*Target Journal: American Journal of Preventive Medicine*

**Trends in Preventive Care Practices among US Adults with Diabetes, 2008-2020**

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Word Count:

Conflict of Interest Statement:

Financial Disclosure:

# Abstract

**Introduction:** Preventive care practices are important for managing complications associated with diabetes. We reported trends in receipt of six American Diabetes Association recommended preventive care practices during 2008 – 2020.

**Methods:** We used 2008 – 2020 data from the Medical Expenditures Panel Survey to calculate the proportion of US adults ≥ 18 years of age with diagnosed diabetes that reported receiving preventive care practices, overall and for subpopulations. We used Joinpoint regression to identify trends during 2008 – 2019. The six practices in the past year included at least one dental examination, a dilated eye examination, foot examination, ≥ 2 A1C tests, a cholesterol test, and the receipt of an influenza vaccine.

**Results:** From 2008 to 2019, overall trends in preventive practices among US adults with diabetes were stable with the exception of an increase in the receipt of influenza vaccines (average annual percent change: 2.6% [95% CI: 1.1%, 4.2%]). Trend analysis at the subgroup level swas heterogenous but influenza vaccination, A1C testing, and dental visits tended to improve while foot exams, cholesterol testing, an dental visits among the uninsured tended to decline. In 2020, 8.2% (95% CI: 4.5%, 11.9%) received none of the six recommended preventive care practices.

**Conclusions:** Other than influenza vaccination, we observed no improvement in receipt of preventive care practices among US adults with diabetes. These data highlight practices and specific subgroups that could be targeted to improve preventive care among adults with diabetes.

# Introduction

Diabetes is a chronic disease that affects 11.3% of the adult population, or 37.1 million adults, in the United States1. Diabetes is also costly: total direct and indirect costs are estimated at $327 billion2. Incidence of diabetes peaked in the US at 8.5 cases per 1,000 in 2008 and 2009 and has fallen since to 5.1 cases per 1,000 in 20213,4. Despite this decrease in the incidence of diabetes, rates of hospitalization with diabetes as the primary diagnosis have been increasing since the year 2000 by about 2.5% per year5. The prevalence of diabetes in the US is expected to increase to 60.6 million adults by the year 20606.

Access to preventive services health care is important to minimize complications due to diabetes and reduce rates of hospitalization. Other studies have reported on trends in receipt of some preventive practices in the 2000s using data from various surveys, such as the Behavioral Risk Factor Surveillance System (BRFSS) and the National Health and Nutrition Examination Survey (NHANES). The proportion and trend of receipt of preventive practices from the Medical Expenditure Panel Survey (MEPS) has not been reported. We reported the proportion of and trends in the receipt of six preventive care practices recommended by the ADA overall and among subgroups. These data are valuable for identifying groups that may be underutilizing health care services, examining any effects the COVID-19 pandemic may have had on the receipt of these practices, and providing benchmarks for future studies.

# Methods

## Data Source

We used data from MEPS from the years 2008 – 2020 MEPS, a household survey of U.S. noninstitutionalized populations administered and maintained by the Agency for Healthcare Research and Quality since 1996. We chose 2008 to 2020 due to method changes in MEPS and the consistency of questions related to preventive care practices during that time period. Data used from MEPS were collected through a combination of computer assisted personal interviewing and pencil-and-paper surveys. MEPS provides national and regional estimates of health care use, expenditures, sources of payment and health insurance coverage. This survey also contains information on patient demographics, socioeconomic, and, via the Diabetes Care Survey (DCS), information on diabetes preventive care practices. The DCS is a self-administered paper-and-pencil questionnaire that is provided to MEPS respondents who indicate that they have been told by a doctor or health professional that they have diabetes. In this analysis, we used data from the full-year consolidated MEPS file with an average annual number of 32,170 individual respondents over the 13-year period and response rates ranging from 59.3% in 2008 to 27.6% in 2020.

## Outcome measures

Among those respondents with self-reported diagnosed diabetes, we selected six preventive care variables that were available in the data from 2008–2020. These variables are based on self-reported receipt in a given year7: ≥1 dental examination (derived from total number of reported dental care visits), a dilated eye examination, a foot examination by a healthcare provider, ≥2 A1C tests, a blood cholesterol test, and an influenza vaccine. Respondents were asked about receiving each of these practices in a given year (e.g. “Did you receive an influenza vaccine in 2013?”). We also created a binary variable classifying adults with diabetes having received none of the recommended preventive care practices, although these results are only presented for the overall population due to small sample sizes in many of the examined subgroups.

## Analysis

Our analysis accounts for the complex survey design used, including clustering and stratification. Reported values were age-adjusted using the direct method, standardized to the 2000 US population grouped by ages 18 – 44, 45 – 64, 65 – 74, and ≥75. We presented these estimates for the overall population, as well as stratified by age, sex, race and ethnicity, highest degree of education obtained, type of insurance, and the ratio of family income to the poverty line (income poverty ratio). We used the package gtsummary in R Statistical Software (v4.2.1) to calculate estimates8,9.

Medical care utilization decreased as a result of the COVID-19 pandemic starting in early 202010. We reported the estimated proportions for 2020 in Table 1 and as points in [Figure 1](#fig-exams) and [Figure 2](#fig-tests), but 2020 was excluded from trend analysis. Trends were analyzed using Joinpoint Command Line Software11 with R via the R package nih.joinpoint12. Joinpoint regression uses permutation tests to detect statistically significant changes at a pre-specified alpha of 0.05 in direction or magnitude of trends13. The Joinpoint software also provided estimates of the annual percent change (APC) for each trend segment and the average annual percent change (AAPC) for the entire trend.

# Results

All values presented below, as well as those that are not described, can be found in Supplemental Table 1.

## Cholesterol testing

During 2008–2019, we found no significant change in the percentage of adults with diabetes who received cholesterol tests (Table 1). For adults age 45–64 years, cholesterol testing was flat from 2008 to 2015 and showed a significant decrease starting in 2016 (APC: -4.8% [95% CI: -7.3%, -2.4%], AAPC: -1.3% [95% CI: -2.0%, -0.6%]). We found significant decreases starting in 2016 in the percentage of males receiving cholesterol testing (APC: -6.9% [95% CI: -11.7%, -1.8%]) and adults with less than a high school education (APC: -10.4% [95% CI: -15.8%, -4.6%], AAPC: -2.3% [95% CI: -3.8%, -0.6%]). Adults with Medicaid had an AAPC: of -2.3% [95% CI: -3.6%, -1.0%].

## Influenza vaccine

From 2008 to 2019, receipt of influenza vaccines increased at an AAPC of 2.6% (95% CI: 1.1%, 4.2%). Specifically, we noted significant increases during 2008 – 2012 (APC: 9.2% [95% CI: 6.9%, 11.6%], AAPC: ), and after 2015 (APC: 2.9% [95% CI: 0.7%, 5.1%]) (Table 1). The influenza vaccine trend for non-Hispanic White adults followed a similar pattern (3.7% (95% CI: 1.5%, 5.9%)), although only the period from 2008 to 2012 had a significant increase (APC: 12.2% [95% CI: 8.9%, 15.7%]). Receipt of influenza vaccines increased among females over the entire study period (AAPC: 2.0% [95% CI: 0.4%, 3.7%]). Adult males, adults in the poverty income ratio group 200%–399% and >400%, and adults on private insurance show increase in the receipt of influenza vaccines in the early part of the study period, but flat thereafter. Receipt of influenza vaccines increased slightly for adults on Medicare (AAPC: 1.0% [95% CI: 0.1%, 1.9%]).

## A1C tests

We observed no significant changes in the overall trend in the proportion of adults receiving two or more A1C tests in a year (Table 1). Proportions increased annually by 1.2% (95% CI: 0.6%, 1.7%), 1.8% (95% CI: 0.8%, 2.9%), and 2.2% (95% CI: 0.7%, 3.8%) for those age 45–64, 65–74, and ≥75 years, respectively. We also found increases in A1C testing for Hispanic adults (AAPC: 6.8% [95% CI: 2.0%, 11.8%] ) and for non-Hispanic White adults (AAPC: 1.2% [95% CI: 0.5%, 1.9%]), those with Medicare only (AAPC: 1.6% [95% CI: 0.4%, 2.9%]), and those in the highest poverty income ratio group (> 400%) (AAPC: 1.1% [95% CI: 0.5%, 1.8%]).

## Dilated eye exam

The overall proportion receiving dilated eye exams was stable during 2008–2019 (Table 1). Similarly for males, we observed stable trends from 2008 to 2011 but a significant decrease after 2011 (APC: -1.6% [95% CI: -2.9%, -0.3%]). Uninsured adults with diabetes had average annual increases in the receipt of eye exams of 3.3% [95% CI: 0.1%, 6.6%]. Adults with diabetes in the highest income to poverty ratio group (> 400%) had a flat trend in eye examinations until 2013, after which the proportion significantly decreased (APC: -3.8% [95% CI: -6.8%, -0.7%]).

## Foot exam

The trend for foot exams for the overall adult population with diabetes was flat until 2011, after which it decreased (APC: -1.1% [95% CI: -2.1%, -0.1%], Table 1). We found an increase in foot exams among adults with diabetes age 65–74 until 2014 (APC: 1.9% [95% CI: 0.5%, 3.4%]), and the trend was flat thereafter.

## One or more dentist visits

Adults age 65–74 and ≥75 years had average annual percent increases of 3.1% (95% CI: 2.1%, 4.1%) and 1.4% (95% CI: 0.1%, 2.7%), respectively. Non-Hispanic White adults with diabetes had an average annual percent increase of 1.8% (95% CI: 0.5%, 3.1%). Among those with private insurance, we found decreasing proportions visiting the dentist during 2008–2015 (APC -2.6% [95% CI: -4.3%, -0.9%]), followed by an increase after 2015 (APC: 5.6% [95% CI: 1.4%, 9.9%]. The trends for adults with diabetes in the poverty income ratio group < 100% and those with a high school education had multiple changes in direction during the study period.

## Absence of preventive care practices

In 2008, 5.1% (95% CI: 2.7%, 7.5%) adults with diabetes reported receiving none of the six recommended care practices. In 2019, this estimate was 6.1% (95% CI: 3.7%, 8.5%) and in 2020 it was 8.2% (95% CI: 4.5%, 11.9%).

## Comparisons among subgroups

The youngest adults (14–44 years) often reported lower rates of eye exams, foot exams, cholesterol testing, and influenza vaccination (Supplemental Figure 1 & 2). Uninsured adults also often reported the lowest rates of preventive care for eye exams, foot exams, cholesterol testing, and A1C testing. Adults with less than a high school education were less likely to visit the dentist in most years, although they were only significantly less likely to visit the dentist from 2008–2010, 2013–2014, and in 2020.

# Discussion

Despite the recovery from the Great Recession in 2008 and the passing of the Affordable Care Act (ACA) in 2010, we found no significant change over time in five out of the six preventive care practices for the overall US adult population with diabetes. Influenza vaccination was the only preventive practice that increased during 2008–2019. Among subgroups, influenza vaccine uptake, A1c testing, and dental visits tended to improve. However, foot exams, cholesterol testing, and dental visits among the uninsured tended to decline. While the passing of the ACA led to an increase in the number of adults with diagnosed and undiagnosed diabetes that have health insurance and an increase in their use of health care services14,15, detecting corresponding increases in the receipt of preventive care has proved more elusive. As of 2020, 8.2% of adults with diabetes had received none of the six preventive services.

