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Prescription Medication Use, Coverage, and Nonadherence Among Adults Age 65 and Older: United States, 2021–2022

by Robin A. Cohen, Ph.D., and Laryssa Mykyta, Ph.D.

Objectives—This report provides a comprehensive look at prescription medication use, prescription drug coverage, and cost-related nonadherence among adults age 65 and older (older adults).

Methods—Data from the 2021–2022 National Health Interview Survey were used to report prescription medication use in the past 12 months, prescription drug coverage at the time of interview, and cost-related nonadherence in the past 12 months among older adults. Two types of cost-related nonadherence are reported: 1) not getting needed prescription medication due to cost; and 2) not taking medication as prescribed due to cost (skipping doses, delaying filling a prescription, and taking less medication than prescribed) in the past 12 months. All estimates are presented by sex, age group, race and Hispanic origin, family income, food insecurity, urbanization, education, marital status, health insurance coverage, health status, disability status, and number of chronic conditions.

Results— In 2021–2022, 88.6% of older adults took prescription medication, 82.7% had prescription drug coverage, 3.6% did not get needed prescription medication due to cost, and 3.4% did not take medication as prescribed due to cost. Older adults with no prescription drug coverage were more likely to not get prescription medication and to not take needed medication as prescribed than older adults with private or public prescription drug coverage. For both measures, cost-related nonadherence was six times higher among older adults who were food insecure compared with those who were food secure, and more than twice as likely among older adults reporting fair or poor health or with disabilities compared with those in excellent, very good, or good health, or without disabilities.

Keywords: prescription drug cost • health insurance coverage • cost-related nonadherence (CRN) • National Health Interview Survey

Introduction

Prescription drug costs in the United States are a major concern for Americans (1). According to a recent study from RAND, prescription drug prices in the United States are nearly three times higher than for those living in 33 other Organisation for Economic Co-operation and Development countries (2). Out-of-pocket costs for retail drugs rose 4.8% to $63 billion between 2020 and 2021 (3). Rising prescription costs may be particularly challenging for older adults. Previous research has found that most adults age 65 and older (older adults) report taking prescription medication, and nearly one-quarter have reported difficulty affording prescription medications (4).

Although Medicare provides nearly universal health coverage for older adults, prescription coverage for adults age 65 and older is not universal. Some older adults enroll in prescription drug coverage through Medicare Part D. Adults enrolled in Medicare Part D typically pay a premium for coverage and are also responsible for any copays associated with prescription medication costs. Low-income adults may be eligible for a Medicare Part D subsidy, which covers the premium cost and reduces their copays (5,6). Other older adults have prescription drug coverage through their private health plans or may purchase supplemental coverage for prescription medication costs. Having prescription drug coverage through Part D, private health plans, or supplemental coverage may reduce the cost of medications for older adults. However, many older adults with prescription coverage may still face high prescription costs due to cost-sharing requirements such as premiums and deductibles. Previous

research has found that nearly one in five older adults do not have prescription drug coverage at all (4,7).

Access to prescription drugs among older adults is complex and the type of prescription drug coverage, changing prescription drug formularies, cost-sharing requirements, and complicated medication regimes may impact out-of-pocket medication costs and cause older adults to use strategies to reduce costs like skipping doses or delaying filling a prescription (4,6,8–11). High out-of-pocket costs may not only deter older adults from using medication as prescribed, but also from getting needed medication. Moreover, the cost of prescription drugs may necessitate tradeoffs between taking medications and meeting other needs, such as food or housing costs (7).

Much of the literature on cost-related nonadherence (CRN) among older adults focuses on identifying its correlates (9–17). Less attention has been paid to differences in prescription drug use or coverage, or the varying strategies used to reduce prescription costs by older adults' characteristics.

This report provides a more complete picture of prescription drug coverage, use of prescription drugs, and CRN among older, community-dwelling adults in the United States that may inform research and policy making. This report explores two types of CRN: 1) not getting prescription medication due to cost in the past 12 months; and 2) not taking medication as prescribed due to cost (skipping doses, delaying filling a prescription, and taking less medication than prescribed) in the past 12 months.

Methods

Data source

Data from the 2021 and 2022 National Health Interview Survey (NHIS) were pooled for this analysis. Two years of data were used to increase the number of reliable estimates that can be presented. NHIS is a multipurpose health survey of the U.S. civilian noninstitutionalized population conducted continuously throughout the year by the National Center for Health Statistics. The NHIS interview begins by identifying everyone who usually lives in the household. One sample adult, age 18 and older, and one sample child, age 17 and younger (if any children live in the household) are randomly selected to be part of the NHIS sample. This report is based only on the Sample Adult interviews. The selected sample adult answers detailed questions about their health insurance, health status, health-related behaviors, and healthcare access and use. Information about the sample adult is collected from the sample adults themselves unless they are physically or mentally unable to report, in which case a knowledgeable proxy can answer for them. Interviews are typically conducted in respondents' homes, but follow-ups to complete interviews may be conducted over the telephone when necessary. Due to the COVID-19 pandemic, in both 2021 and 2022, 62.8% and 55.7%, respectively, of Sample Adult interviews were conducted at least partially by telephone (18,19). The response rate for the Sample Adult component was 50.9% in 2021 and 47.7% in 2022 (18,19). Detailed information regarding the design, content, and use of NHIS, and annual sample sizes and response rates of NHIS, are available in the annual NHIS Survey Description document (18,19). This report is limited to adults age 65 and older. In this report, the term "older adult" refers to people age 65 and older. Estimates in this report are based on 17,706 sample adults age 65 and older.

Prescription drug use

Took prescription medication in the past 12 months—Based on a positive response to the question, "At any time in the past 12 months, did you take prescription medication?"

Prescription drug coverage

Adults were considered to have private prescription drug coverage if, at the time of interview, they had coverage through either a single-service plan, a private health insurance plan, or Medicare Part D. Adults were considered to have public prescription drug coverage if they were covered by Medicaid, other public coverage, or military coverage.

Cost-related prescription medication nonadherence

Two types of CRN were explored: 1) not getting prescription medication due to cost in the past 12 months; and 2) not taking medication as prescribed due to cost (skipping doses, delaying filling a prescription, and taking less medication than prescribed) in the past 12 months. These two types of CRN were examined separately, as adults who do not get prescription medication are forgoing needed medication completely, while those who are not taking medication as prescribed are taking at least some needed medication.

Did not get prescription medication due to cost—Based on a positive response to the question, "During the past 12 months, was there any time when you needed prescription medication, but did not get it because of cost?" This measure includes older adults who reported that they did not take medication in the past 12 months.

Did not take medication as prescribed to reduce costs—Based on a positive response to any of the following questions, "During the past 12 months, are any of the following true for you? 1) You skipped medication doses to save money; 2) You took less medication to save money; and 3) You delayed filling a prescription to save money." Adults were asked these questions only if they reported taking medication prescribed by a doctor or other health care provider during the past 12 months. For this report, older adults who reported that they did not take medication in the past 12 months were considered to be a "no" response for these questions and were included in the denominators. This report also presents the individual components of this measure (skipped medication doses, took less medication, and delayed filling a prescription).

Statistical analysis

All estimates of prescription drug use, coverage, and CRN are presented by sex, age group, race and Hispanic origin, family income, food insecurity, urbanization, education, marital status, health insurance coverage, health status, disability status, and number of chronic

conditions (see Technical Notes for more details about these variables). Additionally, estimates of prescription drug use and CRN are also shown by type of prescription drug coverage.

