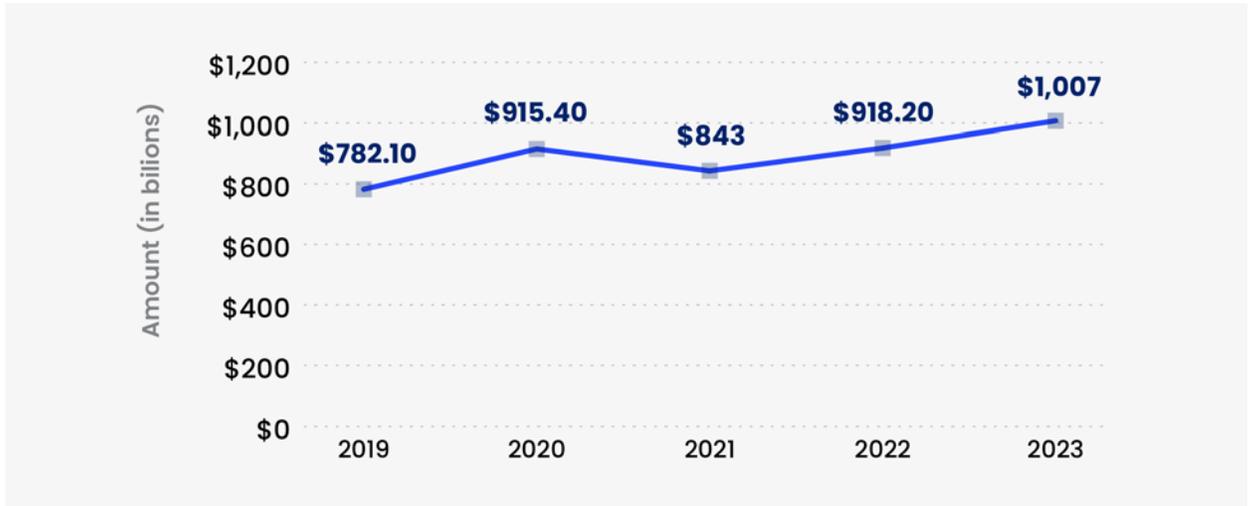


Medicare Expenditures for Cancer Care

Cancer can be very expensive to treat. Given that the incidence of cancer increases with age, the costs associated with cancer treatment have a fiscal impact on the Medicare program.

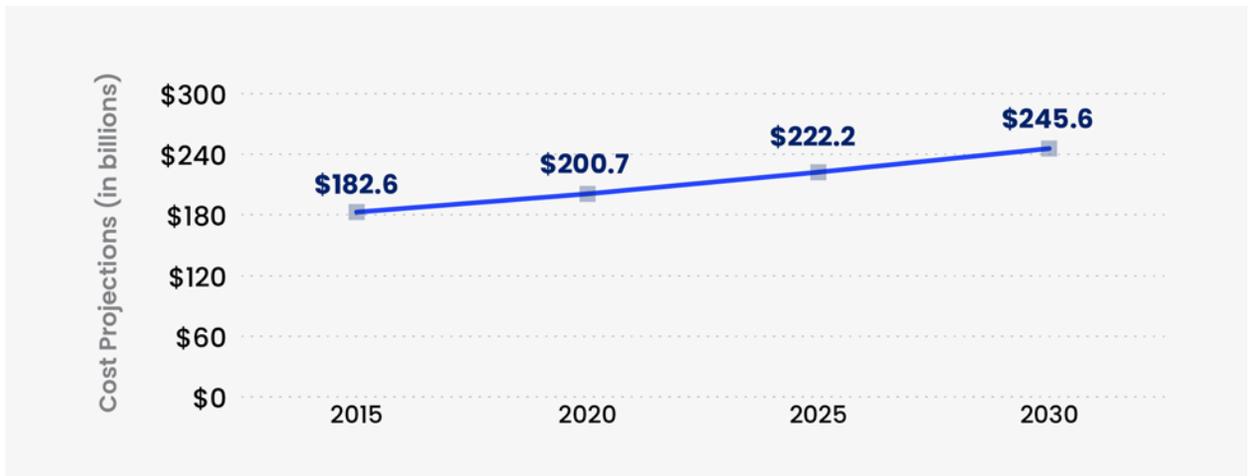
Figure 50: Medicare Expenditure Growth, 2019–2023



Source: 2023 Medicare Trustees Report.

The national cost for all types of cancer is projected to increase over time. Projections shown below reflect only the aging and growing US population and do not incorporate related increases in Medicare expenditures on cancer care.¹⁰²

