

FOCUS ON: High blood pressure (BP) and stroke

Hypertension is a leading cause of death, premature morbidity and disability-adjusted life years worldwide, including the United States. Hypertension is a primary risk factor for coronary artery disease, cerebrovascular disease, heart failure, chronic kidney disease and dementia.¹ In the United States nearly half of the adults (45%) have hypertension defined as systolic BP >130 mm Hg or a diastolic BP >80 mm Hg or are taking medication for hypertension. Hypertension is listed as a primary or contributing cause of death in approximately half a million deaths in 2017; that's nearly 1,300 deaths each day in the U.S. Only about 1 in 4 adults with hypertension have their condition under control and approximately 30 million U.S. adults with a BP >140/90 or higher are not prescribed or are not taking medication to control their BP.²

Stroke is the fifth leading cause of death for Americans and a leading cause of serious long-term disability. Stroke reduces mobility in more than half the stroke survivors age 65 and over. Someone in the United States has a stroke every 40 seconds and every four minutes someone dies of stroke. Stroke risk increases with age, but can occur at any age.² Given the importance of hypertension management to prevent stroke and heart disease, clinical guidelines have been established by the American College of Cardiology (ACC) and the American Heart Association (AHA) to provide a framework to guide clinicians in the diagnosis and treatment of hypertension.² The ACC and AHA guidelines are as follows:

| Blood Pressure Category | Systolic Blood Pressure | Diastolic Blood Pressure |
|-------------------------|-------------------------|--------------------------|
| Normal | <120 mm Hg and | <80 mm Hg |
| Elevated | 120-129 mm Hg and | <80 mm Hg |
| Hypertension | | |
| Stage 1 | 130-139 mm Hg or | 80-89 mm Hg |
| Stage 2 | ≥140 mm Hg or | ≥90 mm Hg |

Research repeatedly shows that successfully treating high blood pressure can reduce the risk of stroke by about 50% and the likelihood of a heart attack by about 20%.

Per the ICD-10-CM Official Guidelines for Coding and Reporting FY 2020: "A dash (-) at the end of an alphabetic index entry indicates that additional characters are required. Even if a dash is not included at the alphabetic index entry, it is necessary to refer to the tabular list to verify that no 7th character is required." The bolding of the ICD-10-CM codes represents categories, subcategories or codes that map to the CMS-HCC risk adjustment model for payment year 2021: <https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Risk-Adjustors>

This guidance is to be used for easy reference; however, the current ICD-10-CM code classification and the Official Guidelines for Coding and Reporting are the authoritative references for accurate and complete coding. The information presented herein is for general informational purposes only. Neither Optum nor its affiliates warrant or represent that the information contained herein is complete, accurate or free from defects. Specific documentation is reflective of the "thought process" of the provider when treating patients. All conditions affecting the care, treatment or management of the patient should be documented with their status and treatment, and coded to the highest level of specificity. Enhanced precision and accuracy in the codes selected is the ultimate goal. Lastly, on April 6, 2020, the Centers for Medicare & Medicaid Services (CMS) announced that 2020 dates of service for the 2021 payment year model are based on the Centers for Medicare & Medicaid Services Announcement. <https://www.cms.gov/files/document/2021-announcement.pdf>

The following references were used to create the content of this document:

Optum360 ICD-10-CM: Professional for Physicians 2020. Salt Lake City, UT: 2019.

- Sharma G, S. Ram CV, Yang E. Comparison of the ACC/AHA and ESC/ESH Hypertension Guidelines. American College of Cardiology. <https://www.acc.org/latest-in-cardiology/articles/2019/11/25/08/57/comparison-of-the-acc-aha-and-esc-esh-hypertension-guidelines>. Published November 25, 2019. Accessed May 26, 2020.
- Facts About Hypertension. Centers for Disease Control and Prevention. <https://www.cdc.gov/bloodpressure/facts.htm>. Published February 25, 2020. Accessed May 26, 2020.

Documentation and coding tips

- For (acute) stroke, document the type, vessel affected including laterality, and any immediate effects of stroke.
- After the initial acute care episode (hospitalization), if the patient has late effects (hemiplegia, dysphagia, etc.) then all residual deficits are coded to "sequelae" of stroke.
 - The sequelae may occur any time after the onset of the stroke. There is no time limit to code the sequelae.
- If a patient recovers from a stroke with no residual deficits, report history of stroke.
- For hypertension, the classification presumes a causal relationship between hypertension and heart involvement and between hypertension and kidney involvement, as the two conditions are linked by the term "with" in the Alphabetic Index.
 - If the documentation clearly states the conditions are unrelated then code separately.

Stroke

I63.- Cerebral infarction

I69.3- Sequelae of cerebral infarction

G45.9 Transient cerebral ischemic attack, unspecified

Z86.73 Personal history of transient ischemic attack (TIA), and cerebral infarction without residual deficits

Hypertension

I10 Essential (primary) hypertension

I11.- Hypertensive heart disease

Use additional code to identify type of heart failure (I50.-)

I12.- Hypertensive chronic kidney disease

Use additional code to identify the stage of chronic kidney disease (N18.1-N18.9)

I13.- Hypertensive heart and chronic kidney disease

Use additional code to identify type of heart failure (I50.-)

Use additional code to identify the stage of chronic kidney disease (N18.1-N18.9)

Z91.15 Patient's noncompliance with renal dialysis

Z99.2 Dependence on renal dialysis

Coding example

Previous CVA with residual hemiplegia

I69.359 Hemiplegia and hemiparesis following cerebral infarction affecting unspecified side

Note: Specify which side is affected.