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Twenty-five years ago, hoping to change careers, I left my desk as a writer/editor at a daily newspaper for a job interview with a small medical publishing company. The interview was going well when the leader of the editorial team pulled out a copy of what could become my responsibility: a 14-lb treatise called *International Classification of Diseases, 9th Revision, Clinical Modification*.

“So,” I said, flipping through the oversized paperback and eyeing the long lists of numbers and their associated descriptors, “this job is sort of like editing a phone book.”

The editorial team erupted with good-natured laughter. By the end of the meeting, I had accepted the job.

Within months of exposure to my first ICD-9-CM code set files, I understood the joke. ICD-9-CM wasn’t some dull list of inconsequential data, necessary only when one needed a plumber. Its annual updates revealed the agendas of our healthcare leaders, and provided a glimpse of new scientific discoveries. The classification of diagnoses was dynamic, and still is, reflecting our national health status.

As a lifelong learner, I have found the ICD to be a charismatic teacher. From the human papillomavirus epidemic to the adverse effects of terrorism, from homelessness to child sexual abuse, ICD codes speak of societal ills as well as physical ones. Code proposals are accompanied by health care data in support of code creation, offering up topical, short courses for issues such as newborn conditions related to Zika virus or anemia due to myelosuppressive antineoplastic chemotherapy. Medical science constantly brings new information to the table, and once a concept is accepted, the federal ICD managers codify it.

Unlike the obsolete phone book, ICD has strengthened over the years, albeit in an improved 10th revision. Accurate and complete diagnostic coding in the US health care industry is more important with each passing year. A synopsis of this importance can be seen in the timeline below, which represents both ICD-9-CM and ICD-10-CM as “ICD.”

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**Growing Importance of Diagnostic Codes in the United States**

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<tr>
<td>United States (US) implements ICD as the single classification system of disease for statistical compilation of data (but not for payment)</td>
<td>Medicare Act of 1988 mandates use of ICD codes on all Medicare claims</td>
<td>Balance Budget Act creates risk-adjusted plans through Medicare+Choice</td>
<td>Medicare Modernization Act changes Medicare+Choice to Medicare Advantage</td>
<td>Medicare Access and CHIP Reauthorization Act (MACRA) is passed, changing physician payment methodology to focus on diagnosis-based quality payments for all Medicare enrollees in a program called Merit-based Incentive Payment System (MIPS).</td>
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<td>1986</td>
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<td>Medicare hospital payments based on diagnosis-related groups are linked to ICD codes</td>
<td>“Reasonable and necessary” treatment is tied to diagnosis in 1862(a)(1)(A) of the Social Security Act</td>
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<td>1997</td>
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<td>2000</td>
<td>US implements Health Insurance Portability and Accountability Act, mandating use of the ICD code set on essentially all claims</td>
<td>Affordable Care Act establishes risk pools instilling risk adjustment in private insurance plans</td>
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Sheri Poe Bernard, CCS-P, CPC, CRC, CDEO, is one of the nation’s leading developers of medical coding curricula and referential material. With more than 25 years of experience in coding and reimbursement, publishing, training, and test development, she is an expert communicator of coding concepts.

Bernard is a risk-adjustment consultant, as well as a freelance writer and educator. She is the author of the AMA’s 2015 publication, Netter’s Atlas of Surgical Anatomy for CPT Coding and the 2018 ICD-10-CM Chronic Disease Cards. Previously, she was vice president of clinical coding content at American Academy of Professional Coders (AAPC). Prior to joining the AAPC as an employee, she served on its National Advisory Board for eight years and on the executive team of that board for four years. For 15 years, she created clinical coding products at Optum360® (Ingenix), where she developed a love for the International Classification of Disease. She is a frequent national speaker on topics involving CPT, ICD-9-CM, ICD-10-CM, and risk-adjustment coding.
About the Reviewers

The AMA and author sought input of multiple risk-adjustment and coding experts from across the nation to review for accuracy and completeness the contents of *Risk Adjustment Documentation & Coding*. The following reviewers provided feedback that was extremely helpful in finalizing the manuscript for *Risk Adjustment Documentation & Coding*. What follows is a description of the reviewers.

**Suzan Hauptman, MPM; CPC; CEMC; CEDC; AAPC Fellow; Senior Principal at ACE Med Group**

Suzan Hauptman has 25 years of experience in the medical insurance industry including coding management and clinical documentation improvement roles within regional hospital systems in Pennsylvania, auditing for consulting firms, and generating content for healthcare business publishers. She has a master’s degree in public management with an emphasis in health, and is a regular contributor to numerous health business publications. She is a frequent speaker at local and national American Academy of Professional Coders (AAPC) events.