Estimates of the percentage of adults age 65 and older who have taken prescription medication in the past 12 months, have prescription drug coverage at the time of interview, and have not taken prescription medication due to cost in the past 12 months are presented overall and by selected characteristics. Estimates that did not meet National Center for Health Statistics presentation standards were suppressed (20). The 95% confidence intervals were generated using the Korn–Graubard method for complex surveys (21). Statistical significance was set at $p < 0.05$ for all tests. No adjustments were made for multiple comparisons. Estimates were calculated using the NHIS survey weights and are representative of the U.S. civilian noninstitutionalized population (18,19). Point estimates and their corresponding variances were calculated using SUDAAN software version 11.0.0 (RTI International, Research Triangle Park, N.C.), to account for the complex sampling design of NHIS. Respondents with missing data or unknown information were excluded from the analysis unless specifically noted.

Trends by family income (as a percentage of the federal poverty level [FPL]), education level, age group, and urbanization level for adults age 65 and older were evaluated using orthogonal polynomials in logistic regression. Terms such as "more likely" and "less likely," or specific group comparisons, indicate a statistically significant difference unless noted otherwise. Lack of comment regarding the difference between any two estimates does not necessarily mean that the difference was tested and found to be not statistically significant.

Results

Prescription medication use

In 2021–2022, 88.6% of older adults took prescription medication in the past 12 months (Table 1). Prescription medication use was similar for men and women. Adults ages 65–74 (86.9%) were less likely than those ages 75–84 (91.3%) and age 85 and older (91.2%) to take prescription medication. White adults (89.7%) were more likely than Black (87.4%), Hispanic (83.9%), and Asian (83.8%) adults to take prescription medication. Taking prescription medication in the past 12 months increased with increasing family income, number of chronic conditions, and decreasing urbanization level. Adults with Medicare only and older adults with no prescription drug coverage were less likely than those with other types of health coverage or any prescription drug coverage (private or public) to have taken prescription medication in the past 12 months.

Prescription drug coverage

Any prescription drug coverage

In 2021–2022, 82.7% of older adults had any prescription drug coverage (Table 2). Prescription drug coverage was higher among men (84.6%) than women (81.1%), and among White adults (83.4%) compared with Hispanic adults (79.4%) (differences between other race and Hispanic-origin groups were not significant). Adults with incomes greater than 400% FPL (86.1%) were more likely than those with incomes of less than 100% FPL (81.0%), 100% to less than 200% FPL (78.2%), and 200% to less than or equal to 400% FPL (81.7%) to have any prescription drug coverage. Married adults (84.7%) were more likely than widowed (80.1%), divorced or separated (80.1%), or never married (79.4%) adults to have any prescription drug coverage. The percentage of adults with any prescription drug coverage was highest among those with dual-eligible health coverage (100%), followed by those with other (97.5%), private (91.9%), Medicare Advantage (74.9%), and Medicare only (59.9%) coverage. Having no prescription drug coverage at all increased with age and decreased with education and number of chronic conditions.

Private prescription drug coverage

Among older adults, 68.7% had private prescription drug coverage (Table 2). Men (68.4%) and women (68.9%) had similar rates of private prescription drug coverage. White adults (72.9%) were more likely than adults of other and multiple races (59.8%) and Black (58.5%), Hispanic (54.0%), and Asian (53.6%) adults to have private prescription drug coverage. Private prescription drug coverage increased with increasing family income, from 38.4% among those with incomes of less than 100% FPL to 78.7% among those with incomes greater than 400% FPL. Married adults (74.0%) were more likely than cohabiting (64.8%), widowed (64.3%), divorced or separated (60.6%), or never married (55.8%) adults to have private prescription drug coverage. Private prescription drug coverage was highest among adults with private health insurance coverage (90.4%) followed by those with Medicare Advantage (74.6%), Medicare only (59.9%), and other (24.8%) coverage. Private prescription drug coverage decreased with age and increased with education level. Adults with food insecurity (48.4%), in fair or poor health (60.3%), and with disabilities (61.5%) were less likely than their counterparts who are food secure (69.8%), in excellent, very good, and good health (71.2%), and without disabilities (70.3%) to have private prescription drug coverage.

Public prescription drug coverage

Among older adults, 14.0% had public prescription drug coverage (Table 2). Men (16.2%) were more likely than women (12.1%) to have public prescription drug coverage. White adults (10.5%) were less likely than adults of other and multiple races (19.1%) and Black (23.4%), Hispanic (25.3%), and Asian (26.8%) adults to have public prescription drug coverage. Public prescription drug coverage decreased with increasing family income, from 42.5% among those with incomes of less than 100% FPL to 7.4% among those with incomes greater than 400% FPL. Married adults (10.7%) were less likely than widowed (15.7%), cohabiting (17.0%), divorced or separated (19.5%),

or never married (23.7%) adults to have public prescription drug coverage. Public prescription drug coverage was highest among adults with dual-eligible coverage (100.0%), followed by those with other (72.8%), private (1.5%), and Medicare Advantage (0.3%) coverage. Public prescription drug coverage increased with age and decreased with education level. Adults with food insecurity (31.4%), in fair or poor health (22.8%), and with disabilities (22.7%) were about twice as likely than their counterparts who are food secure (13.1%); in excellent, very good, and good health (11.4%); and without disabilities (12.0%) to have public prescription drug coverage.

Prescription drug nonadherence due to cost

Did not get prescription medication

In 2021–2022, 3.6% of older adults did not get prescription medication due to cost in the past 12 months (Table 3). Women (4.0%) were more likely than men (3.1%) to not get prescription medication. The percentage of adults not getting prescription medication decreased by age, from 4.3% among those ages 65–74 to 1.6% among those age 85 and older. Black (5.3%) and Hispanic (5.3%) adults were more likely to not get medication due to cost compared with White (3.2%) and Asian (2.0%) adults. Adults with family incomes of 100% to less than 200% FPL were the most likely to not get prescription medication compared with other income groups. Adults living in food insecure families (18.1%) were six times more likely than adults living in food secure families (2.9%) to not get prescription medication. Adults in fair or poor health (7.3%) and with disabilities (6.1%) were more than twice as likely than their counterparts in excellent, very good, and good health (2.5%) and without disabilities (3.0%) to not get prescription medication. Not getting prescription medication increased with an increasing number of chronic conditions. Adults with either private (3.5%) or public (2.9%) prescription drug coverage were less likely than older adults without prescription drug coverage (4.5%) to not get prescription drugs due to cost.

Did not take medication as prescribed

In 2021–2022, 3.4% of older adults did not take medication as prescribed due to cost in the past 12 months (Table 3). The percentage of adults not taking medication as prescribed decreased by age, from 4.1% among those ages 65–74 to 1.7% among those age 85 and older. Adults with family incomes greater than 400% FPL were the least likely to not take medication as prescribed compared with other income groups. Adults living in food insecure families (16.8%) were six times more likely than adults living in food secure families (2.8%) to not take medication as prescribed. Older adults in fair or poor health (7.3%) and with disabilities (6.1%) were more than twice as likely than their counterparts in excellent, very good, and good health (2.3%) and without disabilities (2.8%) to not take medication as prescribed. Not taking medication as prescribed increased with the increasing number of chronic conditions. Adults with either private (3.4%) or public (2.6%) prescription drug coverage were less likely than adults without prescription drug coverage (4.4%) to not take medication as prescribed.

In 2021–2022, 2.2% of older adults took less medication than prescribed, 2.7% delayed filling a prescription, and 1.7% skipped medication doses due to cost (Table 3). Differences by sociodemographic and health characteristics were also seen for these three cost-reducing strategies. For each strategy, adults ages 65–74 were more likely than those ages 75–84 or 85 and older to engage in CRN. Black adults were more likely to take less medication than prescribed or delay filling a prescription than White or Asian adults. Adults with family incomes greater than 400% FPL were the least likely to engage in any of the three cost-reducing strategies compared with the other income groups. Adults living in food insecure families were more than six times more likely than adults living in food secure families to take less medication than prescribed, delay filling a prescription, or skip medication doses. Adults in fair or poor health and with disabilities were also more likely than their counterparts in excellent, very good, and good health and without disabilities to engage in each cost-reducing strategy. The percentage of adults who took less medication than prescribed, delayed filling a prescription, or skipped prescribed doses increased with an increasing number of chronic conditions.