Two studies that used data from BRFSS found no changes overall in the receipt of preventive care for adults with diabetes as a result of the Medicaid expansion between 2014 and 201916,17. Similarly the majority of subgroups exhibited no change or decreased in receipt of these six preventive practices. The subgroup trends we observed suggest disparities in diabetes care that have been shown in other research. Consistent with our findings, studies using data from NHANES for 2005–2018 as well as BRFSS from 2004–2014 both found that younger adults with diabetes were less likely to report receiving various recommended preventive care practices18,19. Additionally, insurance was a barrier to preventive care, as uninsured adults also reported lower rates of preventive care in these studies18,19. In our study, dental visits decreased over the study period but dilated eye exams increased. Education has also been linked to meeting recommendations for preventive care, with adults with lower education consistently reporting lower rates of prevention18,20. We found that adults with less than a high school education had decreasing trends in cholesterol testing and frequently were less likely to report visiting the dentist at least once than adults with higher educational attainment, although this difference was not always statistically significant. Future research may wish to examine the percentage of adults with diabetes reporting receiving none of the six preventive care practices. While the confidence intervals for the estimates from 2008 and 2019/2020 overlap, the increase highlights there is sustained inadequate preventive care for a subset of adults with diabetes.

A1C testing and influenza vaccinations were the only two preventive practices that showed increases either among the overall population or various subgroups, which may be linked with the increase in health care service usage14. These practices can be administered at the point-of-care during regular physician visits, whereas a dilated eye exam or dental visit require seperate appointments. Lack of access to specialists, limited provider acceptance of public insurance options like Medicare, and inadequate care coordination may further complicate access to eye exams or dentist visits and may explain why, for most groups, we observed no change or a decrease in the receipt of these practices20–22.

Other studies on trends in preventive care using different data sources report some conflicting findings. A study using data from NHANES found increases in the proportion of adults with diabetes that reported having a primary care doctor, received an annual check-up with a physician, had at least two A1C tests in a year, had their cholesterol levels tested, and had an annual foot exam by a doctor18. Another study that reported on data from NHANES, the National Health Interview Survey (NHIS), and BRFSS found that foot exams, influenza vaccinations, and A1C testing increased from 1999 - 2016, although eye exams stayed roughly constant23. Data from BRFSS showed that adults with diabetes had reported decreasing dentist visits from 2004 to 201419, while reported eye examinations increased briefly following expansion of Medicaid in 2014 and then decreased21. In contrast, a study using data from NHANES found that eye exams for adults with diabetes did not increase from 2005 to 201620. No change was found for rates of influenza vaccination from 2007 to 2018 for the overall population of adults with diabetes when evaluated using data from NHIS24. Differences in the results of these surveys may be due to differences in how questions are phrased and differences in the population being asked questions. Additionally, it is difficult to compare trends for overlapping time periods of different lengths so caution should be used when interpreting these differences; when possible, trends should be compared over similar, longer time periods25,26.

It may be difficult to detect changes in any single preventive care practice or aggregate count of preventive care, especially if other factors are presenting stronger barriers to care. For example, depression may reduce adherence to or seeking of patient-initiated activities such as diet and exercise recommendations among adults with diabetes27. Even with higher rates of medical service use among adults with both depression and diabetes, rates of physician-initiated services were no different between adults with and without depression28.

## Limitations

The responses from MEPS were self-reported which may introduce bias. The study group was also cross-sectional and does not provide insight into how past receipt of preventive practices may affect future receipt. In 2013, MEPS implemented efforts to improve collection of complete information by field interviewers with the goal of improving underreporting. This effort may have improved data quality after 2014 and could have impacted our trend analyses. Furthermore, changes to the NHIS sample design in 2016 were made to better cover the target population and reduce bias.

We are also unable to identify factors that are causally linked to the changes in trends. Additionally, there has been a steadily declining response rate for both MEPS and DCS from a peak during the studied time period of 59.3% and 92.4%, respectively in 2008 to 39.5% and 65.8%, respectively, in 2019 and 27.6% and 59.3%, respectively in 2020. Although weights for these data were adjusted for non-response, the direction of bias due to non-response cannot be known. Furthermore, we were unable to distinguish between type 1 and type 2 diabetes in these data. Because of the greater prevalence of type 2 diabetes the trends we report likely are more reflective of type 2 diabetes than type 1.

# Conclusions

In summary, with the exception of influenza vaccination, overall, the receipt of preventive care for diabetes from 2008 to 2019 was flat. The trend pattern in subgroups was heterogeneous. This work highlights practices and specific subgroups that could be targeted to improve preventive care, especially groups that reported declines in receipt of preventive care. Declining trends in preventive care may lead to increasing diabetes complications, increasing the morbidity of diabetes.

# Acknowledgements

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# Tables

Table 1: Age-adjusted trends in proportions of US adults with diabetes that report receiving recommended care practices - at least one dental visit, one dilated eye exam, one foot exam, two or more A1C tests, cholesterol level tested, and receiving an influenza vaccine.

| Preventive Practice | 2008 (SE) | 2009 (SE) | 2010 (SE) | 2011 (SE) | 2012 (SE) | 2013 (SE) | 2014 (SE) | 2015 (SE) | 2016 (SE) | 2017 (SE) | 2018 (SE) | 2019 (SE) | 2020 (SE) | Percent Change (95% CI)trueafalse | Joinpoint Year | APC (95% CI)trueafalse | AAPC (95% CI)trueafalse |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Cholesterol tested | 82.7 (1.9) | 84.3 (1.8) | 87.8 (1.3) | 89.0 (1.4) | 84.9 (1.6) | 85.9 (1.7) | 85.9 (1.8) | 89.9 (1.5) | 89.3 (1.6) | 77.0 (1.8) | 79.7 (1.7) | 76.8 (2.6) | 71.1 (3.1) | -7.1 (-14.5, 0.4) |  | -0.7 (-1.6, 0.2) | -0.7 (-1.6, 0.2) |
| Received influenza vaccine | 33.6 (1.8) | 36.5 (2.2) | 40.5 (1.9) | 45.4 (2.1) | 47.6 (2.1) | 44.7 (2.4) | 41.0 (2.3) | 39.4 (2.0) | 43.4 (2.3) | 42.2 (2.1) | 43.1 (2.2) | 44.4 (2.7) | 42.5 (2.8) | 32.4 (11.3, 53.5) | 2012, 2015 | 9.2 (6.9, 11.6), -6.0 (-12.1, 0.6), 2.9 (0.7, 5.1) | 2.6 (1.1, 4.2) |
| One or more dentist visits | 37.2 (2.0) | 37.0 (2.2) | 32.8 (2.0) | 36.6 (2.4) | 32.6 (1.8) | 35.1 (2.0) | 34.6 (2.1) | 35.9 (2.0) | 32.6 (2.1) | 34.6 (2.2) | 37.9 (2.3) | 41.9 (2.7) | 32.7 (2.9) | 12.9 (-5.6, 31.3) | 2017 | -0.7 (-2.2, 0.9), 11.6 (-6.1, 32.7) | 1.4 (-1.4, 4.3) |
| Two or more A1C tests | 53.7 (2.3) | 49.1 (2.3) | 51.7 (2.0) | 55.4 (2.0) | 50.1 (2.3) | 48.8 (2.2) | 52.3 (2.1) | 53.6 (2.2) | 54.7 (2.1) | 52.7 (2.0) | 55.3 (2.5) | 58.3 (2.5) | 59.3 (3.0) | 8.7 (-4.3, 21.7) |  | 0.8 (-0.1, 1.7) | 0.8 (-0.1, 1.7) |
| Dilated eye exam | 55.5 (2.1) | 52.6 (2.3) | 56.6 (2.1) | 58.8 (2.4) | 59.8 (2.1) | 57.7 (2.2) | 54.8 (2.1) | 54.3 (2.1) | 55.0 (2.1) | 51.7 (2.2) | 56.6 (2.4) | 52.3 (3.0) | 49.7 (2.9) | -5.7 (-18.2, 6.9) |  | -0.4 (-1.3, 0.4) | -0.4 (-1.3, 0.4) |
| Foot examination | 57.9 (2.4) | 61.3 (2.2) | 60.8 (2.0) | 64.3 (1.8) | 66.2 (2.0) | 61.7 (2.4) | 64.0 (2.2) | 60.3 (2.1) | 59.5 (2.2) | 62.0 (1.9) | 59.4 (2.5) | 59.7 (2.5) | 54.4 (2.9) | 3.2 (-8.5, 14.9) | 2011 | 3.5 (-1.1, 8.4), -1.1 (-2.1, -0.1) | 0.2 (-1.0, 1.4) |
| *a*Values in these columns were estimated excluding data from 2020. |

# Figures

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| Fig 1: Age-adjusted trends in proportions of US adults with diabetes who reported receiving recommended medical examinations from 2008 - 2019. The dashed black line is the overall trend, while dots represent percentages for 2020. Data from 2020 was not included in the trend analysis. |

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| Fig 2: Age-adjusted trends in proportions of US adults with diabetes who reported receiving recommended lab tests and vaccinations. The dashed black line is the overall trend, while dots represent percentages for 2020. Data from 2020 was not included in the trend analysis. |

# Supplement

Table 1: Age-adjusted trends in proportions of US adults overall and by subgroup with diabetes that report receiving six recommended care practices - at least one dental visit, one dilated eye exam, one foot exam, two or more A1C tests, cholesterol level tested, and receiving an influenza vaccine.

