



Rural-Urban Disparities in Health Care in Medicare

November 2018



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Executive Summary



This report describes quality of health care received in 2017 by Medicare beneficiaries nationwide. Specifically, the report highlights rural-urban¹ differences in health care experiences and clinical care and looks at how these differences vary by race and ethnicity.

The report is based on an analysis of two sources of information. The first source is the Medicare Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey, which is conducted annually by CMS and focuses on health care experiences (e.g., ease of getting needed care, how well providers communicate, and getting needed prescription drugs) of Medicare beneficiaries across the nation. The second source of information is the Healthcare Effectiveness Data and Information Set (HEDIS). HEDIS collects information from medical records and administrative data on the technical quality of care that Medicare beneficiaries receive for a variety of medical issues, including diabetes, cardiovascular disease, and chronic lung disease. Whereas Medicare CAHPS data are available for beneficiaries enrolled in fee-for-service (FFS) Medicare and managed care (Medicare Advantage [MA]) plans, HEDIS data are available only for beneficiaries enrolled in MA plans.

Rural-Urban Disparities in Health Care in Medicare

With just one exception (rates of flu vaccination), both MA and FFS beneficiaries living in rural areas reported experiences with care that were similar to the experiences reported by MA and FFS beneficiaries living in urban areas (see figure on p. 9). In contrast, disparities in clinical care were widespread: MA beneficiaries living in rural areas received worse clinical care than MA beneficiaries living in urban areas for 18 of 33 measures, similar care for 13 measures, and better care for just 2 measures (both pertained to the receipt of follow-up care after hospitalization for mental illness).²

Rural-Urban Disparities in Health Care in Medicare by Racial and Ethnic Group

Patterns of rural-urban differences in patient experience varied substantially by race and ethnicity and coverage type (see figure on p. 10). Among Black MA beneficiaries, rural residents reported worse experiences than urban residents for 4 of 7 measures, similar experiences for 2 measures, and better experiences for 1 measure. Among Black FFS beneficiaries, rural residents consistently reported experiences with care that were similar to the experiences reported by urban residents. Among Hispanic MA beneficiaries, rural residents reported worse experiences than urban residents for 1 of 7 measures, similar experiences for 4 measures, and better experiences for 2 measures. Among Hispanic FFS beneficiaries, rural residents reported worse experiences than urban residents for 2 of 7 measures and similar experiences for 5 measures. Among White MA and White FFS beneficiaries, the pattern of rural and urban differences was the same as it was for beneficiaries overall. That is, rural residents received worse care for 1 measure and similar care for the other 6 measures.

In contrast, patterns of rural and urban differences in clinical care were largely similar among Asians and Pacific Islanders, Blacks, Hispanics, and Whites (see figure on p. 11). Among Asian and Pacific Islander beneficiaries, rural residents received worse care than urban residents for 10 of 13 measures and similar

¹ For this report, any beneficiary residing within a Census Bureau core-based statistical area (CBSA) was classified as an urban resident; any beneficiary living outside of a CBSA was classified as a rural resident. CBSAs consist of the county or counties or equivalent entities associated with at least one core (urbanized area or urban cluster) of at least 10,000 population, plus adjacent counties having a high degree of social and economic integration with the core as measured through commuting ties with the counties that make up the core.

² Here, “similar” is used to characterize differences that are not statistically significant, fall below a magnitude threshold, or both, as described in the technical appendix. “Worse” and “better” are used to characterize differences that are statistically significant and exceed a magnitude threshold.

care for 3 measures.³ Among Black beneficiaries, rural residents received worse care than urban residents for 18 of 33 measures and similar care for 15 measures. Among Hispanic beneficiaries, rural residents received worse care than urban residents for 20 of 33 measures, similar care for 9 measures, and better care for 4 measures. Among White beneficiaries, rural residents received worse care than urban residents for 15 of 33 measures, similar care for 17 measures, and better care for 1 measure.

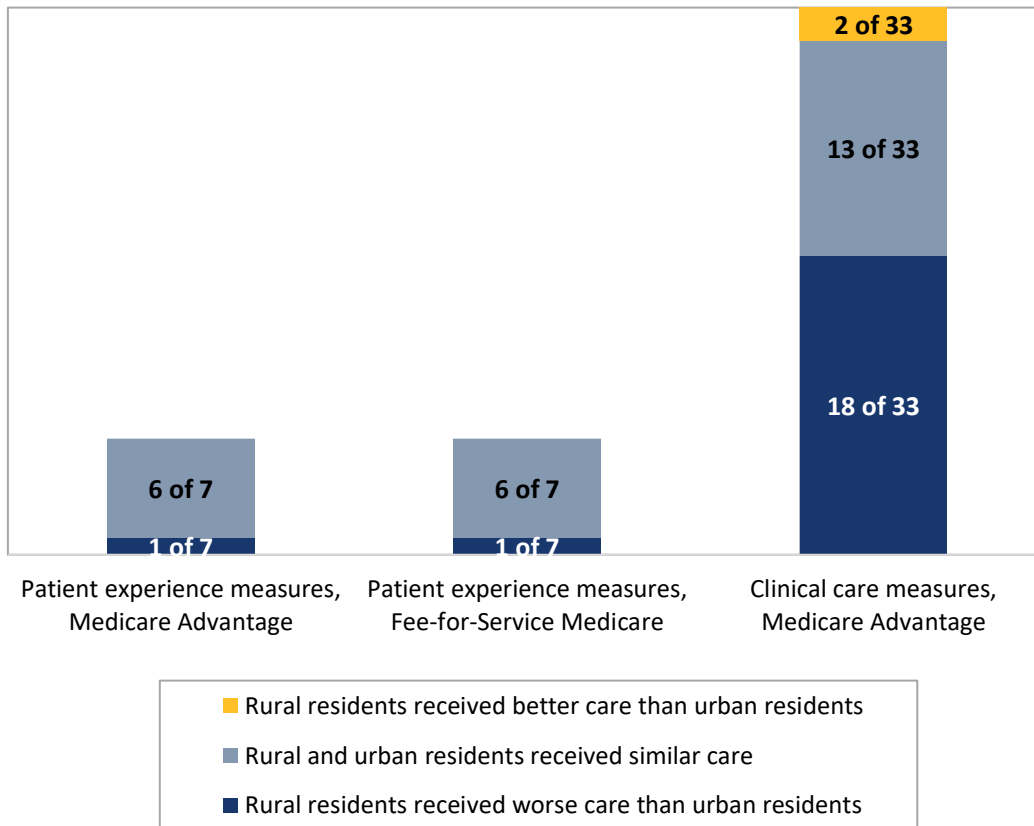
Conclusion

This analysis revealed a pattern in which rural residents, regardless of race or ethnicity, commonly received worse clinical care than urban residents. Future research is needed to understand whether this pattern reflects poorer dissemination of clinical practice guidelines to rural areas, poorer translation of those guidelines into clinical practice, or some other cause. Findings from that research would be useful for informing efforts to reduce these disparities. This analysis also identified rural Blacks receiving care from MA plans as a group that often reports notably worse patient experiences than others. Future research, perhaps involving focus groups with such beneficiaries, might provide insight into the causes of those poorer experiences and suggest efforts to address them.

³ There were not enough data to compare rural and urban Asian and Pacific Islander beneficiaries on 20 of the 33 clinical care measures, or to compare them on any measure of patient experience.