Summary

This report provides a detailed picture of prescription drug use, coverage, and CRN among community-dwelling older adults in the United States. In 2021–2022, 88.6% of older adults took prescription medication, 82.7% had prescription drug coverage, 3.6% did not get prescription medication due to cost, and 3.4% did not take medication as prescribed due to cost. Previous reports have found similar use of prescription drugs and prescription drug coverage among older adults (4,22,23). Prescription drug use varied by most sociodemographic, health, and disability measures examined in this report, ranging from 80% to 90% among older adults for most measures.

Most older adults in the United States can enroll in prescription drug coverage through Medicare Part D either through a separate plan or through many of the Medicare Advantage plans (24), and others may enroll in private plans or purchase supplemental coverage. In addition to premium costs and copays associated with prescription drug coverage, if an older adult does not enroll in Medicare Part D when they are first eligible and cannot document alternative coverage, they may be subject to an enrollment penalty increasing the cost of obtaining prescription coverage. These additional costs may contribute to about one out of five older adults not having prescription drug coverage (4,7).

Across most sociodemographic and health characteristics, the percentage of older adults reporting any prescription drug coverage generally ranged from 75% to 85%. However, among older adults who relied on only Medicare coverage for their health expenses, about 60% reported that they had enrolled in prescription drug coverage.

Both measures of CRN (not getting prescription medication due to cost or not taking medication as prescribed due to cost) varied by most sociodemographic, health, and disability measures examined. The highest levels of CRN were among older adults in fair or poor health, those with disabilities, and those who experienced food insecurity. Studies have found a dose-response relationship between food insecurity and CRN, with high levels of food insecurity increasing the likelihood of CRN (12,13,25). In addition, CRN increased with the number of chronic conditions. Both of these risk factors for CRN have been previously noted (11,26). Food insecurity has also been associated with CRN for specific conditions, for example among adults with diabetes, stroke survivors, and older adults with hypertension (14,15,27).

Reducing household food insecurity and hunger is a Healthy People 2030 objective (28). A recent study found that more than 7% of adults age 60 and older (5.5 million) live with food insecurity (29). The interrelationship between food insecurity and CRN has been previously documented and both measures share many of the same risk factors, including low income and presence of chronic conditions (12,13,25). The reasons for higher levels of CRN among food insecure older adults are complex and factors may exist, such as the ability to obtain food or family support, that NHIS does not measure.

In 2022, 47.9% of older adults had been diagnosed with arthritis, 20.1% with diabetes, 48.1% with high cholesterol, and 58.5% with hypertension (30–33). Together, prescriptions for diabetes, high cholesterol, hypertension, and pain accounted for more than 45% of all prescriptions in the United States (34). Although a majority of older adults have prescription drug coverage, previous studies have shown that many older adults still cannot afford their medication (7). Out-of-pocket costs have risen significantly for Medicare beneficiaries since 2016 (3), which may contribute to CRN, especially for prescriptions costing more than $75 out of pocket (3). Cost-saving strategies to reduce prescription drug costs may have implications for health status and, in the past, have been associated with increased emergency room use and hospitalization compared with adults who followed recommended pharmacotherapy (35,36).

One strength of NHIS is its low item nonresponse on questions about prescription drug use and CRN (about 1%). For the measure of prescription drug coverage, nonresponse ranged from 1% for the questions about single-service coverage to about 5% for the question about Medicare Part D coverage. In addition, CRN can be analyzed in combination with other measures available in NHIS, including problems paying medical bills, worry about healthcare costs, forgone care, and healthcare access and use. However, NHIS responses are self-reported and may be subject to recall bias. In addition, NHIS does not collect information on actual out-of-pocket costs for prescribed medications, which conditions medications are prescribed for, or which medications are subject to cost-saving strategies and CRN. While this report presents unadjusted estimates of prescription drug use and coverage and two measures of CRN, it highlights differences in each of these outcomes by sociodemographic and health characteristics. As a result, these findings may inform efforts to reduce disparities in healthcare access and health outcomes for older adults.

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Table 1. Percentage of adults age 65 and older who took prescription medication in the past 12 months, by selected characteristics: United States, 2021–2022

Selected characteristic	Took prescription medication in the past 12 months
	Percent (95% confidence interval)
Total	88.6 (88.1–89.2)
Sex	
Men	88.4 (87.5–89.1)
Women	88.8 (88.1–89.6)
Age group (years)	
65–74	[1]86.9 (86.2–87.7)
75–84	91.3 (90.4–92.2)
85 and older	91.2 (89.5–92.7)
Race and Hispanic origin[2]	
Asian, non-Hispanic	[3]83.8 (79.9–87.3)
Black, non-Hispanic	[3,4]87.4 (85.5–89.1)
White, non-Hispanic	[4]89.7 (89.1–90.3)
Other and multiple races, non-Hispanic	[3]86.8 (81.1–91.3)
Hispanic	83.9 (81.3–86.2)
Family income as a percentage of federal poverty level[5]	
Less than 100%	[6]85.1 (82.5–87.4)
100% to less than 200%	88.6 (87.1–90.0)
200% to less than or equal to 400%	88.7 (87.7–89.8)
Greater than 400%	89.3 (88.4–90.1)
Food insecurity[7]	
Insecure	[8]92.6 (90.2–94.6)
Secure	89.2 (88.7–89.8)
Urbanization level[9]	
Large central metropolitan	[10]86.8 (85.6–87.9)
Large fringe metropolitan	89.2 (88.1–90.2)
Medium and small metropolitan	88.9 (88.0–89.8)
Nonmetropolitan	90.2 (88.8–91.6)
Education	
Less than high school	[11]87.0 (85.1–88.8)
High school graduate	88.3 (87.2–89.4)
Some college	90.5 (89.5–91.4)
Bachelor's degree or higher	88.6 (87.6–89.5)
Marital status	
Married	[12,13]90.1 (89.3–90.8)
Widowed	[12–14]90.6 (89.5–91.6)
Divorced or separated	[13]87.4 (86.0–88.7)
Never married	83.5 (80.9–85.8)
Cohabiting	86.4 (82.0–90.0)
Health insurance coverage[15]	
Private	[16]90.3 (89.4–91.1)
Dual-eligible	[16]89.8 (87.6–91.8)
Medicare Advantage	[16]89.1 (88.2–89.9)
Medicare only	83.0 (81.0–84.8)
Other coverage	[16]89.5 (87.4–91.3)
Prescription drug coverage[17]	
Private	[18]90.0 (89.4–90.6)
Public	[18]89.6 (88.0–91.0)
None	82.5 (80.8–84.1)
Health status	
Excellent, very good, or good	[19]86.9 (86.3–87.6)
Fair or poor	94.3 (93.3–95.2)

See footnotes at end of table.

Table 1. Percentage of adults age 65 and older who took prescription medication in the past 12 months, by selected characteristics: United States, 2021–2022—Con.

