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FAYE BROWN'S
ICD-9-CM
CODING
HANDBOOK

W I T H O U T A N S W E R S

Produced in cooperation with the Central Office on
ICD-9-CM of the American Hospital Association

1999 REVISED EDITION

ICD-9-CM

Coding Handbook, without Answers

1999 REVISED EDITION

Faye Brown

In cooperation with the
Central Office on ICD-9-CM of the
American Hospital Association



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About the Author

Faye Brown is a nationally known consultant in medical record management and data quality evaluation. She has worked extensively for national and international health care organizations, including the American Hospital Association, the Institute of Medicine, the Panamerican Health Organization, and the World Health Organization.

Mrs. Brown has been a member of the editorial advisory board for the *Coding Clinic for ICD-9-CM*, which is published by the Central Office on ICD-9-CM at the American Hospital Association. She served as acting director of the Central Office in 1990. She has also participated in several coding teleconferences presented by the AHA.

In addition to having broad hospital experience in medical record administration, Mrs. Brown has served as chairman of the Medical Record Administration Department in the School of Allied Health Sciences at Loma Linda University, Loma Linda, California. She is past president of the American Medical Record Association (1970–1971) and was named the association's distinguished member for 1978.



Editor's Note for 1999 Edition

This edition of the *ICD-9-CM Coding Handbook* includes guidelines and advice based on official coding changes that took effect on October 1, 1998. There will be no changes to *ICD-9-CM* on October 1, 1999. This decision was published in the *Federal Register* on May 7, 1999.

How to Use This Handbook

Like earlier editions of this handbook, this revision is designed to be used in several ways:

- As a textbook for academic programs in health information technology and administration
- As a text for inservice training programs
- As a self-instructional guide for individuals interested in learning coding outside a formal program or in refreshing their skills
- As a reference tool for general use in the workplace

This last usage prompted the inclusion of material that may be considered too advanced for the entry-level coder. More advanced material in chapters 9 through 29 can be omitted as needed to meet the requirements of various basic courses in the use of *ICD-9-CM*. General and basic information covered through chapter 8 should be understood before moving on to the study of individual chapters of *ICD-9-CM*, however, to provide a foundation for further study.

The handbook is designed to be used in conjunction with the three volumes of *ICD-9-CM*. The three volumes must be consulted throughout the learning process, and the material cannot be mastered without using them. The official versions published by the Government Printing Office are available only in CD-ROM format. Unofficial print versions are available from a number of publishers, often combined in one book with three divisions corresponding to the three volumes of the official version. If you are using a print version, there may be minor variations between the way material is displayed in this handbook and the way it is displayed in your version of the print classification.

The chapters in this handbook are not arranged in the same sequence as the chapters in *ICD-9-CM*. The first two sections of this handbook (chapters 1–8) provide discussions of the format and conventions followed in *ICD-9-CM* as well as basic coding guidelines and introductory material on the supplementary classifications (V codes and E codes). The remaining chapters work from the less complicated chapters to those that are more difficult. Faculty in either academic or inservice programs can rearrange this sequence to suit their particular course outlines. The appendix, which provides official guidelines for coding and reporting, is a handy reference source.

To use this handbook effectively, readers should work through each example until they fully understand the coding principles under discussion. With the exception of a few examples cited in the first part of the handbook to illustrate basic coding conventions and practice, readers should be able to arrive at correct code assignments by following the instructions provided. An incorrect answer indicates that the reader needs to review the pertinent handbook material until it is fully understood. Exercises in the body of each chapter should be completed as they come up in the discussion rather than at the end of the chapter or part. Most chapters also provide a review exercise. There is also a final review exercise at the end of the book that offers additional practice in coding.

The handbook follows three conventions:

- In some examples, a lowercase letter x is used to indicate a fourth or fifth digit that is required but cannot be assigned in the example given because certain information needed for assignment of these digits is not given. This is done to emphasize the concept and specific guideline without going too deeply into specific coding situations.
- The underlining of codes in text examples indicates correct sequencing; that is, the underlined code must be sequenced first in that particular combination of codes.

When no code is underlined, there is no implicit reason why any of the codes in the series should be sequenced first. In actual coding, of course, other information in the medical record may dictate a different sequence. This underlining convention is used in the handbook solely as a teaching device. It is not an element of the *ICD-9-CM* coding system.