Figure 51: National Cost Projections for All Cancer Sites, 2015–2030



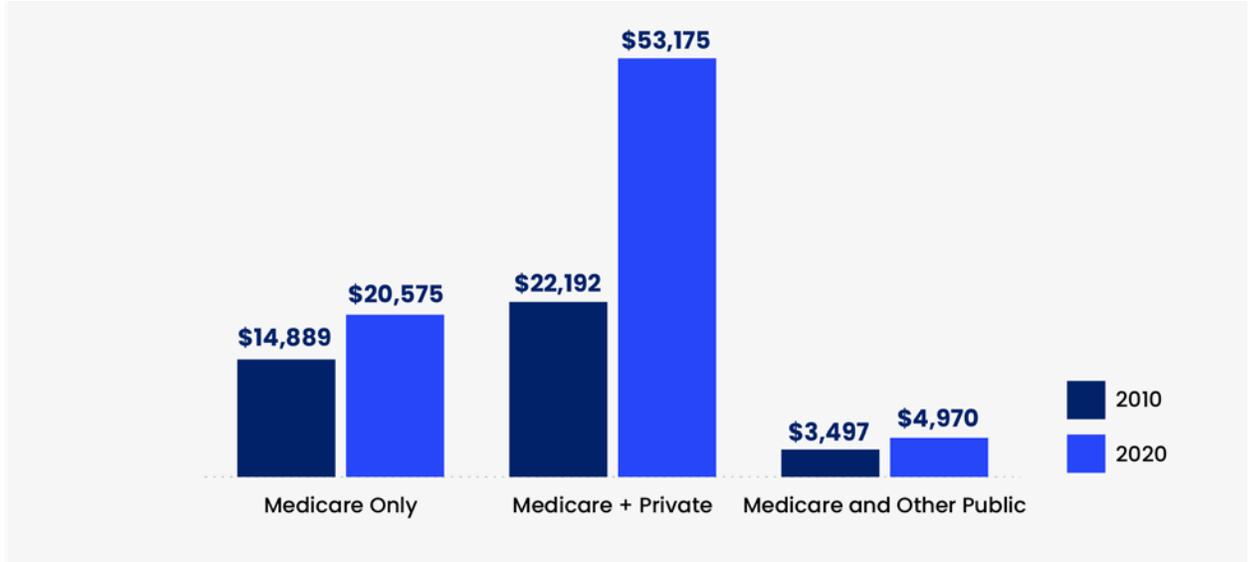
NOTE: All cancer sites of care include bladder, brain, breast, cervical, colorectal, esophagus, Hodgkin, kidney, leukemia (AML, CLL and CML), liver, lung (non-small cell and small cell), melanoma, myeloma, non-Hodgkin, oral, ovary, pancreas, prostate, stomach, thyroid and uterus.

National cost projections include Medical Services (Medicare Part A and B) and Oral Prescription Drugs (Part D).

Source: Mariotto AB, Enewold L, Zhao J, Zeruto CA, Yabroff KR. Medical Care Costs Associated with Cancer Survivorship in the United States. *Cancer Epidemiol Biomarkers Prev.* 2020;29(7):1304-1312. doi:10.1158/1055-9965.EPI-19-1534.

Over one-third (33%) of cancer costs are attributed to the Medicare population.¹⁰³ Total expenditures for individuals ages 65 and older with cancer increased over the period from 2010 to 2020. This was particularly true for individuals with both Medicare and private supplemental coverage, with private coverage bearing more responsibility for Medicare cost sharing.

Figure 52: Total Expenditures for Ages 65+ with Cancer by Insurance Type (in millions), 2010–2020

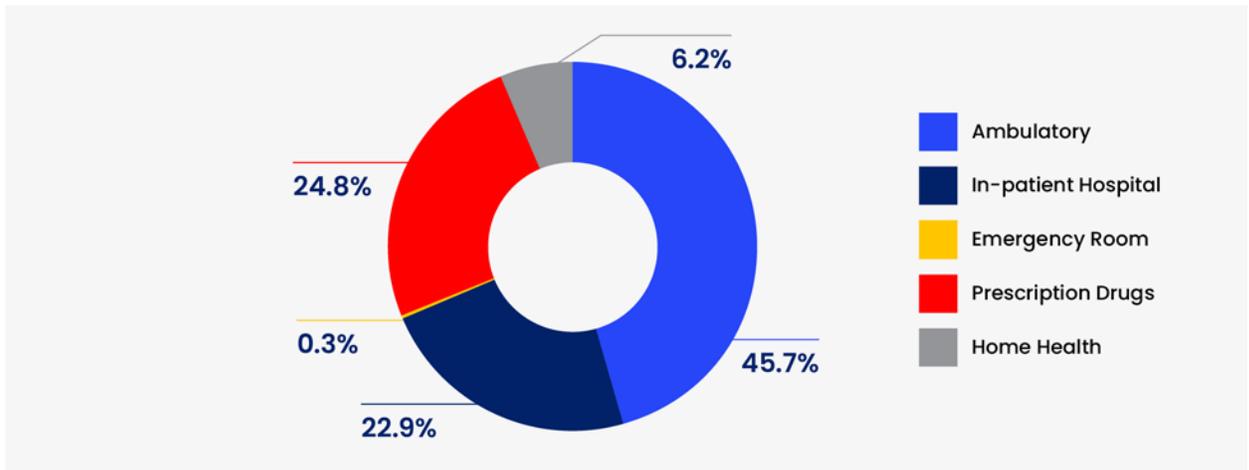


Note: Beneficiaries enrolled in Medicare Advantage plans would be included in the Medicare and Other Public category. The 2020 data comprise the first summary statistics that reflect the coronavirus disease (COVID-19).

Source: Agency for Healthcare Research and Quality. Total expenditures (\$) in millions by condition and insurance coverage, 2020. Medical Expenditure Panel Survey. Available from: [MEPS-NC Data Tools – Medical Expenditure Panel Survey \(MEPS\) Household Component \(HC\) \(ahrq.gov\)](https://meps-ncs.org/data-tools/meps-ncs-household-component-hc).