Selected characteristic	Took prescription medication in the past 12 months
Disability status[20]	Percent (95% confidence interval)
With disabilities	[21]94.4 (93.4–95.3)
Without disabilities	87.3 (86.7–87.9)
Number of chronic conditions[22]	
Zero	[23]60.6 (58.4–62.8)
One	86.4 (85.2–87.5)
Two or more	96.2 (95.7–96.6)

[1]Significant quadratic trend with age ($p < 0.05$).
[2]Adults categorized as Hispanic may be of any race or combination of races. Adults categorized as Asian non-Hispanic, Black non-Hispanic, and White non-Hispanic indicated one race only. Non-Hispanic adults of multiple or other races are combined in the other and multiple races non-Hispanic category.
[3]Statistically different from White non-Hispanic older adults ($p < 0.05$).
[4]Statistically different from Hispanic older adults ($p < 0.05$).
[5]Calculated using the U.S. Census Bureau's poverty thresholds for the previous calendar year, which consider family size and age.
[6]Significant linear increase with increasing family income ($p < 0.05$).
[7]Family food insecurity was determined based on a composite recode of responses to 10 questions developed by the U.S. Department of Agriculture to measure if adults had problems with eating patterns or access, quality, variety, and quantity of food in the past 30 days. In the National Health Interview Survey, food insecurity was calculated at the family level, and families that reported six or more problems were considered food insecure.
[8]Statistically different from older adults who were food secure ($p < 0.05$).
[9]Measured using metropolitan statistical area (MSA) status. The Office of Management and Budget defines MSAs according to published standards that are applied to U.S. Census Bureau data. Generally, an MSA consists of a county or group of counties containing at least one urbanized area with a population of 50,000 or more (see reference 42 in this report). See Technical Notes in this report for more detail. Large central MSAs have a population of 1 million or more (similar to inner cities). Large fringe MSAs have a population of 1 million or more (similar to suburbs). Medium and small MSAs have a population of less than 1 million.
[10]Significant linear increase with decreasing urbanization level ($p < 0.05$).
[11]Significant quadratic trend with education level ($p < 0.05$).
[12]Significantly different from divorced older adults ($p < 0.05$).
[13]Significantly different from never married older adults ($p < 0.05$).
[14]Significantly different from cohabiting older adults ($p < 0.05$).
[15]A health insurance hierarchy of six mutually exclusive categories was developed. This hierarchy eliminates duplicate responses for both private health insurance and Medicare Advantage giving preference to those with Medicare Advantage. Older adults with more than one type of health insurance were assigned the first appropriate category in the following hierarchy: private, dual-eligible (Medicare and Medicaid), Medicare Advantage, Medicare only, and other coverage. Uninsured older adults are shown in the total, but are not shown separately due to small number of older adults who are uninsured.
[16]Statistically different from older adults with Medicare only coverage ($p < 0.05$).
[17]Prescription drug coverage determined at the time of interview. Older adults were considered to have private prescription drug coverage if they obtained coverage through either a single service plan, a private health insurance plan, or Medicare Part D. Adults were considered to have public prescription drug coverage if they were covered by Medicaid, Children's Health Insurance Program (CHIP), other public coverage, or military coverage.
[18]Significantly different from older adults with no prescription drug coverage ($p < 0.05$).
[19]Significantly different from older adults in fair or poor health ($p < 0.05$).
[20]Defined by the reported level of difficulty (no difficulty, some difficulty, or a lot of difficulty) in six functioning domains: seeing (even wearing glasses), hearing (even wearing hearing aids), mobility (walking or climbing stairs), communication (understanding or being understood by others), cognition (remembering or concentrating), and self-care (such as washing all over or dressing). Sample adults who responded "a lot of difficulty" or "cannot do at all" to at least one question were considered to have disabilities.
[21]Significantly different from older adults without disability ($p < 0.05$).
[22]Chronic conditions include hypertension, coronary heart disease, stroke, diabetes, cancer, arthritis; currently had asthma; or had chronic obstructive pulmonary disease (COPD) (that is, ever had emphysema, ever had COPD, or had chronic bronchitis in the past 12 months).
[23]Significant linear increase with increasing number of chronic conditions ($p < 0.05$).

NOTE: Estimates are based on household interviews of a sample of the U.S. civilian noninstitutionalized population.

SOURCE: National Center for Health Statistics, National Health Interview Survey, 2021–2022.

Table 2. Percentage of adults age 65 and older with any prescription drug coverage, private drug coverage, public drug coverage, or no prescription drug coverage, by selected characteristics: United States, 2021–2022