Rural-Urban Disparities in Care: All Patient Experience and Clinical Care Measures

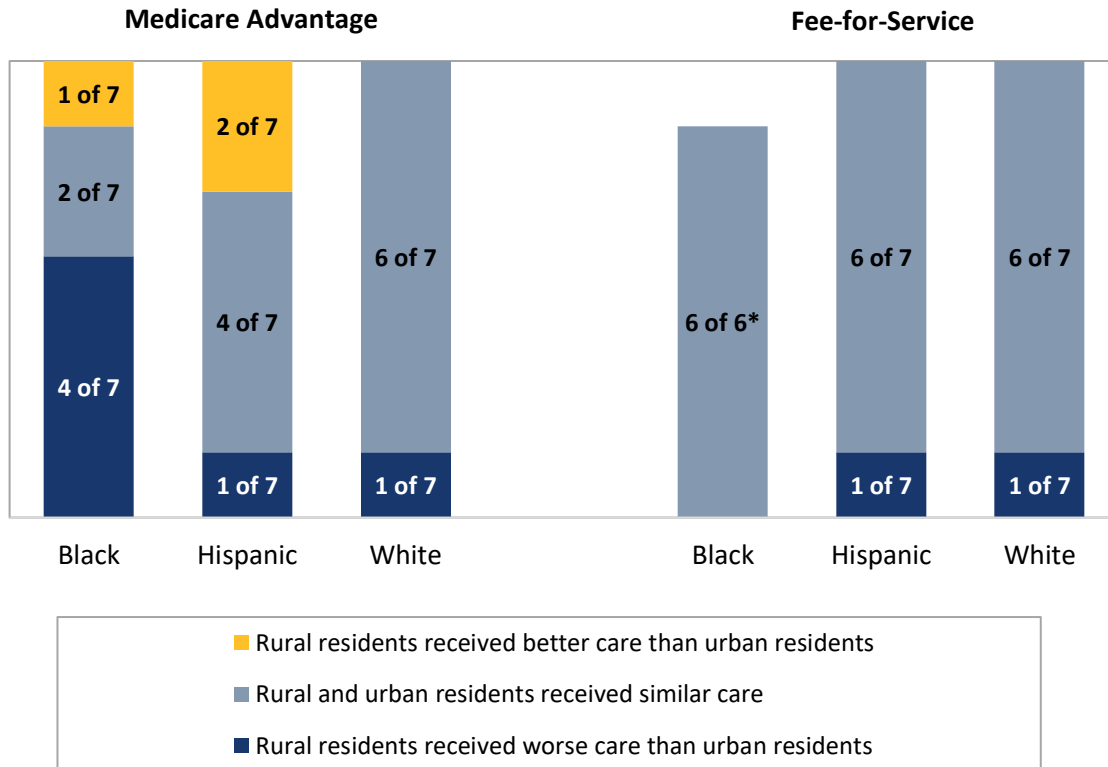
Number of patient experience measures and clinical care measures for which rural residents received care that was worse than, similar to, or better than the care received by urban residents in 2017



SOURCES: The bar on the left summarizes patient experience data from all MA beneficiaries nationwide who participated in the 2017 Medicare CAHPS survey. The bar in the middle summarizes patient experience data from all FFS beneficiaries nationwide who participated in the 2017 Medicare CAHPS survey. The bar on the right summarizes clinical quality (HEDIS) data collected in 2017 from MA plans nationwide.

Rural-Urban Disparities in Care: All Patient Experience Measures

Number of patient experience measures for which rural Black, Hispanic, and White beneficiaries reported experiences that were worse than, similar to, or better than the experiences reported by urban Black, Hispanic, and White beneficiaries in 2017



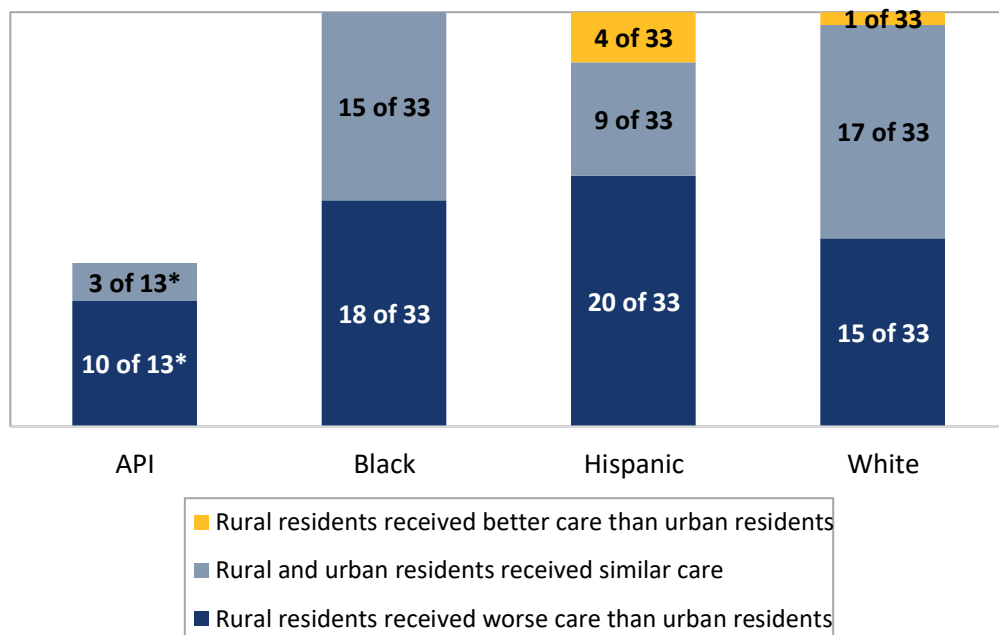
SOURCE: This chart summarizes data from all Medicare Advantage and fee-for-service beneficiaries nationwide who participated in the 2017 Medicare CAHPS survey.

NOTES: Blacks and Whites are non-Hispanic. Hispanic ethnicity includes all races.

* For one patient experience measure, there was not enough data from rural FFS Blacks to make a rural-urban comparison.

Rural-Urban Disparities in Care: All Clinical Care Measures

Number of clinical care measures for which rural Asian and Pacific Islander (API), Black, Hispanic, and White MA beneficiaries experienced care that was worse than, similar to, or better than the care experienced by urban API, Black, Hispanic, and White MA beneficiaries in 2017



SOURCE: This chart summarizes clinical quality (HEDIS) data collected in 2017 from MA plans nationwide.

NOTES: Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races.

* There was only enough data from rural API beneficiaries to make rural-urban comparisons on 13 of the 33 clinical care measures.



Background



Overview

This report presents summary information on the quality of health care received in 2017 by Medicare beneficiaries nationwide. Two types of quality of care data are presented: measures of patient experience, which describe how well the care patients receive meets their needs for such things as timely appointments, respectful care, clear communication, and access to information; and measures of clinical care, which describe the extent to which patients receive appropriate screening and treatment for specific health conditions. Patient experience data are presented for beneficiaries enrolled in fee-for-service (FFS) Medicare as well as those enrolled in managed care (Medicare Advantage [MA]) plans; clinical data are presented only for beneficiaries enrolled in MA plans.

The Institute of Medicine (IOM, now The National Academy of Medicine) has identified the equitable delivery of care as a hallmark of quality.⁴ Assessing equity of care delivery requires making comparisons of quality by patient characteristics such as rural residence, race, and ethnicity. Prior studies have found higher rates of chronic illness and poorer overall health in rural communities compared with urban populations. One possible source of these differences in morbidity is disparate experiences with health care and differences in access to high-quality care between rural and urban areas.⁵ There is also evidence that the health care disadvantages faced by those living in rural areas are sometimes greater for racial and ethnic minorities compared with non-Hispanic Whites. This may be because living in a rural area exacerbates exposure to unequal social conditions that foster disparities in health care.⁶ Given these prior findings, two sets of comparisons are presented in this report. In the first set, quality of care for rural residents is compared with quality of care for urban residents. In the second, quality of care for rural residents is compared with quality of care for urban residents of the same race or ethnicity. The focus of this report is on rural-urban differences in quality of care that exist at the national level. This information may be of interest to Medicare beneficiaries, MA organizations, and prescription drug plan sponsors. The results presented in this report lead us to conclude that quality improvement efforts should focus on improving clinical care for all rural residents and on investigating and addressing the causes of poor patient experiences for Black rural residents.

Data Sources

In all, this report provides data regarding 7 patient experience measures and 33 clinical care measures. The patient experience data were collected from a national survey of Medicare beneficiaries, known as the Medicare Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey. This survey is administered each year to both FFS and MA beneficiaries. The data in this report are from the 2017 Medicare CAHPS survey. Examples of patient experience measures include how easy it is to get needed care, how well doctors communicate with beneficiaries, and how easy it is for beneficiaries to get information from their drug plans about prescription drug coverage and cost.

The clinical care data were gathered through medical records and insurance claims for hospitalizations, medical office visits, and procedures. These data, which are collected each year from MA plans

⁴ IOM, *Crossing the Quality Chasm: A New Health System for the 21st Century*, Washington, D.C.: National Academy Press, 2001.

