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

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# Abstract

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

**Methods:** We used 2008 - 2020 data from the Medical Expenditures Panel Survey to calculate the proportion of adults diagnosed with diabetes 18 years of age and older that reported receiving preventive care practices overall and for subpopulations. We used Joinpoint regression to identify trends in the data from 2008 - 2019. The six practices we have data for were at least one dental examination, an eye examination that includes dilation, a foot examination, at least two A1C tests, a cholesterol test, and the receipt of a flu vaccine.

**Results:** From 2008 to 2019, the proportion of adults reporting having received at least three of six recommended practices decreased from 71.0% in 2008 to 67.3%, although this trend was not significant. No significant changes were seen for most subgroups. Most individual practices examined also were flat or decreased over the study period, except for the receipt of 2 or more A1C tests in year, which increased.

**Conclusions:** Receipt of preventive care for diabetes was flat from 2008 to 2019 overall and for most subgroups. Declining trends were observed in few subgroups and may lead to increasing diabetes burden among these subgroups.

# 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 associated with diabetes 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 1,0003,4. 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.

In this study, we report 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 the Medical Expenditure Panel Survey (MEPS) from the years 2008 - 2020. We chose 2008 to 2020 due to method changes in MEPS and the consistency of particular questions related to preventive care practices during that time period. Respondents were randomly chosen from a subsample of households that participated in the National Health Interview Survey (NHIS). Data used from MEPS were collected through a combination of computer assisted personal interviewing and pencil-and-paper surveys. The average number annual of individual respondents over this 13 year period was 32,170. MEPS targets the civilian noninstitutionalized population in the US and 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. The data we used comes from the full-year consolidated file from MEPS for the 13 year time span of our report.

## Outcomes

Among those respondents with self-reported diagnosed diabetes, we selected six preventive care variables that were available in the data from 2008 – 2020, based on self-reported receipt in the past year7: ≥1 dental examination, a dilated eye examination, a foot examination, ≥2 A1C tests, a cholesterol test, and an influenza vaccine. We also created a binary variable classifying adults as having received at least three of those recommended preventive care practices.

## Analysis

Our analysis accounts for the complex survey design used, including clustering and stratification. Reported values throughout were age-adjusted using the direct method, standardized to the 2000 US population grouped by ages 18 - 44, 45 - 64, 65 - 74, and older than 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

## Trends in ≥ 3 preventive care practices received

Overall, we observed no statistically significant percent change of adults receiving three or more recommended preventive care practices between 2008 and 2019 (3.2 [95% CI: -7.5, 13.9]) (Table 1). Few groups exhibited significant changes in this trend over the same time period (Table 1). For adults age 75 and older, the percentage receiving three or more of the recommended care practices was flat from 2008 to 2014 (APC 0.2 [95% CI: -0.5, 1.0]), and after 2015 was decreasing (APC NA). Adults with less than a high school education had a flat trend until 2012, which was followed by an APC in the second period of NA.

Both males and females showed decreasing percentages of adults receiving three or more recommended preventive care practices. The AAPC for females was -0.2 (95% CI: -0.8, 0.5) over the entire period, whereas the trend for males was flat until 2015, at which point it began to decrease (APC NA). Among the insurance groups, there were no significant change with the exception of Medicaid, which showed an overall decline in percentage of adults receiving three or more practices (AAPC -1.3 (95% CI: -2.8, 0.3)). The percentage of adults in the highest earning group receiving three or more recommended care practices increased annually by 1.2 (95% CI: -0.4, 2.7) and was flat after 2010 (NA). Adults earning just above the poverty line that received three or more of the recommended practices changed by -1.8 (95% CI: -3.1, -0.4). Estimated proportions tended to be lower in 2020 than in 2019 for most groups, except Black/Not Hispanic, males, and the uninsured.

