How to Document and Code for Hypertensive Diseases in ICD-10

This installment in FPM’s ICD-10 series explains the guidelines for coding hypertension.

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Because ICD-10 can be a distressing topic, let’s start with some good news: Hypertension has a limited number of ICD-10 codes—only nine codes for primary hypertension and five codes for secondary hypertension. This makes the task of coding hypertension relatively simple—well, at least compared to some of the other ICD-10 complexities.

Another positive change in ICD-10 is that the new code set drops the previous reference to benign and malignant hypertension. As physicians, we are well aware that hypertension is never truly “benign,” and the removal of this antiquated term is a welcome improvement in the lexicon of diseases.

But, of course, nothing is easy in ICD-10, and there are several things you need to be aware of before we dig into the codes themselves. For example, the hypertensive disease codes in ICD-10 exclude several conditions: hypertension complicating pregnancy, neonatal hypertension, primary pulmonary hypertension, and primary and secondary hypertension involving vessels of the brain or the eye. Postprocedural hypertension is also excluded from the secondary hypertension codes.

In addition, you’ll need to be careful throughout the “Diseases of the Circulatory System” chapter of ICD-10 to differentiate the capital “I” from the number “1.” The hypertension codes span from I10 to I15 (there is no I14), and each series has its own peculiarities, as this article will explain.

Essential (primary) hypertension: I10

In ICD-9, essential hypertension was coded using 401.0 (malignant), 401.1 (benign), or 401.9 (unspecified). ICD-10 uses only a single code for individuals who meet criteria for hypertension and do not have comorbid heart or kidney disease. That code is I10, Essential (primary) hypertension.

As in ICD-9, this code includes “high blood pressure” but does not include elevated blood pressure without a diagnosis of hypertension (that would be ICD-10 code R03.0). If a patient has progressed from elevated blood pressure to a formal diagnosis of hypertension, a good documentation practice would be to include the reason for progressing the formal diagnosis. Similarly, a single mildly elevated blood pressure reading should be coded with the R03.0 until the formal diagnosis is established.

Although various sources define hypertension slightly differently, the provider should document elevated systolic pressure above 140 or diastolic pressure above 90 with at least two readings on separate office visits. There are slight

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Variations of this for older individuals and for individuals with readings obtained through ambulatory blood pressure monitoring. From a documentation viewpoint, it is only important that the provider clearly document the basis for a newly established diagnosis.

**Example:** Your patient, a 55-year-old female, has had blood pressure readings between 130-135/80-85 for several years. At her annual examination, you record her blood pressure as 144/92 and 142/90. You discuss with her the importance of following up and schedule another appointment for two weeks later. At that time, she again has several readings above 140/90, so you document the progression from prehypertension (R03.0) to essential hypertension (I10).

**Hypertension and hypertensive heart disease: I11**

When an individual has hypertension and heart disease, it is up to the provider to determine whether there is a causal relationship stated or implied. This relationship determination is spelled out in the “Official Guidelines for Coding and Reporting” (draft 2014).

The combination of hypertension and hypertensive heart disease is currently coded using the ICD-9 402.xx series of codes. As noted earlier, each category is currently divided into malignant, benign, and unspecified essential hypertension with or without heart failure. In ICD-10, this is narrowed to only two base codes:

- **I11.0, Hypertensive heart disease with heart failure,**
- **I11.9, Hypertensive heart disease without heart failure.**

The ICD-10 manual does not list the required documentation for hypertensive heart disease. It is recommended, however, that the provider document the basis for the diagnosis (exam, electrocardiogram, echocardiogram, etc.) at least the first time this diagnosis is made for the patient. It is not uncommon for patients with long-standing hypertension to develop some cardiac changes, but to code I11.9 instead of just I10, the provider needs to document the support for doing so.

Unlike ICD-9, when you code hypertension with heart failure (I11.0) using ICD-10, you are required to also code the type of heart failure from the I10 series:

- **I50.1, Left ventricular failure,**
- **I50.2, Systolic (congestive) heart failure,**
- **I50.3, Diastolic (congestive) heart failure,**
- **I50.4, Combined systolic and diastolic heart failure,**
- **I50.9, Heart failure, unspecified.**

If you do not have a measurement of the left ventricular ejection fraction (typically from an echocardiogram), then you would need to use the more general left ventricular failure code (I50.1).