⁵ Michael Meit, Alana Knudson, Tess Gilberr, Amanda Tzy-Chyi Yu, Erin Tanenbaum, Elizabeth Ormson, Shannon TenBroeck, Alycia Bayne, and Shena Popat, *The 2014 Update of the Rural-Urban Chartbook*, Bethesda, Md.: Rural Health Reform Policy Research Center, 2014.

⁶ J. T. Caldwell, C. L. Ford, S. P. Wallace, M. C. Want, and L. M. Takahashi, "Intersection of Living in a Rural Versus Urban Area and Race/Ethnicity in Explaining Access to Health Care in the United States," *American Journal of Public Health*, Vol. 106, No. 8, 2016, pp. 1463–1469.

nationwide, are part of the Healthcare Effectiveness Data and Information Set (HEDIS). HEDIS data are not available for FFS beneficiaries. Examples of clinical care measures include whether beneficiaries received appropriate screening for colon cancer, whether beneficiaries with diabetes received a test that determines whether their blood sugar is under control, and whether appropriate treatment was provided to beneficiaries with chronic obstructive pulmonary disease (COPD). Although the annual flu vaccination measure is considered a HEDIS measure, the measure is included on the Medicare CAHPS survey and so is included with the patient experience measures in this report. The HEDIS data reported here were collected in 2017. Whereas all patient experience measures are applicable to beneficiaries aged 18 years and older, certain HEDIS measures apply to beneficiaries in a more limited age range, as noted throughout the report.

Beneficiaries were classified as living in a rural or urban area based on the zip code of their mailing address and the corresponding Census Bureau core-based statistical area (CBSA). CBSAs consist of the county or counties or equivalent entities associated with at least one core (urbanized area or urban cluster) of at least 10,000 population, plus adjacent counties having a high degree of social and economic integration with the core as measured through commuting ties with the counties that make up the core. For this report, any beneficiary residing within a CBSA (which includes both metropolitan and micropolitan areas) was classified as an urban resident; any beneficiary living outside of a CBSA was classified as a rural resident. By this definition, 7 percent (approximately 1 million) of MA beneficiaries and 10 percent (approximately 3 million) of FFS beneficiaries were rural residents in 2017. Of all Medicare beneficiaries residing in rural areas in 2017, 25 percent were enrolled in MA; of beneficiaries residing in urban areas, 31 percent were enrolled in MA.

Rural-Urban Disparities in Health Care in Medicare

Section I of the report begins with a stacked bar chart showing the number of patient experience measures (out of 7) and the number of clinical care measures (out of 33) for which rural residents reported experiences of care that were worse than, similar to, or better than the experiences reported by urban residents.⁷ In this chart, information on patient experience is presented separately for MA and FFS beneficiaries. Following the stacked bar chart are separate, unstacked bar charts for each patient experience and clinical care measure. Charts for patient experience measures show the average score for rural and urban MA and FFS beneficiaries on a 0–100 scale. The average score represents the percentage of the best possible score for a given group for that measure. For example, consider a measure for which the best possible score is 4 and the worst possible score is 1. If a given group’s score on that measure is 3.5, then that group’s score on a 0–100 scale is $([3.5-1]/[4-1])*100 = 83.3$. Charts for clinical care measures show the percentage of rural and urban MA beneficiaries whose care met the standard called for by the specific measure (e.g., receiving a clinically indicated test or treatment).

Rural-Urban Disparities in Health Care in Medicare by Racial and Ethnic Group

Section II of the report shows how rural-urban gaps in health care vary from one racial or ethnic group to another. Section II begins with a set of stacked bar charts that show, separately for Black, Hispanic, and White MA and FFS beneficiaries, the number of patient experience measures (out of 7) for which rural residents reported experiences of care that were worse than, similar to, or better than the experiences reported by urban residents. These three racial and ethnic groups were chosen because enough information was available to describe the experiences of rural and urban residents within these groups. Following these stacked bar charts are separate, unstacked bar charts for each patient

⁷ Here, “similar” is used to characterize differences that are not statistically significant, fall below a magnitude threshold, or both, as described in the technical appendix. “Worse” and “better” are used to characterize differences that are statistically significant and exceed a magnitude threshold.

experience measure. These charts show, separately for Black, Hispanic, and White MA and FFS beneficiaries, the average score for rural and urban residents on a 0–100 scale. After the patient experience measures, Section II presents a set of stacked bar charts that show, separately for Asian or Pacific Islander (API), Black, Hispanic, and White MA beneficiaries, the number of clinical care measures for which rural residents reported experiences of care that were worse than, similar to, or better than the experiences reported by urban residents. There was enough information from Black, Hispanic, and White beneficiaries to compare rural and urban residents on all 33 clinical care measures. Rural-urban comparisons among API beneficiaries were possible for 13 clinical care measures. Following the stacked bar charts are separate, unstacked bar charts for each clinical care measure that show, separately for API (where available), Black, Hispanic, and White MA beneficiaries, the percentage of rural and urban residents whose care met the standard called for by the measure.

For detailed information on data sources and analytic methods, see the appendix.

Summary of Results and Conclusions

This analysis revealed a pattern in which rural residents, regardless of race or ethnicity, commonly received worse clinical care than urban residents. Although patient experience scores are adjusted for a broad set of case-mix variables (see the appendix), clinical care scores are not. It is therefore possible that the differences observed between rural and urban residents in the quality of clinical care are attributable to factors that are not accounted for in the analysis. Future research is needed to understand whether this pattern reflects poorer dissemination of clinical practice guidelines to rural areas, poorer translation of those guidelines into clinical practice, or some other cause. Findings from that research would be useful for informing efforts to address these disparities. This analysis also identified rural Blacks receiving care from MA plans as a group that often reports notably worse patient experiences than others. Future research, perhaps involving focus groups with such beneficiaries, might provide insight into the causes of those poorer experiences and suggest efforts to address them.

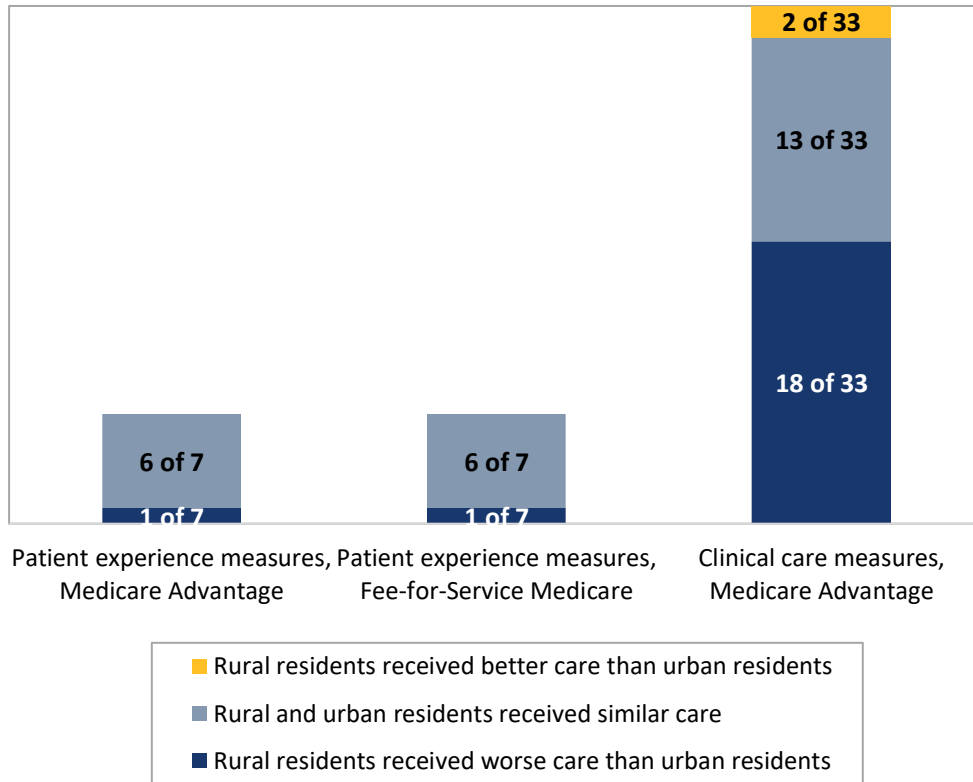


Section 1: Rural-Urban Disparities in Health Care in Medicare



Disparities in Care: All Patient Experience and Clinical Care Measures

Number of patient experience measures and clinical care measures for which rural residents received care that was worse than, similar to, or better than the care received by urban residents in 2017



SOURCE: The bar on the left summarizes patient experience data from all MA beneficiaries nationwide who participated in the 2017 Medicare CAHPS survey. The bar in the middle summarizes patient experience data from all FFS beneficiaries nationwide who participated in the 2017 Medicare CAHPS survey. The bar on the right summarizes clinical quality (HEDIS) data collected in 2017 from MA plans nationwide.