## Trends for each preventive care practice

[Figure 1](#fig-exams) and [Figure 2](#fig-tests) show the trends for individual preventive care practices and indicate which trends were significantly increasing or decreasing, or had segments that were significantly increasing or decreasing. Estimates plotted in [Figure 1](#fig-exams) can be found in the table in Appendix 1. Trends for all adults with diabetes receiving a foot examination decreased starting in 2011 ([Figure 1](#fig-exams)). The percent of adults getting a flu vaccine increased until 2013 then began to decrease ([Figure 2](#fig-tests)). The shape of the trends in subgroups tend to mirror the overall trend for each practice, although the year at which trend values change may differ among these subgroups. The trend in some subgroups for each preventive practice do not always follow the shape of the overall trend, however. For example, the overall trend in the percentage of adults with diabetes receiving an eye examination with dilation was flat over 2008 to 2019. Within the income poverty ratio subgroups, only those in the highest poverty income ratio group (> 400%) deviate from this flat trend by first increasing, then decreasing starting in 2013 ([Figure 1](#fig-exams)). Different groups exhibit different amounts of variation among the categories in each group. For example, the trends for all six practices split by sex tend to be very similar, whereas the gaps between the different insurance group trends are larger.

# Discussion

Despite the recovery from the Great Recession in 2008 and the passing of the Affordable Care Act (ACA) in 2010, there was no change overall and for many subgroups in the percentage of people receiving at least three recommended preventive care services, while a few subgroups showed decreasing percentages. 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 changes in the receipt of preventive care has proved more elusive. Two studies that used data from the Behavioral Risk Factor Surveillance System (BRFSS) found no changes overall in the receipt of preventive care for adults with diabetes as a result of the Medicaid expansion16,17. 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 diabetes18. 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 depression19.

Other studies on the trends in preventive care using different data sources report different findings. A study using data from the National Health and Nutrition Examination Survey (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 doctor20. Another study that reported on data from NHANES, the National Health Interview Survey, and (BRFSS) found that foot exams, flu vaccinations, and A1C testing increased from 1999 - 2016, although eye exams stayed roughly constant21.

## Limitations

This report is not without limitations. The data from MEPS are self-report only, which may introduce bias, and the study group is cross-sectional. Additionally, there has been a steadily declining response rate for this survey from a peak during the studied time period of 59.3% in 2008 to 39.5% in 2019 and 27.6% in 2020, although weights for these data are adjusted for non-response. 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, receipt of preventive care for diabetes was flat from 2008 to 2019 overall and for most subgroups. Decreasing trends in preventive care percentages were seen in adults with diabetes over the age of 74, adults with less than a high school education, males and females, and adults with private insurance only or Medicaid. Declining trends in preventive care may lead to increasing complications due to diabetes in these subgroups, increasing the burden of diabetes.