Beneficiaries who are diagnosed with cancer will likely use a variety of different Medicare services. The following chart shows the percentage of expenditures by service used by beneficiaries with cancer:

Figure 53: Treatment Expenditures for Ages 65+ with Cancer, 2019



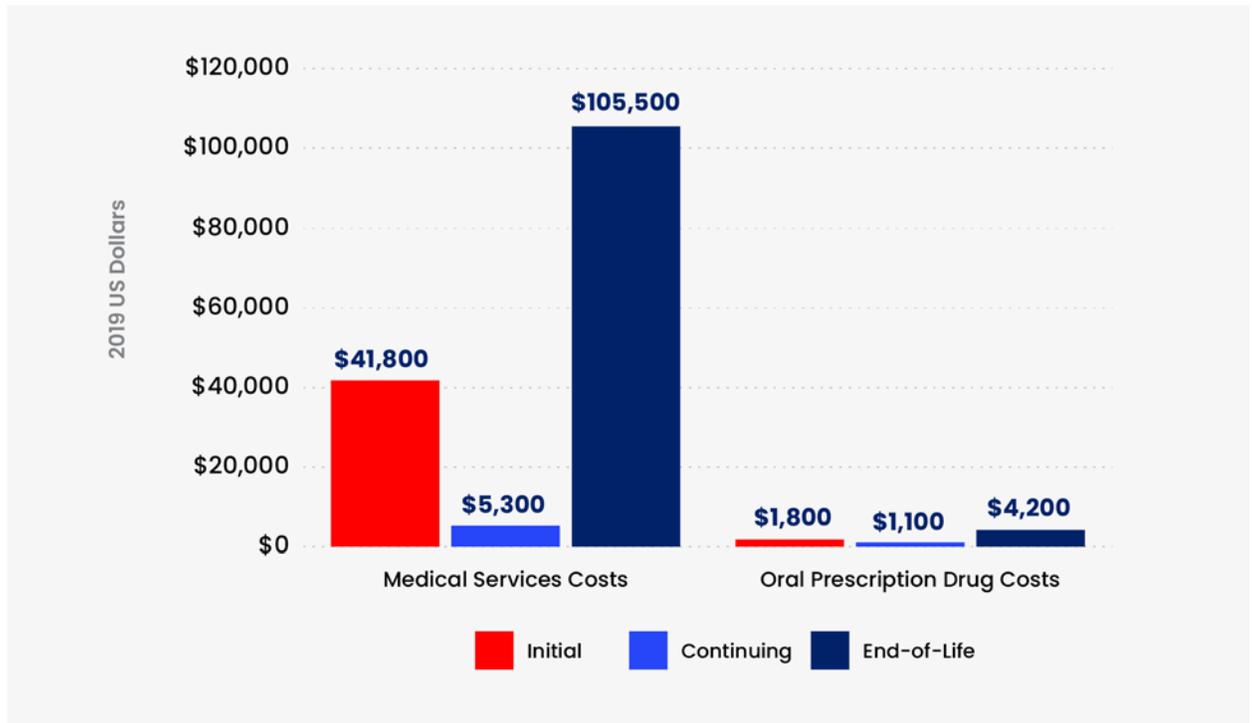
Note: The term Ambulatory includes office-based provider visits and hospital outpatient visits. The term Emergency Room excludes expenses for emergency room services included in an inpatient hospital bill. The term Prescribed Drugs includes all prescribed medicines initially purchased or refilled during the year.

Source: Muhuri, PK. Expenditures for commonly treated conditions among older adults: Estimates from the Medical Expenditure Panel Survey, 2019. 9 Statistical Brief #545. Rockville, MD: Agency for Healthcare Research and Quality; October 2022. https://meps.ahrq.gov/data_files/publications/st545/stat545.pdf.

Research also suggests that individuals ages 65 and older who had a principal diagnosis of cancer had a population rate of hospitalizations that was 15 times higher than the rate among those ages 18-44.¹⁰⁴

Health care spending for cancer care is generally higher after cancer diagnosis and in the last year of life.

Figure 54: Cancer-attributable Annualized Average Costs



Note: The Initial phase is defined as the first 12 months after each diagnosis. The End-of-Life phase is defined as the 12 months before death among survivors who died. The Continuing phase is the months in between the initial and the end-of-life phases.

Source: Mariotto AB, Enewold L, Zhao J, Zeruto CA, Yabroff KR. Medical Care Costs Associated with Cancer Survivorship in the United States. *Cancer Epidemiol Biomarkers Prev.* 2020;29(7):1304-1312. doi:10.1158/1055-9965.EPI-19-1534.