The relative difference between rural and urban is used to assess disparities.

- **Better** = Rural residents received better care than urban residents. Differences are statistically significant ($p < 0.05$), are equal to or larger than 3 points[†] on a 0–100 scale, and favor rural residents.
- **Similar** = Rural and urban residents received care of similar quality. Differences are less than 3 points on a 0–100 scale (differences greater than 3 points were always statistically significant). Differences may be statistically significant.
- **Worse** = Rural residents received worse care than urban residents. Differences are statistically significant, are equal to or larger than 3 points on a 0–100 scale, and favor urban residents.

[†] A difference that is considered to be of moderate magnitude. C. A. Paddison, M. N. Elliott, A. M. Haviland, D. O. Farley, G. Lyratzopoulos, K. Hambarsoomian, J. W. Dembosky, and M. O. Roland, “Experiences of Care Among Medicare Beneficiaries with ESRD: Medicare Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey Results,” *American Journal of Kidney Diseases*, Vol. 61, No. 3, 2013, pp. 440–449.

Rural residents received worse care than urban residents

- Annual flu vaccination (in MA and FFS Medicare)
- Colorectal cancer screening
- Diabetes care—eye exam
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Statin use in patients with diabetes
- Medication adherence for diabetes—statins
- Adult body mass index assessment
- Medication adherence for cardiovascular disease—statins
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of systemic corticosteroids
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Osteoporosis management in women who had a fracture

Rural residents received worse care than urban residents (continued)

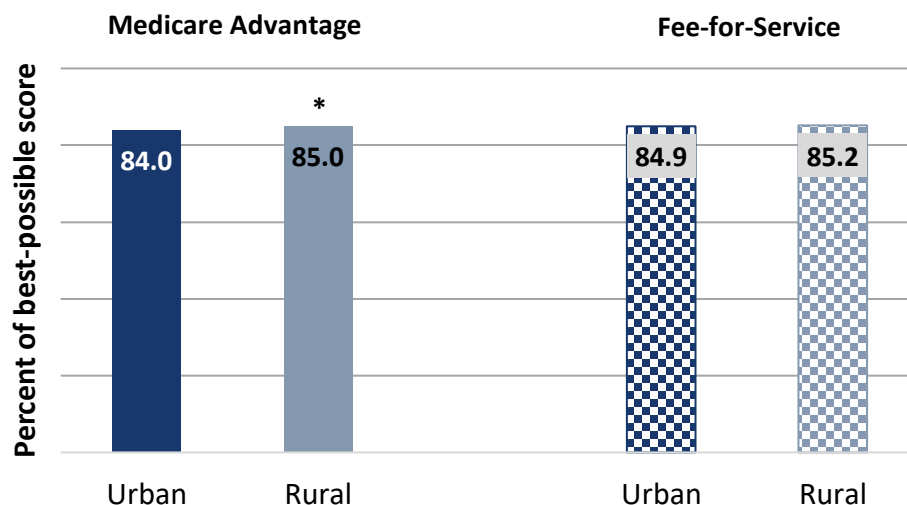
- Avoiding potentially harmful drug-disease interactions in elderly patients with chronic renal failure
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls
- Medication reconciliation after hospital discharge
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment

Rural residents received better care than urban residents

- Follow-up visit after hospital stay for mental illness (within 7 days of discharge)
- Follow-up visit after hospital stay for mental illness (within 30 days of discharge)

Patient Experience: Getting Needed Care

Percentage of the best possible score (on a 0–100 scale) earned on how easy it is for patients to get needed care,[†] by rurality within coverage type, 2017



SOURCE: Data from the Medicare CAHPS survey, 2017.

Disparities

- Among MA beneficiaries, rural residents reported better[‡] experiences with getting needed care than urban residents did. The difference between rural and urban residents was less than 3 points on a 0–100 scale.
- Among FFS beneficiaries, rural residents reported experiences with getting needed care that were similar to the experiences reported by urban residents.

* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

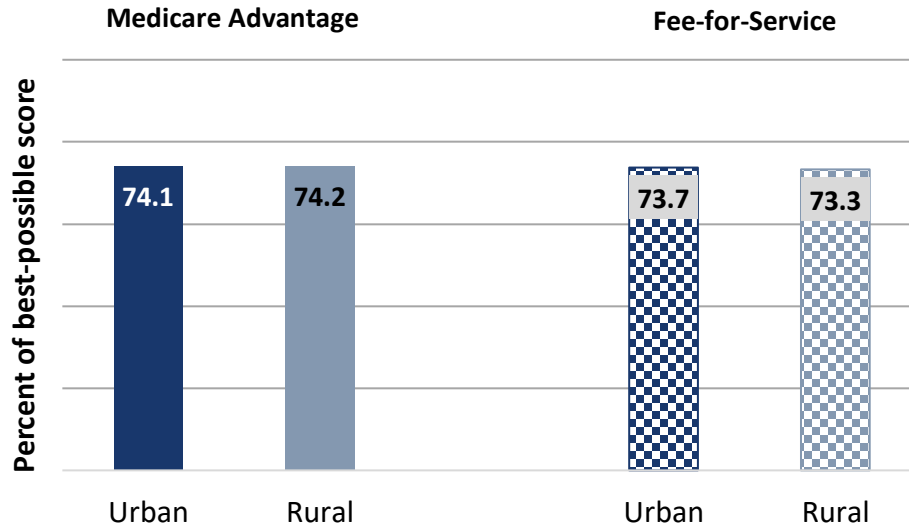
- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] This includes how often in the last 6 months patients got appointments with specialists as soon as they needed them and how easy it was to get needed care, tests, or treatment.

[‡] Unlike on pages 17–18, we use the terms “better” or “worse” to describe all statistically significant differences on individual patient experience measures. We note in the “Disparities” section for each of these measures where differences are greater or less than 3 points.

Patient Experience: Getting Appointments and Care Quickly

Percentage of the best possible score (on a 0–100 scale) earned on how quickly patients get appointments and care,[†] by rurality within coverage type, 2017



SOURCE: Data from the Medicare CAHPS survey, 2017.

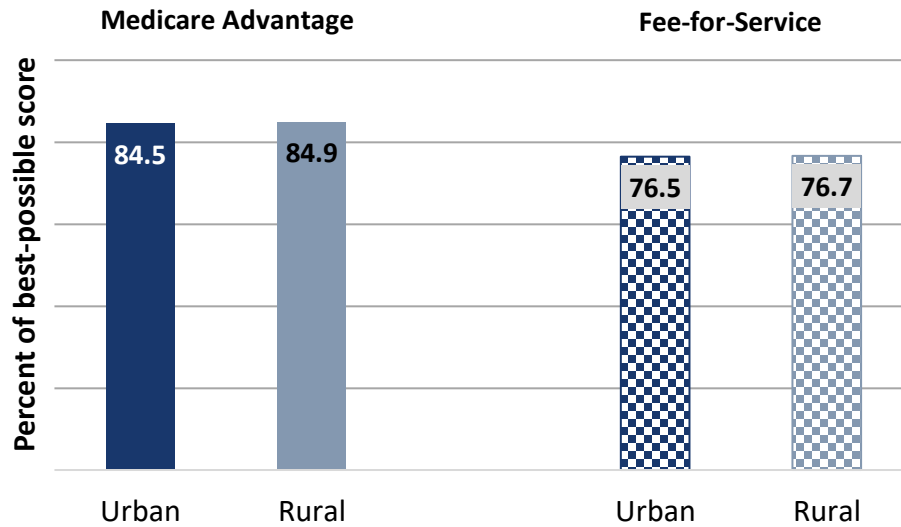
Disparities

- Among both MA and FFS beneficiaries, rural and urban residents reported similar experiences with getting appointments and care quickly.