# Acknowledgements

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# Tables

|  | 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 Period 1 (95% CI)trueafalse | APC Period 2 (95% CI)trueafalse | AAPC (95% CI)trueafalse |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Overall |
| - | 65.2 (2.2) | 69.9 (2.1) | 68.8 (2.1) | 73.8 (1.9) | 71.9 (2.0) | 67.8 (2.1) | 70.1 (1.9) | 71.6 (1.9) | 68.2 (2.2) | 66.3 (1.9) | 70.3 (2.4) | 67.3 (2.7) | 65.1 (2.5) | 3.2 (-7.5, 13.9) |  | -0.1 (-0.8, 0.6) |  | -0.1 (-0.8, 0.6) |
| Age |
| 18 to 44 | 57.2 (3.9) | 61.9 (3.8) | 61.9 (3.7) | 68.6 (3.4) | 66.1 (3.7) | 59.7 (4.0) | 61.8 (3.4) | 63.6 (3.5) | 58.3 (3.8) | 56.6 (3.5) | 63.3 (4.4) | 57.4 (5.0) | 56.4 (4.8) | 0.4 (-21.5, 22.3) |  | -0.4 (-1.6, 0.7) |  | -0.4 (-1.6, 0.7) |
| 45 to 64 | 72.2 (1.9) | 75.4 (1.6) | 74.1 (1.5) | 77.0 (1.6) | 75.6 (1.7) | 73.8 (1.7) | 75.7 (1.8) | 77.7 (1.7) | 74.6 (1.9) | 74.2 (1.8) | 75.4 (1.8) | 74.7 (2.0) | 71.1 (2.4) | 3.4 (-4.1, 11.0) |  | 0.1 (-0.3, 0.5) |  | 0.1 (-0.3, 0.5) |
| 65 to 74 | 79.2 (2.3) | 84.9 (1.9) | 81.5 (2.4) | 82.2 (1.9) | 81.6 (2.0) | 83.6 (2.0) | 84.5 (1.9) | 86.6 (1.7) | 89.6 (1.6) | 83.1 (1.8) | 84.7 (1.5) | 87.1 (1.7) | 83.1 (2.0) | 10.1 (2.5, 17.7) |  | 0.6 (0.1, 1.1) |  | 0.6 (0.1, 1.1) |
| 75+ | 76.9 (3.0) | 85.7 (2.1) | 80.6 (2.7) | 87.6 (2.0) | 84.7 (2.8) | 82.2 (2.7) | 87.8 (1.7) | 85.5 (2.1) | 86.3 (2.0) | 82.0 (2.4) | 81.9 (2.3) | 83.4 (2.6) | 79.5 (2.9) | 8.5 (-2.1, 19.2) |  | 0.2 (-0.5, 1.0) |  | 0.2 (-0.5, 1.0) |
| Highest degree earned |
| Less than high school | 55.0 (4.3) | 63.4 (3.9) | 55.4 (3.8) | 72.1 (2.9) | 66.0 (5.1) | 59.3 (3.0) | 59.0 (3.4) | 63.4 (5.3) | 61.5 (3.3) | 58.5 (3.8) | 56.8 (5.0) | 55.8 (5.2) | 44.3 (6.0) | 1.5 (-22.7, 25.7) |  | -0.5 (-2.0, 1.1) |  | -0.5 (-2.0, 1.1) |
| High school | 63.0 (3.2) | 68.6 (3.1) | 70.0 (3.0) | 69.5 (3.2) | 76.9 (3.5) | 68.2 (3.8) | 70.4 (3.2) | 59.6 (4.6) | 66.6 (3.3) | 64.4 (3.1) | 69.0 (4.0) | 68.2 (3.7) | 64.5 (4.1) | 8.3 (-7.6, 24.1) |  | -0.2 (-1.4, 1.0) |  | -0.2 (-1.4, 1.0) |