**Mary A. Johnson, MBA/HM/HI<sup>®</sup>, CPC**

Mary A. Johnson is currently the Medical Record Coding Program Director at Central Carolina Technical College. She has held this position since 2010. Her experience includes both on-campus and online teaching, as well as designing and implementing customized health information curricula. She also has been doing corporate training for over a decade. She is a frequent speaker, including the American Health Information Management Association (AHIMA) Assembly on Education; Health Professions Virtual Symposium; Allied Health Course Solutions; and AAPC local chapter meetings.

**James S. Kennedy, MD, CCS, CDIP, CCDS**

James S. Kennedy is the founder and President of CDIMD, a Nashville-based physician and facility advisory and consulting firm that advocates ICD-10-pertinent clinical documentation and coding integrity essential to healthcare revenue cycles and quality measurement. As a coding and clinical documentation integrity (CDI) expert with over 17 years of experience and as a frequent speaker to medical staff, Health Information Management (HIM) and CDI associations, Dr. Kennedy is nationally recognized for his subject matter expertise, communication skills, and problem-solving approach.

**Debra Wheatley, CPC, CPMA**

Debra Wheatley’s healthcare career began as a chiropractic assistant who performed physiotherapy, billing, and radiology technologist duties. She began focusing more narrowly on medical coding and reimbursement after receiving her CPC in the healthcare division of Computer Sciences Corporation. She also coded for nephrology and neurosurgery specialties before joining DST Health Solutions, where she now specializes in risk adjustment and outpatient auditing. She became a Certified Professional Medical Auditor in 2012.
At-a-Glance Review of the Features of Risk Adjustment Documentation & Coding

Chapter Opener
The chapter opener presents a general introduction and overview of the subject that may also cover some of the basic concepts and terminology necessary for understanding the topic. In most cases, the educational goals for the chapter are presented as well.

Advice/Alert Note
Highlights important information, exceptions to the rules, and salient advice related to codes and diagnosis, such as federal guidance for coding and documentation from the ICD-10-CM Official Guidelines for Coding and Reporting, Federal Register, CMS 2008 Risk Adjustment Data Technical Assistance for Medicare Advantage Organizations Participant Guide, or other federal regulatory guidance sources.

Example
Samples to further demonstrate or highlight content and concepts covered in the chapter.

FYI
Additional information that may help readers to better understand information regarding a topic or content such as documentation or coding issues, either by providing additional background, an illustration of a concept, or by further defining terminology, diagnostic scoring systems, or code lists.

Sidebar
Provides derivative content/story related to the main concepts covered in a particular section(s) of a chapter.

Definitions
Definitions for terms highlighted throughout the text are located at the end of the page in which the term appears. Readers will not need additional resources to learn the meaning of diagnostic, regulatory, or medical reimbursement terminology.
Evaluate Your Understanding

Each chapter ends with a variety of question types that encourage active learning and critical thinking and allow students to evaluate their understanding of the chapter content.

Internet-based Exercises

Links to online resources encourage readers to explore topics related to chapter concepts. Such exercises reinforce the need to keep abreast of the latest information in coding, documentation, risk adjustment, as well as the role technology plays in the current learning and teaching environment.
This chapter provides a simple overview of the concept of administrative and/or diagnosis-based risk adjustment (RA), its history, and the many uses of RA in outcomes measurement and reimbursement today and in the future. It starts by addressing how RA ties to medical records and codes within the International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and the International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS). In addition, the chapter establishes the value of the education and training materials provided in the remaining chapters of Risk Adjustment Documentation & Coding. This introduction provides a foundation of knowledge in the language and practicalities of RA necessary for clinicians and coders seeking to improve their documentation and coding skills, and discusses how insurance companies and the Centers for Medicare & Medicaid Services (CMS) use coded claims and encounters to determine the “risk” associated with individual patients. The chapter also explains how revenue is tied to risk, and how risk drives private insurance companies to champion improved documentation and actively correct the coding submitted to them, and to CMS, in physician and facility claims.

RA is a process by which the resource intensity of a physician’s or group of physicians’ patient populations is measured, and health insurers are compensated based on the underlying health status of their enrollees. Risk is calculated using an actuarial tool that predicts the cost of healthcare for patient populations or plan enrollees based on their health status and demographics. While several RA models for payer reimbursement are relatively new, RA has existed as a payment factor for hospitals since the 1980s. Hospitals have long been paid for inpatient Medicare services using a formula that considers patient characteristics and

**Risk adjustment (RA)**
Process by which health insurers are compensated based on the underlying health status of their enrollees, thereby protecting the insurers against losses due to high-risk, high-cost patients.