Characteristic	Has prescription drug coverage[1]			No prescription drug coverage
	Any coverage[1]	Private coverage[1]	Public coverage[1]	
	Percent (95% confidence interval)			
Total	82.7 (81.9–83.4)	68.7 (67.8–69.6)	14.0 (13.3–14.7)	17.3 (16.6–18.1)
Sex				
Men	[2]84.6 (83.6–85.6)	68.4 (67.0–69.7)	[2]16.2 (15.2–17.4)	[2]15.4 (14.4–16.4)
Women	81.1 (80.0–82.0)	68.9 (67.8–70.1)	12.1 (11.3–13.0)	18.9 (18.0–20.0)
Age group (years)				
65–74	[3]83.1 (82.2–84.0)	[3]69.7 (68.5–70.8)	[4]13.4 (12.5–14.3)	[4]16.9 (16.0–17.8)
75–84	82.8 (81.6–84.0)	68.5 (67.0–69.9)	14.3 (13.2–15.5)	17.2 (16.0–18.4)
85 and older	79.7 (77.5–81.9)	63.6 (60.9–66.1)	16.2 (14.2–18.4)	20.3 (18.1–22.5)
Race and Hispanic origin[5]				
Asian, non-Hispanic	80.4 (76.0–84.3)	[6]53.6 (48.6–58.5)	[6,7]26.8 (22.4–31.5)	19.6 (15.7–24.0)
Black, non-Hispanic	81.8 (79.4–84.0)	[6]58.5 (55.5–61.4)	[6]23.4 (21.0–25.8)	18.2 (16.0–20.6)
White, non-Hispanic	[8]83.4 (82.6–84.2)	[7,8]72.9 (72.0–73.9)	[7,8]10.5 (9.9–11.1)	[8]16.6 (15.8–17.4)
Other and multiple races, non-Hispanic	78.9 (72.1–84.8)	59.8 (51.4–67.9)	[8]19.1 (14.3–24.7)	21.1 (15.2–27.9)
Hispanic	79.4 (76.3–82.2)	54.0 (50.4–57.6)	25.3 (22.2–28.7)	20.6 (17.8–23.7)
Family income as a percentage of federal poverty level[9]				
Less than 100%	[10]81.0 (78.3–83.5)	[10]38.4 (35.3–41.6)	[10]42.5 (39.3–45.8)	[10]19.0 (16.5–21.7)
100% to less than 200%	78.2 (76.2–80.0)	58.7 (56.4–60.9)	19.5 (17.8–21.3)	21.8 (20.0–23.8)
200% to less than or equal to 400%	81.7 (80.3–83.0)	70.2 (68.6–71.8)	11.5 (10.4–12.6)	18.3 (17.0–19.7)
Greater than 400%	86.1 (85.1–87.1)	78.7 (77.5–80.0)	7.4 (6.6–8.2)	13.9 (12.9–14.9)
Food insecurity[11]				
Insecure	79.8 (75.8–83.4)	[12]48.4 (43.6–53.3)	[12]31.4 (27.1–36.0)	20.2 (16.6–24.2)
Secure	83.0 (82.2–83.7)	69.8 (68.9–70.8)	13.1 (12.5–13.9)	17.0 (16.3–17.8)
Urbanization level[13]				
Large central metropolitan	80.9 (79.4–82.2)	[14]63.1 (61.3–64.8)	[14]17.8 (16.3–19.3)	19.1 (17.8–20.6)
Large fringe metropolitan	83.5 (82.0–85.0)	74.4 (72.6–76.1)	9.1 (8.1–10.2)	16.5 (15.0–18.0)
Medium and small metropolitan	83.4 (82.1–84.6)	69.6 (67.9–71.3)	13.8 (12.5–15.1)	16.6 (15.4–17.9)
Nonmetropolitan	83.0 (81.0–84.9)	67.5 (65.1–69.8)	15.5 (13.9–17.3)	17.0 (15.1–19.0)
Education				
Less than high school	[15]78.8 (76.4–81.0)	[16]52.1 (49.3–54.9)	[17]26.6 (24.2–29.2)	[17]21.2 (19.0–23.6)
High school graduate	82.2 (80.9–83.5)	66.7 (65.0–68.3)	15.6 (14.3–16.9)	17.8 (16.5–19.1)
Some college	83.5 (82.1–84.7)	70.4 (68.7–72.0)	13.1 (12.0–14.2)	16.5 (15.3–17.9)
Bachelor's degree or higher	84.3 (83.2–85.4)	76.7 (75.4–77.9)	7.6 (6.9–8.4)	15.7 (14.6–16.8)
Marital status				
Married	[18–20]84.7 (83.8–85.6)	[18–21]74.0 (72.8–75.1)	[18–21]10.7 (9.9–11.6)	[18–20]15.3 (14.4–16.2)
Widowed	80.1 (78.5–81.6)	[19,20]64.3 (62.5–66.2)	[19–20]15.7 (14.3–17.3)	19.9 (18.4–21.5)
Divorced or separated	80.1 (78.3–81.8)	[20]60.6 (58.5–62.7)	[20]19.5 (17.8–21.3)	19.9 (18.2–21.7)
Never married	79.4 (76.6–82.1)	[21]55.8 (52.2–59.3)	[21]23.7 (20.6–27.0)	20.6 (17.9–23.4)
Cohabiting	81.8 (77.1–86.0)	64.8 (59.1–70.2)	17.0 (12.8–22.0)	18.2 (14.0–22.9)
Health insurance coverage[22]				
Private	[23–26]91.9 (91.1–92.6)	[24–26]90.4 (89.5–91.2)	[23,24,26]1.5 (1.2–1.9)	[23–26]8.1 (7.4–8.9)
Dual-eligible	[24–26]100.0 (99.7–100.0)	–	[24,26]100.0 (99.7–100.0)	[24–26]0.0 (0.0–0.3)
Medicare Advantage	[25,26]74.9 (73.6–76.3)	[25,26]74.6 (73.3–76.0)	[26]0.3 (0.2–0.5)	[25,26]25.1 (23.7–26.4)
Medicare only	[26]59.9 (57.2–62.5)	[26]59.9 (57.2–62.5)	–	[26]40.1 (37.5–42.8)
Other coverage	97.5 (95.8–98.7)	24.8 (22.3–27.4)	72.8 (70.0–75.4)	2.5 (1.3–4.2)
Health status				
Excellent, very good, or good	82.6 (81.8–83.4)	[27]71.2 (70.3–72.2)	[27]11.4 (10.7–12.1)	17.4 (16.6–18.2)
Fair or poor	83.1 (81.5–84.6)	60.3 (58.3–62.3)	22.8 (21.1–24.5)	16.9 (15.4–18.5)
Disability status[28]				
With disabilities	[29]84.2 (82.6–85.7)	[29]61.5 (59.4–63.6)	[29]22.7 (20.9–24.6)	[29]15.8 (14.3–17.4)
Without disabilities	82.3 (81.5–83.1)	70.3 (69.4–71.3)	12.0 (11.3–12.7)	17.7 (16.9–18.5)

See footnotes at end of table.

Table 2. Percentage of adults age 65 and older with any prescription drug coverage, private drug coverage, public drug coverage, or no prescription drug coverage, by selected characteristics: United States, 2021–2022—Con.

Characteristic	Has prescription drug coverage[1]			No prescription drug coverage
	Any coverage[1]	Private coverage[1]	Public coverage[1]	
Number of chronic conditions[30]	Percent (95% confidence interval)			
Zero	[31]78.6 (76.6–80.6)	[31]67.7 (65.4–69.9)	[31]11.0 (9.5–12.6)	[31]21.4 (19.4–23.4)
One	81.9 (80.5–83.2)	71.1 (69.5–72.7)	10.7 (9.7–11.9)	18.1 (16.8–19.5)
Two or more	84.0 (83.1–84.9)	67.9 (66.7–69.0)	16.1 (15.2–17.1)	16.0 (15.1–16.9)

– Quantity zero.
[1]Prescription drug coverage was determined at the time of interview. Older adults were considered to have private prescription drug coverage if they obtained coverage through either a single service plan, a private health insurance plan, or Medicare Part D. Adults were considered to have public prescription drug coverage if they were covered by Medicaid, Children's Health Insurance Program (CHIP), other public coverage, or military coverage.
[2]Statistically different from women ($p < 0.05$).
[3]Significant linear decrease with increasing age ($p < 0.05$).
[4]Signficant linear increase with increasing age ($p < 0.05$).
[5]Adults categorized as Hispanic may be of any race or combination of races. Adults categorized as Asian non-Hispanic, Black non-Hispanic, and White non-Hispanic indicated one race only. Non-Hispanic adults of multiple or other races are combined in the other and multiple races non-Hispanic category.
[6]Statistically different from White non-Hispanic older adults ($p < 0.05$).
[7]Statistically different from other and multiple races non-Hispanic older adults ($p < 0.05$).
[8]Statistically different from Hispanic older adults ($p < 0.05$).
[9]Calculated using the U.S. Census Bureau's poverty thresholds for the previous calendar year, which consider family size and age.
[10]Significant quadratic trend with family income ($p < 0.05$).
[11]Family food insecurity was determined based on a composite recode of responses to 10 questions developed by the U.S. Department of Agriculture to measure if adults had problems with eating patterns or access, quality, variety, and quantity of food in the past 30 days. In the National Health Interview Survey, food insecurity was calculated at the family level, and families that reported six or more problems were considered food insecure.
[12]Statistically different from food secure older adults ($p < 0.05$).
[13]Measured using metropolitan statistical area (MSA) status. The Office of Management and Budget defines MSAs according to published standards that are applied to U.S. Census Bureau data. Generally, an MSA consists of a county or group of counties containing at least one urbanized area with a population of 50,000 or more (see reference 42 in this report). See Technical Notes in this report for more detail. Large central MSAs have a population of 1 million or more (similar to inner cities). Large fringe MSAs have a population of 1 million or more (similar to suburbs). Medium and small MSAs have a population of less than 1 million.
[14]Significant quadratic trend by urbanization level ($p < 0.05$).
[15]Significant linear increase with increasing education ($p < 0.05$).
[16]Signficant quadratic trend by education ($p < 0.05$).
[17]Significant linear decrease with increasing education ($p < 0.05$).
[18]Significantly different from widowed older adults ($p <0.05$).
[19]Significantly different from divorced older adults ($p < 0.05$).
[20]Significantly different from never married older adults ($p < 0.05$).
[21]Significantly different from cohabiting older adults ($p < 0.05$).
[22]A health insurance hierarchy of six mutually exclusive categories was developed. This hierarchy eliminates duplicate responses for both private health insurance and Medicare Advantage, giving preference to those with Medicare Advantage. Older adults with more than one type of health insurance were assigned the first appropriate category in the following hierarchy: private, dual-eligible (Medicare and Medicaid), Medicare Advantage, Medicare only, and other coverage. Uninsured older adults are shown in the total, but are not shown separately due to small numbers of older adults who are uninsured.
[23]Statistically different from older adults who are dual-eligible ($p < 0.05$).
[24]Statistically different from older adults with Medicare Advantage ($p < 0.05$).
[25]Statistically different from older adults with Medicare only ($p < 0.05$).
[26]Statistically different from older adults with other coverage ($p < 0.05$).
[27]Statistically different from older adults in fair and poor health ($p < 0.05$).
[28]Defined by the reported level of difficulty (no difficulty, some difficulty, or a lot of difficulty) in six functioning domains: seeing (even wearing glasses), hearing (even wearing hearing aids), mobility (walking or climbing stairs), communication (understanding or being understood by others), cognition (remembering or concentrating), and self-care (such as washing all over or dressing). Sample adults who responded "a lot of difficulty" or "cannot do at all" to at least one question were considered to have disabilities.
[29]Statistically different from older adults without disability ($p < 0.05$).
[30]Chronic conditions include hypertension, coronary heart disease, stroke, diabetes, cancer, arthritis; currently had asthma; or had chronic obstructive pulmonary disease (COPD) (that is, ever had emphysema, ever had COPD, or had chronic bronchitis in the past 12 months).
[31]Significant quadratic trend with increasing number of chronic conditions ($p < 0.05$).