|  | 2008 (SE) | 2009 (SE) | 2010 (SE) | 2011 (SE) | 2012 (SE) | 2013 (SE) | 2014 (SE) | 2015 (SE) | 2016 (SE) | 2017 (SE) | 2018 (SE) | 2019 (SE) | 2020 (SE) | Percent Change (95% CI)trueafalse | Joinpoint Year | APC (95% CI)trueafalse | AAPC (95% CI)trueafalse |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Cholesterol tested |
| Overall | 82.7 (1.9) | 84.3 (1.8) | 87.8 (1.3) | 89.0 (1.4) | 84.9 (1.6) | 85.9 (1.7) | 85.9 (1.8) | 89.9 (1.5) | 89.3 (1.6) | 77.0 (1.8) | 79.7 (1.7) | 76.8 (2.6) | 71.1 (3.1) | -7.1 (-14.5, 0.4) |  | -0.7 (-1.6, 0.2) | -0.7 (-1.6, 0.2) |
| Age: 18 to 44 | 73.7 (3.4) | 77.2 (3.2) | 82.9 (2.4) | 84.0 (2.6) | 78.6 (2.9) | 79.8 (3.4) | 78.8 (3.3) | 84.8 (2.8) | 83.6 (3.0) | 70.2 (3.3) | 75.9 (3.1) | 69.9 (4.7) | 62.5 (5.7) | -5.2 (-20.2, 9.9) |  | -0.6 (-1.8, 0.6) | -0.6 (-1.8, 0.6) |
| Age: 45 to 64 | 91.6 (1.1) | 91.0 (1.1) | 92.6 (0.9) | 93.9 (0.7) | 90.2 (1.1) | 90.7 (1.1) | 93.2 (1.1) | 94.1 (0.9) | 94.9 (0.7) | 83.2 (1.5) | 82.0 (1.9) | 82.0 (1.9) | 78.3 (2.2) | -10.5 (-15.2, -5.8) | 2016 | 0.1 (-0.5, 0.6), -4.8 (-7.3, -2.4) | -1.3 (-2.0, -0.6) |
| Age: 65 to 74 | 94.6 (1.4) | 94.1 (1.5) | 96.2 (1.1) | 94.9 (1.6) | 96.6 (1.1) | 95.1 (1.2) | 94.7 (1.4) | 97.6 (0.8) | 96.9 (0.8) | 87.7 (1.7) | 87.5 (1.4) | 90.6 (1.5) | 85.9 (1.9) | -4.2 (-8.3, 0.0) |  | -0.6 (-1.2, 0.0) | -0.6 (-1.2, 0.0) |
| Age: 75+ | 95.5 (1.4) | 94.7 (1.5) | 92.6 (1.7) | 97.2 (1.0) | 94.1 (1.6) | 98.1 (0.7) | 95.7 (1.3) | 98.6 (0.6) | 97.9 (0.8) | 86.4 (1.9) | 87.6 (1.7) | 88.0 (2.1) | 83.9 (2.4) | -7.8 (-12.8, -2.8) |  | -0.7 (-1.4, 0.1) | -0.7 (-1.4, 0.1) |
| Highest degree earned: Less than high school | 77.7 (4.2) | 81.7 (4.3) | 83.2 (3.1) | 86.6 (2.5) | 79.0 (5.0) | 87.6 (2.3) | 88.0 (2.8) | 86.0 (3.7) | 88.0 (3.1) | 72.1 (3.5) | 71.1 (4.6) | 63.5 (5.6) | 56.8 (7.0) | -18.2 (-34.9, -1.5) | 2016 | 1.0 (-0.4, 2.4), -10.4 (-15.8, -4.6) | -2.3 (-3.8, -0.6) |
| Highest degree earned: High school | 79.6 (3.0) | 83.7 (2.8) | 89.4 (1.7) | 88.9 (2.1) | 87.2 (2.6) | 85.9 (2.7) | 88.1 (2.5) | 84.1 (4.7) | 88.0 (2.8) | 73.9 (3.0) | 80.7 (2.7) | 84.0 (2.5) | 72.4 (4.5) | 5.6 (-4.4, 15.6) |  | -0.4 (-1.5, 0.6) | -0.4 (-1.5, 0.6) |
| Highest degree earned: Greater than high school | 92.9 (1.9) | 87.9 (3.1) | 88.9 (2.9) | 91.5 (2.6) | 86.1 (4.3) | 84.6 (4.1) | 81.4 (4.3) | 90.9 (4.9) | 92.7 (2.4) | 85.3 (2.6) | 84.2 (2.5) | 78.4 (4.2) | 76.1 (4.8) | -15.6 (-25.1, -6.1) |  | -0.8 (-1.7, 0.0) | -0.8 (-1.7, 0.0) |
| Race/Ethnicity: Hispanic | 88.3 (7.4) | 75.8 (11.8) | 51.1 (17.6) | 93.8 (5.5) | 83.7 (2.5) | 82.2 (2.9) | 87.7 (2.5) | 91.1 (1.8) | 89.8 (2.1) | 70.7 (4.0) | 73.1 (4.3) | 71.8 (5.1) | 59.1 (6.9) | -18.6 (-36.1, -1.1) |  | -0.1 (-3.3, 3.3) | -0.1 (-3.3, 3.3) |
| Race/Ethnicity: Black/Not Hispanic | 80.9 (3.6) | 85.5 (3.1) | 83.8 (3.1) | 91.3 (2.5) | 77.8 (3.5) | 89.4 (2.4) | 93.2 (2.3) | 89.8 (3.2) | 91.2 (3.3) | 71.8 (3.8) | 74.1 (5.0) | 81.9 (4.2) | 75.6 (6.9) | 1.2 (-12.3, 14.7) |  | -0.6 (-2.2, 1.0) | -0.6 (-2.2, 1.0) |
| Race/Ethnicity: Asian/Not Hispanic | 82.0 (11.5) | 96.9 (1.5) | 91.6 (3.6) | 86.3 (6.8) | 91.2 (5.3) | 95.1 (2.1) | 87.5 (5.6) | 96.9 (1.5) | 97.0 (1.7) | 84.9 (6.9) | 94.4 (2.9) | 68.3 (16.1) | 53.0 (14.4) | -16.8 (-61.5, 28.0) |  | -0.7 (-2.6, 1.2) | -0.7 (-2.6, 1.2) |
| Race/Ethnicity: White/Not Hispanic | 82.5 (2.4) | 83.1 (2.2) | 89.5 (1.5) | 89.2 (1.7) | 88.2 (2.4) | 84.9 (2.7) | 84.1 (3.0) | 88.7 (2.6) | 88.7 (2.4) | 81.3 (2.6) | 83.4 (2.4) | 79.2 (3.4) | 76.9 (4.2) | -4.1 (-13.8, 5.6) |  | -0.4 (-1.1, 0.4) | -0.4 (-1.1, 0.4) |
| Sex: Male | 80.8 (2.9) | 84.8 (3.0) | 88.2 (2.1) | 90.9 (1.7) | 85.8 (2.1) | 85.3 (2.9) | 89.3 (2.1) | 92.9 (1.5) | 92.5 (1.4) | 79.6 (2.5) | 78.7 (2.7) | 75.0 (3.7) | 71.2 (3.8) | -7.2 (-18.3, 3.9) | 2016 | 1.0 (-0.1, 2.2), -6.9 (-11.7, -1.8) | -1.2 (-2.6, 0.2) |
| Sex: Female | 84.4 (2.4) | 83.8 (2.5) | 87.4 (2.0) | 87.2 (2.1) | 84.0 (2.3) | 86.6 (2.3) | 83.0 (2.9) | 87.3 (2.6) | 86.5 (2.7) | 74.5 (2.5) | 80.7 (2.4) | 78.8 (3.1) | 71.0 (4.3) | -6.6 (-15.6, 2.3) |  | -0.8 (-1.5, 0.0) | -0.8 (-1.5, 0.0) |
| Insurance coverage: Private only | 84.0 (2.5) | 87.9 (2.2) | 92.0 (1.5) | 90.1 (2.3) | 86.1 (2.2) | 88.0 (2.7) | 83.6 (3.1) | 90.2 (2.3) | 90.9 (2.1) | 82.3 (2.6) | 84.2 (2.3) | 79.0 (3.5) | 75.2 (4.6) | -5.9 (-15.7, 3.8) |  | -0.6 (-1.4, 0.2) | -0.6 (-1.4, 0.2) |
| Insurance coverage: Medicaid | 86.9 (3.7) | 91.0 (2.8) | 83.6 (4.4) | 90.0 (2.5) | 86.0 (4.1) | 90.1 (3.0) | 86.3 (3.0) | 85.3 (3.7) | 82.6 (4.5) | 67.4 (3.9) | 73.4 (4.0) | 67.7 (5.9) | 61.3 (6.2) | -22.1 (-36.8, -7.3) |  | -2.3 (-3.6, -1.0) | -2.3 (-3.6, -1.0) |
| Insurance coverage: Uninsured | 55.5 (7.1) | 57.8 (7.7) | 68.9 (5.1) | 73.1 (4.5) | 63.0 (5.4) | 55.8 (6.5) | 77.5 (6.0) | 83.3 (5.7) | 83.5 (5.7) | 62.0 (7.4) | 49.9 (10.9) | 59.4 (12.7) | 38.6 (11.4) | 7.1 (-45.3, 59.5) |  | 0.2 (-3.1, 3.6) | 0.2 (-3.1, 3.6) |
| Insurance coverage: Medicare only | 95.2 (1.2) | 91.4 (2.5) | 95.1 (1.0) | 95.0 (1.8) | 95.4 (1.0) | 95.2 (1.0) | 95.3 (1.1) | 97.3 (0.7) | 96.9 (0.7) | 86.1 (1.7) | 86.7 (1.8) | 91.4 (1.2) | 85.8 (1.9) | -4.0 (-7.4, -0.7) |  | -0.5 (-1.2, 0.2) | -0.5 (-1.2, 0.2) |
| Poverty income ratio: > 400% | 84.9 (3.7) | 84.8 (4.4) | 93.5 (2.5) | 92.4 (2.3) | 88.0 (2.7) | 93.0 (1.9) | 92.6 (2.8) | 91.3 (3.2) | 95.9 (1.4) | 89.3 (2.5) | 85.8 (2.3) | 86.3 (3.0) | 79.9 (5.1) | 1.7 (-9.4, 12.8) |  | 0.1 (-0.7, 0.9) | 0.1 (-0.7, 0.9) |
| Poverty income ratio: 200% - 399% | 83.7 (3.3) | 83.8 (3.4) | 88.4 (2.3) | 87.2 (3.1) | 87.6 (2.2) | 77.7 (4.2) | 81.2 (4.1) | 90.3 (2.3) | 81.5 (4.2) | 80.2 (3.2) | 83.0 (2.8) | 76.2 (5.0) | 70.9 (5.3) | -8.9 (-22.7, 4.8) |  | -0.7 (-1.6, 0.2) | -0.7 (-1.6, 0.2) |
| Poverty income ratio: 100% - 199% | 84.9 (2.8) | 86.2 (2.9) | 88.0 (2.4) | 90.5 (2.3) | 81.4 (4.1) | 91.0 (1.9) | 81.9 (4.4) | 89.8 (3.1) | 92.8 (2.0) | 69.0 (4.1) | 73.4 (4.1) | 67.5 (6.1) | 60.7 (7.2) | -20.5 (-35.4, -5.6) |  | -1.9 (-3.5, -0.2) | -1.9 (-3.5, -0.2) |