**RA models**
Actuarial tools used to predict healthcare costs based on the relative actuarial risk of enrollees in RA covered plans. (45 CFR 153.20)
procedures reported using the ICD-10-CM and ICD-10-PCS codes, which is currently embodied in the Medicare severity diagnosis-related group (MS-DRG) system. These MS-DRGs are based on ICD-10-CM and ICD-10-PCS codes derived from physician documentation, not the coder’s clinical interpretation of the patient’s circumstances, and are weighted or risk-adjusted based on coefficients assigned to each of these codes. Care provided to patients documented to be sicker is reimbursed at a higher rate than care to patients documented with less-serious illnesses. In MS-DRGs, it generally does not matter how many days the Medicare patient remains in the hospital or the cost of the care delivered by the hospital except for extreme circumstances. Payment is based solely on how sick the patient is, which is evidenced and based on the ICD-10-CM and ICD-10-PCS codes submitted by the facility. The advent of DRGs changed hospitals from a payment system based on payment for service provided to one that was based on the patient’s condition.

Essentially, diagnosis-based RA models for payers are similar to the MS-DRG system, except the payment is made to the private insurance company over a specified period (eg, one year) rather than for an individual episode of care. Rather than assigning diagnostic codes to MS-DRGs, Medicare RA assigns codes to hierarchical condition categories (HCCs). Each HCC is assigned a value that contributes to an aggregated reimbursement that reflects the severity of the patient’s illness, to pay for resources projected for patient care. For example, Patient A has uncomplicated diabetes (E11.9, HCC 19), which is assigned to one HCC. Patient B has diabetic ketoacidosis (DKA) (E10.10, HCC 17), assigned to a higher-valued HCC. Patient C has DKA (E10.10, HCC 17), diabetic polyneuropathy (E10.42, HCC 18 and 75), and a history of great toe amputation (Z89.419, HCC 189). Sicker patients will have more HCCs and/or higher-valued HCCs.

RA payment models for insurance plans were first mandated by the Balanced Budget Act of 1997 (BBA) and implemented by CMS for Medicare. The Medicare RA program allows CMS to pay private insurance plans for the known risks associated with insuring the Medicare beneficiaries they enroll. Risk scores measure individual enrollees’ relative risks, and the scores are used to adjust payments that fund payments for each beneficiary’s medical care.

RA expanded in 2014, when the Affordable Care Act (ACA) established an RA methodology to compensate insurance companies for insuring high-risk patients in affordable plans, which because of differing patient populations, uses different ICD-10-CM codes than that of Medicare. The ACA’s program set up risk pools that would transfer premium revenue from plans with below-average actuarial risk to plans with above-average actuarial risk. Without an RA mechanism, a health plan gains a competitive advantage if it enrolls the healthy and avoids the sick. RA provides a safety net for insurers enrolling patients with pre-existing conditions.
Diagnosis-Based RA

In simplest terms, diagnosis-based RA is a methodology with a two-pronged goal: to ensure that patients’ conditions are sufficiently diagnosed, documented, and coded in an effort to measure and monitor outcomes, and to accurately track the care needed through current and potential resources and reimburse accordingly. In more practical terms, RA widens the marketplace for health care insurers by compensating those insurers who enroll patients they would otherwise consider too risky to insure, ie, in order to inhibit the practice of what is known as “cherry picking” or “lemon dropping.” This situation is defined as the practice of enrolling only the healthiest patients and discontinuing coverage for those with resource-intensive comorbidities. It also widens the marketplace of health care insurers for the enrollees, whose pre-existing conditions give rise to unaffordable medical premiums or total exclusion from insurance programs. Diagnosis-based RA is associated with insurance programs including Medicare Advantage (MA), Medicare prescription Part D coverage, Medicaid managed care plans, and the health insurance marketplace under the ACA. More than 75 million Americans are enrolled in risk-adjusting insurance plans, which is more than 20% of the insured population in the United States (US). Use of diagnosis-based RA approaches is now spreading to large employers that have a large pool of enrollees that include healthy as well as unhealthy employees in the commercial sector.