References

- 1 American Cancer Society. Cancer Fact & Figures 2024. Atlanta: American Cancer Society; 2024 [hereinafter Cancer Facts & Figures 2024].
- 2 Zhao, J., Han, X., Nogueira, L., Fedewa, S.A., Jemal, A., Halpern, M.T. and Yabroff, K.R. (2022), Health insurance status and cancer stage at diagnosis and survival in the United States. *CA A Cancer J Clin.* <https://doi.org/10.3322/caac.21732>.
- 3 Shiels MS, Haque AT, Berrington de González A, Freedman ND. Leading Causes of Death in the US During the COVID-19 Pandemic, March 2020 to October 2021. *JAMA Intern Med.* 2022;182(8):883–886. doi:10.1001/jamainternmed.2022.2476.
- 4 U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on 2022 submission data (1999-2020): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; <https://www.cdc.gov/cancer/dataviz>, released in June 2023.
- 5 Cancer Facts & Figures 2024.
- 6 Throughout this report, we assume individuals ages 65 and older qualify for Medicare coverage. Thus, the terms Medicare beneficiary, Medicare enrollee and individuals 65+ are used interchangeably unless otherwise noted.
- 7 The Board of Trustees, Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds. 2023 Medicare Trustees Report. 2023. Available from: <https://www.cms.gov/oact/tr/2023> (hereinafter 2023 Medicare Trustees Report).
- 8 Medicare Payment Advisory Commission. A Data Book: Health Care Spending and the Medicare Program. July 2023. Available from: https://www.medpac.gov/wp-content/uploads/2023/07/July2023_MedPAC_DataBook_SEC.pdf (hereinafter MedPAC 2023 data book).
- 9 Cancer Facts & Figures 2024.
- 10 National Cancer Institute. NCI Dictionaries. Available at: <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/invasive-cancer>.
- 11 More information is discussed in the Medicare Supplemental Coverage section below.
- 12 While Medicare Part B covers home health care, Medicare Part A covers and pays for home health care for beneficiaries in certain circumstances after a hospital or skilled nursing facility stay.
- 13 2023 Medicare Trustees Report. This figure includes enrollment in Original Medicare only. Enrollment information in the Medicare Advantage program is contained in the Medicare Part C section below.
- 14 Individuals who paid less than 30 quarters in Medicare taxes will pay a Part A premium of \$504 a month in 2024. Individuals who paid between 30-39 quarters of Medicare taxes will pay a monthly premium of \$278 in 2024. Centers for Medicare & Medicaid Services. Fact Sheet. 2024 Medicare Parts A & B premiums and Deductibles. Oct. 12, 2023. Available from: <https://www.cms.gov/newsroom/fact-sheets/2024-medicare-parts-b-premiums-and-deductibles> [hereinafter 2024 Medicare Parts A and B fact sheet].
- 15 Most beneficiaries do not pay a premium for Part A and therefore are not assessed a late enrollment penalty if they fail to enroll in Part A when first eligible. However, beneficiaries who are assessed a Part A premium and who fail to sign up for Part A coverage when they are first eligible to do so, may incur a 10 percent penalty on their monthly premium. This penalty is temporary and is assessed for twice the number of years the beneficiary failed to enroll. Most beneficiaries who work beyond the age of 65 and who receive health insurance coverage from an employer who covers more than 20 full-time employees will not be assessed a late enrollment penalty.
- 16 In fact, the Centers for Medicare & Medicaid Services (CMS) advises most individuals to enroll in Part A when they turn 65, even if they have health insurance from an employer. See CMS Fact Sheet: Deciding Whether to Enroll in Medicare Part A and Part B When You Turn 65. CMS Prod. No. 11962. Available from <https://www.cms.gov/Outreach-and-Education/Find-Your-Provider-Type/Employers-and-Unions/FS3-Enroll-in-Part-A-and-B.pdf>.
- 17 Medicare has different cost obligations for mental health inpatient stays. For more information, see <https://www.medicare.gov/your-medicare-costs/costs-at-a-glance/costs-at-a-glance.html#collapse-4808>.
- 18 2024 Medicare Parts A and B fact sheet.
- 19 Beneficiaries only have 60 “lifetime reserve days” over the course of their lifetime. Beneficiaries who exhaust their lifetime reserve days (following 90 days of inpatient care) are responsible for the full cost of the remainder of their hospital stay. <https://www.medicare.gov/basics/costs/medicare-costs#collapse-4808>. Beneficiaries who receive mental health services on an inpatient basis face different cost-sharing.
- 20 Medicare will only pay for skilled nursing facility (SNF) extended-care services immediately following a medically necessary three-consecutive-day inpatient hospital stay (3-Day rule). 42 U.S.C. § 409.30(a).
- 21 2024 Medicare Parts A and B factsheet.
- 22 Because of the lack of a cap in out-of-pocket costs, many beneficiaries opt to purchase supplemental coverage to help cover their cost sharing. Supplemental or Medigap coverage charges an additional monthly premium. For more information, see the Medicare Supplemental Coverage section of this report.
- 23 2023 Medicare Trustees Report.
- 24 Centers for Medicare & Medicaid Services. Internet-Only Manual, Pub 100-02, Chapter 15, 50.4.5 Off Label Use of Anti-Cancer Drugs and Biologicals.
- 25 2023 Medicare Trustees Report. This figure includes enrollment in Original Medicare only. Enrollment information in the Medicare Advantage program is contained in the Medicare Part C section below.
- 26 Medicare uses the beneficiary’s reported income to the Internal Revenue Service (IRS) on their tax return from two years prior for purposes of determining a beneficiary’s income.
- 27 Beginning in 2023, Medicare beneficiaries who were 36 months post-kidney transplant (and thus no longer eligible for Medicare) can choose to pay a monthly premium to continue Part B coverage of immunosuppressive drugs. More information on premium amounts for immunosuppressive coverage only can be found at <https://www.cms.gov/newsroom/fact-sheets/2024-medicare-parts-b-premiums-and-deductibles>.
- 28 Specific information regarding income related premiums for Part B is available at <https://www.cms.gov/newsroom/fact-sheets/2024-medicare-parts-b-premiums-and-deductibles>.
- 29 Most beneficiaries who work beyond the age of 65 and who receive health insurance coverage from an employer will not be assessed a late enrollment penalty. 42 C.F.R. § 407.20(c).
- 30 2024 Medicare Parts A and B fact sheet.
- 31 Because of the lack of a cap in out-of-pocket costs, many beneficiaries opt to purchase supplemental coverage to help cover their cost sharing. Supplemental coverage charges an additional monthly premium. For more information, see the Medicare Supplemental Coverage section of this report.

