Chronic Conditions Warehouse (CCW)
Medicare Chronic Condition Charts
2019 Version
Summary charts derived from the Chronic Conditions Warehouse (CCW) Master Beneficiary Summary File (MBSF) data are available for various 2019 Medicare chronic conditions using beneficiary fee-for-service (FFS) prevalence statistics, including:

- **CCW Condition Period Prevalence, 2019**
- **Cardiovascular Conditions Trends, 2010–2019**
- **Cancer Trends, 2010–2019**
- **Endocrine and Renal Conditions Trends, 2010–2019**
- **Cognitive and Mental Health Conditions Trends, 2010–2019**
- **Musculoskeletal and Joint Conditions Trends, 2010–2019**
- **Pulmonary Conditions Trends, 2010–2019**
- **Ophthalmic Conditions Trends, 2010–2019**
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- **Selected Chronic Conditions by Age Group, 2019**
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- **Selected Chronic Conditions by Sex, 2019**
- **Selected Chronic Conditions by Medicare Status Code, 2019**
- **Diabetes Period Prevalence by State, 2019**
- **Alzheimer’s/Dementia Period Prevalence by State, 2019**
- **Depression Period Prevalence by State, 2019**
CCW CONDITION PERIOD PREVALENCE, 2019

SOURCE: Chronic Conditions Warehouse (CCW), Medicare Beneficiary Summary Files, August 2021.

Description:
The conditions with the highest period prevalence rates are hypertension (59.0%) and hyperlipidemia (50.0%). Approximately one-third of the population has been treated for rheumatoid/osteo-arthritis (35.2%), ischemic heart disease (27.8%), and/or diabetes (27.5%).

Technical notes:
Period prevalence is calculated for these rates. Beneficiaries with full or nearly full fee-for-service (FFS) coverage during the year who had FFS claims for the condition within the condition-specified look back period. Chronic conditions have a one- to three-year look-back time period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage). Only females are included in the denominator for endometrial and female breast cancer; only males are included for prostate cancer and benign prostatic hyperplasia. Beneficiaries may be counted in more than one chronic condition category.
Description:
The rates for several of the cardiovascular conditions have been fairly stable over time, with a slight decrease in ischemic heart disease (from 31.4% in 2010 to 27.8% in 2019) and heart failure (16.3% in 2010 and 14.6% in 2019). Atrial fibrillation has increased slightly, from 8.1% in 2010 to 8.8% in 2019.

Technical notes:
Period prevalence is calculated for these rates. Beneficiaries with full or nearly full fee-for-service (FFS) coverage during the year who had FFS claims for the condition within the condition-specified look back period. Chronic conditions have a one- to two-year look-back time period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage). Beneficiaries may be counted in more than one chronic condition category.
CANCER TRENDS, 2010–2019

Description:
The rate for female breast cancer has risen slightly over time — from 5.0% in 2010 to 6.2% in 2019. The rate for prostate cancer fluctuated somewhat — from 7.5% in 2011, to a low of 7.0% in 2014, then to 7.6% in 2019. The rates of endometrial, lung and colorectal cancer were stable over time.

Technical notes:
Period prevalence is calculated for these rates. Beneficiaries with full or nearly full fee-for-service (FFS) coverage during the year who had FFS claims for the condition within the condition-specified look back period. These conditions have a one-year look back time period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage). Only females are included in the denominator for endometrial and female breast cancer; only males are included for prostate cancer. Beneficiaries may be counted in more than one chronic condition category.
ENDOCRINE AND RENAL CONDITIONS TRENDS, 2010–2019

Description:
There has been an increase over time for each of the endocrine and renal conditions. The proportion of the population being treated for diabetes fluctuated a bit from 27.9% in 2010, to a high of 28.5% in 2012, and to 27.5% in 2019. The period prevalence rate of chronic kidney disease has risen from 14.8% in 2010 to 26.0% in 2019; note that the large increase from 2014 to 2016 may be partially due to the conversion from ICD-9-CM to ICD-10-CM diagnosis codes on the claims. Acquired hypothyroidism increased from 13.5% in 2010 to 16.5% in 2019.

Technical notes:
Period prevalence is calculated for these rates. Beneficiaries with full or nearly full fee-for-service (FFS) coverage during the year who had FFS claims for the condition within the condition-specified look back period. These conditions have a one- to two-year look back time period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage). Beneficiaries may be counted in more than one chronic condition category.
**COGNITIVE AND MENTAL HEALTH CONDITIONS TRENDS, 2010–2019**

The rate of treatment for depression has increased over time — from 14.4% in 2010 to 19.4% in 2019. The prevalence of treatment for Alzheimer’s disease decreased from 5.3% in 2010 to 3.9% in 2019. The prevalence of treatment for Alzheimer’s disease or related senile dementia has been fairly stable over time. However, the proportion of treatment for Alzheimer’s disease or related senile dementia that is comprised of Alzheimer’s disease was 46.9% in 2010 and began to decline after 2010. By 2019, Alzheimer’s disease comprised 35.5% of the Alzheimer’s disease or related senile dementia period prevalence.