- In the edition with answers, the underlining of words in exercise questions indicates the appropriate term to be referenced in using the alphabetic indexes. The underlining of codes in the answer column of the exercises indicates correct code sequencing, as it does in the examples in the main text.

Changes in Code Usage

Official coding guidelines and official coding advice, approved by the four cooperating parties responsible for administering the *ICD-9-CM* system in the United States (American Hospital Association, American Health Information Management Association, Health Care Financing Administration, and National Center for Health Statistics), are published quarterly in the *Coding Clinic for ICD-9-CM* by the Central Office on ICD-9-CM at the American Hospital Association. Such advice becomes effective as of the date of printing, although in some cases the information is merely a clarification of coding practice that is already in existence, in which case the date does not necessarily apply. In other cases, this official information may provide new advice on coding specific conditions or procedures and therefore require updating of some of the advice in this handbook or in previous issues of *Coding Clinic*.

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Format and
Conventions and Current
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1

Introduction to the *ICD-9-CM* Classification

The *International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)*, is the medical classification system used in the United States for the collection of information regarding disease and injury. Volumes 1 and 2 consist of a clinical modification of the World Health Organization's *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, Ninth Revision (ICD-9)*. *ICD-9-CM* is entirely compatible with *ICD-9* and maintains its statistical orientation. The clinical modification expands *ICD-9* codes to facilitate more precise coding of clinical diagnoses. Volume 3 of *ICD-9-CM* is a classification of operations and procedures developed for use in the United States; it is not a part of the World Health classification. For statistical purposes, the procedure classification system follows the same organization and principles on which volumes 1 and 2 are based.

A classification system is an arrangement of elements into groups according to established criteria. In *ICD-9* and *ICD-9-CM* these elements are diseases, injuries, and causes of death, which are grouped into appropriate chapters, sections, and three-digit categories. These groups are the common basis of classification for general medical statistical use. They help to answer questions about groups of related causes and provide the capacity for the systematic tabulation, storage, and retrieval of disease-related data. Each numerical code represents a counting unit, with the three-digit categories forming the basis for data tabulation. In *ICD-9-CM* many categories have been expanded by fourth- and fifth-digits that provide for additional specificity but remain collapsible back to the three-digit category.

ICD-9-CM is a closed classification system—it provides one and only one place to classify each condition and procedure. Despite the large number of different conditions to be classified, the system must limit its size in order to be usable. Certain conditions that occur infrequently or are of low importance are frequently grouped together in residual codes labeled “other” or “not elsewhere classified.” A final residual category is provided for diagnoses not stated specifically enough to permit more precise classification. Occasionally these two residual groups are combined in one code.

Medical coders must understand the basic principles behind the classification system in order to use *ICD-9-CM* appropriately and effectively. This knowledge is also the basis for understanding and applying the official coding advice provided through the *Coding Clinic for ICD-9-CM*, published by the Central Office on *ICD-9-CM* of the American Hospital Association. This official advice is developed through the editorial board for the *Coding Clinic* and approved by the four cooperating parties for *ICD-9-CM*, which include the American Hospital Association, the American Health Information Management Association, the Health Care Financing Administration, and the National Center for Health Statistics.

ICD-9-CM is presented as three volumes:

- Tabular List of Diseases and Injuries (volume 1)
- Alphabetic Index of Diseases and Injuries (volume 2)
- Tabular List and Alphabetic Index of Procedures (volume 3)

The official version of *ICD-9-CM* is available in CD-ROM format from the Superintendent of Documents, U.S. Government Printing Office (P.O. Box 371954, Pittsburgh, PA 15250-7954—GPO stock number 017-022-0316-9; telephone number 202/512-2233). Printed versions of all three volumes are also available from a number of commercial publishers.

Because of slight variations in their formats, the print volumes being used by some coders may appear slightly different from the examples in this handbook. Although some print versions now combine all three volumes into one publication, the three-volume structure is usually retained.