| Poverty income ratio: < 100% | 73.2 (5.0) | 81.8 (3.1) | 77.2 (3.8) | 84.0 (3.5) | 80.3 (3.5) | 84.5 (4.1) | 87.9 (3.2) | 86.4 (3.2) | 84.2 (4.1) | 61.6 (4.9) | 72.0 (5.5) | 73.3 (4.8) | 64.4 (7.6) | 0.1 (-18.6, 18.7) |  | -0.9 (-2.7, 1.1) | -0.9 (-2.7, 1.1) |
| Received influenza vaccine |
| Overall | 33.6 (1.8) | 36.5 (2.2) | 40.5 (1.9) | 45.4 (2.1) | 47.6 (2.1) | 44.7 (2.4) | 41.0 (2.3) | 39.4 (2.0) | 43.4 (2.3) | 42.2 (2.1) | 43.1 (2.2) | 44.4 (2.7) | 42.5 (2.8) | 32.4 (11.3, 53.5) | 2012, 2015 | 9.2 (6.9, 11.6), -6.0 (-12.1, 0.6), 2.9 (0.7, 5.1) | 2.6 (1.1, 4.2) |
| Age: 18 to 44 | 20.8 (3.0) | 28.1 (3.8) | 32.2 (3.3) | 39.2 (3.7) | 43.0 (3.7) | 40.2 (4.4) | 34.1 (4.0) | 29.7 (3.3) | 36.8 (3.9) | 31.7 (3.8) | 35.1 (3.9) | 37.4 (4.9) | 32.1 (4.7) | 79.8 (11.9, 147.8) | 2011 | 22.1 (1.0, 47.6), -2.1 (-6.1, 2.1) | 4.0 (-1.1, 9.3) |
| Age: 45 to 64 | 42.4 (2.4) | 41.2 (1.9) | 44.9 (2.0) | 47.1 (1.9) | 45.8 (2.1) | 44.2 (2.2) | 44.2 (2.2) | 46.1 (2.1) | 45.3 (2.2) | 50.0 (2.0) | 46.7 (2.0) | 44.6 (2.3) | 48.7 (2.8) | 5.4 (-10.5, 21.2) |  | 0.8 (0.0, 1.6) | 0.8 (0.0, 1.6) |
| Age: 65 to 74 | 57.9 (2.9) | 53.0 (3.0) | 58.3 (3.5) | 57.0 (2.9) | 60.7 (2.7) | 57.3 (2.8) | 58.3 (2.5) | 53.0 (2.9) | 55.9 (2.8) | 57.5 (2.5) | 58.8 (2.0) | 65.7 (2.4) | 67.1 (2.6) | 13.5 (-0.3, 27.3) |  | 0.6 (-0.4, 1.6) | 0.6 (-0.4, 1.6) |
| Age: 75+ | 57.7 (3.5) | 55.6 (3.6) | 59.6 (3.3) | 67.4 (3.4) | 69.3 (3.2) | 62.2 (3.2) | 55.2 (3.6) | 62.9 (3.3) | 66.4 (2.9) | 65.3 (3.0) | 65.3 (3.0) | 66.1 (2.9) | 60.7 (3.6) | 14.5 (-2.1, 31.1) |  | 1.1 (-0.2, 2.4) | 1.1 (-0.2, 2.4) |
| Highest degree earned: Less than high school | 29.4 (2.9) | 27.2 (2.7) | 31.5 (3.0) | 46.3 (3.8) | 46.9 (5.0) | 40.9 (3.4) | 35.0 (3.3) | 37.1 (6.4) | 41.1 (3.6) | 41.8 (4.7) | 31.7 (3.8) | 33.2 (4.5) | 29.3 (4.7) | 13.1 (-24.3, 50.4) | 2012 | 13.3 (-0.8, 29.4), -4.0 (-9.2, 1.5) | 2.0 (-3.0, 7.2) |
| Highest degree earned: High school | 32.1 (2.6) | 40.8 (3.6) | 41.6 (3.0) | 41.4 (3.1) | 42.8 (3.7) | 40.3 (4.1) | 40.4 (3.4) | 35.9 (3.7) | 42.3 (2.8) | 39.9 (2.9) | 40.6 (3.2) | 43.7 (3.8) | 36.6 (4.1) | 36.2 (4.6, 67.8) |  | 0.9 (-0.6, 2.5) | 0.9 (-0.6, 2.5) |
| Highest degree earned: Greater than high school | 40.1 (4.0) | 37.4 (4.1) | 45.6 (3.8) | 52.0 (4.1) | 59.4 (6.3) | 54.2 (4.4) | 46.3 (4.3) | 50.2 (7.0) | 47.3 (5.1) | 46.3 (4.2) | 53.8 (4.1) | 53.8 (4.7) | 58.1 (4.8) | 34.0 (-0.8, 68.7) |  | 1.9 (-0.3, 4.2) | 1.9 (-0.3, 4.2) |
| Race/Ethnicity: Hispanic | 23.9 (9.8) | 19.8 (9.5) | 28.9 (14.6) | 47.5 (18.5) | 35.4 (3.4) | 34.8 (3.5) | 32.9 (4.7) | 35.1 (3.6) | 35.2 (3.3) | 35.2 (3.7) | 34.5 (3.7) | 38.0 (5.5) | 26.8 (5.0) | 59.2 (-76.9, 195.4) |  | 3.5 (-0.2, 7.4) | 3.5 (-0.2, 7.4) |
| Race/Ethnicity: Black/Not Hispanic | 24.4 (3.4) | 29.0 (3.9) | 32.9 (3.7) | 37.8 (3.7) | 33.3 (3.7) | 29.6 (3.4) | 27.8 (3.5) | 30.1 (3.1) | 27.3 (3.4) | 29.6 (3.6) | 40.3 (5.9) | 32.2 (5.1) | 37.9 (7.9) | 32.2 (-22.6, 87.0) |  | 1.2 (-1.4, 3.8) | 1.2 (-1.4, 3.8) |
| Race/Ethnicity: Asian/Not Hispanic | 30.6 (6.9) | 30.2 (5.9) | 36.6 (7.2) | 40.3 (8.1) | 43.5 (8.6) | 42.5 (6.4) | 43.4 (7.6) | 30.3 (6.4) | 56.2 (8.3) | 37.4 (8.3) | 47.0 (11.8) | 44.7 (13.6) | 59.1 (14.0) | 46.0 (-62.3, 154.3) |  | 3.2 (0.0, 6.4) | 3.2 (0.0, 6.4) |
| Race/Ethnicity: White/Not Hispanic | 35.4 (2.3) | 39.0 (2.8) | 42.4 (2.4) | 47.6 (2.7) | 56.9 (3.0) | 53.4 (3.4) | 46.8 (3.3) | 45.3 (3.0) | 50.1 (3.3) | 50.1 (3.4) | 48.3 (2.6) | 51.7 (3.6) | 48.1 (3.7) | 45.9 (18.6, 73.2) | 2012, 2015 | 12.2 (8.9, 15.7), -5.6 (-14.3, 3.9), 2.7 (-0.4, 5.9) | 3.7 (1.5, 5.9) |
| Sex: Male | 33.7 (2.9) | 37.4 (2.7) | 42.5 (2.9) | 46.9 (3.0) | 47.6 (3.0) | 45.7 (3.4) | 43.0 (3.3) | 38.9 (2.9) | 41.8 (3.1) | 39.2 (2.7) | 43.7 (3.3) | 42.4 (3.6) | 41.8 (3.7) | 25.8 (-4.0, 55.7) | 2011 | 11.0 (0.6, 22.5), -1.7 (-3.8, 0.4) | 1.6 (-1.0, 4.3) |
| Sex: Female | 33.4 (2.3) | 35.6 (3.1) | 38.7 (2.5) | 43.9 (2.9) | 47.5 (2.6) | 43.7 (3.2) | 39.2 (2.7) | 39.7 (2.9) | 44.9 (3.1) | 45.0 (3.0) | 42.5 (2.7) | 46.6 (3.3) | 43.2 (3.9) | 39.3 (12.2, 66.5) |  | 2.0 (0.4, 3.7) | 2.0 (0.4, 3.7) |
| Insurance coverage: Private only | 30.5 (2.7) | 38.7 (3.8) | 44.4 (3.3) | 44.9 (3.4) | 51.8 (3.6) | 49.2 (4.1) | 43.4 (4.0) | 39.0 (3.1) | 43.0 (3.6) | 44.2 (3.4) | 44.1 (3.4) | 49.0 (4.3) | 44.7 (4.1) | 60.6 (21.8, 99.5) | 2012, 2015 | 13.1 (4.7, 22.1), -9.2 (-28.8, 15.8), 4.9 (-2.9, 13.3) | 3.7 (-1.8, 9.5) |
| Insurance coverage: Medicaid | 34.9 (3.8) | 28.0 (3.7) | 30.5 (4.0) | 46.6 (4.7) | 37.8 (4.4) | 37.3 (4.6) | 32.9 (3.9) | 33.0 (3.9) | 39.7 (4.8) | 34.8 (4.0) | 34.6 (4.0) | 30.1 (4.5) | 29.4 (4.3) | -13.8 (-45.0, 17.5) |  | -0.1 (-2.7, 2.7) | -0.1 (-2.7, 2.7) |
| Insurance coverage: Uninsured | 19.2 (5.6) | 17.9 (3.7) | 24.5 (4.7) | 22.6 (4.3) | 29.8 (4.6) | 25.2 (5.2) | 25.2 (7.1) | 18.7 (5.2) | 28.0 (4.7) | 24.6 (7.9) | 20.6 (6.4) | 19.7 (8.7) | 21.7 (9.2) | 2.6 (-103.3, 108.4) |  | 0.4 (-2.8, 3.8) | 0.4 (-2.8, 3.8) |
| Insurance coverage: Medicare only | 53.5 (2.5) | 53.2 (2.8) | 55.1 (2.7) | 60.5 (2.7) | 60.1 (2.6) | 57.1 (2.5) | 53.6 (2.7) | 59.7 (2.5) | 57.1 (2.9) | 57.2 (2.5) | 59.4 (2.3) | 64.4 (2.3) | 67.0 (2.6) | 20.5 (6.5, 34.4) |  | 1.0 (0.1, 1.9) | 1.0 (0.1, 1.9) |
| Poverty income ratio: > 400% | 39.0 (4.0) | 41.0 (3.8) | 50.2 (4.0) | 49.0 (4.3) | 58.5 (4.0) | 59.6 (4.3) | 46.9 (4.2) | 45.6 (3.9) | 48.2 (4.4) | 53.7 (4.3) | 55.2 (4.0) | 55.6 (4.9) | 53.7 (5.1) | 42.6 (4.9, 80.3) | 2012, 2015 | 11.4 (4.3, 18.9), -7.8 (-25.1, 13.3), 5.7 (-1.0, 12.8) | 3.8 (-0.9, 8.7) |
| Poverty income ratio: 200% - 399% | 30.1 (3.2) | 34.8 (3.1) | 35.7 (3.4) | 44.3 (3.6) | 48.0 (4.1) | 40.5 (3.7) | 43.0 (3.9) | 39.1 (3.7) | 47.5 (4.2) | 42.4 (3.9) | 41.8 (3.9) | 43.8 (5.0) | 45.6 (4.9) | 45.4 (1.0, 89.9) | 2011 | 13.2 (0.2, 27.9), -0.2 (-2.8, 2.5) | 3.3 (0.1, 6.7) |
| Poverty income ratio: 100% - 199% | 35.9 (3.9) | 43.4 (5.6) | 41.8 (4.0) | 44.9 (3.0) | 42.5 (4.2) | 44.9 (4.5) | 36.2 (4.7) | 36.7 (4.6) | 37.9 (4.3) | 30.9 (3.2) | 35.8 (4.1) | 37.7 (5.6) | 27.0 (4.5) | 5.1 (-32.9, 43.0) |  | -1.7 (-3.5, 0.2) | -1.7 (-3.5, 0.2) |