**Technical notes:**

Period prevalence is calculated for these rates. Beneficiaries with full or nearly full fee-for-service (FFS) coverage during the year who had FFS claims for the condition within the condition-specified look back period. Chronic conditions have a one- to three-year look back time period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage). Beneficiaries may be counted in more than one chronic condition category.
MUSCULOSKELETAL AND JOINT CONDITIONS TRENDS, 2010–2019

Description:
The rates of hip fractures and treatment for osteoporosis have been stable over time. The rate of treatment for rheumatoid or osteoarthritis has increased from 29.4% to 35.2% (2010 to 2019, respectively); note that the relatively larger increase from 2014 to 2016 may be partially due to the conversion from ICD-9-CM to ICD-10-CM diagnosis codes on the claims.

Technical notes:
Period prevalence is calculated for these rates. Beneficiaries with full or nearly full fee-for-service (FFS) coverage during the year who had FFS claims for the condition within the condition-specified look back period. These conditions have a one- to two-year look back time period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage). Beneficiaries may be counted in more than one chronic condition category.
Description:
The period prevalence for asthma has increased over time — from 4.8% in 2010 to 5.2% in 2019. Prevalence of treatment for chronic obstructive pulmonary disease (COPD) has been fairly stable — from 11.8% in 2010, up to 12.0% in 2011, and then down to 11.7% in 2019.

Technical notes:
Period prevalence is calculated for these rates. Beneficiaries with full or nearly full fee-for-service (FFS) coverage during the year who had FFS claims for the condition within the condition-specified look back period. These conditions have a one-year look back time period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage). Beneficiaries may be counted in more than one chronic condition category.
Description:

The proportion of Medicare beneficiaries with a cataract procedure has been gradually decreasing over time. The rate of cataract procedures declined from 19.9% in 2010 to 17.6% in 2019. The proportion of beneficiaries identified as having treatment for glaucoma decreased from 10.4% in 2010 to 9.6% in 2019.

Technical notes:

Period prevalence is calculated for these rates. Beneficiaries with full or nearly full fee-for-service (FFS) coverage during the year who had FFS claims for the condition within the condition-specified look back period. These conditions have a one-year look back time period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage). Beneficiaries may be counted in more than one chronic condition category.
OTHER CONDITIONS TRENDS, 2010–2019

The period prevalence of hypertension and hyperlipidemia has increased over time. In 2010, 58.2% of beneficiaries had fee-for-service claims for hypertension compared to 59.0% in 2019. For hyperlipidemia the increase was substantial — 45.6% in 2010 to 50.0% in 2019. Anemia has fluctuated slightly over time — it increased from 24.4% in 2010 to 24.9% in 2011, and then decreased to 22.6% in 2019. Benign prostatic hyperplasia has increased over time — from 13.4% in 2010 to 18.0% in 2019.

Technical notes:
Period prevalence is calculated for these rates. Beneficiaries with full or nearly full fee-for-service (FFS) coverage during the year who had FFS claims for the condition within the condition-specified look back period. These conditions have a one-year look back time period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage). Beneficiaries may be counted in more than one chronic condition category.
Description:

The age distribution of Medicare beneficiaries with selected chronic conditions is shown. Some conditions are comprised largely of older Medicare beneficiaries. For example, 76.2% of beneficiaries with claims for Alzheimer’s and related senile dementia were 75 years of age or older; similarly, 60.9% of people with heart failure, 58.8% of those with stroke, and 58.0% of those with colorectal cancer treatment were 75 or older. Other conditions, such as depression, were comprised largely of younger beneficiaries (61.5% of beneficiaries treated for depression were 74 years of age or less).

Technical notes:

Age is calculated based on the age of the Medicare beneficiary as of December 31. If the beneficiary expired, the age is calculated based on age at time of death. Period prevalence is calculated for these rates. Beneficiaries with full or nearly full fee-for-service (FFS) coverage during the year who had FFS claims for the condition within the condition-specified look back period. These conditions have a one- to three-year look back time period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage). Beneficiaries may be counted in more than one chronic condition category.
Description:

There is racial variation in the prevalence of treatment for Medicare fee-for-service (FFS) beneficiaries with these conditions. Although the white racial group comprised 83% of the Medicare FFS population in 2019, they comprised 89.1% of the subpopulation with treatment for chronic obstructive pulmonary disease, 88.9% of the population with depression, and 88% of the population with colorectal cancer. In 2019, although the black racial group comprised 8.7% of the total Medicare FFS population, they comprised 13% of the subpopulation with diabetes, 12.4% of those with stroke, 12.3% of those with claims for chronic kidney disease (CKD), and 11.4% of the population with heart failure.