TABULAR LIST OF DISEASES AND INJURIES (VOLUME 1)

The main classification of diseases and injuries in the Tabular List of Diseases and Injuries (volume 1) consists of 17 chapters. (See the table of contents reproduced in figure 1.1.) Approximately half of the chapters are devoted to conditions that affect a specific body system; the rest classify conditions according to etiology. Chapter 2, for example, classifies neoplasms of all body systems, while chapter 8 addresses diseases of the respiratory system only.

In addition, two supplementary classifications are included in volume 1. The first provides V codes that are used to code conditions that are not included in the main classification but may be recorded as diagnoses. The second provides E codes that are used as additional codes to indicate the external circumstances responsible for injuries and certain other conditions. V and E codes will be discussed briefly in chapter 8 of this handbook and in more detail in the chapters discussing the conditions to which they apply.

The variation in chapter titles in *ICD-9-CM*'s table of contents represents the compromises made during the development of a statistical classification system based partially on etiology, partially on anatomical site, and partially on the circumstances of onset. The result is a classification system based on multiple axes. (By contrast, a single-axis classification would be based entirely on the etiology of the disease, the anatomical site of the disease, or the nature of the disease process.) Each chapter in the main classification is structured to provide the following subdivisions:

- Sections (groups of three-digit categories)
- Categories (three-digit code numbers)
- Subcategories (four-digit code numbers)
- Fifth-digit subclassifications (five-digit code numbers)

The basic code used to classify a particular disease or injury consists of three digits and is called a category. Most categories are expanded into subcategories by the addition of fourth digits, and many subcategories also include fifth-digit subclassifications that provide more specificity in coding. A decimal point is used to separate the basic three-digit category code from its subcategory and subclassification (for example, 842.13).

Listings of fifth-digit subclassifications appear at the beginning of the chapter, section, or three-digit category code to which they apply. Fifth-digit subclassifications must

FIGURE 1.1 Table of Contents from *ICD-9-CM*

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be assigned for all of the codes within the chapter, section, or category that follows the listing. In other cases, fourth-digit subcategory codes are expanded to display applicable fifth digits.

Codes in the Tabular List appear in numerical order. References from the Alphabetical Index to the Tabular List are by code number, not by page number. Code numbers and titles appear in bold type in the Tabular List. Instructional notes that apply to the section, category, or subcategory are also included in the Tabular List.

In addition, volume 1 includes four appendixes that provide further information:

- Appendix A, Morphology of Neoplasms, provides optional codes indicating the histological type and behavior of neoplasms.
- Appendix B, Glossary of Mental Disorders, provides definitions and descriptions of terms used in classifying mental disorders.
- Appendix C, Classification of Drugs by American Hospital Formulary Service List Number and Their ICD-9-CM Equivalents, provides help in determining appropriate E codes for use with certain types of drugs.
- Appendix D, Classification of Industrial Accidents According to Agency, is provided for use by external agencies but is rarely used in acute-care coding.

The coder should become familiar with the location and format of all four appendixes because they often provide help in arriving at correct code assignment.

ALPHABETIC INDEX OF DISEASES AND INJURIES (VOLUME 2)

The Alphabetical Index of Diseases and Injuries (volume 2) includes entries for main terms, subterms, and more specific subterms. Main terms identify disease conditions or injuries. Subterms indicate site, type, or etiology for conditions or injuries. For example, acute appendicitis is listed under **Appendicitis**, acute, and stress fracture is listed under **Fracture**, stress. Occasionally, it is necessary for the coder to think of a synonym or other alternative term in order to locate the correct entry. There are, however, exceptions to this general rule, including the following:

- Congenital conditions are often indexed under the main term **Anomaly** rather than under the name of the condition.
- Conditions that complicate pregnancy, childbirth, or the puerperium are usually found under such terms as **Delivery**, **Labor**, **Pregnancy** and **Puerperal**. They may also appear under the main term for the condition causing the complication by referencing the subterm “complicating pregnancy, childbirth, or puerperium.” (An example of this type of entry appears under the main term **Diabetes**, **diabetic** in the Alphabetical Index.)
- Many of the complications of medical or surgical care are indexed under the term **Complications** rather than under the name of the condition.
- Late effects of an earlier condition can be found under **Late**, effect(s) (of).