| Greater than high school | 78.5 (3.3) | 78.5 (4.0) | 77.2 (3.6) | 83.5 (2.9) | 80.3 (4.8) | 74.5 (4.1) | 77.5 (4.7) | 85.7 (3.8) | 76.8 (4.6) | 75.2 (3.3) | 81.0 (2.8) | 75.2 (4.3) | 75.9 (3.9) | -4.2 (-17.5, 9.1) |  | -0.2 (-1.0, 0.6) |  | -0.2 (-1.0, 0.6) |
| Race/Ethnicity |
| Hispanic | 55.7 (13.3) | 59.7 (12.4) | 42.2 (16.2) | 83.5 (9.4) | 58.4 (3.3) | 58.6 (3.6) | 61.9 (4.0) | 68.1 (3.4) | 58.5 (3.8) | 58.3 (4.2) | 62.9 (5.7) | 60.7 (5.8) | 50.3 (6.7) | 8.9 (-45.9, 63.8) |  | 0.8 (-2.1, 3.9) |  | 0.8 (-2.1, 3.9) |
| Black/Not Hispanic | 56.2 (4.4) | 67.2 (4.2) | 62.4 (4.8) | 69.2 (3.5) | 62.4 (3.7) | 63.1 (3.4) | 71.4 (3.6) | 66.5 (4.8) | 61.6 (4.3) | 59.6 (4.6) | 63.8 (5.5) | 60.1 (6.0) | 66.8 (7.1) | 6.9 (-19.7, 33.5) |  | -0.1 (-1.4, 1.2) |  | -0.1 (-1.4, 1.2) |
| Asian/Not Hispanic | 63.8 (10.0) | 62.3 (8.5) | 69.3 (10.8) | 64.8 (9.2) | 72.5 (7.4) | 72.8 (6.1) | 72.5 (6.5) | 51.1 (9.2) | 70.7 (7.8) | 69.5 (8.5) | 77.8 (7.2) | 64.4 (15.5) | 56.8 (14.2) | 1.0 (-56.1, 58.0) |  | 0.5 (-1.6, 2.7) |  | 0.5 (-1.6, 2.7) |
| White/Not Hispanic | 67.6 (2.7) | 71.1 (2.5) | 70.6 (2.4) | 75.3 (2.2) | 81.0 (2.9) | 73.4 (3.3) | 72.3 (3.1) | 75.3 (3.1) | 74.0 (3.1) | 72.5 (2.9) | 76.5 (2.9) | 73.4 (3.5) | 70.8 (3.2) | 8.6 (-4.7, 21.8) |  | 0.5 (-0.3, 1.3) |  | 0.5 (-0.3, 1.3) |
| Sex |
| Male | 62.1 (3.2) | 69.1 (3.0) | 67.2 (3.2) | 75.2 (2.4) | 69.5 (3.0) | 69.0 (2.9) | 70.4 (2.6) | 73.9 (2.5) | 70.0 (2.7) | 66.0 (2.9) | 69.0 (3.3) | 64.3 (3.8) | 64.9 (4.0) | 3.6 (-12.2, 19.5) |  | 0.0 (-1.0, 1.1) |  | 0.0 (-1.0, 1.1) |
| Female | 68.1 (2.8) | 70.6 (2.8) | 70.4 (2.6) | 72.5 (2.6) | 74.3 (2.5) | 66.8 (2.8) | 69.8 (3.1) | 69.7 (2.9) | 66.7 (3.0) | 66.5 (2.4) | 71.6 (3.1) | 70.5 (3.1) | 65.3 (3.4) | 3.6 (-8.7, 15.8) |  | -0.2 (-0.8, 0.5) |  | -0.2 (-0.8, 0.5) |
| Insurance coverage |