| Poverty income ratio: < 100% | 26.2 (3.7) | 23.1 (3.4) | 32.9 (4.0) | 41.4 (4.6) | 37.4 (4.3) | 31.2 (4.1) | 35.7 (4.7) | 31.9 (3.9) | 34.9 (3.8) | 37.3 (4.3) | 37.1 (4.7) | 34.0 (4.0) | 30.9 (5.9) | 29.8 (-16.8, 76.5) |  | 2.4 (-0.3, 5.2) | 2.4 (-0.3, 5.2) |
| One or more dentist visits |
| Overall | 37.2 (2.0) | 37.0 (2.2) | 32.8 (2.0) | 36.6 (2.4) | 32.6 (1.8) | 35.1 (2.0) | 34.6 (2.1) | 35.9 (2.0) | 32.6 (2.1) | 34.6 (2.2) | 37.9 (2.3) | 41.9 (2.7) | 32.7 (2.9) | 12.9 (-5.6, 31.3) | 2017 | -0.7 (-2.2, 0.9), 11.6 (-6.1, 32.7) | 1.4 (-1.4, 4.3) |
| Age: 18 to 44 | 35.0 (3.5) | 35.3 (3.9) | 30.1 (3.6) | 37.0 (4.2) | 28.6 (3.1) | 32.9 (3.4) | 32.6 (3.6) | 32.7 (3.8) | 28.8 (3.8) | 31.1 (3.8) | 33.6 (4.2) | 38.0 (4.8) | 28.9 (5.0) | 8.5 (-25.7, 42.8) |  | -0.1 (-1.8, 1.7) | -0.1 (-1.8, 1.7) |
| Age: 45 to 64 | 42.1 (2.0) | 39.0 (2.0) | 35.7 (2.0) | 35.1 (2.2) | 37.9 (2.2) | 37.7 (2.0) | 35.3 (1.9) | 38.0 (1.9) | 34.6 (2.1) | 37.7 (2.0) | 41.2 (2.2) | 45.8 (2.4) | 34.5 (2.4) | 8.8 (-6.2, 23.7) | 2016 | -1.4 (-3.3, 0.5), 8.9 (-0.4, 19.0) | 1.3 (-1.0, 3.7) |
| Age: 65 to 74 | 34.6 (3.1) | 38.9 (2.7) | 36.3 (2.9) | 37.3 (2.8) | 36.7 (2.7) | 40.3 (2.6) | 43.6 (3.0) | 44.4 (3.0) | 45.7 (3.0) | 41.8 (2.6) | 47.9 (2.5) | 50.5 (2.7) | 43.4 (2.6) | 45.8 (15.6, 76.1) |  | 3.1 (2.1, 4.1) | 3.1 (2.1, 4.1) |
| Age: 75+ | 35.8 (3.2) | 37.9 (3.1) | 36.0 (3.3) | 38.4 (2.9) | 34.1 (3.1) | 35.0 (3.7) | 35.8 (3.6) | 39.1 (3.1) | 35.3 (3.0) | 38.6 (2.9) | 43.3 (2.7) | 44.2 (3.2) | 39.3 (3.4) | 23.3 (-4.3, 50.9) |  | 1.4 (0.1, 2.7) | 1.4 (0.1, 2.7) |
| Highest degree earned: Less than high school | 22.7 (3.2) | 21.1 (2.7) | 17.1 (2.8) | 29.9 (4.0) | 29.4 (5.2) | 19.5 (2.6) | 20.5 (2.5) | 29.6 (6.2) | 21.7 (3.3) | 22.5 (3.0) | 28.9 (4.2) | 28.6 (5.0) | 10.6 (2.0) | 26.0 (-29.4, 81.4) |  | 2.0 (-1.5, 5.7) | 2.0 (-1.5, 5.7) |
| Highest degree earned: High school | 35.9 (2.9) | 36.3 (3.2) | 30.6 (2.6) | 31.1 (3.2) | 35.6 (3.9) | 36.0 (3.5) | 33.9 (3.3) | 29.7 (3.9) | 26.4 (2.4) | 30.3 (2.9) | 33.7 (3.2) | 37.5 (3.4) | 29.3 (4.1) | 4.5 (-20.7, 29.6) | 2010, 2013, 2016 | -8.8 (-11.3, -6.2), 5.8 (2.9, 8.8), -9.9 (-12.4, -7.4), 12.1 (10.5, 13.6) | 0.1 (-0.1, 0.3) |
| Highest degree earned: Greater than high school | 52.8 (4.4) | 53.0 (4.6) | 48.1 (4.0) | 52.6 (4.7) | 51.0 (5.1) | 47.7 (4.1) | 46.2 (4.2) | 56.9 (5.6) | 51.9 (4.4) | 50.6 (3.8) | 49.2 (4.1) | 57.6 (5.0) | 49.5 (5.0) | 9.1 (-16.7, 34.9) |  | 0.3 (-1.0, 1.6) | 0.3 (-1.0, 1.6) |
| Race/Ethnicity: Hispanic | 36.5 (15.3) | 20.5 (9.6) | 38.0 (16.3) | 17.4 (9.1) | 21.6 (3.2) | 22.6 (3.1) | 28.2 (3.3) | 26.2 (3.2) | 23.8 (2.8) | 33.1 (4.1) | 29.8 (4.4) | 30.0 (5.1) | 18.8 (5.5) | -17.8 (-90.5, 54.9) |  | 0.9 (-3.7, 5.7) | 0.9 (-3.7, 5.7) |
| Race/Ethnicity: Black/Not Hispanic | 31.7 (4.3) | 30.2 (3.6) | 31.5 (4.3) | 26.2 (3.6) | 23.9 (2.9) | 36.4 (3.9) | 36.5 (5.4) | 26.1 (3.1) | 23.6 (2.6) | 24.9 (4.0) | 28.3 (4.2) | 28.7 (4.7) | 40.5 (8.6) | -9.4 (-47.0, 28.3) |  | -1.2 (-4.0, 1.5) | -1.2 (-4.0, 1.5) |
| Race/Ethnicity: Asian/Not Hispanic | 44.7 (9.0) | 40.4 (9.3) | 41.6 (8.2) | 28.5 (7.0) | 43.5 (8.5) | 43.3 (6.7) | 37.7 (8.6) | 28.7 (6.0) | 24.9 (5.7) | 26.8 (7.4) | 46.1 (11.7) | 74.0 (9.8) | 31.1 (12.6) | 65.7 (-12.4, 143.8) | 2017 | -5.3 (-10.4, 0.1), 64.5 (-10.4, 202.0) | 4.7 (-5.1, 15.6) |
| Race/Ethnicity: White/Not Hispanic | 38.0 (2.6) | 39.1 (2.8) | 32.2 (2.5) | 40.0 (2.8) | 39.7 (2.9) | 39.6 (3.4) | 36.4 (3.1) | 42.6 (3.1) | 39.7 (3.4) | 41.7 (3.1) | 44.4 (3.1) | 45.7 (3.6) | 35.4 (3.5) | 20.2 (-4.3, 44.8) |  | 1.8 (0.5, 3.1) | 1.8 (0.5, 3.1) |
| Sex: Male | 36.5 (2.9) | 36.4 (2.7) | 31.2 (3.0) | 35.7 (3.4) | 29.0 (2.4) | 34.0 (2.9) | 30.3 (3.1) | 34.0 (3.0) | 37.2 (3.1) | 32.4 (2.8) | 36.0 (2.8) | 41.6 (3.7) | 32.9 (4.2) | 13.8 (-13.0, 40.6) |  | 0.7 (-1.1, 2.7) | 0.7 (-1.1, 2.7) |
| Sex: Female | 37.7 (3.0) | 37.4 (3.1) | 34.3 (2.8) | 37.4 (3.1) | 36.2 (2.8) | 36.2 (3.0) | 38.4 (2.8) | 37.5 (2.7) | 28.4 (2.7) | 36.7 (3.2) | 39.8 (3.1) | 42.4 (3.4) | 32.6 (3.9) | 12.2 (-12.7, 37.1) |  | 0.4 (-1.5, 2.3) | 0.4 (-1.5, 2.3) |
| Insurance coverage: Private only | 46.3 (2.9) | 47.6 (3.3) | 41.4 (3.0) | 43.2 (3.8) | 40.1 (3.3) | 42.3 (3.5) | 38.6 (3.7) | 39.5 (3.6) | 40.7 (3.5) | 42.3 (3.6) | 45.3 (3.4) | 48.2 (4.2) | 38.4 (4.5) | 4.2 (-17.9, 26.3) | 2015 | -2.6 (-4.3, -0.9), 5.6 (1.4, 9.9) | 0.3 (-1.2, 1.8) |
| Insurance coverage: Medicaid | 24.7 (4.5) | 23.4 (3.6) | 19.4 (4.4) | 32.1 (5.7) | 22.1 (4.0) | 23.0 (3.6) | 29.2 (4.7) | 27.5 (4.5) | 19.0 (2.9) | 24.7 (4.3) | 27.8 (4.3) | 33.5 (5.7) | 20.4 (5.0) | 35.9 (-30.8, 102.7) |  | 1.7 (-1.6, 5.2) | 1.7 (-1.6, 5.2) |
| Insurance coverage: Uninsured | 18.4 (5.4) | 18.2 (6.5) | 20.4 (4.2) | 16.9 (4.4) | 13.1 (3.4) | 18.6 (5.8) | 16.3 (4.6) | 23.8 (9.8) | 9.6 (4.1) | 17.5 (7.6) | 7.9 (2.8) | 9.8 (7.1) | 12.1 (7.1) | -46.4 (-128.4, 35.6) |  | -5.6 (-10.5, -0.5) | -5.6 (-10.5, -0.5) |
| Insurance coverage: Medicare only | 35.0 (2.6) | 35.8 (2.4) | 34.6 (2.4) | 37.4 (2.2) | 39.1 (2.4) | 43.3 (2.8) | 39.8 (2.5) | 41.4 (2.4) | 40.0 (2.5) | 39.3 (2.3) | 45.0 (2.1) | 48.1 (2.6) | 45.1 (3.0) | 37.7 (12.7, 62.6) | 2010, 2013, 2017 | -0.5 (-41.7, 69.5), 6.4 (-37.6, 81.5), -1.6 (-24.6, 28.5), 11.0 (-34.9, 89.3) | 3.0 (-0.5, 6.6) |
| Poverty income ratio: > 400% | 46.3 (4.0) | 54.2 (4.3) | 47.1 (4.3) | 54.6 (4.6) | 47.2 (4.0) | 52.2 (3.7) | 48.9 (4.6) | 44.6 (4.4) | 47.7 (4.5) | 50.1 (4.2) | 52.5 (3.9) | 55.0 (4.7) | 56.5 (5.1) | 18.7 (-9.7, 47.1) |  | 0.4 (-1.0, 1.8) | 0.4 (-1.0, 1.8) |
| Poverty income ratio: 200% - 399% | 38.2 (3.5) | 32.9 (3.3) | 30.6 (3.3) | 29.5 (3.1) | 35.9 (3.7) | 33.5 (4.1) | 35.1 (4.0) | 33.5 (4.0) | 28.1 (3.5) | 33.8 (3.5) | 41.0 (4.1) | 47.1 (4.6) | 21.8 (3.9) | 23.2 (-9.4, 55.9) | 2010, 2013, 2016 | -11.6 (-40.1, 30.5), 6.7 (-27.8, 57.5), -6.4 (-36.6, 38.2), 17.0 (-3.7, 42.2) | 2.0 (-0.7, 4.8) |
| Poverty income ratio: 100% - 199% | 29.0 (3.8) | 28.8 (4.9) | 27.6 (4.0) | 33.1 (4.9) | 22.9 (3.4) | 26.5 (3.9) | 23.7 (3.7) | 32.1 (4.1) | 22.8 (3.2) | 23.8 (3.7) | 27.1 (3.7) | 30.6 (5.0) | 20.0 (5.3) | 5.6 (-37.9, 49.1) |  | -0.7 (-3.1, 1.8) | -0.7 (-3.1, 1.8) |
