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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 only preventive practice that had an increasing trend in the overall population of adults with diabetes was receipt of influenza vaccines. Trend analysis at the subgroup level showed that trends in nearly every subgroup were flat or decreased for most practices with exceptions for A1C testing and influenza vaccines. Both A1C testing and influenza vaccinations increased among white/non-Hispanic adults, adults with Medicare, and adults with income greater than 400% of the poverty income ratio. Influenza vaccinations alone increased among both males and females, as well as adults in the poverty income ratio group of 200% - 399%. A1C testing increased among adults age 45 to 64, 64 to 75, 75 and older, and Hispanics.

**Conclusions:** Receipt of preventive care for diabetes was flat or decreased 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. These data highlight disparities among subgroups that may be receiving inadequate preventive care.

# 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. 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. 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 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 with diabetas 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 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

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

## Cholesterol testing

There was no significant change in the percentage of adults with diabetes who received cholesterol tests during the studied time period (Table 1). From 2008 to 2015, cholesterol testing was flat for adults age 45 to 64 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], AAPC -1.2 [95% CI: -2.6, 0.2]) 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

Receipt of influenza vaccines in the overall population of adults with diabetes increased over the period from 2008 to 2012 (APC: 9.2 [95% CI: 6.9, 11.6], AAPC: 2.6 [95% CI: 1.1, 4.2]), was flat from 2012 to 2015, and increased again from 2015 to 2019 (APC: 2.9 [95% CI: 0.7, 5.1]) (Table 1). The influenza vaccine trend for White/non Hispanic adults followed the same trend break points at 2012 and 2015, although only the period from 2008 to 2012 had a significant increase (APC: 12.2 [95% CI: 8.9, 15.7]); this group also had an increasing AAPC of 3.7 (95% CI: 1.5, 5.9). Receipt of influenza vaccines increased among adults females over the entire study period (AAPC: 2.0 [95% CI: 0.4, 3.7]). The trend for females receiving influenza vaccines increased on average (AAPC: 2.6 [95% CI: 1.1, 4.2]). Both adult males and adults in the poverty income ratio group 200% – 399% show increasing receipt of influenza vaccines with APC estimates of 11.0 (95% CI: 0.6, 22.5) and 13.2 (95% CI: 0.2, 27.9), respectively. Adults in the highest poverty income ratio group (> 400%) reported increased receipt of influenza vaccines from 2008 to 2012 (APC: 11.4 [95% CI: 4.3, 18.9]), but this trend was flat after 2012. Receipt of flu vaccines increased slightly for adults on Medicare only (AAPC: 1.0 [95% CI: 0.1, 1.9]).

## A1C tests

Overall, there was no significant trend in the proportion of adults receiving two or more A1C tests in a year (Table 1). Proportions of adults with diabetes receiving two or more A1C tests in year 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 to 64, 65 to 74, and 75 or older, respectively. We also saw increases in A1C testing for Hispanic adults (AAPC: 6.8 [95% CI: 2.0, 11.8] ) and for White/non-Hispanic adults (AAPC: 1.2 [95% CI: 0.5, 1.9]). Adults with diabetes on Medicare only were the only insurance coverage group to show increases in receipt of two or more A1C tests, with an AAPC of 1.6 (95% CI: 0.4, 2.9). Adults in the highest poverty income ratio group (> 400%) also had significant annual increases in A1C testing (AAPC: 1.1 [95% CI: 0.5, 1.8]).

## Eye exam

For the overall population of adults with diabetes, there was no significant change in the proportion receiving eye exams with dilation (Table 1). From 2008 to 2011, there was no change in the proportion of males receiving eye exams with dilation while after 2011 there was a decrease (APC: -1.6 [95% CI: -2.9, -0.3]). Uninsured adults with diabetes had 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 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). Adults with diabetes age 65 to 74 received more foot examinations until 2014 (APC: 1.9 [95% CI: 0.5, 3.4]), and was flat after 2014.