- 32 Centers for Medicare & Medicaid Services. Medicare Enrollment Dashboard. 2023. Available at: [Medicare Enrollment Dashboard - Centers for Medicare & Medicaid Services Data \(cms.gov\)](https://www.cms.gov/medicare/medicaid-services/medicare-enrollment-dashboard).
- 33 Id.
- 34 Faith Leonard et al., Traditional Medicare or Medicare Advantage: How Older Americans Choose and Why (Commonwealth Fund, Oct. 2022). <https://doi.org/10.26099/2rfq-z770>.
- 35 Centers for Medicare & Medicaid Services. Press Release. Biden-Harris Administration Announces Lower Premiums for Medicare Advantage and Prescription Drug Plans in 2023. 2022. Available at: <https://www.cms.gov/newsroom/press-releases/biden-harris-administration-announces-lower-premiums-medicare-advantage-and-prescription-drug-plans>.
- 36 Kaiser Family Foundation. Medicare Advantage 2023 Spotlight: First Look. 2022. Available at: <https://www.kff.org/medicare/issue-brief/medicare-advantage-2023-spotlight-first-look/#:~:text=CMS%20announced%20that%20the%20average,to%20be%20%2418%20a%20month>.
- 37 Kaiser Family Foundation. Medicare Advantage in 2023: Premiums, Out-of-Pocket Limits, Cost Sharing, Supplemental Benefits, Prior Authorization, and Star Ratings. 2023. Available at: <https://www.kff.org/medicare/issue-brief/medicare-advantage-in-2023-premiums-out-of-pocket-limits-cost-sharing-supplemental-benefits-prior-authorization-and-star-ratings/>
- 38 2023 Medicare Trustees Report Table IV.B.7.
- 39 Centers for Medicare & Medicaid Services. Medicare Prescription Drug Benefit Manual, Ch. 6 – Part D Drugs and Formulary Requirements, sect. 30.2.5 (Rev. 18, 01-15-16), available at <https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/Downloads/Part-D-Benefits-Manual-Chapter-6.pdf>.
- 40 The six protected classes include anticonvulsants, antidepressants, antineoplastics, antipsychotics, antiretrovirals, and immunosuppressants.
- 41 Centers for Medicare & Medicaid Services. Internet-Only Manual, Pub 100-02, Chapter 15, 50.4.5 Off Label Use of Anti-Cancer Drugs and Biologicals.
- 42 For 2024, the threshold amount for a specialty tier drug is \$950 for a 30-day supply. Centers for Medicare & Medicaid Services. Final Contract Year (CY) 2024 Bidding Instructions. Apr. 4, 2023. Available at <https://www.cms.gov/files/document/final-cy-2024-part-d-bidding-instructions.pdf>.
- 43 Id.
- 44 Centers for Medicare & Medicaid Services. Monthly Contract Summary Report July 2023. 2023. Available at: <https://www.cms.gov/files/zip/monthly-contract-summary-report-july-2023.zip>.
- 45 Centers for Medicare & Medicaid Services. Medicare Enrollment Dashboard. 2023. Available at: [Medicare Enrollment Dashboard - Centers for Medicare & Medicaid Services Data \(cms.gov\)](https://www.cms.gov/medicare/medicaid-services/medicare-enrollment-dashboard).
- 46 Geography matters in the Medicare Advantage context because CMS' payment to the MA plan is determined in part based on the local Medicare Advantage benchmark (a local target based on the average fee-for-service spending per beneficiary). For more information, see Medicare Payment Advisory Commission. Payment Basics: Medicare Advantage Program Payment System. October 2022. Available at https://www.medpac.gov/wp-content/uploads/2021/11/MedPAC_Payment_Basics_22_MA_FINAL_SEC.pdf.
- 47 Centers for Medicare & Medicaid Services. Fact Sheet. CMS Releases 2024 Projected Medicare Part D Premium and Bid Information. 2023. Available at: <https://www.cms.gov/newsroom/fact-sheets/cms-releases-2024-projected-medicare-part-d-premium-and-bid-information> CMS calculates the average total Part D premium, which is the sum of the average basic premium and the average supplemental premium for plans with enhanced coverage. According to CMS, this figure is the most accurate projection of what Part D enrollees are likely to pay on average.
