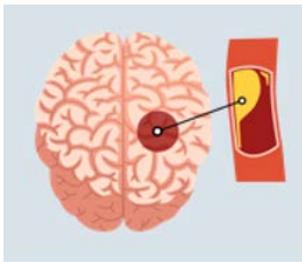


Stroke Disparities in Medicare Fee-For-Service Beneficiaries

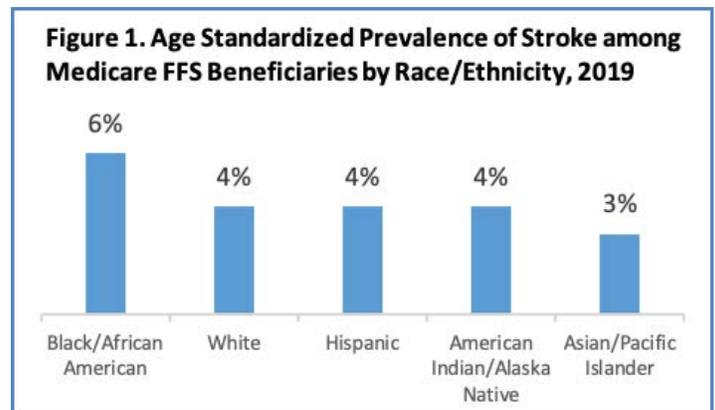


A stroke is a medical emergency in which brain cells die following a sudden interruption in the flow of oxygen to the brain. There are two types of stroke – hemorrhagic and ischemic. Ischemic stroke, which occurs in around 87% of cases, is caused by a blood clot that plugs a blood vessel in the brain depriving cells of essential nutrients and oxygen.¹ Hemorrhagic stroke, occurs when an artery in the brain bursts allowing blood to leak out and pool, exerting an increasing amount of pressure on brain cells until they die. Individuals can

also suffer from a Transient Ischemic Attack (TIA), also known as a “mini-stroke”. Symptoms of a TIA are like those of ischemic stroke but they come and go quickly, and it is a warning sign of a future stroke. Symptoms of stroke occur suddenly and include: numbness or weakness of the face, arm, or leg (especially on one side of the body); confusion, trouble speaking or understanding speech; trouble seeing in one or both eyes; trouble walking, dizziness, loss of balance or coordination; and severe headache with no known cause. According to the Centers for Disease Control and Prevention, more than 795,000 people in the United States have a stroke every year, including nearly 150,000 deaths. Experiencing a TIA increases the risk for having a more serious stroke and around 185,000 strokes each year occur in those who have had a previous stroke or TIA.¹

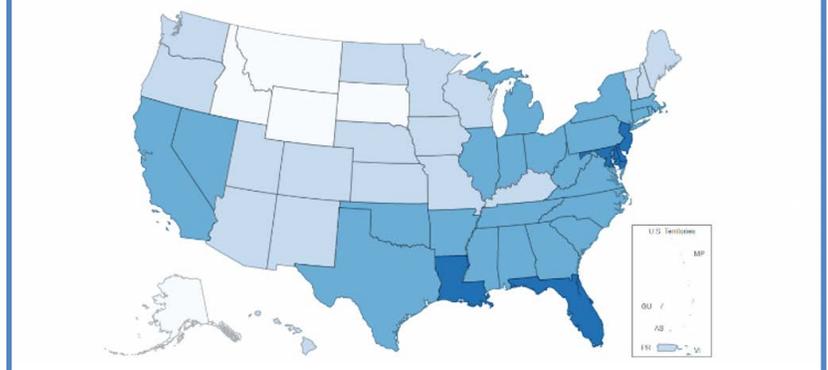
The Centers for Medicare & Medicaid Services’ (CMS’s) Chronic Condition data indicates that 3.8% of all Medicare fee-for-service (FFS) beneficiaries had a diagnosis of stroke in 2018.² FFS beneficiaries aged 65 years and over had a higher prevalence rate of stroke (3.9%) compared to the beneficiaries under 65 years (2.7%). The prevalence rate was higher among beneficiaries with both Medicare and Medicaid (5.2%) than those with Medicare only (3.4%).

The **Mapping Medicare Disparities Tool** developed by CMS Office of Minority Health shows the prevalence of osteoporosis among Medicare FFS beneficiaries varied by age, sex, race and ethnicity,



eligibility for Medicare and Medicaid, and geographic areas in 2019.³ Figure 1 shows the age standardized prevalence of stroke among FFS beneficiaries by race and ethnicity. Black/African Americans had the highest prevalence rate (6%) compared to the other racial/ethnic groups. The prevalence rates for stroke observed in the remaining racial and ethnic groups were fairly even, at 4%, with the exception of Asian/Pacific Islander beneficiaries, who had the lowest prevalence of stroke (3%). As shown in Figure 2, Delaware, Florida, Louisiana, Maryland and New Jersey, had a higher prevalence rate (5%), and Hawaii, Idaho, Montana, South Dakota and Wyoming had a lower prevalence rate (2%).

Figure 2. Prevalence of Stroke among Medicare FFS Beneficiaries by State, 2019



Although stroke risk increases with age, strokes can—and do—occur at any age and stroke continues to be one of the top 10 leading causes of serious long-term disability.¹ Common heart disorders, high cholesterol, and high blood pressure are major risk factors for stroke. Coronary artery disease, for example, increases the risk for stroke because a build-up of plaque in the arteries can block the flow of oxygen-rich blood to the brain. Under the Medicare program, Medicare Part B covers cardiovascular disease screenings that help detect conditions that may lead to a heart attack or stroke, and it covers other **Preventive & Screening Services** such as Cardiovascular Behavioral Therapy, Tobacco Use Cessation Counseling and more to help prevent or lower the risk for heart disease and stroke. The U.S. Department of Health and Human Services launched an initiative to help fight stroke and heart disease. Million Hearts® brings together communities, health systems, nonprofit organizations, federal agencies, and private-sector partners from across the country with the goal of preventing one million heart attacks and strokes by 2022.

Beneficiary Resources

- [What is a stroke?](#)
- [Medicare and You Handbook](#)
- [Chronic Care Management Services](#)
- [Your Medicare Coverage: Cardiovascular disease screenings](#)
- [Million Hearts® 2022](#)
- [Medicare & You: Stroke Awareness Month \(video\)](#)
- [Medicare & You: Heart Disease and Stroke \(video\)](#)

Provider Resources

- [CMS: Medicare Chronic Conditions](#)
- [CMS-Medicare Learning Network: Medicare Preventive Services](#)
- [CDC: Stroke Communications Kit](#)
- [Interactive Atlas of Heart Disease and Stroke](#)
- [Vital Signs: Preventing Stroke Deaths](#)
- [Million Hearts® Cardiovascular Disease \(CVD\) Risk Reduction Model](#)

References/Sources

1. Centers for Disease Control and Prevention. Stroke. <http://www.cdc.gov/stroke/index.htm>
2. Centers for Medicare & Medicaid Services. Chronic Conditions. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/CC_Main
3. Centers for Medicare & Medicaid Services. Mapping Medicare Disparities Tool. <https://data.cms.gov/mapping-medicare-disparities>. (Results from 2019 were considered preliminary at the time of this analysis, as the data were not fully complete due to a “claims lag” between when a service occurs and when the claim is collected by CMS and, ultimately, appears in the CCW database.)

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