[†] This includes how often in the last 6 months patients got care that was needed right away, as well as how easy it was to get appointments for checkups and routine care.

Patient Experience: Customer Service

Percentage of the best possible score (on a 0–100 scale) earned on three aspects of customer service,[†] by rurality within coverage type, 2017



SOURCE: Data from the Medicare CAHPS survey, 2017.

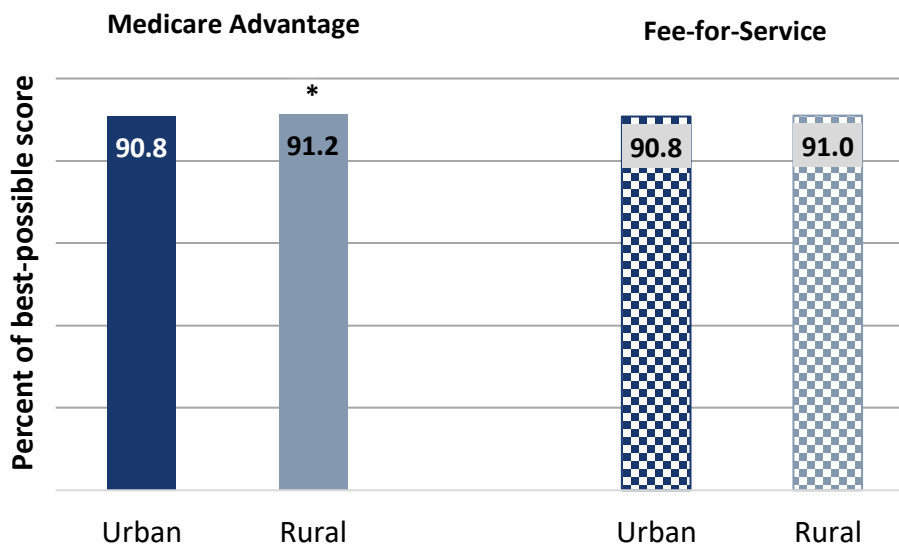
Disparities

- Among both MA and FFS beneficiaries, rural and urban residents reported similar experiences with customer service.

[†] This includes how often in the last 6 months health plan customer service staff provided the information or the help that beneficiaries needed, how often beneficiaries were treated with courtesy and respect, and how often forms from the health plan were easy to fill out.

Patient Experience: Doctors Who Communicate Well

Percentage of the best possible score (on a 0–100 scale) earned on how well doctors communicate with patients,[†] by rurality within coverage type, 2017



SOURCE: Data from the Medicare CAHPS survey, 2017.

Disparities

- Among MA beneficiaries, rural residents reported better experiences with doctor communication than urban residents reported. The difference between rural and urban residents was less than 3 points on a 0–100 scale.
- Among FFS beneficiaries, rural residents reported experiences with doctor communication that were similar to the experiences reported by urban residents.

* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

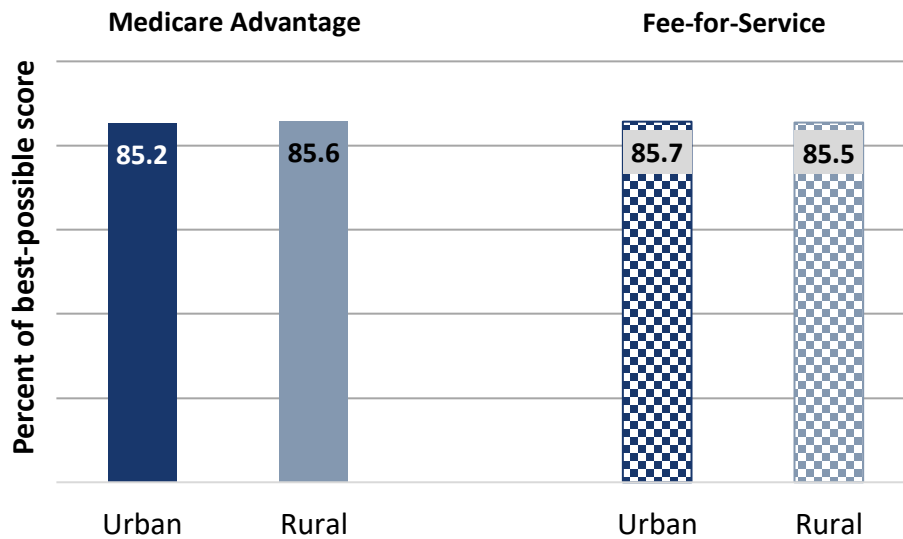
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] This includes how often in the last 6 months doctors explained things in a way that was easy to understand, listened carefully, showed respect for what patients had to say, and spent time with patients.

Patient Experience: Care Coordination

Percentage of the best possible score (on a 0–100 scale) earned on how well patient care is coordinated,[†] by rurality within coverage type, 2017



SOURCE: Data from the Medicare CAHPS survey, 2017.

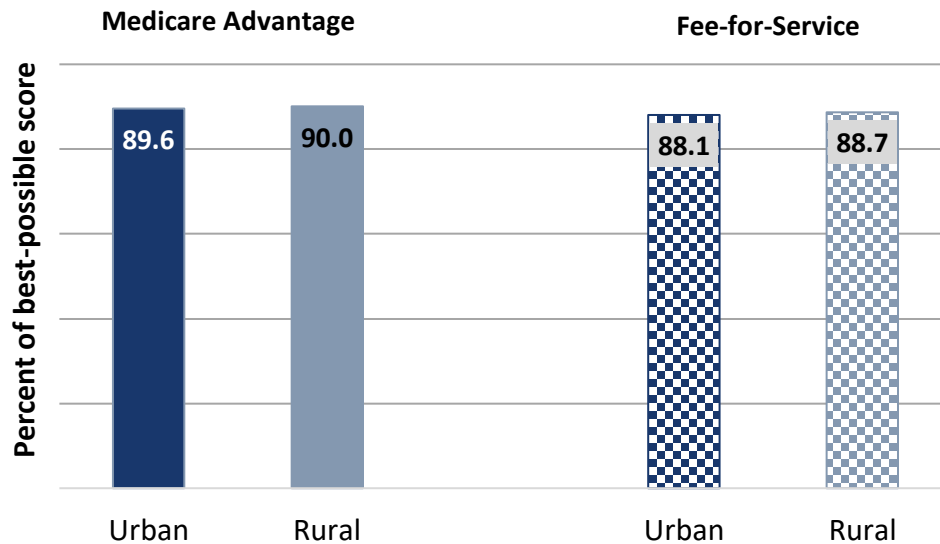
Disparities

- Among both MA and FFS beneficiaries, rural and urban residents reported similar experiences with care coordination.

[†] This includes how often in the last 6 months doctors had medical records and other information about patients' care at patients' scheduled appointments and how quickly patients received their test results.

Patient Experience: Getting Needed Prescription Drugs

Percentage of the best possible score (on a 0–100 scale) earned on how easy it is for beneficiaries to get the prescription drugs they need using their plans,[†] by rurality within coverage type, 2017



SOURCE: Data from the Medicare CAHPS survey, 2017.

