials that exhibit code competency across hospitals, medical facilities and physician practices. You will learn everything you need to know to get started in the medical coding profession, including multiple sets of code and medical terminology.

#### 3. Certified Coding Specialist (CCS):

The CCS certification provides medical coders with the skills to classify medical data from patient records. Obtaining this certification shows that you can review and assign numeric codes to patient records, possess expertise in CPT and ICD-10-CM coding systems and a strong knowledge of medical terminology.

#### 4. Certified Coding Specialist Physician-Based (CCS-P):

The CCS-P certification provides medical coders with specialized skills for physician-based settings. Obtaining this certification displays your knowledge of reviewing patient records, assigning numeric codes for diagnoses and procedures and understanding CPT, ICD-10-CM and HCPCS level II coding systems.

#### 5. Certified Professional Coder (CPC-A):

The CPC certification validates your proficiency in CPT, HCPCS level II supply and procedure codes and ICD-10-CM diagnosis codes. Obtaining this certification allows you to code medical claims in a physician's office or similar setting.

#### 6. Certified Outpatient Coder (COC):

The COC certification validates your proficiency in CPT, HCPCS level II supply and procedure codes and ICD-10-CM diagnosis codes. Obtaining this certification allows you to code in an outpatient hospital or facility.

#### 7. Certified Inpatient Coder (CIC):

The CIC certification validates your proficiency in ICD-10-CM diagnosis codes used for coding medical claims in an inpatient facility or hospital.

#### 8. Certified Risk Adjustment Coder (CRC):

The CRC certification demonstrates your proficiency in the ICD-10-CM diagnosis codes specifically used in risk adjustment payment models.

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## 9. Ambulatory Surgical Center Coder (CASCC):

The CASCC credential shows your knowledge of ICD-10-CM, CPT and HCPCS level II coding with a specialty in surgical procedures, drugs and biological

## **CARRIER OPPORTUNITIES**

Medical coders work with a team that includes medical billers, auditors, documentation specialists, and other health information technicians. Each of these plays a role in the management of health information data. Health information technicians who specialize in coding are called medical coders or medical coding specialists.

Medical coders review the patient record and translate items mentioned above into classified numeric and alphanumeric codes. This may sound straightforward, but coding a medical chart often involves chasing down clues to find the best codes to tell the patient's story.

## WHERE DO MEDICAL CODERS WORK

The diversity of businesses and agencies employing medical coders opens myriad career opportunities. Besides health systems and hospitals, physician practices, and ambulatory surgery centers, coders are needed by:

- Urgent care clinics
- Sports medicine clinics
- Mental health practices
- Hospices
- Telehealth providers
- Collection agencies
- Risk adjustment vendors
- Insurance companies
- Professional liability companies
- Federal government agencies
- Information technology services
- Law firms
- Dental offices
- Durable medical equipment and supply vendors
- Imaging centers
- Physical therapy centers
- Long-term care facilities
- Home health agencies
- Consulting firms
- EHR software vendors
- Accountable care organizations
- Workman's compensation companies
- State government agencies
- Medical billing service
- Medical laboratories
- Rehabilitation services
- Clearinghouses
- Cancer

Healthcare organizations occasionally hire remote coders to manage their medical coding online, making working from home a possibility. According to AAPC's annual medical coding salary survey, more than one-third of AAPC-certified medical coders and billers work remotely

## LIST OF TOP COMPANIES HIRING FOR MEDICAL CODING JOBS

- Visionary RCM InfoTech
- Episource
- GeBBS Healthcare
- Omega Healthcare
- NTT Data
- AGS Health
- Cognizant

## SOME EXAMPLES OF MEDICAL CODES

1. ICD-10-CM Codes :

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- A00 A09 : Intestinal infectious diseases
- A15 A19 : TB
- A20 A28 : Certain zoonotic bacterial diseases
- A30 A49 : Other bacterial diseases
- A50-A64 : Infections with a predominantly sexual mode of transmission
- A65-A69 : Other spirochetal diseases
- A70-A74 : Other diseases caused by Chlamydia
- A75-A79 : Rickettsioses

## 2. ICD-10-PCS Codes :

- 0 Medical and Surgical
- 1 Obstetrics
- 2 Placement
- 3 Administration
- 4 Measurement and Monitoring
- 5 Extracorporeal or Systemic Assistance and Performance
- 6 Extracorporeal or Systemic Therapies
- 7 Osteopathic
- 8 Other Procedures
- 9 Chiropractic
- B Imaging
- C Nuclear Medicine
- D Radiation Therapy
- F Physical Rehabilitation and Diagnostic Audiology
- G Mental Health
- H Substance Abuse Treatment
- X New Technology

## 3. ICD-9-CM Diagnosis Codes

- 001- 139 : Infectious And Parasitic Diseases
- 140 239 : Neoplasms
- 240- 279 : Endocrine, Nutritional And Metabolic Diseases, And Immunity Disorders
- 280-289 : Diseases Of The Blood And Blood-Forming Organs
- 290- 319 : Mental Disorders
- 320- 389 : Diseases Of The Nervous System And Sense Organs
- 390 –459: Diseases Of The Circulatory System
- 460-519 : Diseases Of The Respiratory System
- 520-579 : Diseases Of The Digestive System
- 580-629 : Diseases Of The Genitourinary System
- 630-679 : Complications Of Pregnancy, Childbirth, And The Puerperium
- 680- 709 : Diseases Of The Skin And Subcutaneous Tissue
- 710-739 : Diseases Of The Musculoskeletal System And Connective Tissue
- 740-759 : Congenital Anomalies
- 760-779 : Certain Conditions Originating In The Perinatal Period
- 780-799 : Symptoms, Signs, And Ill-Defined Conditions
- 800-999 : Injury And Poisoning
- V01- V91 : Supplementary Classification Of Factors Influencing Health Status And Contact With Health Services
- E000- E999 : Supplementary Classification Of External Causes Of Injury And Poisoning

## SUMMARY

The process of converting medical diagnoses, procedures, medical services, and equipment into universal medical alphanumeric codes is known as medical coding. Medical record material, such as transcriptions of physician's notes, laboratory and radiologic results, are used to generate diagnoses and procedure codes. This medical coder job description sample is a great starting point for creating a job posting that will attract the best candidates. Maintain the structure and organization of this plan for best outcomes, then alter and adapt it to match the job duties and requirements of your available position. Browse Monster's medical office job listings for more suggestions on how to write your description.

## CONCLUSION

The conversion of procedures, healthcare diagnoses, medical services, and equipment into medical alphanumeric codes is known as medical coding. Reducing and managing medical coding and billing errors have a significant influence on the organization's accuracy

and income. Insufficient documentation, improper coding and modifiers, unbundling of services, lack of expertise on coding principles, anatomy, and medical language were the most common problems. Medical coders can reduce errors by receiving proper training on coding guidelines, auditing and monitoring, and imparting information on medical language, anatomy and physiology, medical abbreviations, and diagnosis. Coding and billing errors cannot be avoided, but they can be reduced and managed by understanding the cause of the issue.

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