Technical notes:

American Indian, Native American, Other, and Unknown races are grouped together due to small cell sizes. Period prevalence is calculated for these rates. Beneficiaries with full or nearly full fee-for-service (FFS) coverage during the year who had FFS claims for the condition within the condition-specified look back period. These conditions have a one- to three-year look back time period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage). Beneficiaries may be counted in more than one chronic condition category.
SELECTED CHRONIC CONDITIONS BY SEX, 2019

SOURCE: Chronic Conditions Warehouse (CCW), Medicare Beneficiary Summary Files, August 2021.

Description:
The gender distribution of Medicare beneficiaries varies by condition. Overall, in 2019 Medicare fee-for-service (FFS), 54.7% of the population was female. For depression and Alzheimer’s and related senile dementia, 67.1 and 61.6% of the subpopulation, respectively, was female. For chronic kidney disease (CKD), diabetes, and colorectal cancer, we observed a higher proportion of males with claims for the conditions than we would have expected based on the overall population distribution of males (which was 45.3% of the total Medicare FFS population) — 48.7% with diabetes, 48.5% with CKD, and 48.1% with colorectal cancer claims were male.

Technical notes:
Period prevalence is calculated for these rates. Beneficiaries with full or nearly full fee-for-service (FFS) coverage during the year who had FFS claims for the condition within the condition-specified look back period. These conditions have a one- to three-year look back time period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage). Beneficiaries may be counted in more than one chronic condition category.
SELECTED CHRONIC CONDITIONS BY MEDICARE STATUS CODE, 2019

SOURCE: Chronic Conditions Warehouse (CCW), Medicare Beneficiary Summary Files, August 2021.

Description:
The reason for Medicare entitlement varies by condition. In Medicare fee-for-service (FFS) overall, 13.9% of the population were entitled to Medicare due to disability rather than age in 2019. A higher than expected proportion of people with treatment for depression were entitled due to disability (23.7%). For some conditions, a much higher proportion of the subpopulation were aged — for example, Alzheimer’s and related senile dementia and colorectal cancer, with 94.1% and 92.7% of the subpopulations, respectively, entitled due to age.

Technical notes:
Classification used the Medicare status code, and combined ESRD and Disabled categories into the "Disabled" grouping. Beneficiaries with full or nearly full fee-for-service (FFS) coverage during the year who had FFS claims for the condition within the condition-specified look back period. These conditions have a one- to three-year look back time period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage). Beneficiaries may be counted in more than one chronic condition category.
Description:
The number of Medicare fee-for-service (FFS) enrollees with diabetes varied by state. Colorado had the lowest rate (18.8%), and New York had the highest (31.8%).

Technical notes:
Period prevalence is calculated for these rates. Beneficiaries with full or nearly full FFS coverage during the year who had FFS claims for diabetes within the two-year look back period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage).
ALZHEIMER’S/DEMENTIA PERIOD PREVALENCE BY STATE, 2019

The number of Medicare fee-for-service (FFS) beneficiaries with Alzheimer’s disease or related senile dementia varied by state. Wyoming had the lowest rate (7.8%), and Washington, D.C. had the highest (14.2%).

Technical notes:
Period prevalence is calculated for these rates. Beneficiaries with full or nearly full FFS coverage during the year who had FFS claims for Alzheimer’s disease or related senile dementia within the three-year look back period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019, and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage).

SOURCE: Chronic Conditions Warehouse (CCW), Medicare Beneficiary Summary Files, August 2021.
DEPRESSION PERIOD PREVALENCE BY STATE, 2019

Description:
The number of Medicare fee-for-service (FFS) enrollees with depression varied by state. Hawaii had the lowest rate (9.58%), and West Virginia had the highest (24.15%).

Technical notes:
Period prevalence is calculated for these rates. Beneficiaries with full or nearly full FFS coverage during the year who had FFS claims for depression within the one-year look back period. Please refer to the CCW Chronic Condition Categories for algorithm criteria. Denominator is all who were enrolled in Medicare on or after January 1, 2019 and had full or nearly full FFS coverage (i.e., 11 or 12 months of Medicare Part A and B [or coverage until time of death] and one month or less of HMO coverage).