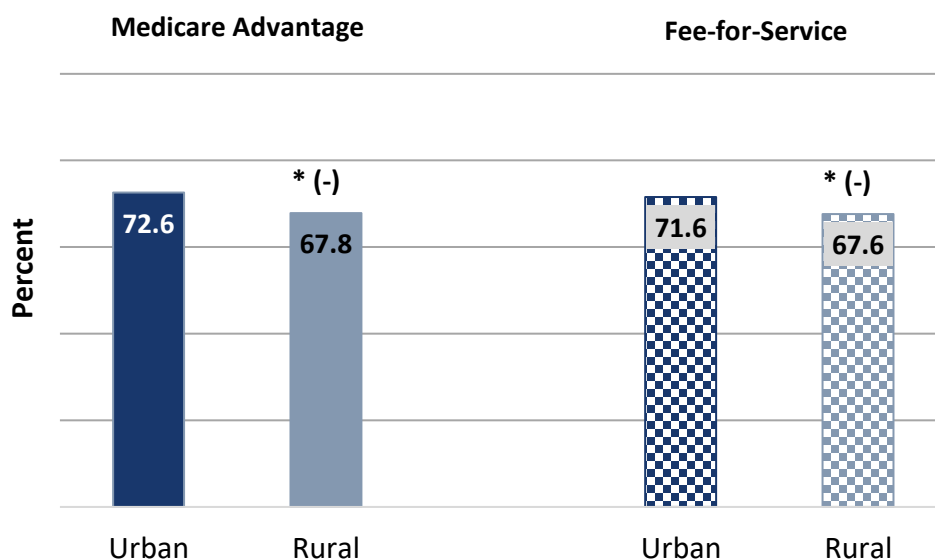
Disparities

- Among both MA and FFS beneficiaries, rural and urban residents reported similar experiences with getting needed prescription drugs.

[†] This includes how often in the last 6 months it was easy to use the plan to get prescribed medications and how easy it was to fill prescriptions at a pharmacy or by mail.

Patient Experience: Annual Flu Vaccine

Percentage of Medicare enrollees who got a vaccine (flu shot),
by rurality within coverage type, 2017



NOTE: Data from the Medicare CAHPS survey, 2017.

Disparities

- Among both Medicare Advantage and fee-for-service beneficiaries, rural residents were less likely than urban residents to have received the flu vaccine. In each case, the difference between rural and urban residents was greater than 3 percentage points.

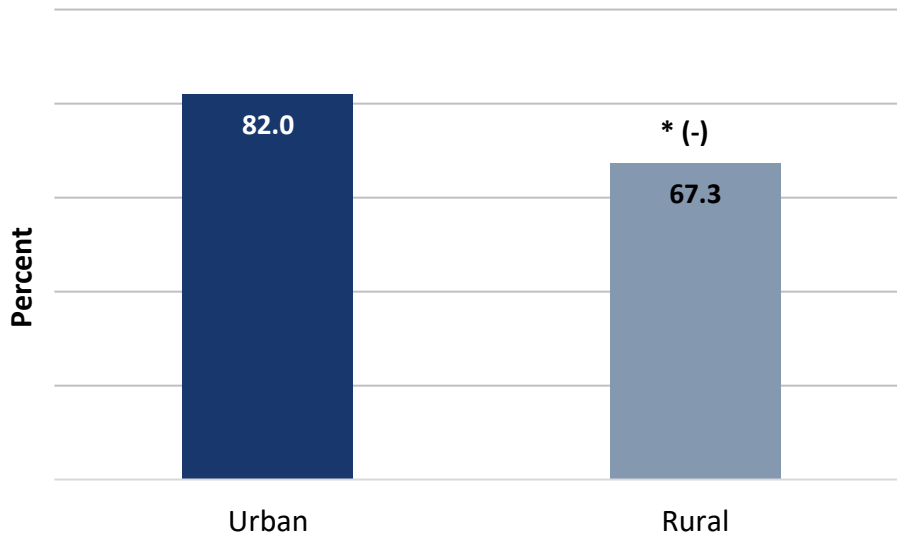
* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Colorectal Cancer Screening

Percentage of MA enrollees aged 50 to 75 years who had appropriate screening for colorectal cancer, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents were less likely than urban residents to have been appropriately screened for colorectal cancer. The difference between rural and urban residents was greater than 3 percentage points.

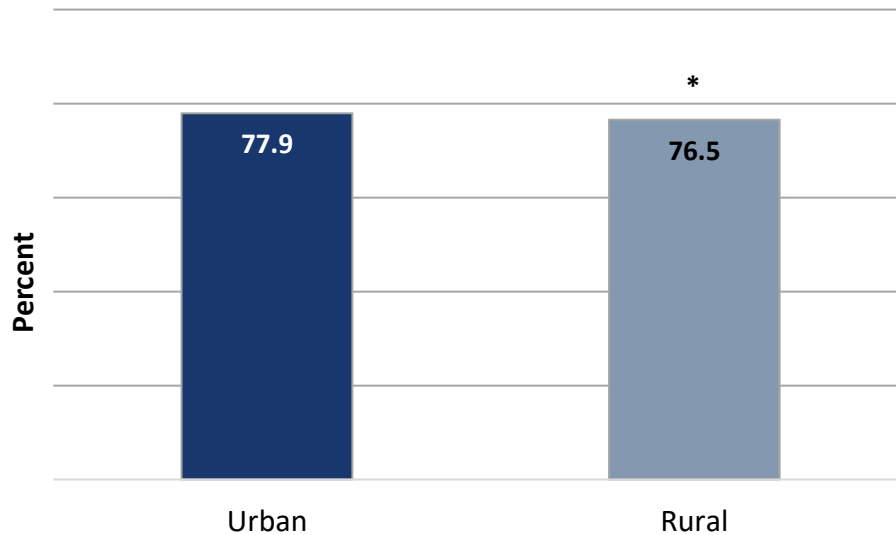
* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Breast Cancer Screening

Percentage of MA enrollees (women) aged 50 to 74 years who had appropriate screening for breast cancer, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural women were less likely than urban women to have been appropriately screened for breast cancer, but the difference between rural and urban women was less than 3 percentage points.

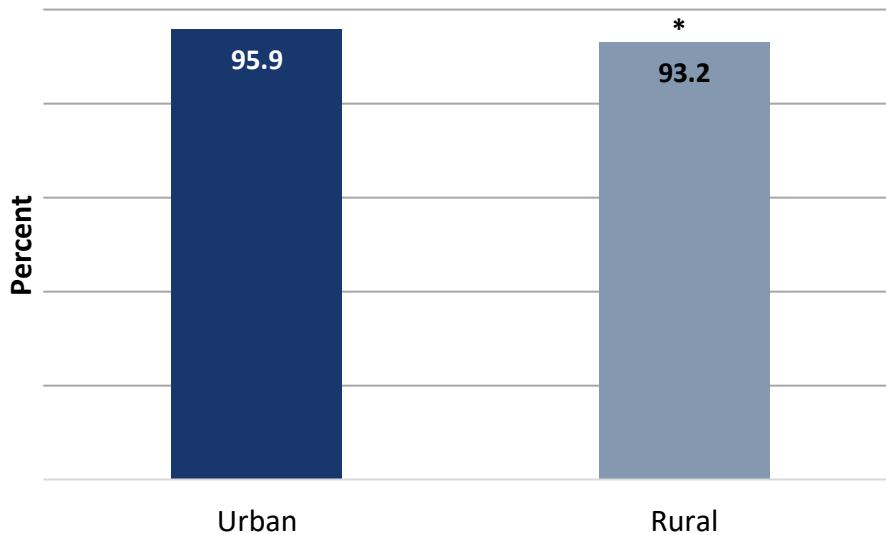
* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Diabetes Care—Blood Sugar Testing

Percentage of Medicare Advantage enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had one or more HbA1c tests in the past year, by rurality, 2017



NOTE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have had their blood sugar tested at least once in the past year. The difference between rural and urban residents was less than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

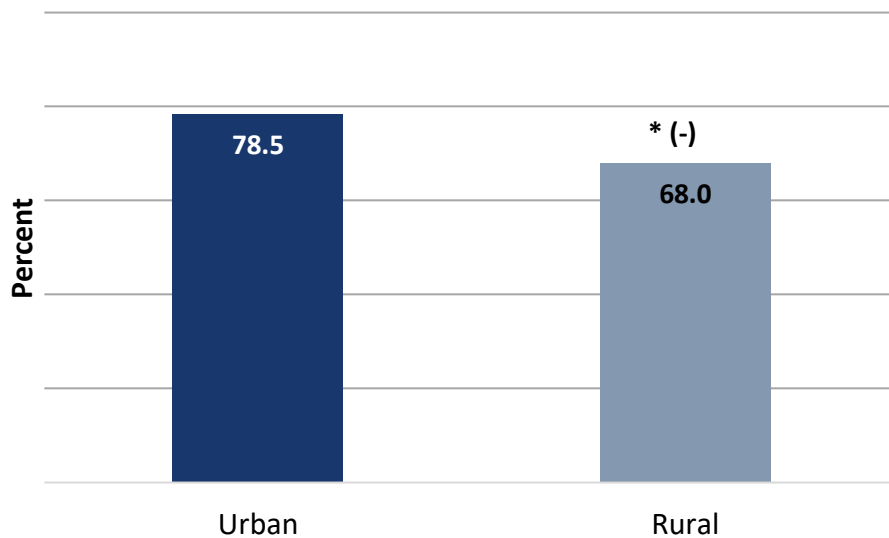
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Diabetes Care—Eye Exam

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had an eye exam (retinal) in the past year, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have had an eye exam in the past year. The difference between rural and urban residents was greater than 3 percentage points.