The three codes for systolic, diastolic, and combined failure also require a fifth digit specifying the acuity of the diagnosis:

- **0, Unspecified,**
- **1, Acute,**
- **2, Chronic,**
- **3, Acute on chronic.**

**Example:** You have been following a 60-year-old male with hypertension and mild heart failure. You have coded I11.0 and I50.9. He recently had an acute exacerbation of his heart failure, was briefly hospitalized, and had an echocardiogram performed documenting combined systolic and diastolic failure. At discharge, you update his diagnosis codes to I11.0 and I50.43. When you see him in the office two weeks post-discharge and he is asymptomatic, his diagnosis codes could be I11.0 and I50.42 reflecting the chronic nature of his condition.

**Hypertension and chronic kidney disease: I12**

Unlike hypertension and heart disease, where the provider must determine whether a causal
relationship exists, if the patient has hypertension and develops chronic kidney disease, ICD-10 presumes a cause and effect relationship and classifies the condition as hypertensive chronic kidney disease. Note, however, that if the chronic kidney disease came first, then the combination falls into the secondary hypertension codes discussed later in this article.

Both ICD-9 and ICD-10 require specifying the stage of the chronic kidney disease to properly code the condition. Very few patients have a true glomerular filtration rate (GFR) measured and most staging relies on the estimated glomerular filtration rate (eGFR). Most laboratory reports provide a race-based reference range. It is not uncommon for these estimates to have slight variability and for the patient’s staging to vary between stage 2 and 3. Note that ICD-10 differentiates stage 5 from end-stage renal disease by the need for chronic dialysis.

ICD-10 requires first using an I12 code for the combined diagnosis of hypertension and chronic kidney disease:

- **I12.0**, Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end-stage renal disease,
- **I12.9**, Hypertensive chronic kidney disease with stage 1 through 4 chronic kidney disease or unspecified chronic kidney disease.

These two codes require an additional N18 code to identify the stage of kidney disease, with documentation typically referencing the most recent eGFR:

- **N18.1**, Chronic kidney disease, stage 1,
- **N18.2**, Chronic kidney disease, stage 2 (mild),
- **N18.3**, Chronic kidney disease, stage 3 (moderate),
- **N18.4**, Chronic kidney disease, stage 4 (severe),
- **N18.5**, Chronic kidney disease, stage 5,
- **N18.6**, End-stage renal disease,
- **N18.9**, Chronic kidney disease, unspecified.

**Example:** You have been treating a 55-year-old black female for hypertension (I10) for the past five years. On her most recent office visit, you performed a comprehensive metabolic profile. All values were within the laboratory reference range except her BUN and creatinine. The laboratory calculated her eGFR at 40 (mL/min/1.73m²). Repeat testing produces a similar result. You update her diagnosis codes to I12.9 and N18.3.

### Hypertension, hypertensive heart disease, and chronic kidney disease: I13

To confuse matters further, if the patient has all three conditions (hypertension, heart disease, and chronic kidney disease), then you need to document the relationship between the hypertension and heart disease but assume the causal relationship between hypertension and chronic kidney disease. The documentation requirements are the same as what was outlined above.

The codes for the three-disease combination are numerically arranged by the *degree of chronic kidney disease* rather than the presence or absence of heart failure:

- **I13.0**, Hypertensive heart and chronic kidney disease with heart failure and with stage 1 through 4 chronic kidney disease, or unspecified chronic kidney disease,
- **I13.10**, Hypertensive heart and chronic kidney disease without heart failure with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease,
- **I13.11**, Hypertensive heart and chronic kidney disease without heart failure with

**Countdown to ICD-10**

**ARTICLES IN FPM’S ICD-10 SERIES**

You can access the following articles in *FPM*’s ICD-10 topic collection: http://www.aafp.org/fpm/icd10.