RA’s effect goes far beyond the payer organizations and patients who participate. Risk is determined from the diagnoses in each patient’s medical record, which are translated into ICD-10-CM codes. The diagnoses entered into the medical record by the physician must be specific, accurate, clinically valid, and written using ICD-10-CM’s language if risk is to be captured accurately. Similarly, a lot rides on the correct abstraction of ICD-10-CM codes by physicians or coders in the inpatient or outpatient setting based on this documentation. RA, therefore, affects facilities, physician offices, medical coders, physicians, and payers—pretty much everyone in the health care documentation and coding continuum.

Diagnoses from physicians, other qualified health care providers, and hospitals are the source of most codes submitted for RA. RA rules for chart documentation and medical record abstraction are the same as the rules for physician or facility diagnostic coding, though the rules for physicians and inpatient facility coding differ. While hospitals and physician offices are expected to document and code according to the government’s ICD-10-CM’s conventions, guidelines, and official advice, enforcement of diagnostic coding guidelines in the outpatient arena has been lax for decades. This is due to several factors, such as:

- **Physician payment is based primarily on Current Procedural Terminology (CPT) codes, so CPT code accuracy is the focus for outpatient coding.** Great care must be taken to document and code procedures and services accurately to ensure full payment and to prevent fraud or abuse. Coders in many physician offices ensure that ICD-10-CM codes abstracted from the record are valid only to the extent they support the medical necessity of the service provided. There is little oversight to ensure the diagnosis codes are as complete or precise as they could be and whether they conform to official ICD-10-CM conventions, guidelines, and advice, situations that could negatively affect RA. For example, a malignant neoplasm of the breast risk-adjusts, whereas a documented “history of breast cancer” does not, given that the first is coded with an actual malignant breast neoplasm code, while the second is coded with a personal history code. The official ICD-10-CM Guidelines stipulate that any malignancy undergoing active treatment (eg, toremifene for breast cancer) should be coded with the actual malignant neoplasm code.

**Medicare Advantage (MA)**
A type of health insurance for legal residents of the US who qualify for Medicare, administered by private insurance companies under contract with Medicare to provide coverage for hospitalization and physician care. Often, prescription drugs are included in the plans as well.

**Medical record abstraction**
Process in which a medical record is searched to identify data required for a secondary use; for example, for claims reporting, disease tracking, or resource utilization studies. For diagnoses, the narrative description of a disorder or disease is translated into an ICD-10-CM code and submitted with the claim for the encounter.
Value-Based Payment Modifier Program

The value modifier (VM) program assesses the quality and cost of care provided to Medicare beneficiaries by solo practitioners and medical groups. CMS uses RA in the evaluation of differences in Medicare spending per beneficiary (MSPB), to allow for more accurate evaluation of physicians based on the quality of their services and patient outcomes. Without RA, physicians who treat a sicker population of patients could perform worse on some quality and cost measures. The VM measures that risk-adjust include:

- **30-day all-cause hospital readmission.** This will risk-adjust for age and underlying risks associated with surgery/gynecology, general medicine, cardiorespiratory, cardiovascular, and neurology. For this given population, some readmissions are considered unavoidable. Planned readmissions are excluded from inclusion in this measure. More information on this methodology can be found at www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/2015-ACR-MIF.pdf.

- **Hospital admissions for acute and chronic ambulatory care sensitive condition composite measures.** Age and sex both affect the likelihood of hospitalization for patients with acute and chronic conditions. Evaluation of these hospitalizations can identify physicians who are engaged in better primary care, care planning, and care coordination. Acute conditions measured are dehydration, bacterial pneumonia, and urinary tract infections. Chronic conditions include diabetes, chronic obstructive pulmonary disease or asthma, and heart failure. More information on this methodology can be found at www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/2015-ACSC-MIF.pdf.

- **Per capita costs per member with specific diagnoses.** This measure compares projected costs for care against actual costs. More information can be found at www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/2015-TPCC-MIF.pdf.
• Consumer assessment of health care physicians and systems for PQRS. Case mix is a consideration in the scoring of the consumer surveys enrollees complete for their physicians. More information can be found on page 53 of the CAHPS for PQRS Survey Quality Assurance Guidelines, at www.pqrscahps.org/contentassets/6b04e492602b4bb58f80e3fb4e1e0676/cahps_for_pqrs_survey_qag_v1_july_2015.pdf.

Oversight of RA Programs

By law, if the Department of Health and Human Services (HHS) delegates administration of any of its programs, it is going to do so with significant oversight. For the MA program, oversight comes in two forms: ensure diagnoses reporting is performed correctly and without fraud or abuse, and ensure enrollees in the MA programs are receiving services and benefits that meet the standard set by HHS and CMS. Correct coding is evaluated through RA validation audits, and services and benefits are monitored through CMS’ program integrity audits and measured through Five Star Quality Rating System. CMS also oversees the ACA risk pools for quality of coding, requiring initial and secondary validation audits for all plans.