| Private only | 67.9 (3.1) | 75.0 (2.9) | 76.0 (3.1) | 76.9 (3.0) | 76.5 (3.2) | 75.6 (3.2) | 72.1 (3.1) | 71.3 (3.1) | 71.7 (3.0) | 71.1 (3.1) | 73.2 (3.6) | 70.8 (3.6) | 68.1 (3.5) | 4.3 (-9.7, 18.2) | 2010 | 5.7 (-1.2, 13.1) | -1.0 (-1.6, -0.4) | 0.2 (-0.9, 1.3) |
| Medicare only | 78.1 (2.2) | 81.0 (2.7) | 79.7 (2.2) | 83.7 (2.2) | 83.9 (1.9) | 83.6 (1.7) | 82.9 (2.7) | 87.2 (1.5) | 86.9 (1.7) | 78.1 (2.4) | 81.4 (1.9) | 86.3 (1.6) | 83.1 (2.1) | 10.6 (3.3, 17.9) |  | 0.5 (-0.2, 1.1) |  | 0.5 (-0.2, 1.1) |
| Medicaid | 64.3 (4.7) | 67.9 (4.7) | 62.2 (5.1) | 73.4 (3.8) | 70.2 (4.1) | 60.9 (4.8) | 63.6 (4.2) | 70.9 (4.5) | 54.4 (4.8) | 59.1 (3.9) | 65.8 (4.0) | 55.6 (5.6) | 54.7 (5.2) | -13.4 (-34.4, 7.5) |  | -1.3 (-2.8, 0.3) |  | -1.3 (-2.8, 0.3) |
| Uninsured | 35.4 (6.8) | 41.9 (6.1) | 42.0 (5.1) | 46.8 (5.1) | 41.3 (4.9) | 29.8 (4.7) | 51.6 (6.8) | 45.5 (9.0) | 50.2 (5.9) | 38.8 (8.3) | 30.7 (9.5) | 36.9 (12.6) | 39.5 (11.6) | 4.2 (-75.9, 84.3) |  | -0.6 (-3.9, 2.9) |  | -0.6 (-3.9, 2.9) |
| Poverty income ratio |
| > 400% | 72.4 (3.8) | 76.0 (4.6) | 84.8 (3.1) | 83.5 (3.0) | 81.1 (3.1) | 85.8 (2.8) | 83.7 (3.5) | 79.8 (3.9) | 79.4 (3.2) | 82.7 (3.2) | 84.4 (2.2) | 80.9 (3.3) | 79.7 (4.0) | 11.7 (-3.0, 26.4) | 2010 | 1.2 (-0.4, 2.7) |  | 1.2 (-0.4, 2.7) |
| 200% - 399% | 66.5 (3.9) | 69.9 (3.9) | 63.3 (3.6) | 72.9 (3.4) | 73.1 (4.1) | 62.5 (4.2) | 68.9 (4.1) | 70.1 (3.6) | 60.2 (4.5) | 68.2 (4.1) | 72.4 (4.4) | 65.1 (5.1) | 60.8 (5.3) | -2.1 (-20.8, 16.6) |  | -0.1 (-1.4, 1.1) |  | -0.1 (-1.4, 1.1) |
| 100% - 199% | 63.3 (4.1) | 68.5 (4.3) | 66.7 (3.7) | 72.8 (3.3) | 69.4 (4.1) | 69.1 (3.6) | 60.3 (4.4) | 64.3 (3.4) | 66.9 (3.8) | 53.0 (4.4) | 57.9 (5.0) | 56.7 (6.3) | 49.8 (6.5) | -10.5 (-33.0, 12.1) |  | -1.8 (-3.1, -0.4) |  | -1.8 (-3.1, -0.4) |
| < 100% | 51.3 (5.0) | 61.6 (3.9) | 56.3 (4.6) | 58.9 (4.5) | 59.6 (4.5) | 51.0 (5.1) | 64.2 (4.8) | 69.6 (4.4) | 61.3 (4.6) | 53.1 (4.6) | 61.8 (4.6) | 61.5 (4.5) | 58.9 (6.3) | 20.1 (-8.6, 48.7) |  | 0.9 (-0.8, 2.6) |  | 0.9 (-0.8, 2.6) |
| *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. |