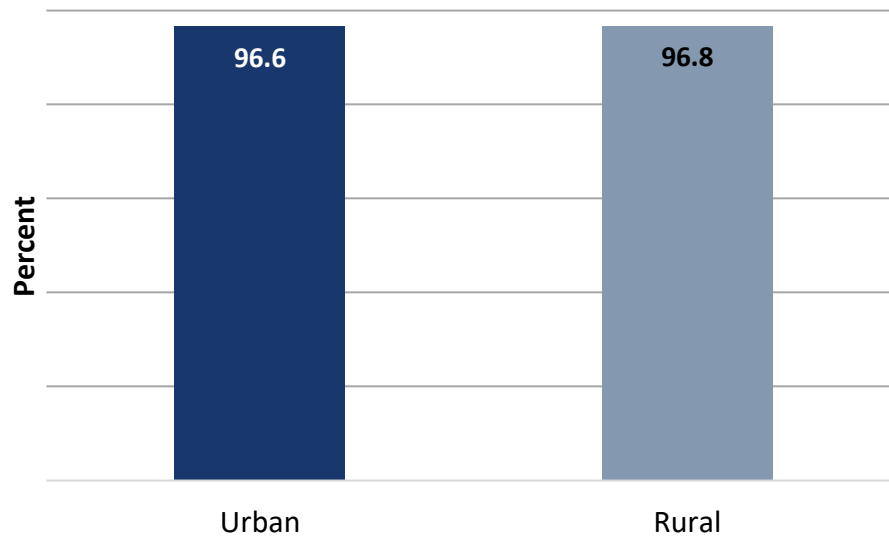
* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Diabetes Care—Kidney Disease Monitoring

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had medical attention for nephropathy in the past year, by rurality, 2017



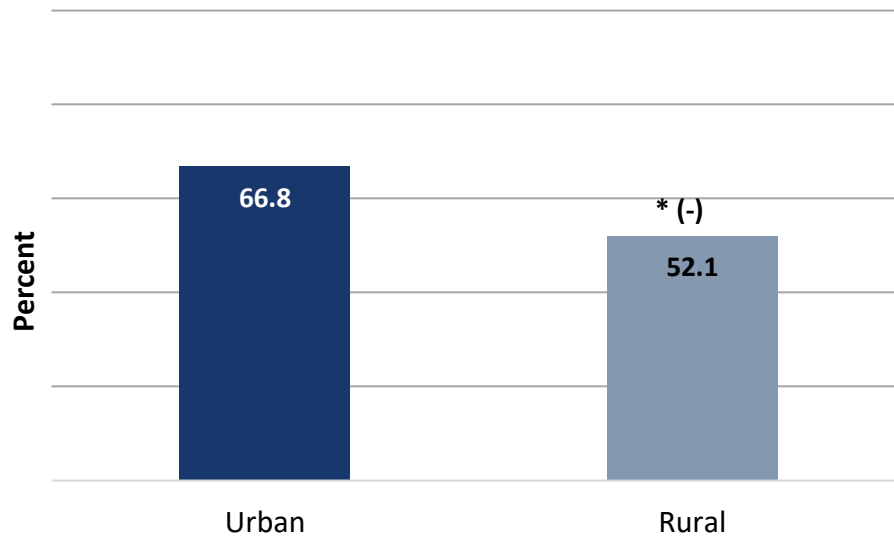
SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents with diabetes were about as likely as urban residents with diabetes to have had medical attention for nephropathy in the past year.

Clinical Care: Diabetes Care—Blood Pressure Controlled

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) whose most recent blood pressure was less than 140/90, by rurality, 2017



NOTE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have their blood pressure under control. The difference between rural and urban residents was greater than 3 percentage points.

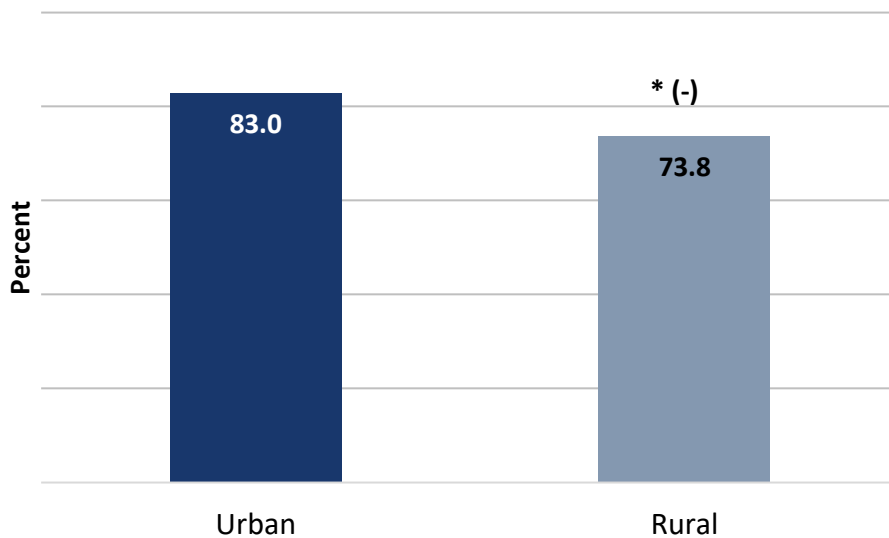
* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Diabetes Care—Blood Sugar Controlled

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) whose most recent HbA1c level was 9 percent or less, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have their blood sugar levels under control. The difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

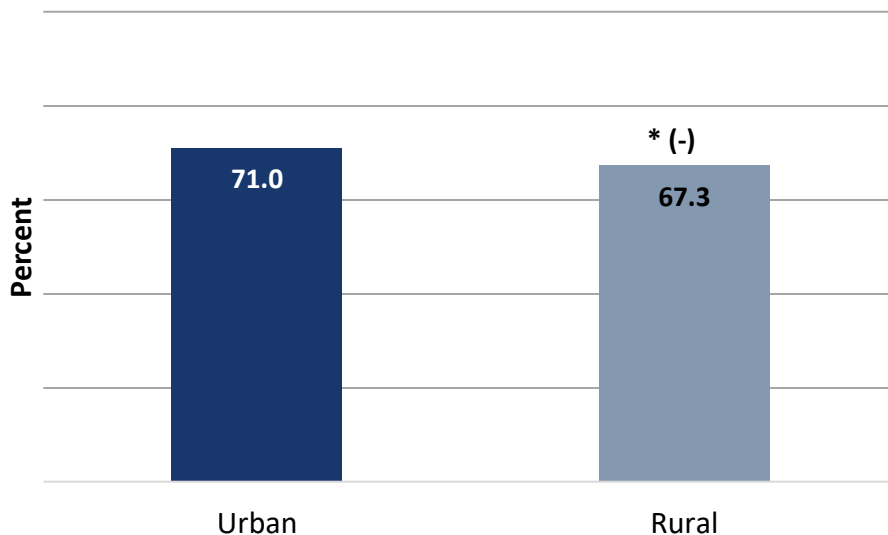
For differences that are statistically significant, the following symbols are also used when applicable:

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(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Statin Use in Patients with Diabetes

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)[†] who received statin therapy, by rurality, 2017



NOTE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have received statin therapy. The difference between rural and urban residents was greater than 3 percentage points.

[†] Excludes those who also have clinical atherosclerotic cardiovascular disease.

* Significantly different from the score for urban residents ($p < 0.05$).