- “Getting Ready for ICD-10: How It Will Affect Your Documentation,” *FPM*, November/December 2013. (Includes a section on documenting and coding diabetes mellitus under ICD-10.)

**Upcoming articles will include the following topics:**

- Signs and symptoms in ICD-10,
- Preventive services in ICD-10,
- Coding common diagnoses in family medicine.
stage 5 chronic kidney disease, or end-stage renal disease,
• I13.2, Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end-stage renal disease.

As with the two-combination codes, all of the three-combination codes require additional coding from the N18 series to identify the stage of kidney disease. The three-combination codes that include heart failure also require additional coding from the I50 series to specify the type and acuity of the failure.

**Example:** The 55-year-old female in the above example presents to your office with some pedal edema, and on examination you also detect some mild crackles in the base of her lungs. You order an echocardiogram that documents mild systolic heart failure. Her eGFR has remained stable. You update her diagnostic codes to I13.0 (Hypertensive heart and chronic kidney disease with heart failure and with stage 1 through 4 chronic kidney disease, or unspecified chronic kidney disease), I50.21 (Systolic, congestive, heart failure, acute), and N18.3 (Chronic kidney disease, stage 3, moderate).

Tobacco use or exposure in individuals with hypertensive diseases

All of the hypertension codes require an additional code if the patient is a current or former tobacco user. The F17 series indicates nicotine dependence; other codes indicate tobacco use but no documented dependence.

• 3, with withdrawal,
• 8, with other specified nicotine-induced disorder,
• 9, with unspecified nicotine-induced disorder.

If you have not documented that a patient who uses tobacco is “dependent,” then you would instead use the code for tobacco use (Z72.0). The difference is not well-defined, but the Centers for Disease Control and Prevention’s website (http://www.cdc.gov/tobacco/data_statistics/fact_sheets/cessation/quitting/) states, “Tobacco use can lead to tobacco/nicotine dependence and serious health problems … Tobacco/nicotine dependence is a chronic condition that often requires repeated interventions.”

Occupational and environmental exposure to tobacco should also be coded if the provider believes these are influencing the patient’s health status. The codes are as follows:
• Z57.31, Occupational exposure to environmental tobacco smoke,
• Z72.0, Problems related to lifestyle, tobacco use,
• Z77.22, Exposure to environmental tobacco smoke (includes second-hand smoke exposure and passive smoking),
• Z87.891, Personal history of nicotine dependence.

The ICD-10 manual partially explains the difference between Z87.891, “Personal history of nicotine dependence,” and F17.211, “Nicotine dependence, cigarettes, in remission.” It states that a personal history code should be used if a patient’s condition no longer exists and is not being treated but has the potential to recur and, therefore, may require continuous monitoring. The remission code would be appropriate if a patient is actively using a product to stop smoking. Once the patient has stopped using such products, it is up to the provider to determine when the patient’s status would move from “in remission” to “personal history of.”

If this introduction to the new hypertension codes has elevated your blood pressure, stop and take a deep breath.
Coding for secondary hypertension: I15

Although the main focus of this article has been essential hypertension, including comorbidities of heart failure and chronic kidney disease, there may be some patients in the primary care setting who have hypertension secondary to other disease states. In these cases, providers cannot use the hypertension ICD-10 codes discussed above. Instead, use the following codes:

- **I15.0**, Renovascular hypertension,
- **I15.1**, Hypertension secondary to other renal disorders,
- **I15.2**, Hypertension secondary to endocrine disorders,
- **I15.8**, Other secondary hypertension,
- **I15.9**, Secondary hypertension, unspecified.

The five secondary hypertension codes require that you also code the underlying condition. ICD-10 typically permits either the underlying condition or the secondary hypertension code to be listed first depending on the reason for the patient encounter. The exception to this is I15.8, Other secondary hypertension. Because this is an “other” code, the “other” condition must be coded first.

Adapting to ICD-10

If this introduction to the new hypertension codes has elevated your blood pressure, stop and take a deep breath. ICD-10 coding is a big adjustment, but it will get easier with time and practice. For more help, see the series overview (page 7) and look for future articles in *FPM*.


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