MA RA Data Validation

MA RA data validation (RADV) is CMS’ method to recoup improper payments, and the risk of a negative RADV audit works to ensure compliance among all participants in the MA program. Some MAOs are selected for audit because their enrollment had a higher-than-average risk score compared to other MAOs, because the MAO reported a high number of outlier HCCs, or a random selection.

An MAO selected for a RADV will be asked to provide a copy of a medical record from a patient encounter as evidence of a reported, patient-specific HCC-linked diagnosis during a proscribed reporting period. The medical record documentation must meet certain criteria and standards for CMS documentation and coding. If a diagnosis is not validated during an audit, CMS will use an extrapolation formula to determine the payment error rate for the MA contract. In many cases, the MAO is asked to refund millions of dollars when data validation is unsuccessful. Therefore, the MAO has a large stake in ensuring physicians enrolled in its programs are documenting and coding properly. An explanation of the payment formula is available at www.cms.gov/Medicare/Medicare-Advantage/Plan-Payment/Downloads/radvmethodology.pdf.

In addition to validation of HCCs in documentation, RADVs look at patient demographics to ensure data is correct for the enrollee. Review of administrative issues (eg, proper signature protocols) are also part of a RADV audit.

MA Star Rating System

The MA Five Star Quality Rating System is designed to provide a twofold boost to MA enrollees. First, it measures the quality of care provided by MAOs to its members. In so doing, it tracks a variety of prevention metrics and rewards plans that encourage their physicians to be more proactive in preventive health. These preventive services include colonoscopies, mammograms, BMI calculations, cholesterol tests, influenza vaccines, and screenings for mental health. Also included are measures for elder care and diabetes. The second boost to MA enrollees comes in the ability of enrollees to evaluate their plan in surveys that look at issues like waiting-room time, customer service, responsiveness to complaints, and overall satisfaction.

The Five Star Quality Rating System is a five-star system that measures five areas: improvement, outcomes, intermediate outcomes, patient experience, and access to care and processes. Bonuses are awarded to MAOs that outperform their peers. The bonuses are computed on a per-enrollee basis. A plan must achieve at least four stars to qualify for a 5% bonus. In 2017, 4% of plans had five stars; 16% had 4.5 stars; and 21% had four stars, which means 41% of plans were eligible for bonuses. High performance has other rewards, namely being allowed to enroll beneficiaries throughout the year if a plan scores five stars. Other plans must wait until the open enrollment period, which runs from October 15 to December 7, to recruit new enrollees.
Writing the Policy

Once an issue has been identified and researched, the coding policy can be created. In some cases, two or more policies may be crafted for discussion in a larger audience before the final policy is selected. A policy should have a title that clearly states the issue. Well-written coding policies are concise and well organized, using simple language. They contain no ambiguities. They quickly direct the coder on how to resolve the issue. All policies should be maintained in a searchable document so that a coder can open the document and immediately access all internal policies.

Every coding policy must be supported by a source document that contains the coding policy and all citations used in development of the policy. This source document is much more detailed than the coding policy published internally for coders. The source document should also contain a history of the development and alteration of the policy, and any notes from the author(s). Some organizations will want a record of who in management approved the policy. The source document should be maintained in a location accessible only to staff responsible for its maintenance. Should the need for a policy be eliminated (eg, a new AHA Coding Clinic addresses a topic for which a policy was created, the policy may be removed from the coder’s resource, but it must be retained in the source document file so that it is available in the event of an audit of past work). A final note on the dispensation of the issue should be appended (eg, did the AHA’s Coding Clinic advice support the organization’s policy or reverse it?). The policy development team may want to develop a procedure for what should be done if official guidance is released that is counter to a long-standing internal policy.

Issues As Examples

What follows are three examples of how coding policies and procedures can be developed. They each identify an issue, its impact, source documentation, and the final policy. These are sample policies for the purpose of illustration; any policies adopted by individual organizations should be researched, carry citations, and be vetted and approved by organization management.

Diabetes Type 1.5

The ICD-10-CM guidelines, instructional notes, and Alphabetical Index have not addressed which diabetes mellitus code to assign to document “type 1.5 diabetes.” Type 1.5 diabetes is also known as latent autoimmune diabetes in adults (LADA). As the name suggests, type 1.5 diabetes has elements of type 1 and elements of type 2. While the AHA’s Coding Clinic advice for ICD-9-CM offers no advice on type 1.5, ICD-10-CM does have the capacity to report specified diabetes that are not type 1, type 2, due to a drug, or due to a disease. Policy could stipulate that an E13.- code be reported for diabetes type 1.5.