## One or more dentist visits

Joinpoint regression identified that the overall trend in proportion of adults with diabetes that had one or more dentist visits changed in 2017, although the estimated APC values are not statistically significant (Table 1). Adults age 65 to 74 and older than 75 had average annual percent increases of 3.1 (95% CI: 2.1, 4.1) and 1.4 (95% CI: 0.1, 2.7), respectively. Adults with diabetes whose highest degree earned was a high school degree had multiples changes in the trend in proportion visiting the dentist: before 2010 the trend was decreasing (APC: -8.8 [95% CI: -11.3, -6.2]), from 2010 to 2013 the trend was increasing (APC: 5.8 [95% CI: 2.9, 8.8]), from 2013 to 2016 the trend decreased again (APC: -9.9 [95% CI: -12.4, -7.4], and after 2016 the trend increased (APC: 12.1 [95% CI: 10.5, 13.6]. White/not Hispanic adults with diabetes had an average annual percent increase of 1.8 (95% CI: 0.5, 3.1). Adults with diabetes with private insurance reported decreasing proportions visiting the dentist from 2008 to 2015 (APC -2.6 [95% CI: -4.3, -0.9]), followed by an increasing trend after 2015 (APC: 5.6 [95% CI: 1.4, 9.9]. The trend for adults with diabetes in the poverty income ratio group (< 100%) reporting at least one dentist visit was decreasing until 2011 (APC: -14.3 [95% CI: -22.3, -5.4]), increased until 2015 (APC: 10.7 [95% CI: 0.4, 22.2]), and was flat after 2015.

Joinpoint regression identified statistically significant joinpoint years although none of the subsequent APC estimates were statistically significant for the following subgroups: adults age 45 to 64, Asian/not Hispanic adults, adults with Medicare only, adults in the 200% - 399% poverty income ratio group.

## Number 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 number 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) often reported lower rates of eye exams, foot exams, cholesterol testing, and flu 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 (Supplemental Figure 1 & 2).

# 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 in the percentage of adults with diabetes reporting receiving each of five of the six preventive care practices examined. Influenza vaccination was the only preventive practice that increased in the overall population of adults with diabetes. 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. 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 expansion16,17.

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. Findings 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 continues to pose a barrier to preventive care, as uninsured adults also reported lower rates of preventive care in these studies18,19. Education has also been linked to adherence to 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 consistently had proportions lower than adults with higher educational attainment, although this difference was not always statistically significant. Also of note are 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 potential increase highlights that there may be an increasing number of adults with diabetes who are receiving inadequate preventive care.

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 may be easily discussed and administered at the point-of-care during regular physician visits, whereas an eye exam with dilation or dental check ups require a separate visit. Lack of access to specialists and limited provider acceptance of public insurance options like Medicare may further complicate access to eye exams or dentist visits and may explain why, for most groups, there was no change or a decrease in the receipt of these practices20,21.

Other studies on trends in preventive care using different data sources report 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, and (BRFSS) found that foot exams, flu vaccinations, and A1C testing increased from 1999 - 2016, although eye exams stayed roughly constant22. 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 NHIS23. Differences in the results of these surveys may be due to differences in how questions are phrased. 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 evaluated over similar, longer time periods24,25.

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 diabetes26. 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 depression27.

## 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. This work highlights preventive practices and subgroups that could be targeted further to improve preventive care, especially those groups that reported declines in receipt of preventive care. Declining trends in preventive care may lead to increasing complications due to diabetes in these subgroups, increasing the burden of diabetes.

# Acknowledgements

# References

1. Centers for Disease Control and Prevention. National diabetes statistics report website. Published 2022. Accessed January 31, 2023. <https://www.cdc.gov/diabetes/data/statistics-report/index.html>

2. Economic Costs of Diabetes in the U.S. in 2017. *Diabetes Care*. 2018;41(5):917-928. doi:[10.2337/dci18-0007](https://doi.org/10.2337/dci18-0007)

3. Centers for Disease Control and Prevention. United States diabetes surveillance system. Published 2022. Accessed January 31, 2023. <https://gis.cdc.gov/grasp/diabetes/diabetesatlas.html>

4. Magliano DJ, Islam RM, Barr ELM, et al. Trends in incidence of total or type 2 diabetes: Systematic review. *BMJ*. Published online September 11, 2019:l5003. doi:[10.1136/bmj.l5003](https://doi.org/10.1136/bmj.l5003)