| Poverty income ratio: < 100% | 28.3 (4.8) | 26.7 (4.0) | 20.5 (3.5) | 19.6 (3.9) | 18.0 (3.0) | 23.2 (4.1) | 27.0 (5.0) | 29.2 (5.4) | 23.2 (3.6) | 23.6 (4.4) | 23.5 (4.3) | 22.2 (4.0) | 17.2 (3.5) | -21.4 (-59.5, 16.7) | 2011, 2015 | -14.3 (-22.3, -5.4), 10.7 (0.4, 22.2), -5.9 (-11.6, 0.1) | -2.7 (-6.1, 0.8) |
| Two or more A1C tests |
| Overall | 53.7 (2.3) | 49.1 (2.3) | 51.7 (2.0) | 55.4 (2.0) | 50.1 (2.3) | 48.8 (2.2) | 52.3 (2.1) | 53.6 (2.2) | 54.7 (2.1) | 52.7 (2.0) | 55.3 (2.5) | 58.3 (2.5) | 59.3 (3.0) | 8.7 (-4.3, 21.7) |  | 0.8 (-0.1, 1.7) | 0.8 (-0.1, 1.7) |
| Age: 18 to 44 | 53.9 (3.8) | 44.2 (3.9) | 49.2 (3.5) | 56.4 (3.4) | 48.0 (4.0) | 43.1 (3.8) | 50.9 (3.9) | 47.4 (3.8) | 49.3 (3.5) | 48.6 (3.6) | 50.5 (4.5) | 53.9 (4.6) | 56.8 (5.5) | -0.1 (-21.8, 21.7) |  | 0.2 (-1.3, 1.7) | 0.2 (-1.3, 1.7) |
| Age: 45 to 64 | 53.9 (2.3) | 55.4 (2.1) | 54.8 (2.0) | 55.2 (2.1) | 53.7 (2.1) | 56.5 (1.8) | 53.9 (2.1) | 60.0 (2.3) | 59.1 (2.2) | 57.8 (2.0) | 60.7 (2.2) | 61.6 (2.6) | 61.9 (2.5) | 14.3 (0.9, 27.7) |  | 1.2 (0.6, 1.7) | 1.2 (0.6, 1.7) |
| Age: 65 to 74 | 54.1 (2.9) | 56.7 (3.0) | 58.8 (3.3) | 57.0 (2.6) | 52.0 (2.7) | 58.9 (2.6) | 57.4 (2.9) | 62.2 (2.7) | 67.4 (2.6) | 58.6 (2.5) | 65.7 (2.4) | 67.9 (2.5) | 65.5 (2.6) | 25.4 (9.6, 41.3) |  | 1.8 (0.8, 2.9) | 1.8 (0.8, 2.9) |
| Age: 75+ | 50.5 (3.5) | 49.8 (3.3) | 48.7 (3.3) | 47.0 (3.0) | 48.3 (3.5) | 46.1 (3.2) | 49.8 (3.0) | 61.0 (2.9) | 59.8 (3.1) | 53.7 (3.2) | 55.3 (3.6) | 64.7 (2.9) | 59.0 (3.4) | 27.9 (7.1, 48.7) |  | 2.2 (0.7, 3.8) | 2.2 (0.7, 3.8) |
| Highest degree earned: Less than high school | 40.4 (3.8) | 41.4 (4.1) | 34.8 (3.1) | 44.3 (3.7) | 45.0 (4.8) | 37.4 (2.8) | 35.8 (2.9) | 41.2 (6.1) | 46.9 (3.5) | 48.0 (4.1) | 49.6 (5.0) | 44.6 (4.7) | 44.6 (6.4) | 10.3 (-20.1, 40.8) |  | 1.7 (-0.2, 3.7) | 1.7 (-0.2, 3.7) |
| Highest degree earned: High school | 54.1 (3.4) | 48.0 (3.0) | 51.8 (2.9) | 53.7 (3.2) | 48.9 (4.0) | 49.9 (3.7) | 52.4 (3.8) | 49.4 (4.1) | 54.1 (3.0) | 50.5 (3.0) | 54.9 (3.7) | 55.7 (3.4) | 60.9 (4.4) | 3.0 (-14.8, 20.8) |  | 0.5 (-0.4, 1.4) | 0.5 (-0.4, 1.4) |
| Highest degree earned: Greater than high school | 64.5 (4.1) | 58.5 (4.7) | 64.5 (3.8) | 68.0 (3.6) | 61.5 (6.3) | 57.3 (4.2) | 64.2 (4.6) | 61.3 (6.5) | 62.1 (4.6) | 59.8 (4.0) | 59.6 (3.4) | 71.7 (3.8) | 65.6 (4.6) | 11.1 (-6.8, 29.0) |  | 0.2 (-1.1, 1.4) | 0.2 (-1.1, 1.4) |
| Race/Ethnicity: Hispanic | 32.2 (11.6) | 16.1 (8.7) | 42.8 (16.5) | 24.9 (11.3) | 39.9 (3.3) | 38.7 (3.2) | 43.3 (4.0) | 47.2 (4.1) | 46.8 (3.4) | 44.0 (3.8) | 49.1 (5.7) | 50.0 (5.4) | 51.8 (7.0) | 55.2 (-58.8, 169.2) |  | 6.8 (2.0, 11.8) | 6.8 (2.0, 11.8) |
| Race/Ethnicity: Black/Not Hispanic | 44.8 (4.5) | 42.3 (4.4) | 38.1 (4.6) | 48.9 (3.4) | 41.3 (4.0) | 44.1 (3.8) | 49.7 (3.8) | 54.6 (4.0) | 52.3 (4.1) | 47.2 (4.0) | 50.9 (4.9) | 46.1 (5.5) | 49.1 (7.5) | 3.1 (-28.7, 34.8) |  | 1.7 (0.0, 3.4) | 1.7 (0.0, 3.4) |
| Race/Ethnicity: Asian/Not Hispanic | 50.7 (9.3) | 44.3 (8.1) | 54.8 (10.1) | 44.9 (8.4) | 43.2 (8.4) | 45.1 (7.2) | 52.7 (7.6) | 39.1 (8.1) | 54.5 (7.7) | 46.9 (9.3) | 47.6 (11.9) | 67.5 (11.8) | 31.3 (9.2) | 33.1 (-33.0, 99.2) |  | 1.2 (-1.4, 4.0) | 1.2 (-1.4, 4.0) |
| Race/Ethnicity: White/Not Hispanic | 56.3 (2.9) | 51.9 (2.7) | 55.0 (2.3) | 57.9 (2.3) | 59.0 (3.5) | 55.1 (3.5) | 56.4 (3.5) | 57.6 (3.5) | 59.0 (3.3) | 58.9 (3.0) | 59.4 (3.2) | 65.6 (3.5) | 68.0 (3.6) | 16.4 (-0.5, 33.4) |  | 1.2 (0.5, 1.9) | 1.2 (0.5, 1.9) |
| Sex: Male | 53.0 (3.5) | 50.5 (3.2) | 46.9 (3.1) | 53.6 (2.9) | 47.8 (3.1) | 50.3 (3.1) | 53.3 (3.0) | 54.4 (3.2) | 52.9 (2.9) | 50.5 (3.0) | 49.2 (3.3) | 56.1 (3.6) | 49.8 (4.0) | 6.0 (-13.1, 25.1) |  | 0.5 (-0.5, 1.5) | 0.5 (-0.5, 1.5) |
| Sex: Female | 54.3 (3.0) | 48.0 (3.1) | 56.3 (2.6) | 57.1 (2.7) | 52.4 (2.9) | 47.3 (3.1) | 51.4 (3.1) | 52.9 (2.9) | 56.3 (2.9) | 54.7 (2.7) | 61.1 (2.8) | 60.7 (3.2) | 68.0 (3.5) | 11.7 (-5.2, 28.6) |  | 1.1 (-0.2, 2.5) | 1.1 (-0.2, 2.5) |
| Insurance coverage: Private only | 58.6 (3.3) | 53.4 (3.3) | 54.9 (3.5) | 61.8 (3.2) | 57.6 (3.6) | 57.9 (3.5) | 56.3 (3.7) | 56.4 (3.3) | 58.1 (3.6) | 55.9 (3.3) | 57.8 (3.8) | 62.8 (3.8) | 65.2 (4.5) | 7.2 (-10.1, 24.4) |  | 0.4 (-0.4, 1.3) | 0.4 (-0.4, 1.3) |
| Insurance coverage: Medicaid | 46.1 (4.8) | 45.4 (5.0) | 47.0 (4.9) | 52.8 (4.7) | 44.3 (4.3) | 36.7 (4.1) | 48.8 (4.7) | 51.7 (4.0) | 44.6 (4.8) | 50.2 (3.8) | 55.1 (5.0) | 49.5 (5.5) | 49.2 (5.8) | 7.4 (-24.7, 39.5) |  | 1.0 (-0.9, 3.0) | 1.0 (-0.9, 3.0) |
| Insurance coverage: Uninsured | 36.6 (6.9) | 32.2 (5.6) | 42.1 (5.1) | 35.9 (4.8) | 29.2 (3.9) | 26.8 (4.7) | 37.8 (7.7) | 27.1 (7.3) | 45.6 (5.0) | 38.3 (7.8) | 24.3 (7.7) | 30.6 (10.2) | 47.6 (13.2) | -16.3 (-79.1, 46.5) |  | -1.3 (-4.9, 2.4) | -1.3 (-4.9, 2.4) |
| Insurance coverage: Medicare only | 54.9 (2.4) | 52.3 (3.0) | 57.8 (2.7) | 53.0 (2.3) | 52.0 (2.6) | 56.1 (2.4) | 54.4 (2.5) | 62.8 (2.7) | 63.2 (2.5) | 55.8 (2.8) | 59.2 (2.8) | 68.2 (2.3) | 62.7 (2.8) | 24.2 (10.9, 37.6) |  | 1.6 (0.4, 2.9) | 1.6 (0.4, 2.9) |
| Poverty income ratio: > 400% | 62.1 (4.1) | 58.4 (4.4) | 59.6 (4.7) | 64.5 (3.6) | 62.1 (4.2) | 62.0 (3.9) | 61.7 (4.4) | 65.3 (4.0) | 63.0 (4.0) | 63.5 (4.0) | 67.1 (3.7) | 70.8 (4.2) | 69.4 (4.7) | 14.1 (-5.6, 33.7) |  | 1.1 (0.5, 1.8) | 1.1 (0.5, 1.8) |
| Poverty income ratio: 200% - 399% | 54.4 (3.8) | 48.5 (4.1) | 48.1 (3.8) | 54.7 (3.6) | 50.6 (4.1) | 49.4 (4.1) | 49.8 (3.9) | 52.0 (4.1) | 51.0 (3.9) | 50.8 (3.6) | 55.7 (5.2) | 61.2 (4.1) | 57.2 (5.5) | 12.6 (-8.8, 34.0) |  | 0.9 (-0.2, 2.1) | 0.9 (-0.2, 2.1) |
| Poverty income ratio: 100% - 199% | 49.9 (4.0) | 45.0 (4.0) | 51.5 (4.1) | 54.6 (4.0) | 46.7 (4.4) | 49.5 (4.2) | 46.3 (4.1) | 46.3 (3.6) | 50.9 (4.0) | 42.8 (4.3) | 45.1 (4.4) | 44.7 (5.5) | 51.0 (6.6) | -10.3 (-36.2, 15.6) |  | -1.0 (-2.2, 0.2) | -1.0 (-2.2, 0.2) |