- 48 Specific information regarding income-related premiums for Part D is available at <https://www.cms.gov/newsroom/fact-sheets/2024-medicare-parts-b-premiums-and-deductibles>.
- 49 Most beneficiaries who work beyond the age of 65 and receive health insurance coverage from an employer who covers more than 20 full-time employees will not be assessed a late enrollment penalty. Individuals who qualify for Extra Help (see section on low-income Medicare beneficiaries) are not assessed a late enrollment penalty.
- 50 The Part D benchmark premium is the average monthly premium for Part D plans in a given region weighted by enrollment in each plan.
- 51 Centers for Medicare & Medicaid Services. Announcement of Calendar Year (CY) 2024 Medicare advantage (MA) Capitation Rates and Part C and Part D Payment Policies. Mar. 31, 2023. Available at [Announcement of Calendar Year \(CY\) 2024 Medicare Advantage \(MA\) Capitation Rates and Part C and Part D Payment Policies \(cms.gov\)](https://www.cms.gov/newsroom/press-releases/2024-medicare-advantage-ma-capitation-rates-and-part-c-and-part-d-payment-policies).
- 52 Drug manufacturer discounts only apply for branded prescription drugs. For generic drugs, the plans pay 75% of the cost in the coverage gap.
- 53 As of December 31, 2023, CMS has not finalized its guidance implementing the capped monthly installment option.
- 54 More information is available at <https://www.medicare.gov/publications/02110-medigap-guide-health-insurance.pdf>.
- 55 A chart depicting the Medigap plan benefits can be found at <https://www.medicare.gov/health-drug-plans/medigap/basics/compare-plan-benefits>. Medigap standardization varies in Massachusetts, Minnesota, and Wisconsin. More information is available at <https://www.medicare.gov/health-drug-plans/medigap/basics>.
- 56 More information about eligibility for enrollment in Medicare and Medigap plans is available at <https://www.medicare.gov/health-drug-plans/medigap/ready-to-buy>.
- 57 Medicare's annual enrollment period runs from October 15 through December 7 each year.
- 58 In 2023, the federal poverty level for an individual living in the 48 contiguous states and the District of Columbia was \$14,580 (200% of the federal poverty level is \$29,160). Health and Human Services. Annual Update of the HHS Poverty Guidelines. 88 Fed. Reg. 3424 (Jan. 19, 2023).
- 59 More information is available at https://www.medpac.gov/wp-content/uploads/2023/02/Feb23_MedPAC_MACPAC_DualsDataBook-WEB-508-SEC.pdf [Table 1].
- 60 2023 MedPAC data book.
- 61 Medicare. Help with Drug Costs. What's Extra Help? 2023. Available at: <https://www.medicare.gov/basics/costs/help/drug-costs>.
- 62 Individuals who are full benefit duals, those that participate in a Medicare Savings Program, and those who receive Supplemental Security Income (SSI) from Social Security automatically are enrolled in the LIS benefit.
- 63 More information on LIS beneficiary cost sharing is available at <https://www.medicare.gov/basics/costs/help/drug-costs>.
- 64 Davius JC, Rupasingha A, Cromartie J. Rural America at a Glance: 2022 Edition. U.S. Department of Agriculture Economic Research Service. Available from: <https://www.ers.usda.gov/webdocs/publications/105155/eib-246.pdf?v=4569.3>.
- 65 National Institutes of Health. National Cancer Institute GIS Portal for Cancer Research. Cancer Map Stories. Rural-Urban Disparities in Cancer. 2023. Available at: <https://gis.cancer.gov/mapstory/rural-urban/index.html>.
- 66 Cancer Facts & Figures 2023. Note: This figure is for the entire population, not just the Medicare population.