Issue and Impact

HCCs associated with diabetes are based on whether the diabetes is associated with complications. The category of diabetes chosen for diabetes type 1.5 does not affect HCC assignment or have financial implications for Medicare Advantage organizations (MAOs) or participants in a health insurance marketplace risk pool. However, coding consistency, individual IRR scores, and productivity are affected when coders cannot easily identify the ICD-10-CM category of diabetes, which are as follows:

- E08 Diabetes mellitus due to underlying condition
- E09 Drug or chemical induced diabetes mellitus
- E10 Type 1 diabetes mellitus
- E11 Type 2 diabetes mellitus
- E13 Other specified diabetes mellitus

Many practices also want to be sure patients with type 1.5 diabetes are appropriately represented in their claims and in the patient population, and will want all type 1.5 diabetes patients to be represented with the same codes.

Research

An Internet search using key terms “type 1.5 diabetes” nets an article from the American Diabetes Association (ADA), a professional organization of physicians and other professionals invested in diabetes care (http://www.diabetesforecast.org/2010/may/the-other-diabetes-lada-or-type-1-5.html). This article states that type 1.5 diabetes has a progression to insulin dependence that can take months or years. The patient will have autoantibodies, a hallmark of type 1 diabetes, but also an adult onset with some insulin resistance, both common to type 2 diabetes.
Developing Risk-Adjustment Policies

The ADA suggests as many as 10% of patients diagnosed with type 2 diabetes actually have type 1.5 diabetes. The ADA states there are 30 million diabetics in the US. This translates into a potential of millions of type 1.5 diabetics in the US.

The AHA's *Coding Clinic for ICD-9-CM* (Third Quarter, 2013) has an entry regarding type 1.5, which states:

ICD-9-CM does not currently recognize diabetes mellitus type 1.5. Query the provider so the most appropriate code can be assigned. If the physician does not indicate type I, assign code 250.00, Diabetes mellitus type II or unspecified type, not stated as uncontrolled, for diabetes type 1.5. Code 250.00 is the default.2

While we can use certain aspects of the AHA's *Coding Clinic for ICD-9-CM* when it does not conflict with ICD-10-CM conventions or supersede guidelines or advice, we must benchmark this advice as to what we experience in the ICD-10-CM environment. Refer to the AHA's *Coding Clinic for ICD-9-CM* (Third Quarter, 2013),7 which suggests reporting an unspecified type of diabetes when type 1.5 is documented and the physician is not available for query. ICD-10-CM Guideline Section I(C.4.a.2) states that, “[i]f the type of diabetes mellitus is not documented in the medical record, the default is E11-. Type 2 diabetes mellitus.”5 Besides the guidelines, the code set also provides the following pertinent information and notes:

<table>
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<tr>
<th>CODE</th>
<th>PROS</th>
<th>CONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>E10</td>
<td>E10 reports autoimmune process; Type 1.5 has autoimmune components.</td>
<td>Type 1.5 also has insulin resistance/insulin secretory defects like type 2.</td>
</tr>
<tr>
<td>E11</td>
<td>AHA’s <em>Coding Clinic for ICD-9-CM</em> citation on Type 1.5 supports 250.00, which crosswalks to E11.9.</td>
<td>Reports NOS. Meaning of NOS from guidelines is “unspecified”, type 1.5 is a specific type of diabetes.</td>
</tr>
<tr>
<td>E13</td>
<td>E13 reports other “specified.” Type 1.5 is a specified form of diabetes, and no Alphabetic Index or Tabular List entries apply to type 1.5; therefore, using “other specified” makes sense. Excludes autoimmune process (E10); type 1.5 is autoimmune, but perhaps the exclusion is for E10 specifically. E13 includes genetic defects of beta cell function; genetic defects to insulin action. Type 1.5 has these defects. Excludes immune mediated pancreatic islet beta-cell destruction (E10); type 1.5 is autoimmune, but perhaps the exclusion is for E10 specifically.</td>
<td></td>
</tr>
</tbody>
</table>

In this case, it seems that type 1.5 diabetes mellitus is not captured accurately with code E10, E11, or E13. How should a coder determine which category is the best fit when the physician is not available for query? First, organize the conflicting data so that the choices can be compared more easily. In this case, the information sorts as outlined in Table 5.1.