A clear understanding of the format of the Alphabetical Index (volume 2) is a prerequisite for accurate coding. In most print versions entries are arranged with two columns to a page, dictionary style. Understanding the indentation pattern of the entries is a very important part of learning how to use the Alphabetical Index. The following pattern is carried through consistently:

- Main terms are set flush with the left-hand margin. They are printed in bold type and begin with a capital letter.

- Subterms are indented one standard indentation (equivalent to about two typewriter spaces) to the right under the main term. They are printed in regular type and begin with a lowercase letter.
- More specific subterms are indented farther and farther to the right as needed, always indented by one standard indentation from the preceding subterm and listed in alphabetical order.
- Carryover lines are indented two standard indentions from the level of the preceding line. Carryover lines are used only when the complete entry cannot fit on a single line. They are indented farther to avoid confusion with subterm entries.

The subterms listed under the main term **Rabies** in the following entry provide an example:

Rabies 071 [main term]
 contact V01.5 [subterm]
 exposure to V01.5 [subterm]
 inoculation V04.5 [subterm]
 reaction—*see* Complications, [more specific subterm]
 vaccination [carryover line]
 vaccination, prophylactic (against) V04.5 [subterm]

Each of the subterms (contact, exposure to, inoculation, and vaccination) is indented one standard indentation from the level of the main term and is listed in alphabetical order. The fifth line is a more specific entry (“reaction”) under the subterm “inoculation,” and the sixth line is a carryover line indented two standard indentions from the preceding line.

Exercise 1.1

A reproduction of a page from volume 2 is shown below. Label the indicated lines as either main terms, subterms, or carryover lines.

1.	Racket nail 757.5
	Radial nerve — <i>see</i> condition
2.	Radiation effects and sickness — <i>see also</i> Effect, adverse, radiation
3.	cataract 366.46 dermatitis 692.89
4.	sunburn 692.71 Radiculitis (pressure) (vertebrogenic) 729.2 accessory nerve 723.4 anterior crural 724.4 arm 723.4 brachial 723.4 cervical NEC 723.4 due to displacement of intervertebral disc
5.	— <i>see</i> Neuritis, due to, displacement intervertebral disc
6.	leg 724.4 lumbar NEC 724.4 lumbosacral 724.4 rheumatic 729.2 syphilitic 094.89 thoracic (with visceral pain) 724.4 Radiculomyelitis 357.0 toxic, due to Clostridium tetani 037
7.	

Exercise 1.1 (continued)

	Corynebacterium diphtheriae 032.89
8.	Ramsay Hunt syndrome (herpetic geniculate ganglionitis) 053.11
9.	meaning dyssynergia cerebellaris myoclonica 334.2
	Ranke's primary infiltration (see also Tuberculosis) 010.0
	Ranula 527.6
	congenital 750.26
10.	Rape (see also nature and site of injury) alleged, observation or examination V71.5

Alphabetization Rules

In order to locate main terms and subterms quickly and efficiently, it is important to understand the alphabetization rules followed in the Alphabetic Index. Letter-by-letter alphabetization is used both in volume 2 and in the alphabetical portion of volume 3. The system of alphabetization ignores the following:

- Single spaces between words
- Single hyphens within words
- The final "s" in the possessive forms of words

The following list shows an example of letter-by-letter alphabetization with these modifications:

- **Beer-drinkers' heart** (disease) 425.5 [ignores hyphen]
- **Bee sting** (with . . .) 989.5 [ignores space between words]
- **Brailsford's disease** 732.3 [ignores possessive form]
- **Brailsford-Morquio disease or syndrome** 277.5

Numerical Entries

Subterm entries for numerical characters and words indicating numbers appear first under the appropriate main term or subterm entry and are listed in numerical order rather than being alphabetized in their spelled-out form. Examples of such characters and words include Roman numerals, such as "II"; Arabic numerals, such as "2"; and adjectival terms, such as "second." For example, in volume 2, **Paralysis**, nerve, third, comes before, rather than after, **Paralysis**, nerve, fourth. Here are more examples:

Anomaly, anomalous . . .
 chromosomes, chromosomal 758.9
 13 . . .
 18 . . .
 21 . . .

Disorder . . .
 coagulation . . . 286.9
 factor VIII . . .
 factor IX . . .
 neonatal . . .

Disorder . . .
 nerve 349.9 . . .
 cranial 352.9
 first
 second
 third