- 67 Id.
- 68 Breast Cancer: Screening. U.S. Preventive Services Task Force, Jan. 11, 2016. Available at <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/breast-cancer-screening>.
- 69 Oeffinger KC, Fontham ETH, Etzioni R, et al. Breast Cancer Screening for Women at Average Risk: 2015 Guideline Update From the American Cancer Society. *JAMA*. 2015;314(15):1599–1614. doi:10.1001/jama.2015.12783.
- 70 Cervical Cancer: Screening. U.S. Preventive Services Task Force, Aug. 21, 2018. Available at <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/cervical-cancer-screening>.
- 71 Fontham ETH, Wolf AMD, Church TR, Etzioni R, et al. Cervical Cancer Screening for Individuals at Average Risk: 2020 Guideline Update From the American Cancer Society. *CA Cancer J Clin*. 2020; 321-346. doi:10.3322/caac.21628.
- 72 Colorectal Cancer: Screening. U.S. Preventive Services Task Force, May 18, 2021. Available at <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/colorectal-cancer-screening>.
- 73 Wolf AMD, Fontham ETH, Church TR, Flowers CR, et al. Colorectal Cancer Screening for Average-Risk Adults: 2018 Guideline Update From the American Cancer Society. *CA Cancer J Clin*. 2023; 250-281. Doi:10.3322/caac.21457.
- 74 Lung Cancer: Screening. U.S. Preventive Services Task Force, Mar. 9, 2021. Available at <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/lung-cancer-screening>.
- 75 Wolf, AMD, Oeffinger, KC, Shih, TY-C, et al. Screening for lung cancer: 2023 guideline update from the American Cancer Society. *CA Cancer J Clin*. 2023; 1-32. doi:10.3322/caac.21811.
- 76 Prostate Cancer: Screening. U.S. Preventive Services Task Force, May 8, 2018. Available at <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/prostate-cancer-screening>.
- 77 Wolf AMD, Wender RC, Etzioni RB, Thompson IM, et al. American Cancer Society Guideline for the Early Detection of Prostate Cancer: Update 2010. *CA Cancer J Clin*. 2010; 70-98. doi: 10.3322/caac.200066.
- 78 Reddy SR, Broder MS, Chang E, Paydar C, Chung KC, Kansal AR. Cost of cancer management by stage at diagnosis among Medicare beneficiaries. *Curr Med Res Opin*. 2022 Aug;38(8):1285-1294. doi: 10.1080/03007995.2022.2047536. Epub 2022 Apr 20. PMID: 35285354.
- 79 Medicare has different coverage rules for individuals who are at high risk.
- 80 42 C.F.R. § 410.34(d).
- 81 Centers for Medicare & Medicaid Services. CMS Medicare National Coverage Determination Manual. § 210.2. 2023. Available at: https://www.cms.gov/regulations-and-guidance/guidance/manuals/downloads/ncd103c1_part4.pdf.
- 82 Throughout this document, the term woman or women refers to individuals assigned female at birth.
- 83 Centers for Medicare & Medicaid Services. CMS Medicare National Coverage Determination Manual §210.2.1. 2023. Available at: [Medicare National Coverage Determinations Manual \(cms.gov\)](https://www.cms.gov/regulations-and-guidance/guidance/manuals/downloads/ncd103c1_part4.pdf).
- 84 42 C.F.R. § 410.39(c).
- 85 42 C.F.R. § 410.37(c).
- 86 42 C.F.R. § 410.37(g).
- 87 Centers for Medicare and Medicaid Services. CMS Medicare National Coverage Analysis. 2014. [Screening for Colorectal Cancer – Stool DNA Testing \(CAG-00440N\)](https://www.cms.gov/regulations-and-guidance/guidance/manuals/downloads/ncd103c1_part4.pdf). Medicare coverage of the Multi-target Stool DNA test is limited to individuals between the ages of 45 and 85 years who are asymptomatic and at average risk of developing colorectal cancer. Centers for Medicare and Medicaid Services. CMS Medicare National Coverage Determination Manual §210.3(B) (2). 2023. Available at: [Medicare National Coverage Determinations Manual \(cms.gov\)](https://www.cms.gov/regulations-and-guidance/guidance/manuals/downloads/ncd103c1_part4.pdf).
- 88 42 C.F.R. § 410.37(i).
- 89 While Medicare provides coverage of screening barium enemas, Medicare enrollees incur 20% co-insurance post deductible.
- 90 42 C.F.R. § 410.37(e).
- 91 42 C.F.R. § 410.37(k).
- 92 Centers for Medicare & Medicaid Services. CMS Medicare National Coverage Determinations Manual. §210.14(B). 2023. Available at: https://www.cms.gov/regulations-and-guidance/guidance/manuals/downloads/ncd103c1_part4.pdf.
- 93 MIPPA provided the Department of Health and Human Services the authority to expand Medicare coverage for new preventive services using the National Coverage Determination process if the following conditions are met: (1) if the preventive service is reasonable and necessary for the prevention or early detection of an illness or disability; if the preventive services is recommended with a grade of A or B from the U.S. Preventive Services Task Force; and (3) if the preventive service is appropriate for individuals entitled to benefits under Part A or enrolled in Part B. 42 U.S.C. § 1395x(ddd).
- 94 Centers for Medicare & Medicaid Services. 2023 Medicare Advantage and Part D Star Ratings. Oct. 6, 2023. Available from: <https://www.cms.gov/newsroom/fact-sheets/2023-medicare-advantage-and-part-d-star-ratings>.
- 95 Centers for Medicare & Medicaid Services. Screening for Lung Cancer with Low Dose Computed Tomography (LDCT) (CAG-00439R). Feb. 10, 2022. Available at <https://www.cms.gov/medicare-coverage-database/view/ncacal-decision-memo.aspx?proposed=N&ncid=304>.
- 96 American Cancer Society, Breast Cancer Facts & Figures 2022-2024. Atlanta: American Cancer Society, Inc. 2022.
- 97 Centers for Medicare & Medicaid Services. 2023 Medicare Advantage and Part D Star Ratings. Oct. 6, 2023. Available from: <https://www.cms.gov/newsroom/fact-sheets/2023-medicare-advantage-and-part-d-star-ratings>.
- 98 National Center for Health Statistics. Health, United States, 2020-2021: Table 34. Hyattsville, MD. 2023. Available from: <https://www.cdc.gov/nchs/health/data-finder.htm>.
- 99 American Cancer Society. Cancer Facts & Figures for African American/Black People 2022-2024. Atlanta: American Cancer Society; 2022.
- 100 Centers for Medicare & Medicaid Services. CMS Medicare National Coverage Determination Manual §210.4. 2023. Available at: <https://www.cms.gov/medicare-coverage-database/view/ncd.aspx?NCID=308&ncdver=1&bc=AAAAEAAAQAA&>.
- 101 Centers for Medicare & Medicaid Services. Medicare Prescription Drug Benefit Manual. Chapter 6 – Part D Drugs and Formulary Requirements. § 20.1.
- 102 National Cancer Institute. Cancer Trends Progress Report. Financial Burden of Cancer Care. Aug. 2023. Available from: https://progressreport.cancer.gov/after/economic_burden.
- 103 Ruiz ES, Seiger K, Mostaghimi A, Schmults C. National cancer expenditure analysis in the United States Medicare population, 2013. *J Clin Oncol*. 2019;37(15 suppl):6647. doi:10.1200/JCO.2019.37.15_SUPPL.6647.