---

TABLE 5-1 Components Weighed for Choosing a Code for Type 1.5 Diabetes Mellitus

---

2 Type 1 diabetes mellitus
Includes: diabetes (mellitus) due to autoimmune process

E10 Type 1 diabetes mellitus
Includes: diabetes (mellitus) due to autoimmune process

E11 Type 2 diabetes mellitus
Includes: diabetes NOS
Use additional code to identify control using: insulin (Z79.4) oral antidiabetic drugs (Z79.84)

E13 Other specified diabetes mellitus
Includes: diabetes mellitus due to genetic defects of beta-cell function diabetes mellitus due to genetic defects to insulin action
Use additional code to identify control using: insulin (Z79.4) oral hypoglycemic drugs (Z79.84)

Excludes1: diabetes (mellitus) due to autoimmune process (E10.-) diabetes (mellitus) due to immune mediated pancreatic islet beta-cell destruction (E10.-).

---

In this case, it seems that type 1.5 diabetes mellitus is not captured accurately with code E10, E11, or E13. How should a coder determine which category is the best fit when the physician is not available for query? First, organize the conflicting data so that the choices can be compared more easily. In this case, the information sorts as outlined in Table 5.1.

---

1 Type 1 diabetes mellitus includes: diabetes (mellitus) due to autoimmune process

2 Type 1 diabetes mellitus includes: diabetes (mellitus) due to immune mediated pancreatic islet beta-cell destruction (E10.-).

---

3 Type 2 diabetes mellitus includes: diabetes (mellitus) due to obesity and/or lack of insulin sensitivity

---

4 Type 2 diabetes mellitus includes: diabetes (mellitus) due to obesity and/or lack of insulin sensitivity

---

5 Type 2 diabetes mellitus includes: diabetes (mellitus) due to obesity and/or lack of insulin sensitivity

---

6 Type 2 diabetes mellitus includes: diabetes (mellitus) due to obesity and/or lack of insulin sensitivity

---

7 Type 2 diabetes mellitus includes: diabetes (mellitus) due to obesity and/or lack of insulin sensitivity
In assembling the evidence, a case could be made for any of the three categories, but the strongest case seems to be for E13, Other specified diabetes mellitus. Because there is no HCC component for the decision, the QA department or managers in charge of coding policy could decide how to report type 1.5 diabetes when the physician does not specify a diabetes category for type 1.5 diabetes, and communicate the policy to the staff with a sourced rationale. Monitor the AHA’s Coding Clinic publication and the ICD-10-CM Guidelines and code changes, as these resources could publish guidance on type 1.5 diabetes mellitus coding.

Coder policy should be sparse and concise. While the source rationale should be made available to staff in the initial training related to the policy, it should be omitted from a searchable reference available for daily use by coders. Brevity is the goal in writing a coding policy.

### Coding Policy Sample

**Type 1.5 diabetes mellitus**
Report the appropriate code from category E13, Other specified diabetes mellitus, for documented type 1.5 diabetes or latent autoimmune diabetes of adults (LADA), if the physician does not assign a code category in documentation. Long-term use of oral antihyperglycemic drugs or insulin should be reported secondarily.

**Sourced Rationale (on file; not in coding policy resource)**

- **Coding:** ICD-10-CM Alphabetic Index: Diabetes/specified type NEC E13.9; Tabular rubrics E10, E11, E13
  - NEC in guidelines is defined as: “Not elsewhere classifiable.” This abbreviation in the Alphabetic Index represents “other specified.”
  - When a specific code is not available for a condition, the Alphabetic Index directs the coder to the “other specified” code in the Tabular List.
- **Pathophysiology:** Type 1.5 contains elements of types 1 and 2, and is genetic in origin. ([http://www.diabetesforecast.org/2010/may/the-other-diabetes-lada-or-type-1-5.html](http://www.diabetesforecast.org/2010/may/the-other-diabetes-lada-or-type-1-5.html))
  - E13 include diabetes due to genetic defects, as is the case for type 1.5.

**HCC Risk:** None

**Resource Defensibility:** Authoritative

### CLINICAL CODING EXAMPLE

**DOS:** 12/26/2017

**Patient:** Dory Martinez  
**DOB:** 9/23/1973

**Surgeon:** Alfred Monmichael, MD

**CC [chief complaint]:** This is a 44-year-old woman being admitted today with a herniated disc at L2-L3 with a large disc fragment pressing the spinal cord.

**HPI:** The patient states she was exercising a week ago and developed immediate, severe pain radiating down her right leg. The patient was prescribed oxycodone for pain control. The patient is being admitted for surgery.