5. Zhang Y, Bullard KM, Imperatore G, Holliday CS, Benoit SR. Proportions and trends of adult hospitalizations with diabetes, United States, 2000-2018. *Diabetes Research and Clinical Practice*. 2022;187:109862. doi:[10.1016/j.diabres.2022.109862](https://doi.org/10.1016/j.diabres.2022.109862)

6. Lin J, Thompson TJ, Cheng YJ, et al. Projection of the future diabetes burden in the United States through 2060. *Population Health Metrics*. 2018;16(1). doi:[10.1186/s12963-018-0166-4](https://doi.org/10.1186/s12963-018-0166-4)

7. American Diabetes Association. Comprehensive medical evaluation and assessment of comorbidities: Standards of Medical Care in Diabetes—2021. *Diabetes Care*. 2022;44(Supplement 1):S40-S52.

8. Sjoberg DD, Whiting K, Curry M, Lavery JA, Larmarange J. Reproducible summary tables with the gtsummary package. *The R Journal*. 2021;13:570-580. doi:[10.32614/RJ-2021-053](https://doi.org/10.32614/RJ-2021-053)

9. R Core Team. *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing; 2022. <https://www.R-project.org/>

10. Cantor J, Sood N, Bravata DM, Pera M, Whaley C. The impact of the COVID-19 pandemic and policy response on health care utilization: Evidence from county-level medical claims and cellphone data. *Journal of Health Economics*. 2022;82:102581. doi:[10.1016/j.jhealeco.2022.102581](https://doi.org/10.1016/j.jhealeco.2022.102581)

11. Statistical Methodology and Applications Branch, Surveillance Research Program, National Cancer Institute. *Joinpoint Regression Program*.; 2022.

12. Chaltiel D. *Nih.joinpoint: R Interface for NIH’s Joinpoint Regression Software*.; 2022. <https://github.com/DanChaltiel/nih.joinpoint/>

13. Kim HJ, Fay MP, Feuer EJ, Midthune DN. Permutation tests for joinpoint regression with applications to cancer rates. *Statistics in medicine*. 2000;19(3):335-351.

14. Myerson R, Romley J, Chiou T, Peters AL, Goldman D. The Affordable Care Act and health insurance coverage among people with diagnosed and undiagnosed diabetes: Data from the National Health and Nutrition Examination Survey. *Diabetes Care*. 2019;42(11):e179-e180. doi:[10.2337/dc19-0081](https://doi.org/10.2337/dc19-0081)

15. Simon K, Soni A, Cawley J. The impact of health insurance on preventive care and health behaviors: Evidence from the first two years of the ACA Medicaid expansions. *Journal of Policy Analysis and Management*. 2017;36(2):390-417. doi:[10.1002/pam.21972](https://doi.org/10.1002/pam.21972)

16. Monnette A, Stoecker C, Nauman E, Shi L. The impact of Medicaid expansion on access to care and preventive care for adults with diabetes and depression. *Journal of Diabetes and its Complications*. 2020;34(10):107663. doi:[10.1016/j.jdiacomp.2020.107663](https://doi.org/10.1016/j.jdiacomp.2020.107663)

17. Luo H, Chen Z(Adam), Xu L, Bell RA. Health Care Access and Receipt of Clinical Diabetes Preventive Care for Working-Age Adults With Diabetes in States With and Without Medicaid Expansion: Results from the 2013 and 2015 BRFSS. *Journal of Public Health Management and Practice*. 2019;25(4):E34-E43. doi:[10.1097/phh.0000000000000832](https://doi.org/10.1097/phh.0000000000000832)

18. Shin JI, Wang D, Daya N, et al. Trends in receipt of American Diabetes Association guideline-recommended care among U.S. adults with diabetes: NHANES 2005-2018. Published online April 16, 2021. <http://dx.doi.org/10.2337/figshare.14120087>

19. Luo H, Bell RA, Wright W, Wu Q, Wu B. Trends in annual dental visits among US dentate adults with and without self-reported diabetes and prediabetes, 2004-2014. *The Journal of the American Dental Association*. 2018;149(6):460-469. doi:[10.1016/j.adaj.2018.01.008](https://doi.org/10.1016/j.adaj.2018.01.008)