NOTES: Estimates may not add up to 100% because of rounding. Estimates are based on household interviews of a sample of the U.S. civilian noninstitutionalized population.

SOURCE: National Center for Health Statistics, National Health Interview Survey, 2021–2022.

Table 3. Percentage of adults age 65 and older who did not get prescription medication due to cost and did not take medication as prescribed to reduce costs in the past 12 months, by selected characteristics: United States, 2021–2022

Characteristic	Did not get prescription medication	Did not take medication as prescribed			
		Any method	Took less	Delayed filling a prescription	Skipped doses
	Percent (95% confidence interval)				
Total	3.6 (3.2–4.0)	3.4 (3.1–3.8)	2.2 (2.0–2.5)	2.7 (2.4–3.0)	1.7 (1.4–1.9)
Sex					
Men	[1]3.1 (2.7–3.7)	3.1 (2.7–3.7)	2.0 (1.6–2.4)	2.5 (2.1–3.0)	[1]1.4 (1.1–1.8)
Women	4.0 (3.5–4.5)	3.7 (3.3–4.1)	2.4 (2.1–2.8)	2.8 (2.4–3.2)	1.9 (1.6–2.2)
Age group (years)					
65–74	[2]4.3 (3.8–4.8)	[2]4.1 (3.7–4.6)	[2]2.8 (2.4–3.2)	[2]3.2 (2.8–3.7)	[2]2.1 (1.8–2.4)
75–84	3.0 (2.4–3.6)	2.7 (2.2–3.2)	1.7 (1.3–2.2)	2.0 (1.6–2.5)	1.2 (0.9–1.6)
85 and older	1.6 (0.8–2.6)	1.7 (0.9–2.8)	0.8 (0.4–1.5)	1.3 (0.6–2.4)	0.7 (0.3–1.3)
Race and Hispanic origin[3]					
Asian, non-Hispanic	[4–6]2.0 (1.0–3.7)	[4,6,7]0.9 (0.2–2.4)	[4,6,7]0.9 (0.2–2.4)	[4,6,7]0.8 (0.1–2.4)	[4,6]0.8 (0.2–2.4)
Black, non-Hispanic	[7]5.3 (4.1–6.9)	[7]5.1 (3.9–6.6)	[7]3.3 (2.3–4.5)	[7]4.2 (3.1–5.7)	2.1 (1.4–3.0)
White, non-Hispanic	[6]3.2 (2.9–3.6)	3.3 (2.9–3.7)	2.1 (1.8–2.4)	2.5 (2.2–2.8)	1.6 (1.4–1.9)
Other and multiple races, non-Hispanic	5.0 (2.8–8.3)	*	2.5 (1.0–5.1)	*	1.4 (0.4–3.6)
Hispanic	5.3 (3.8–7.0)	4.0 (2.8–5.6)	2.9 (2.0–4.2)	3.2 (2.1–4.7)	2.2 (1.4–3.3)
Family income as a percentage of federal poverty level[8]					
Less than 100%	[9]4.2 (2.9–5.8)	[9]4.1 (2.8–5.8)	[9]3.1 (2.1–4.4)	[9]2.9 (1.8–4.3)	[9]2.1 (1.4–3.1)
100% to less than 200%	6.0 (5.0–7.0)	5.1 (4.3–6.1)	3.0 (2.4–3.8)	4.1 (3.3–5.0)	2.5 (2.0–3.2)
200% to less than or equal to 400%	4.1 (3.4–4.8)	4.1 (3.4–4.9)	2.8 (2.3–3.5)	3.4 (2.8–4.0)	2.0 (1.5–2.6)
Greater than 400%	1.9 (1.5–2.3)	1.9 (1.5–2.3)	1.2 (0.9–1.5)	1.3 (1.0–1.7)	0.9 (0.6–1.2)
Food insecurity[10]					
Insecure	[11]18.1 (14.8–21.8)	[11]16.8 (13.3–20.8)	[11]11.7 (9.1–14.8)	[11]14.5 (11.2–18.4)	[11]8.2 (6.0–10.9)
Secure	2.9 (2.5–3.2)	2.8 (2.5–3.1)	1.8 (1.5–2.0)	2.1 (1.8–2.4)	1.4 (1.2–1.6)
Urbanization level[12]					
Large central metropolitan	3.4 (2.7–4.2)	3.1 (2.5–3.8)	2.1 (1.6–2.6)	2.3 (1.8–3.0)	1.4 (1.1–1.8)
Large fringe metropolitan	3.2 (2.6–4.0)	3.3 (2.6–4.1)	2.4 (1.8–3.1)	2.5 (1.9–3.2)	2.0 (1.4–2.7)
Medium and small metropolitan	3.9 (3.3–4.6)	3.9 (3.3–4.6)	2.2 (1.8–2.7)	3.1 (2.5–3.7)	1.8 (1.4–2.2)
Nonmetropolitan	3.7 (2.9–4.7)	3.4 (2.7–4.1)	2.3 (1.7–3.0)	2.7 (2.1–3.4)	1.5 (1.0–2.1)
Education					
Less than high school	[13]5.4 (4.2–6.8)	[13]4.0 (3.0–5.2)	[13]3.0 (2.1–4.0)	2.9 (2.0–4.0)	1.9 (1.3–2.7)
High school graduate	3.5 (2.9–4.2)	3.5 (2.9–4.2)	2.2 (1.8–2.8)	2.6 (2.1–3.3)	1.9 (1.4–2.4)
Some college	4.1 (3.5–4.8)	4.0 (3.4–4.7)	2.5 (2.0–3.1)	3.4 (2.8–4.0)	1.8 (1.4–2.3)
Bachelor's degree or higher	2.5 (2.0–3.0)	2.7 (2.3–3.3)	1.7 (1.3–2.2)	2.1 (1.6–2.6)	1.3 (1.0–1.7)
Marital status					
Married	[14,15]2.8 (2.4–3.3)	[14]3.1 (2.7–3.6)	[14]2.1 (1.7–2.4)	[14]2.4 (2.0–2.8)	[14]1.6 (1.3–2.0)
Widowed	[14]3.5 (2.8–4.3)	[14]3.2 (2.7–3.9)	[14]1.9 (1.5–2.5)	[14]2.6 (2.0–3.2)	[14]1.4 (1.1–1.9)
Divorced or separated	[16]5.8 (4.8–6.9)	[16]4.9 (4.0–5.9)	[16]3.3 (2.6–4.1)	[16]4.0 (3.2–5.0)	[16]2.3 (1.8–3.0)
Never married	3.3 (2.3–4.7)	2.5 (1.6–3.7)	1.7 (0.9–2.8)	1.8 (1.0–2.8)	1.2 (0.6–2.0)
Cohabiting	6.5 (3.5–10.8)	4.6 (2.6–7.4)	2.4 (1.0–4.9)	3.0 (1.4–5.7)	2.2 (0.9–4.5)
Health insurance coverage[17]					
Private	[18–20]3.0 (2.5–3.5)	[19,20]3.1 (2.6–3.6)	[19]2.0 (1.6–2.5)	[19,20]2.5 (2.0–3.0)	[19]1.5 (1.1–1.9)
Dual-eligible	[20]3.7 (2.6–5.2)	[19,20]3.2 (2.1–4.6)	2.2 (1.3–3.5)	2.3 (1.4–3.5)	[19]1.4 (0.7–2.5)
Medicare Advantage	[20]3.9 (3.3–4.5)	[20]3.8 (3.2–4.4)	[20]2.4 (1.9–2.9)	[20]2.9 (2.4–3.5)	[20]1.8 (1.4–2.2)
Medicare only	[20]5.0 (4.0–6.3)	[20]5.0 (3.9–6.3)	[20]3.1 (2.3–4.1)	[20]3.7 (2.8–4.9)	2.7 (1.9–3.7)
Other coverage	2.0 (1.3–2.9)	1.7 (1.1–2.5)	1.4 (0.8–2.2)	1.4 (0.8–2.2)	1.1 (0.6–1.8)
Prescription drug coverage[21]					
Private	[22]3.5 (3.1–3.9)	[22]3.4 (3.0–3.8)	2.1 (1.8–2.4)	[22]2.6 (2.3–3.0)	1.6 (1.4–1.9)
Public	[22]2.9 (2.2–3.8)	[22]2.6 (1.9–3.5)	[22]2.0 (1.4–2.8)	[22]2.0 (1.4–2.7)	1.4 (0.9–2.1)
None	4.5 (3.6–5.5)	4.4 (3.6–5.4)	2.9 (2.2–3.7)	3.5 (2.8–4.4)	2.0 (1.5–2.7)