**PMI**

- Diabetes mellitus type 1.5
- Neuropathy in both feet
- Multiple sclerosis

**Past Surgical History:** Hemorrhoidectomy

**Medications**

- Lantis, Humulin insulin, sliding scale
- Lisinopril one tab per day
- Ezetimibe 10 mg
- Gabapentin 300 mg

---

continued
Appendix D: Training/Teaching Tools

OBESITY/MALNUTRITION

Physician Documentation

Excess weight or malnutrition is always going to affect the health of the patient and should be documented for any encounter in which the condition is observed. Body mass index (BMI) is a valuable screening tool for weight and nutrition status.

Documentation Tips

- **Ensure the patient’s BMI** is calculated at least once annually.
- **Document a weight-related diagnosis** for any patient with an abnormal BMI as follows:

<table>
<thead>
<tr>
<th>BMI</th>
<th>Associated Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 16.0</td>
<td>severe malnutrition</td>
</tr>
<tr>
<td>16.00-16.99</td>
<td>moderate malnutrition</td>
</tr>
<tr>
<td>17.00-18.49</td>
<td>mild malnutrition</td>
</tr>
<tr>
<td>18.5-24.99</td>
<td>normal</td>
</tr>
<tr>
<td>25.00-29.00</td>
<td>overweight</td>
</tr>
<tr>
<td>30 to less than 39.9</td>
<td>obese (Classes 1 and 2)</td>
</tr>
<tr>
<td>40 or greater</td>
<td>morbidly obese (extreme, severe, Class 3)</td>
</tr>
</tbody>
</table>

- **If a patient’s weight is causing other health issues**, document the health issues and link them to the weight diagnosis. Similarly, if the weight issue is caused by an underlying cause (eg, hypothyroidism, Cushing’s syndrome, AIDS), document the underlying cause.
- **Document malnutrition, obesity, or morbid obesity in pregnant patient** during each encounter that addresses the patient’s weight.
- **Document a treatment plan** for each patient’s weight problem.
- **Cachexia** is weight loss despite caloric intake, seen in some end-stage diseases. Always document cachexia when it is observed. “Cachexic” describes a patient, but is not a diagnosis of cachexia.
- **Report any sequelae** of hyperalimentation in a patient who remains obese, or who has successfully undergone bariatric surgery (eg, bilateral osteoarthritis of the knees, as sequelae of morbid obesity).

<table>
<thead>
<tr>
<th>Associated ICD-10-CM Diagnosis</th>
<th>Directive</th>
</tr>
</thead>
<tbody>
<tr>
<td>E40 Kwashiorkor</td>
<td>Caution: Very rarely seen in US</td>
</tr>
<tr>
<td>E41 Nutritional marasmus</td>
<td>Caution: Very rarely seen in US</td>
</tr>
<tr>
<td>E42 Marasmic kwashiorkor</td>
<td>Caution: Very rarely seen in US</td>
</tr>
<tr>
<td>E43 Severe protein-calorie malnutrition NOS</td>
<td>Document also BMI</td>
</tr>
<tr>
<td>E44.0 Moderate protein-calorie malnutrition</td>
<td>Document also BMI</td>
</tr>
<tr>
<td>E44.1 Mild protein-calorie malnutrition</td>
<td>Document also BMI</td>
</tr>
<tr>
<td>E45 Retarded growth following malnutrition</td>
<td>Document also BMI</td>
</tr>
<tr>
<td>E46 Unspecified protein calorie malnutrition</td>
<td>Document also BMI</td>
</tr>
<tr>
<td>E66.01 Morbid (severe) obesity due to excess calories</td>
<td>Document also BMI</td>
</tr>
<tr>
<td>E66.09 Other obesity due to excess calories</td>
<td>Document also BMI</td>
</tr>
<tr>
<td>E66.1 Drug-induced obesity</td>
<td>Document also drug and BMI</td>
</tr>
<tr>
<td>E66.2 Morbid (severe) obesity with alveolar hypoventilation</td>
<td>Document also BMI</td>
</tr>
<tr>
<td>E66.3 Overweight</td>
<td>Document also BMI</td>
</tr>
<tr>
<td>E66.9 Obesity, unspecified</td>
<td>More specificity desired. Document BMI</td>
</tr>
<tr>
<td>E68 Sequelae of hyperalimentation</td>
<td>Document also condition</td>
</tr>
<tr>
<td>R64 Cachexia</td>
<td>Document also BMI</td>
</tr>
</tbody>
</table>
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