| Poverty income ratio: < 100% | 40.7 (4.7) | 40.3 (4.8) | 46.3 (4.5) | 40.6 (4.2) | 36.1 (3.7) | 29.3 (3.7) | 49.7 (5.3) | 44.8 (4.7) | 49.5 (4.6) | 50.2 (4.3) | 50.7 (5.4) | 47.5 (4.8) | 51.4 (6.4) | 16.8 (-18.5, 52.0) |  | 2.3 (-0.5, 5.2) | 2.3 (-0.5, 5.2) |
| Dilated eye exam |
| Overall | 55.5 (2.1) | 52.6 (2.3) | 56.6 (2.1) | 58.8 (2.4) | 59.8 (2.1) | 57.7 (2.2) | 54.8 (2.1) | 54.3 (2.1) | 55.0 (2.1) | 51.7 (2.2) | 56.6 (2.4) | 52.3 (3.0) | 49.7 (2.9) | -5.7 (-18.2, 6.9) |  | -0.4 (-1.3, 0.4) | -0.4 (-1.3, 0.4) |
| Age: 18 to 44 | 48.4 (3.8) | 44.6 (4.2) | 49.4 (3.5) | 53.9 (4.2) | 54.4 (3.5) | 51.9 (4.0) | 47.2 (3.7) | 44.8 (3.8) | 46.8 (3.8) | 41.1 (4.0) | 49.5 (4.4) | 42.3 (5.2) | 41.8 (5.2) | -12.7 (-37.7, 12.2) |  | -1.1 (-2.6, 0.4) | -1.1 (-2.6, 0.4) |
| Age: 45 to 64 | 58.5 (2.1) | 57.7 (2.2) | 60.3 (1.8) | 60.7 (2.0) | 61.3 (1.9) | 60.5 (2.1) | 58.0 (2.2) | 59.6 (2.0) | 60.4 (1.9) | 58.0 (2.1) | 61.8 (2.0) | 59.6 (2.4) | 53.0 (2.3) | 1.8 (-8.9, 12.6) |  | 0.1 (-0.3, 0.6) | 0.1 (-0.3, 0.6) |
| Age: 65 to 74 | 71.7 (2.7) | 70.2 (2.4) | 72.1 (2.5) | 68.1 (2.9) | 72.7 (2.4) | 68.7 (2.5) | 69.8 (2.6) | 74.3 (2.2) | 73.7 (2.6) | 74.4 (2.3) | 70.4 (2.3) | 71.5 (2.3) | 67.4 (2.5) | -0.4 (-10.1, 9.4) |  | 0.2 (-0.3, 0.8) | 0.2 (-0.3, 0.8) |
| Age: 75+ | 72.4 (3.2) | 66.5 (3.1) | 73.8 (2.7) | 73.0 (2.9) | 74.9 (3.2) | 72.6 (3.1) | 76.4 (2.6) | 74.1 (2.7) | 68.3 (3.1) | 72.5 (2.8) | 68.7 (2.7) | 70.4 (3.1) | 69.9 (2.6) | -2.8 (-14.7, 9.0) |  | -0.2 (-1.0, 0.6) | -0.2 (-1.0, 0.6) |
| Highest degree earned: Less than high school | 48.5 (3.9) | 42.8 (3.5) | 46.2 (4.1) | 56.6 (3.6) | 52.2 (4.9) | 49.8 (3.3) | 46.1 (3.3) | 45.8 (6.1) | 45.1 (3.6) | 41.4 (3.5) | 51.7 (5.0) | 45.5 (4.7) | 36.9 (5.8) | -6.3 (-30.5, 17.8) |  | -0.5 (-2.2, 1.2) | -0.5 (-2.2, 1.2) |
| Highest degree earned: High school | 54.4 (3.2) | 53.0 (3.6) | 60.3 (3.1) | 56.3 (3.3) | 60.4 (4.0) | 57.6 (3.9) | 55.7 (3.2) | 51.2 (4.5) | 55.8 (2.9) | 48.7 (3.2) | 52.2 (3.7) | 54.7 (4.0) | 51.0 (4.5) | 0.6 (-17.9, 19.0) |  | -0.7 (-1.9, 0.4) | -0.7 (-1.9, 0.4) |
| Highest degree earned: Greater than high school | 63.9 (4.2) | 60.9 (4.6) | 59.1 (3.9) | 65.5 (4.2) | 71.3 (5.0) | 64.5 (4.2) | 59.7 (4.6) | 66.7 (4.8) | 61.6 (4.7) | 64.2 (3.8) | 65.4 (4.2) | 54.8 (4.9) | 53.6 (4.9) | -14.2 (-33.0, 4.5) |  | -0.4 (-1.7, 0.9) | -0.4 (-1.7, 0.9) |
| Race/Ethnicity: Hispanic | 51.4 (13.8) | 58.9 (12.6) | 33.6 (14.9) | 54.6 (18.6) | 47.4 (3.6) | 46.8 (3.6) | 51.0 (3.5) | 46.1 (3.9) | 44.4 (3.5) | 46.1 (4.6) | 52.6 (5.0) | 49.1 (5.5) | 44.3 (6.8) | -4.4 (-58.9, 50.1) |  | -0.1 (-2.8, 2.6) | -0.1 (-2.8, 2.6) |
| Race/Ethnicity: Black/Not Hispanic | 47.6 (4.3) | 55.6 (4.3) | 57.3 (4.2) | 56.9 (4.0) | 53.5 (3.4) | 52.9 (3.8) | 57.4 (4.6) | 49.9 (4.0) | 53.2 (4.1) | 53.8 (4.9) | 53.1 (5.4) | 50.4 (6.3) | 61.2 (7.3) | 5.9 (-26.1, 37.9) |  | -0.2 (-1.3, 0.9) | -0.2 (-1.3, 0.9) |
| Race/Ethnicity: Asian/Not Hispanic | 66.5 (7.5) | 48.2 (7.7) | 48.7 (8.6) | 50.7 (8.6) | 67.2 (7.8) | 62.8 (6.6) | 47.0 (8.3) | 45.1 (9.1) | 48.5 (8.7) | 49.4 (9.5) | 60.2 (11.8) | 46.6 (13.7) | 53.8 (13.8) | -29.9 (-73.2, 13.4) |  | -1.2 (-3.9, 1.5) | -1.2 (-3.9, 1.5) |
| Race/Ethnicity: White/Not Hispanic | 57.4 (2.5) | 51.5 (2.8) | 58.0 (2.3) | 60.6 (2.8) | 65.8 (3.0) | 63.2 (3.1) | 57.1 (3.3) | 58.4 (3.3) | 58.3 (3.2) | 53.9 (3.3) | 61.9 (2.7) | 55.3 (3.8) | 48.5 (3.5) | -3.6 (-19.0, 11.7) |  | 0.0 (-1.3, 1.4) | 0.0 (-1.3, 1.4) |
| Sex: Male | 51.3 (3.2) | 50.6 (3.0) | 55.6 (3.0) | 60.2 (3.3) | 56.3 (3.0) | 58.1 (3.2) | 54.9 (3.2) | 54.3 (2.9) | 54.1 (3.1) | 52.1 (3.1) | 55.9 (3.2) | 49.7 (3.6) | 54.5 (4.7) | -3.1 (-21.4, 15.1) | 2011 | 5.4 (-0.8, 12.0), -1.6 (-2.9, -0.3) | 0.3 (-1.3, 1.9) |
| Sex: Female | 59.3 (2.9) | 54.2 (3.2) | 57.6 (2.7) | 57.3 (2.8) | 63.3 (2.6) | 57.3 (3.1) | 54.7 (2.9) | 54.2 (2.8) | 55.8 (3.0) | 51.3 (2.8) | 57.3 (3.1) | 55.1 (3.6) | 45.3 (3.6) | -6.9 (-21.8, 7.9) |  | -0.6 (-1.5, 0.3) | -0.6 (-1.5, 0.3) |
| Insurance coverage: Private only | 57.0 (3.1) | 57.1 (3.5) | 61.3 (3.3) | 61.5 (3.8) | 61.9 (3.7) | 65.1 (3.6) | 56.4 (3.5) | 51.6 (3.6) | 59.3 (3.2) | 52.0 (3.5) | 57.1 (3.5) | 48.7 (4.4) | 48.1 (4.5) | -14.5 (-32.1, 3.1) |  | -1.3 (-2.7, 0.1) | -1.3 (-2.7, 0.1) |
| Insurance coverage: Medicaid | 57.1 (4.8) | 50.1 (4.7) | 52.6 (4.9) | 56.6 (4.6) | 56.5 (4.8) | 50.9 (4.3) | 46.3 (4.4) | 52.0 (4.2) | 41.3 (4.8) | 46.2 (4.3) | 52.5 (5.0) | 50.3 (5.4) | 45.3 (5.6) | -11.8 (-35.4, 11.8) |  | -1.3 (-2.9, 0.3) | -1.3 (-2.9, 0.3) |
| Insurance coverage: Uninsured | 26.9 (5.5) | 27.4 (4.8) | 27.4 (4.1) | 35.8 (4.8) | 36.3 (4.8) | 23.4 (4.5) | 43.6 (6.8) | 40.3 (9.9) | 34.8 (6.0) | 32.2 (8.3) | 36.2 (11.2) | 41.6 (13.2) | 30.0 (10.5) | 54.9 (-59.9, 169.7) |  | 3.3 (0.1, 6.6) | 3.3 (0.1, 6.6) |
| Insurance coverage: Medicare only | 67.9 (2.9) | 64.9 (2.7) | 72.0 (2.3) | 67.4 (2.6) | 74.2 (2.2) | 71.7 (2.2) | 68.5 (3.0) | 71.7 (2.2) | 71.6 (2.4) | 68.9 (2.3) | 66.6 (2.6) | 71.3 (2.1) | 69.9 (2.3) | 5.0 (-5.5, 15.5) |  | 0.2 (-0.5, 1.0) | 0.2 (-0.5, 1.0) |
| Poverty income ratio: > 400% | 64.5 (4.3) | 58.5 (4.4) | 66.7 (4.0) | 67.3 (3.9) | 69.6 (3.8) | 73.7 (3.7) | 72.2 (4.0) | 62.1 (4.6) | 65.3 (3.9) | 60.6 (4.5) | 63.6 (3.7) | 55.4 (4.9) | 56.4 (5.2) | -14.1 (-32.8, 4.6) | 2013 | 3.4 (-0.9, 7.8), -3.8 (-6.8, -0.7) | -0.6 (-2.7, 1.5) |
| Poverty income ratio: 200% - 399% | 56.6 (3.7) | 51.4 (4.0) | 50.9 (3.7) | 59.6 (4.2) | 56.4 (4.2) | 52.1 (4.1) | 48.6 (3.5) | 51.3 (4.5) | 44.1 (3.7) | 55.1 (4.2) | 61.5 (4.4) | 55.3 (5.4) | 41.3 (5.0) | -2.3 (-24.7, 20.0) |  | 0.0 (-1.8, 1.8) | 0.0 (-1.8, 1.8) |
| Poverty income ratio: 100% - 199% | 50.1 (4.0) | 50.2 (5.3) | 60.0 (4.0) | 56.0 (3.6) | 59.0 (3.9) | 58.2 (4.3) | 44.9 (4.2) | 47.1 (3.5) | 55.9 (4.2) | 44.8 (4.3) | 51.1 (4.8) | 42.4 (4.8) | 50.0 (7.0) | -15.4 (-38.6, 7.9) |  | -1.6 (-3.6, 0.4) | -1.6 (-3.6, 0.4) |
| Poverty income ratio: < 100% | 42.8 (4.7) | 47.8 (4.0) | 47.2 (4.9) | 45.0 (4.6) | 52.0 (4.0) | 44.5 (4.8) | 50.9 (5.0) | 55.2 (4.9) | 51.1 (4.9) | 40.6 (4.6) | 42.5 (4.7) | 54.2 (4.5) | 50.4 (6.3) | 26.6 (-7.5, 60.8) |  | 0.5 (-1.5, 2.5) | 0.5 (-1.5, 2.5) |