- 104 Roemer M (AHRQ). Cancer-Related Hospitalizations for Adults, 2017. HCUP Statistical Brief #270. January 2021. Agency for Healthcare Research and Quality, Rockville, MD. <https://hcup-us.ahrq.gov/reports/statbriefs/sb270-Cancer-Hospitalizations-Adults-2017.jsp>.
- 105 Social Security Administration. History of SSA During the Johnson Administration 1963-1968. Available at <https://www.ssa.gov/history/ssa/lbjmedicare1.html>.
- 106 NORC at the University of Chicago. MCBS Interactives – Transportation. Available at <https://mcbs-interactives.norc.org/financial-well-being/transportation/>.
- 107 Id.
- 108 American Cancer Society Cancer Action Network. Survivor Views: Cancer & Medical Debt. Fielded February 9-February 24, 2022.
- 109 Jiang C, Yabroff KR, Deng L, Wang Q, Perimbeti S, Shapiro CL, Han X. Self-reported Transportation Barriers to Health Care Among US Cancer Survivors. *JAMA Oncol.* 2022 May 1;8(5):775-778. doi: 10.1001/jamaoncol.2022.0143. PMID: 35323841; PMCID: PMC8949758.
- 110 Henley SJ, Anderson RN, Thomas CC, Massetti GM, Peaker B, Richardson LC. Invasive Cancer Incidence, 2004-2013, and Deaths, 2006-2015, in Nonmetropolitan and Metropolitan Counties - United States. *MMWR Surveill Summ.* 2017 Jul 7;66(14):1-13. doi: 10.15585/mmwr.ss6614a1. PMID: 28683054; PMCID: PMC5879727.
- 111 Levit LA, Byatt L, Lyss AP, Paskett ED, Levit K, Kirkwood K. Closing the Rural Cancer Care Gap: Three Institutional Approaches. *JCO Oncol.* 2020. June 23;16(7): 422-430. doi:10.1200/OP.20.00174.
- 112 Henley SJ, Jemal A: Rural cancer control: Bridging the chasm in geographic health inequity. *Cancer Epidemiol Biomarkers Prev* 27:1248-1251, 2018.
- 113 National Institutes of Health. National Cancer Institute GIS Portal for Cancer Research. Cancer Map Stories. Rural-Urban Disparities in Cancer. 2023. Available at: <https://gis.cancer.gov/mapstory/rural-urban/index.html>.
- 114 Tax Foundation. Average Income Tends to Rise with Age. 2019. Available at: <https://taxfoundation.org/average-income-age/>.
- 115 NORC at the University of Chicago. Only 14% of Cancers Are Detected Through a Preventive Screening Test. Dec. 14, 2022. Available from: <https://www.norc.org/content/dam/norc-org/pdfs/State-Specific%20PCDSs%20chart%201213.pdf>.
- 116 For example, while Medicare provides coverage of screening barium enemas, Medicare enrollees incur 20% coinsurance post deductible. See Medicare coverage of cancer screening chart.
- 117 [American Cancer Society Position Statement on the Elimination of Patient Cost-Sharing Associated with Cancer Screening and Follow-up Testing | American Cancer Society.](#)
- 118 Patrick Rucker, Maya Miller and David Armstrong. “How Signa Saves Millions by Having Its Doctors Reject Claims Without Reading Them.” *ProPublica.* Mar. 25, 2023. Available from: <https://www.propublica.org/article/cigna-pdx-medical-health-insurance-rejection-claims>.
- 119 See American Cancer Society Cancer Action Network. The Medicare Appeals Process: Reforms Needed to Ensure Beneficiary Access. Nov. 17, 2020. Available from: <https://www.fightcancer.org/policy-resources/medicare-appeals-process-reforms-needed-ensure-beneficiary-access>.
- 120 Natale-Pereira, A., Enard, K., Nevarez, L., Jones, L. (2011) “The Role of Patient Navigators in Eliminating Health Disparities”, *Cancer*, p. 3543-3552, <https://acsjournals.onlinelibrary.wiley.com/doi/epdf/10.1002/cncr.26264>.
- 121 Nelson HD, Cantor A, Wagner J, et al. Effectiveness of patient navigation to increase cancer screening in populations adversely affected by health disparities: a meta-analysis. *J Gen Intern Med.* 2020;35(10):3026-3035. doi:10.1007/s11606-020-06020-9.
- 122 Guide to Community Preventive Services. Cancer Screening: Patient Navigation Services to Increase Cervical Cancer Screening and Advance Health Equity. <https://www.thecommunityguide.org/findings/cancer-screening-patient-navigation-services-to-increase-cervical-cancer-screening.html>. Page last updated: January 24, 2023.
- 123 Marshall, J.K., Mbah, O.M., Ford, J.G. et al. (2016) “Effect of Patient Navigation on Breast Cancer Screening Among African American Medicare Beneficiaries: A Randomized Controlled Trial”. *Journal of General Internal Medicine*, 31, p. 68–76. <https://doi.org/10.1007/s11606-015-3484-2>.
- 124 Le Blanc JM, Heller DR, Friedrich A, Lannin DR, Park TS. Association of Medicaid Expansion Under the Affordable Care Act With Breast Cancer Stage at Diagnosis. *JAMA Surg.* 2020;155(8):752–758. doi:10.1001/jamasurg.2020.1495.