|  |
| --- |
| 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. |

# Supplemental Table

|  | 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 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Overall |
| - | 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 flu vaccine | 16.1 (1.5) | 47.4 (2.0) | 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) | 175.2 (115.5, 234.9) |  | 3.4 (-1.8, 8.9) | 3.4 (-1.8, 8.9) |
| - | 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) |
| - | Eye exam with dilation | 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) |
| Age |
| 18 to 44 | Cholesterol tested | 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) |
| 45 to 64 | Cholesterol tested | 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) |
| 65 to 74 | Cholesterol tested | 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) |
| 75+ | Cholesterol tested | 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) |
| 18 to 44 | Received flu vaccine | 11.7 (2.6) | 35.7 (3.3) | 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) | 218.8 (56.1, 381.5) |  | 3.9 (-2.2, 10.3) | 3.9 (-2.2, 10.3) |
| 45 to 64 | Received flu vaccine | 17.3 (1.7) | 54.3 (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) | 157.7 (102.7, 212.8) |  | 3.4 (-1.8, 8.9) | 3.4 (-1.8, 8.9) |
| 65 to 74 | Received flu vaccine | 28.3 (2.8) | 67.0 (2.6) | 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) | 132.5 (84.7, 180.2) |  | 2.7 (-1.3, 6.8) | 2.7 (-1.3, 6.8) |
| 75+ | Received flu vaccine | 27.3 (3.3) | 77.3 (3.0) | 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) | 142.5 (81.0, 204.0) |  | 3.0 (-1.8, 8.0) | 3.0 (-1.8, 8.0) |
| 18 to 44 | One or more dentist visits | 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) |
| 45 to 64 | One or more dentist visits | 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) |
| 65 to 74 | One or more dentist visits | 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) |
| 75+ | One or more dentist visits | 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) |
| 18 to 44 | Two or more A1C tests | 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) |
| 45 to 64 | Two or more A1C tests | 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) |
| 65 to 74 | Two or more A1C tests | 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) |
| 75+ | Two or more A1C tests | 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) |
| 18 to 44 | Eye exam with dilation | 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) |
| 45 to 64 | Eye exam with dilation | 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) |
| 65 to 74 | Eye exam with dilation | 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) |
| 75+ | Eye exam with dilation | 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) |
| 18 to 44 | Foot examination | 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) |
| 45 to 64 | Foot examination | 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) |
| 65 to 74 | Foot examination | 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) |
| 75+ | Foot examination | 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 | Cholesterol tested | 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) |
| High school | Cholesterol tested | 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) |
| Greater than high school | Cholesterol tested | 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) |
| Less than high school | Received flu vaccine | 16.1 (2.1) | 41.1 (3.6) | 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) | 105.9 (29.2, 182.6) |  | 2.2 (-3.2, 7.8) | 2.2 (-3.2, 7.8) |
| High school | Received flu vaccine | 16.6 (2.3) | 46.0 (3.1) | 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) | 164.0 (78.6, 249.5) |  | 3.1 (-1.7, 8.2) | 3.1 (-1.7, 8.2) |
| Greater than high school | Received flu vaccine | 14.8 (3.1) | 55.9 (4.0) | 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) | 264.2 (101.0, 427.3) |  | 4.6 (-2.0, 11.6) | 4.6 (-2.0, 11.6) |
| Less than high school | One or more dentist visits | 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) |
| High school | One or more dentist visits | 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) | 0.1 (-0.1, 0.3) |
| Greater than high school | One or more dentist visits | 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) |
| Less than high school | Two or more A1C tests | 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) |
| High school | Two or more A1C tests | 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) |
| Greater than high school | Two or more A1C tests | 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) |
| Less than high school | Eye exam with dilation | 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) |
| High school | Eye exam with dilation | 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) |
| Greater than high school | Eye exam with dilation | 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) |
| Less than high school | Foot examination | 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) |
| High school | Foot examination | 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) |
| Greater than high school | Foot examination | 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 | Cholesterol tested | 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) |
| Black/Not Hispanic | Cholesterol tested | 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) |
| Asian/Not Hispanic | Cholesterol tested | 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) |
| White/Not Hispanic | Cholesterol tested | 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) |
| Hispanic | Received flu vaccine | 16.7 (8.5) | 57.7 (12.5) | 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) | 127.0 (-109.0, 362.9) |  | 1.5 (-4.0, 7.3) | 1.5 (-4.0, 7.3) |
| Black/Not Hispanic | Received flu vaccine | 8.9 (1.6) | 39.0 (3.8) | 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) | 263.5 (93.1, 433.8) |  | 4.2 (-3.0, 11.9) | 4.2 (-3.0, 11.9) |
| Asian/Not Hispanic | Received flu vaccine | 7.6 (2.8) | 41.4 (7.0) | 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) | 491.2 (-63.6, 1046.0) |  | 7.8 (-1.1, 17.4) | 7.8 (-1.1, 17.4) |
| White/Not Hispanic | Received flu vaccine | 18.0 (2.0) | 50.3 (2.6) | 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) | 187.3 (114.5, 260.2) |  | 4.2 (-0.9, 9.7) | 4.2 (-0.9, 9.7) |
| Hispanic | One or more dentist visits | 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) |
| Black/Not Hispanic | One or more dentist visits | 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) |
| Asian/Not Hispanic | One or more dentist visits | 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) |
| White/Not Hispanic | One or more dentist visits | 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) |
| Hispanic | Two or more A1C tests | 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) |
| Black/Not Hispanic | Two or more A1C tests | 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) |
| Asian/Not Hispanic | Two or more A1C tests | 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) |
| White/Not Hispanic | Two or more A1C tests | 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) |
| Hispanic | Eye exam with dilation | 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) |