See footnotes at end of table.

Table 3. Percentage of adults age 65 and older who did not get prescription medication due to cost and did not take medication as prescribed to reduce costs in the past 12 months, by selected characteristics: United States, 2021–2022—Con.

Characteristic	Did not get prescription medication	Did not take medication as prescribed			
		Any method	Took less	Delayed filling a prescription	Skipped doses
Health status	Percent (95% confidence interval)				
Excellent, very good, or good	[23]2.5 (2.2–2.8)	[23]2.3 (2.0–2.6)	[23]1.5 (1.2–1.7)	[23]1.8 (1.5–2.1)	[23]1.1 (0.9–1.3)
Fair or poor	7.3 (6.2–8.4)	7.3 (6.3–8.5)	4.8 (4.0–5.7)	5.7 (4.7–6.8)	3.6 (2.9–4.5)
Disability status[24]					
With disabilities	[25]6.1 (5.2–7.1)	[25]6.1 (5.2–7.2)	[25]4.1 (3.4–5.0)	[25]4.8 (3.9–5.7)	[25]3.1 (2.4–3.9)
Without disabilities	3.0 (2.7–3.4)	2.8 (2.5–3.2)	1.8 (1.5–2.1)	2.2 (1.9–2.5)	1.3 (1.1–1.6)
Number of chronic conditions[26]					
Zero	[27]1.5 (0.9–2.3)	[27]1.0 (0.6–1.6)	[27]0.8 (0.4–1.3)	[27]0.7 (0.4–1.2)	[27]0.5 (0.3–0.9)
One	2.5 (2.0–3.1)	2.3 (1.8–2.9)	1.5 (1.1–2.0)	1.7 (1.2–2.2)	1.1 (0.8–1.5)
Two or more	4.6 (4.1–5.1)	4.5 (4.0–5.0)	2.9 (2.5–3.3)	3.6 (3.1–4.1)	2.2 (1.9–2.6)

* Estimate does not meet National Center for Health Statistics standards of reliability.
[1]Statistically different from women ($p < 0.05$).
[2]Significant decreasing linear trend with increasing age ($p < 0.05$).
[3]Adults categorized as Hispanic may be of any race or combination of races. Adults categorized as Asian non-Hispanic, Black non-Hispanic, and White non-Hispanic indicated one race only. Non-Hispanic adults of multiple or other races are combined in the other and multiple races non-Hispanic category.
[4]Statistically different from Black non-Hispanic older adults ($p < 0.05$).
[5]Statistically different from other and multiple races non-Hispanic older adults ($p < 0.05$).
[6]Statistically different from Hispanic older adults ($p < 0.05$).
[7]Statistically different from White non-Hispanic older adults ($p < 0.05$).
[8]Calculated using the U.S. Census Bureau's poverty thresholds for the previous calendar year, which consider family size and age.
[9]Significant quadratic trend by family income ($p < 0.05$).
[10]Family food insecurity was determined based on a composite recode of responses to 10 questions developed by the U.S. Department of Agriculture to measure if adults had problems with eating patterns or access, quality, variety, and quantity of food in the past 30 days. In the National Health Interview Survey, food insecurity was calculated at the family level, and families that reported six or more problems were considered food insecure.
[11]Statistically different from food secure older adults ($p < 0.05$).
[12]Measured using metropolitan statistical area (MSA) status. The Office of Management and Budget defines MSAs according to published standards that are applied to U.S. Census Bureau data. Generally, an MSA consists of a county or group of counties containing at least one urbanized area with a population of 50,000 or more (see reference 42 in this report). See Technical Notes in this report for more detail. Large central MSAs have a population of 1 million or more (similar to inner cities). Large fringe MSAs have a population of 1 million or more (similar to suburbs). Medium and small MSAs have a population of less than 1 million.
[13]Significant linear decrease with increasing education ($p < 0.05$).
[14]Statistically different from divorced older adults ($p < 0.05$).
[15]Statistically different from cohabiting older adults ($p < 0$ .05).
[16]Statistically different from never married older adults ($p < 0.05$).
[17]A health insurance hierarchy of six mutually exclusive categories was developed. This hierarchy eliminates duplicate responses for both private health insurance and Medicare Advantage, giving preference to those with Medicare Advantage. Older adults with more than one type of health insurance were assigned the first appropriate category in the following hierarchy: private, dual-eligible (Medicare and Medicaid), Medicare Advantage, Medicare only, and other coverage. Uninsured older adults are shown in the total, but are not shown separately due to small numbers of older adults who are uninsured.
[18]Statistically different from older adults with Medicare Advantage ($p < 0.05$).
[19]Statistically different from older adults with Medicare only ($p < 0.05$).
[20]Statistically different from older adults with other coverage ($p < 0.05$).
[21]Prescription drug coverage determined at the time of interview. Older adults were considered to have private prescription drug coverage if they obtained coverage through either a single service plan, a private health insurance plan, or Medicare Part D. Adults were considered to have public prescription drug coverage if they were covered by Medicaid, Children's Health Insurance Program (CHIP), other public coverage, or military coverage.
[22]Statistically different from older adults without prescription drug coverage ($p < 0.05$).
[23]Statistically different from older adults in fair and poor health ($p < 0.05$).
[24]Defined by the reported level of difficulty (no difficulty, some difficulty, a lot of difficulty) in six functioning domains: seeing (even wearing glasses), hearing (even wearing hearing aids), mobility (walking or climbing stairs), communication (understanding or being understood by others), cognition (remembering or concentrating), and self-care (such as washing all over or dressing). Sample adults who responded "a lot of difficulty" or "cannot do at all" to at least one question were considered to have disabilities.
[25]Statistically different from older adults without disabilities ($p < 0.05$).
[26]Chronic conditions include hypertension, coronary heart disease, stroke, diabetes, cancer, arthritis; currently had asthma; or had chronic obstructive pulmonary disease (COPD) (that is, ever had emphysema, ever had COPD, or had chronic bronchitis in the past 12 months).
[27]Significant linear increase with increasing number of chronic conditions ($p < 0.05$).