| Foot examination |
| Overall | 57.9 (2.4) | 61.3 (2.2) | 60.8 (2.0) | 64.3 (1.8) | 66.2 (2.0) | 61.7 (2.4) | 64.0 (2.2) | 60.3 (2.1) | 59.5 (2.2) | 62.0 (1.9) | 59.4 (2.5) | 59.7 (2.5) | 54.4 (2.9) | 3.2 (-8.5, 14.9) | 2011 | 3.5 (-1.1, 8.4), -1.1 (-2.1, -0.1) | 0.2 (-1.0, 1.4) |
| Age: 18 to 44 | 50.6 (3.9) | 56.9 (4.0) | 53.4 (3.6) | 60.5 (3.4) | 64.1 (3.5) | 56.4 (4.3) | 57.9 (4.0) | 52.0 (3.9) | 51.8 (3.9) | 56.6 (3.4) | 54.4 (4.4) | 53.7 (4.5) | 49.2 (5.5) | 6.1 (-17.7, 30.0) |  | -0.3 (-1.6, 1.1) | -0.3 (-1.6, 1.1) |
| Age: 45 to 64 | 65.0 (2.0) | 63.7 (1.9) | 66.9 (1.7) | 65.4 (2.0) | 66.1 (2.0) | 64.6 (1.8) | 67.8 (1.8) | 67.4 (2.0) | 65.4 (2.0) | 65.5 (1.9) | 61.3 (2.0) | 63.2 (2.3) | 56.8 (2.5) | -2.8 (-11.8, 6.2) |  | -0.2 (-0.8, 0.3) | -0.2 (-0.8, 0.3) |
| Age: 65 to 74 | 66.7 (3.3) | 70.1 (2.8) | 71.6 (2.8) | 71.9 (2.6) | 71.0 (2.1) | 75.3 (2.2) | 75.6 (2.4) | 76.3 (2.4) | 75.5 (2.3) | 69.7 (2.3) | 72.6 (1.9) | 71.6 (2.2) | 66.8 (2.4) | 7.4 (-4.9, 19.7) | 2014 | 1.9 (0.5, 3.4), -1.4 (-3.3, 0.6) | 0.4 (-0.6, 1.4) |
| Age: 75+ | 69.6 (3.2) | 72.3 (2.8) | 74.1 (2.9) | 76.8 (2.7) | 75.3 (3.2) | 70.3 (3.0) | 77.1 (2.4) | 70.8 (3.2) | 70.6 (3.1) | 75.7 (2.5) | 70.4 (3.0) | 73.3 (2.8) | 65.7 (3.4) | 5.3 (-7.0, 17.6) |  | 0.0 (-0.7, 0.7) | 0.0 (-0.7, 0.7) |
| Highest degree earned: Less than high school | 51.4 (4.0) | 56.5 (3.4) | 55.6 (3.2) | 67.7 (2.9) | 65.5 (5.3) | 56.2 (3.0) | 57.8 (3.6) | 51.3 (6.0) | 58.5 (3.4) | 57.3 (4.1) | 50.7 (4.8) | 54.6 (5.3) | 45.1 (5.9) | 6.1 (-19.5, 31.7) |  | -0.5 (-2.2, 1.2) | -0.5 (-2.2, 1.2) |
| Highest degree earned: High school | 56.0 (3.1) | 62.4 (3.5) | 61.1 (2.8) | 62.8 (3.1) | 70.5 (3.5) | 65.2 (3.8) | 67.1 (3.5) | 56.8 (4.3) | 59.2 (3.3) | 62.1 (3.2) | 62.8 (3.8) | 63.2 (3.8) | 56.2 (4.1) | 13.0 (-5.2, 31.2) |  | 0.2 (-1.0, 1.5) | 0.2 (-1.0, 1.5) |
| Highest degree earned: Greater than high school | 67.6 (4.1) | 63.8 (4.5) | 64.3 (4.0) | 63.9 (3.7) | 73.9 (5.9) | 61.3 (4.4) | 64.0 (4.4) | 61.6 (6.8) | 60.9 (4.9) | 65.2 (3.9) | 60.8 (3.6) | 59.5 (4.5) | 55.9 (5.1) | -11.9 (-28.7, 4.9) |  | -0.9 (-1.8, 0.1) | -0.9 (-1.8, 0.1) |
| Race/Ethnicity: Hispanic | 41.3 (13.3) | 33.1 (11.0) | 60.8 (16.0) | 73.9 (12.3) | 58.3 (3.6) | 50.6 (3.5) | 55.2 (4.0) | 58.9 (3.7) | 47.6 (3.8) | 49.8 (4.2) | 53.3 (5.6) | 53.4 (5.7) | 48.3 (6.8) | 29.3 (-56.5, 115.1) |  | 1.3 (-2.5, 5.3) | 1.3 (-2.5, 5.3) |
| Race/Ethnicity: Black/Not Hispanic | 53.5 (4.3) | 62.2 (4.3) | 59.9 (4.5) | 66.7 (3.2) | 69.9 (3.5) | 59.7 (3.5) | 65.7 (4.1) | 60.8 (5.9) | 58.2 (4.7) | 62.7 (4.4) | 57.9 (4.7) | 63.2 (5.6) | 61.0 (7.0) | 18.1 (-9.6, 45.9) |  | 0.2 (-1.2, 1.6) | 0.2 (-1.2, 1.6) |
| Race/Ethnicity: Asian/Not Hispanic | 59.2 (8.4) | 49.9 (7.3) | 65.9 (9.6) | 61.7 (8.6) | 66.8 (7.4) | 68.1 (5.7) | 59.8 (8.2) | 58.6 (9.4) | 55.2 (8.1) | 61.2 (9.0) | 47.2 (9.6) | 44.2 (13.8) | 45.0 (14.3) | -25.3 (-75.4, 24.8) |  | -1.8 (-4.1, 0.5) | -1.8 (-4.1, 0.5) |
| Race/Ethnicity: White/Not Hispanic | 59.5 (2.9) | 62.2 (2.7) | 60.9 (2.4) | 64.1 (2.4) | 68.9 (2.9) | 66.6 (3.8) | 67.1 (3.2) | 61.0 (3.5) | 65.0 (3.2) | 65.2 (3.0) | 64.0 (3.0) | 64.2 (3.0) | 56.2 (4.0) | 7.9 (-6.2, 22.1) |  | 0.5 (-0.3, 1.2) | 0.5 (-0.3, 1.2) |
| Sex: Male | 57.7 (3.3) | 62.0 (3.1) | 62.0 (3.1) | 66.9 (2.9) | 66.5 (3.0) | 62.5 (3.1) | 65.0 (3.2) | 67.5 (2.6) | 61.7 (3.1) | 64.9 (2.8) | 59.5 (3.2) | 57.2 (3.5) | 56.6 (4.2) | -0.9 (-17.1, 15.4) | 2011 | 5.1 (-1.9, 12.6), -1.4 (-2.9, 0.0) | 0.3 (-1.5, 2.1) |
| Sex: Female | 58.1 (2.9) | 60.8 (3.1) | 59.6 (2.9) | 61.8 (2.6) | 66.0 (2.8) | 60.9 (3.3) | 63.1 (2.8) | 54.1 (3.0) | 57.5 (2.8) | 59.2 (2.7) | 59.2 (3.3) | 62.4 (3.2) | 52.4 (4.0) | 7.5 (-7.7, 22.7) |  | -0.1 (-1.1, 0.8) | -0.1 (-1.1, 0.8) |
| Insurance coverage: Private only | 61.4 (3.4) | 65.0 (3.2) | 61.9 (3.2) | 63.9 (2.9) | 67.9 (3.3) | 64.5 (3.5) | 63.2 (3.5) | 57.3 (3.8) | 59.7 (3.2) | 68.3 (2.9) | 58.6 (4.0) | 61.4 (3.4) | 53.3 (4.8) | 0.0 (-15.4, 15.4) |  | -0.4 (-1.4, 0.6) | -0.4 (-1.4, 0.6) |
| Insurance coverage: Medicaid | 51.8 (4.5) | 61.3 (3.8) | 60.6 (4.9) | 68.9 (4.2) | 68.8 (4.3) | 60.0 (4.8) | 57.6 (4.3) | 66.3 (3.8) | 51.3 (4.7) | 56.1 (4.1) | 60.0 (4.1) | 48.9 (5.0) | 54.5 (5.2) | -5.5 (-30.4, 19.3) |  | -1.0 (-3.1, 1.0) | -1.0 (-3.1, 1.0) |
| Insurance coverage: Uninsured | 40.2 (6.9) | 37.8 (6.0) | 45.2 (4.9) | 46.1 (5.3) | 46.4 (5.5) | 38.0 (6.6) | 60.1 (6.6) | 37.8 (6.7) | 49.8 (7.4) | 31.1 (6.6) | 35.0 (9.9) | 51.7 (12.9) | 31.3 (11.0) | 28.7 (-47.8, 105.2) |  | -0.1 (-3.7, 3.6) | -0.1 (-3.7, 3.6) |
| Insurance coverage: Medicare only | 68.7 (2.5) | 71.3 (2.5) | 72.4 (2.5) | 70.6 (2.8) | 72.5 (2.2) | 73.1 (2.1) | 76.0 (2.3) | 72.3 (2.3) | 74.8 (2.4) | 69.2 (2.5) | 69.0 (2.1) | 74.0 (1.8) | 67.0 (2.3) | 7.7 (-1.6, 17.1) |  | 0.2 (-0.4, 0.8) | 0.2 (-0.4, 0.8) |
| Poverty income ratio: > 400% | 62.9 (4.2) | 61.5 (4.6) | 72.5 (2.7) | 64.4 (3.7) | 63.7 (4.1) | 73.0 (3.8) | 72.8 (4.0) | 65.3 (4.1) | 65.2 (4.1) | 71.2 (3.7) | 62.8 (4.1) | 65.0 (4.4) | 58.8 (5.0) | 3.3 (-16.1, 22.6) |  | 0.2 (-1.1, 1.4) | 0.2 (-1.1, 1.4) |
| Poverty income ratio: 200% - 399% | 59.0 (4.2) | 66.1 (3.7) | 56.4 (3.7) | 67.1 (3.6) | 70.9 (4.2) | 56.4 (4.2) | 61.8 (4.0) | 59.8 (4.5) | 53.7 (4.0) | 63.1 (3.6) | 62.8 (4.3) | 57.2 (5.1) | 56.2 (5.2) | -3.0 (-24.7, 18.8) |  | -0.5 (-2.1, 1.0) | -0.5 (-2.1, 1.0) |
| Poverty income ratio: 100% - 199% | 56.1 (4.0) | 63.3 (4.7) | 60.8 (4.2) | 64.7 (3.6) | 66.8 (4.0) | 63.5 (4.1) | 59.5 (4.9) | 60.6 (3.7) | 61.2 (4.0) | 59.0 (4.3) | 50.4 (4.3) | 59.7 (5.9) | 44.5 (6.1) | 6.4 (-18.9, 31.7) |  | -0.8 (-2.1, 0.5) | -0.8 (-2.1, 0.5) |
| Poverty income ratio: < 100% | 48.3 (5.0) | 49.4 (3.8) | 50.2 (4.4) | 59.2 (4.3) | 61.5 (4.0) | 53.2 (5.6) | 60.0 (4.7) | 51.2 (4.8) | 55.3 (4.4) | 48.2 (4.4) | 60.5 (4.9) | 55.3 (4.6) | 52.6 (5.5) | 14.5 (-15.3, 44.3) |  | 0.8 (-0.9, 2.5) | 0.8 (-0.9, 2.5) |
| *a*Values in these columns were estimated excluding data from 2020. |