20. Eppley SE, Mansberger SL, Ramanathan S, Lowry EA. Characteristics Associated with Adherence to Annual Dilated Eye Examinations among US Patients with Diagnosed Diabetes. *Ophthalmology*. 2019;126(11):1492-1499. doi:[10.1016/j.ophtha.2019.05.033](https://doi.org/10.1016/j.ophtha.2019.05.033)

21. Chen EM, Armstrong GW, Cox JT, et al. Association of the Affordable Care Act Medicaid Expansion with Dilated Eye Examinations among the United States Population with Diabetes. *Ophthalmology*. 2020;127(7):920-928. doi:[10.1016/j.ophtha.2019.09.010](https://doi.org/10.1016/j.ophtha.2019.09.010)

22. Fang M. Trends in diabetes management among US adults: 1999-2016. *Journal of General Internal Medicine*. 2020;35(5):1427-1434. doi:[10.1007/s11606-019-05587-2](https://doi.org/10.1007/s11606-019-05587-2)

23. Hung MC, Lu P, Srivastav A, Cheng YJ, Williams WW. Influenza vaccination coverage among adults with diabetes, United States, 200708 through 201718 seasons. *Vaccine*. 2020;38(42):6545-6552. doi:[10.1016/j.vaccine.2020.08.008](https://doi.org/10.1016/j.vaccine.2020.08.008)

24. Cusser S, Helms J, Bahlai CA, Haddad NM. How long do population level field experiments need to be? Utilising data from the 40-year-old LTER network. Chase J, ed. *Ecology Letters*. 2021;24(5):1103-1111. doi:[10.1111/ele.13710](https://doi.org/10.1111/ele.13710)

25. Bahlai CA, White ER, Perrone JD, Cusser S, Stack Whitney K. The broken window: An algorithm for quantifying and characterizing misleading trajectories in ecological processes. *Ecological Informatics*. 2021;64:101336. doi:[10.1016/j.ecoinf.2021.101336](https://doi.org/10.1016/j.ecoinf.2021.101336)

26. Gonzalez JS, Safren SA, Cagliero E, et al. Depression, self-care, and medication adherence in type 2 diabetes. *Diabetes Care*. 2007;30(9):2222-2227. doi:[10.2337/dc07-0158](https://doi.org/10.2337/dc07-0158)

27. Lin EHB, Katon W, Von Korff M, et al. Relationship of depression and diabetes self-care, medication adherence, and preventive care. *Diabetes Care*. 2004;27(9):2154-2160. doi:[10.2337/diacare.27.9.2154](https://doi.org/10.2337/diacare.27.9.2154)

# Tables

Table : Age-adjusted trends in proportions of US adults with diabetes that report recommended care practices - at least one dental visit, one eye exam with dilation, one foot exam, two or more A1C tests, cholesterol level tested, and receiving a flu 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)*a* | Joinpoint Year | APC (95% CI)*a* | AAPC (95% CI)*a* |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 | 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) |
| 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) |
| *a*Values in these columns were estimated excluding data from 2020. | | | | | | | | | | | | | | | | | |

# Figures

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| Graphical user interface, application  Description automatically generated  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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| Graphical user interface, application  Description automatically generated  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 S1: 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 eye exam with dilation, one foot exam, two or more A1C tests, cholesterol level tested, and receiving a flu 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)*a* | Joinpoint Year | APC (95% CI)*a* | AAPC (95% CI)*a* |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 flu 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) |
| Eye exam with dilation | | | | | | | | | | | | | | | | | |
| 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. | | | | | | | | | | | | | | | | | |

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| Calendar  Description automatically generated  Fig S1: Age-adjusted proportions with 95% confidence intervals of US adults with diabetes who reported receiving recommended medical examinations from 2008 - 2020. |

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| Calendar  Description automatically generated  Fig. S2: Age-adjusted proportions with 95% confidence intervals of US adults with diabetes who reported receiving recommended lab tests and vaccinations from 2008 - 2020. |