NOTE: Estimates are based on household interviews of a sample of the U.S. civilian noninstitutionalized population.

SOURCE: National Center for Health Statistics. National Health Interview Survey, 2021–2022.

Technical Notes

Definitions of selected terms

Selected sociodemographic characteristics

Sociodemographic characteristics presented in this report include age group (65–74, 75–84, and 85 and older), education level, family income, food insecurity, marital status, race and Hispanic origin, sex, and urbanization level.

Education level—Categories are based on years of school completed or the highest degree obtained and are defined as less than high school, high school diploma, some college, bachelor's degree or higher. The high school diploma category includes those who have a GED.

Family income as a percentage of federal poverty level (FPL)—Derived from the family's income in the previous calendar year and family size using the U.S. Census Bureau's poverty thresholds (37). The 2021 and 2022 NHIS imputed income files using multiple imputation methods were used to create the poverty levels (38,39). Family income as a percentage of FPL is defined as less than 100% FPL, 100% to less than 200% FPL, 200% to less than or equal to 400% FPL, and greater than 400% FPL.

Food insecurity—Based on responses to a set of 10 questions: whether the respondent 1) worried that food would run out before there was money to buy more; 2) found food that was purchased didn't last and did not have money to get more; 3) couldn't afford to eat balanced meals; 4) had to cut the size of meals or skip meals because there was not enough money for food, and 5) the number of days this happened; 6) ate less than they should because there was not enough money for food; 7) was hungry but didn't eat because there was not enough money for food; 8) lost weight because there was not enough money for food; 9) did not eat for a whole day because there was not enough money for food, and 10) the number of days this happened. The questions measure the family's food situation based on the past 30 days. Answers of "often true," "sometimes true," and "yes" are considered affirmative. Responses to questions that ask about the frequency of occurrence in the past 30 days are considered affirmative if the respondent's answer was greater than or equal to 3 days. Each affirmative response has a score of 1 for a total score ranging from 0 to 10 (18,19). Based on the responses, families are categorized as food secure (raw score 0–2), low food secure (raw score 3–5), or very low food secure (raw score 6–10). For this analysis, families categorized as low food secure or very low food secure are considered food insecure (40).

Marital status—Based on a series of questions that collect information from sample adults. "Married" includes all adults who identify themselves as married and who are not separated from their spouses. Married adults living apart because of the circumstances of their employment are considered married. Adults may identify themselves as married regardless of the legal status of the marriage or the sex of their spouse. "Widowed" includes adults who have lost their spouse due to death. "Divorced or separated" includes adults who are legally separated from their spouse or living apart for reasons of marital discord, and those who are divorced. "Never married" includes adults who were never married (or who were married and then had that marriage legally annulled). "Cohabiting" includes unmarried adults regardless of sex who are living together as a couple, but who do not identify themselves as married. This category may include adults who are currently divorced, widowed, or separated.

Race and Hispanic origin—Adults were classified into five race and Hispanic-origin groups: Asian non-Hispanic (subsequently, Asian), Black non-Hispanic (subsequently, Black), White non-Hispanic (subsequently, White), other and multiple races non-Hispanic (subsequently, other and multiple races), and Hispanic. Adults categorized as Hispanic may be of any race or combination of races. Adults categorized as Asian, Black, or White indicated one race only. Non-Hispanic adults of other and multiple races who did not identify as Asian, Black, White, or Hispanic, or who identified as more than one race, are combined into the other and multiple races category.

Urbanization level—In this report, urbanization level is measured using a condensed categorization of the NCHS urban–rural scheme (41,42). The NCHS urban–rural classification is based on metropolitan statistical area status defined by the Office of Management and Budget according to published standards that are applied to U.S. Census Bureau data. This report condenses the NCHS urban–rural classification into four categories: large central metropolitan (similar to inner cities), large fringe metropolitan (similar to suburbs), medium and small metropolitan, and nonmetropolitan (42,43). Large metropolitan areas have populations of 1 million or more. Metropolitan areas with populations of less than 1 million were classified as medium (250,000–999,999 population) or small (less than 250,000 population) (43).

Insurance coverage

For older adults, a health insurance hierarchy of six mutually exclusive categories was developed. This hierarchy eliminates duplicate responses for both private health insurance and Medicare Advantage, giving preference to the report of Medicare Advantage. Medicare Advantage is another way for adults covered by Medicare to get their Medicare Part A and Medicare Part B coverage. Medicare Advantage plans are sometimes called "Part C" and are offered by Medicare-approved companies that must follow rules set by Medicare (44). Older adults with more than one type of health insurance were assigned to the first appropriate category in the following hierarchy:

Private coverage—Includes older adults who have both Medicare and any comprehensive private health insurance plan (including health maintenance organizations, preferred provider organizations, and Medigap plans). This category also includes older adults with private insurance only but excludes those with a Medicare Advantage plan.

Medicare and Medicaid (dual-eligible)—Includes older adults who do not have any private coverage but who have Medicare and Medicaid or other state-sponsored health plans.

Medicare Advantage—Includes older adults who only have Medicare coverage through a Medicare Advantage plan.

Traditional Medicare only (excluding Medicare Advantage)—Includes older adults who only have Medicare coverage and who do not receive their coverage through a Medicare Advantage plan.

Other coverage—Includes older adults who have not been classified previously as having private, Medicare and Medicaid, Medicare Advantage, or traditional Medicare-only coverage. This category also includes older adults who have only Medicaid or other state-sponsored health plans, as well as adults who have any type of military coverage without Medicare.

Uninsured—Includes older adults who did not indicate that they are covered at the time of the interview by private health insurance, Medicare, Medicaid or other state-sponsored health plans, other government programs, or military coverage. This category also includes older adults who are covered by Indian Health Service only or who only have a plan that pays for one type of service, such as dental, vision, or prescription drugs. For this report, estimates are not shown for older adults who are uninsured as most older adults are eligible for health care coverage through Medicare (45).

Disability and health

Disability status—Categorized by the level of difficulty reported in the Washington Group Short Set on Functioning. The six domains of functioning include: seeing (even if wearing glasses), hearing (even if wearing hearing aids), mobility (walking or climbing stairs), communication (understanding or being understood by others), cognition (remembering or concentrating), and self-care (such as washing all over or dressing). Adults who responded "a lot of difficulty" or "cannot do at all" to at least one of the six questions are considered to have disabilities.

Health status—Based on the survey question, "Would you say your health in general is excellent, very good, good, fair, or poor?" Responses were divided into two categories: 1) excellent, very good, or good and 2) fair or poor.

Number of chronic conditions—The eight chronic conditions examined in this report are conditions covered in NHIS annually and are a subset of the 20 chronic conditions identified by the U.S. Department of Health and Human Services as part of an effort to foster a more consistent and standardized approach to measuring chronic conditions (46,47). Information on the remaining chronic conditions was not captured in NHIS and therefore could not be included in this report. Adults were asked if they had ever been told by a doctor or health care provider that they had hypertension, coronary heart disease, stroke, diabetes, cancer, or arthritis; currently had asthma; or had chronic obstructive pulmonary disease (COPD) (that is, ever had emphysema, or COPD, or had chronic bronchitis in the past 12 months).

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Disease Control and Prevention
National Center for Health Statistics
3311 Toledo Road, Room 4551, MS P08
Hyattsville, MD 20782–2064

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