| Black/Not Hispanic | Eye exam with dilation | 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) |
| Asian/Not Hispanic | Eye exam with dilation | 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) |
| White/Not Hispanic | Eye exam with dilation | 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) |
| Hispanic | Foot examination | 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) |
| Black/Not Hispanic | Foot examination | 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) |
| Asian/Not Hispanic | Foot examination | 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) |
| White/Not Hispanic | Foot examination | 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 | Cholesterol tested | 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) |
| Female | Cholesterol tested | 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) |
| Male | Received flu vaccine | 17.8 (2.4) | 48.6 (2.9) | 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) | 138.9 (63.4, 214.5) |  | 2.4 (-2.6, 7.6) | 2.4 (-2.6, 7.6) |
| Female | Received flu vaccine | 14.7 (1.9) | 46.4 (2.8) | 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) | 217.4 (126.2, 308.5) |  | 4.4 (-1.1, 10.3) | 4.4 (-1.1, 10.3) |
| Male | One or more dentist visits | 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) |
| Female | One or more dentist visits | 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) |
| Male | Two or more A1C tests | 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) |
| Female | Two or more A1C tests | 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) |
| Male | Eye exam with dilation | 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) |
| Female | Eye exam with dilation | 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) |
| Male | Foot examination | 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) |
| Female | Foot examination | 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 | Cholesterol tested | 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) |
| Medicare only | Cholesterol tested | 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) |
| Medicaid | Cholesterol tested | 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) |
| Uninsured | Cholesterol tested | 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) |
| Private only | Received flu vaccine | 13.8 (2.2) | 47.2 (3.1) | 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) | 256.2 (130.5, 381.8) |  | 4.3 (-2.0, 11.0) | 4.3 (-2.0, 11.0) |
| Medicare only | Received flu vaccine | 24.6 (2.1) | 68.5 (2.6) | 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) | 162.0 (114.4, 209.5) |  | 3.3 (-1.4, 8.1) | 3.3 (-1.4, 8.1) |
| Medicaid | Received flu vaccine | 18.0 (3.0) | 43.1 (4.5) | 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) | 67.6 (-5.7, 140.8) |  | 1.2 (-3.4, 5.9) | 1.2 (-3.4, 5.9) |
| Uninsured | Received flu vaccine | 13.5 (5.5) | 24.9 (3.9) | 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) | 46.3 (-126.3, 219.0) |  | 0.8 (-3.3, 5.0) | 0.8 (-3.3, 5.0) |
| Private only | One or more dentist visits | 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) |
| Medicare only | One or more dentist visits | 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 | 3.0 (-0.5, 6.6) | 3.0 (-0.5, 6.6) |
| Medicaid | One or more dentist visits | 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) |
| Uninsured | One or more dentist visits | 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) |
| Private only | Two or more A1C tests | 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) |
| Medicare only | Two or more A1C tests | 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) |
| Medicaid | Two or more A1C tests | 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) |
| Uninsured | Two or more A1C tests | 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) |
| Private only | Eye exam with dilation | 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) |
| Medicare only | Eye exam with dilation | 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) |
| Medicaid | Eye exam with dilation | 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) |
| Uninsured | Eye exam with dilation | 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) |
| Private only | Foot examination | 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) |
| Medicare only | Foot examination | 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) |
| Medicaid | Foot examination | 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) |
| Uninsured | Foot examination | 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) |
| Poverty income ratio |
| > 400% | Cholesterol tested | 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) |
| 200% - 399% | Cholesterol tested | 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) |
| 100% - 199% | Cholesterol tested | 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) |
| < 100% | Cholesterol tested | 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) |
| > 400% | Received flu vaccine | 16.0 (2.9) | 58.2 (4.4) | 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) | 246.4 (109.2, 383.5) |  | 4.5 (-1.8, 11.2) | 4.5 (-1.8, 11.2) |
| 200% - 399% | Received flu vaccine | 15.3 (2.7) | 46.5 (3.5) | 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) | 186.8 (67.2, 306.4) |  | 4.2 (-1.2, 9.8) | 4.2 (-1.2, 9.8) |
| 100% - 199% | Received flu vaccine | 19.6 (3.6) | 40.8 (4.1) | 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) | 91.9 (3.4, 180.3) | 2010 | 43.5 (6.6, 93.2), -3.4 (-6.0, -0.7) | 3.8 (-1.1, 9.0) |
| < 100% | Received flu vaccine | 13.1 (2.5) | 39.8 (3.7) | 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) | 159.0 (45.7, 272.2) |  | 3.4 (-2.0, 9.1) | 3.4 (-2.0, 9.1) |
| > 400% | One or more dentist visits | 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) |
| 200% - 399% | One or more dentist visits | 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 | 2.0 (-0.7, 4.8) | 2.0 (-0.7, 4.8) |
| 100% - 199% | One or more dentist visits | 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) |
| < 100% | One or more dentist visits | 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) |
| > 400% | Two or more A1C tests | 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) |
| 200% - 399% | Two or more A1C tests | 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) |
| 100% - 199% | Two or more A1C tests | 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) |
| < 100% | Two or more A1C tests | 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) |
| > 400% | Eye exam with dilation | 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) |
| 200% - 399% | Eye exam with dilation | 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) |
| 100% - 199% | Eye exam with dilation | 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) |
| < 100% | Eye exam with dilation | 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) |
| > 400% | Foot examination | 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) |
| 200% - 399% | Foot examination | 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) |
| 100% - 199% | Foot examination | 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) |
| < 100% | Foot examination | 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. |