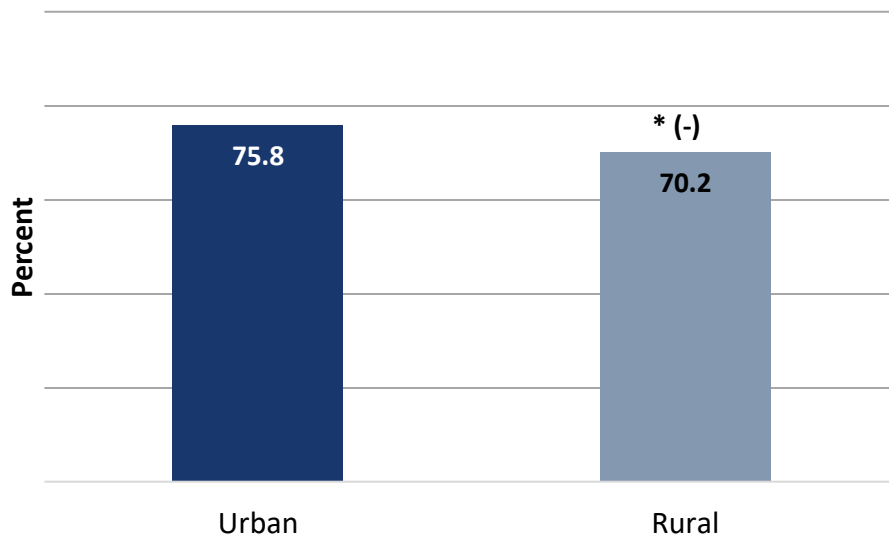
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Medication Adherence for Diabetes—Statins

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)[†] who were dispensed a statin medication during the measurement year who remained on the medication for at least 80 percent of the treatment period, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare Advantage plans nationwide. Clinical quality data not available for fee-for-service Medicare beneficiaries.

Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have had proper statin medication adherence. The difference between rural and urban residents was greater than 3 percentage points.

[†] Excludes those who also have clinical atherosclerotic cardiovascular disease.

* Significantly different from the score for urban residents ($p < 0.05$).

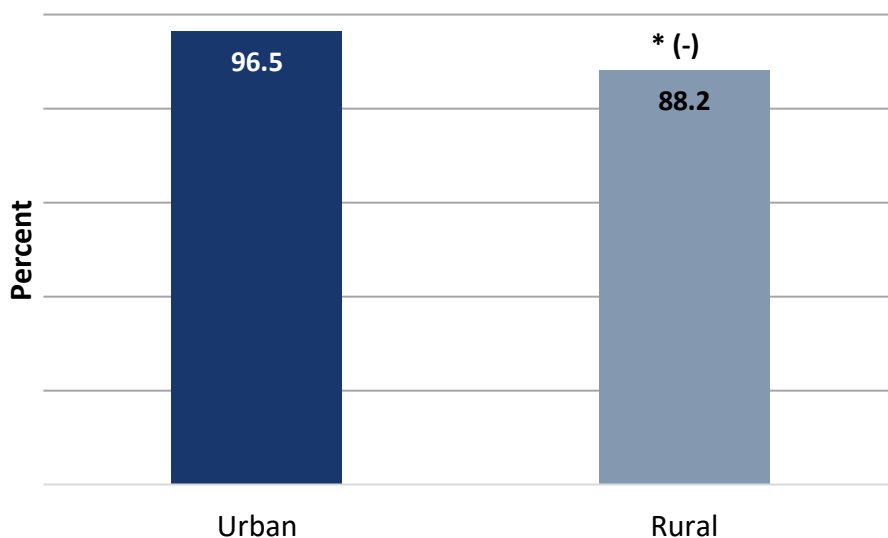
For differences that are statistically significant, the following symbols are also used when applicable:

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Clinical Care: Adult BMI Assessment

Percentage of MA enrollees aged 18 to 74 years who had an outpatient visit and whose body mass index (BMI) was documented in the past two years, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents were less likely than urban residents to have had their BMIs documented. The difference between rural and urban residents was greater than 3 percentage points.

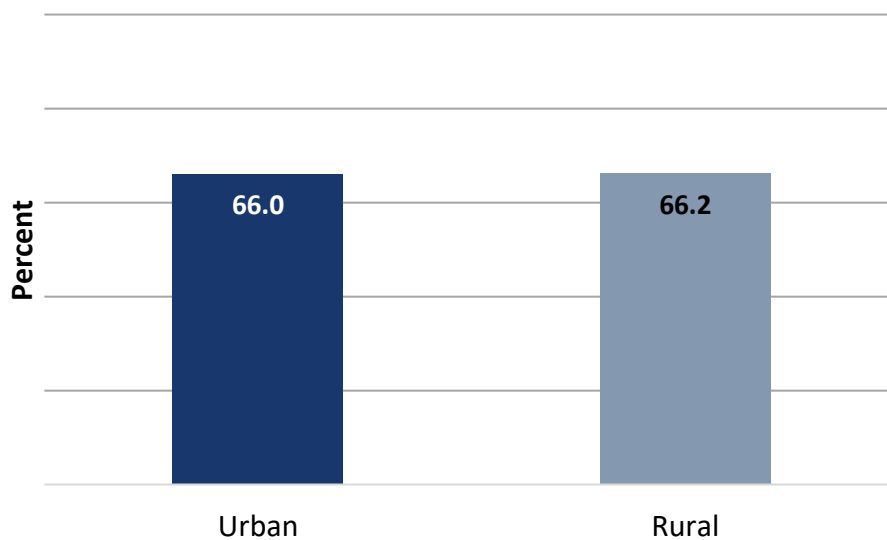
* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
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Clinical Care: Controlling Blood Pressure

Percentage of MA enrollees aged 18 to 85 years who had a diagnosis of hypertension and whose blood pressure was adequately controlled[†] during the past year, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

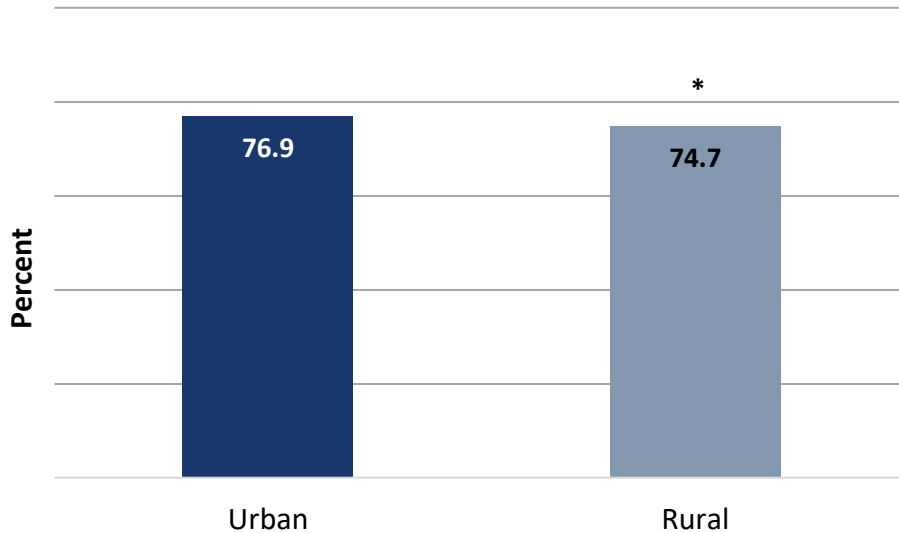
Disparities

- Rural residents who had a diagnosis of hypertension were about as likely as urban residents who had a diagnosis of hypertension to have had their blood pressure adequately controlled.

[†] Less than 140/90 for enrollees 18 to 59 years of age and for enrollees 60 to 85 years of age with a diagnosis of diabetes, or less than 150/90 for members 60 to 85 years of age without a diagnosis of diabetes.

Clinical Care: Statin Use in Patients with Cardiovascular Disease

Percentage of male MA enrollees aged 21 to 75 years and female MA enrollees aged 40 to 75 years who have clinical atherosclerotic cardiovascular disease (ASCVD) and who received statin therapy, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents with ASCVD were less likely than urban residents with ASCVD to have received statin therapy. The difference between rural and urban residents was less than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

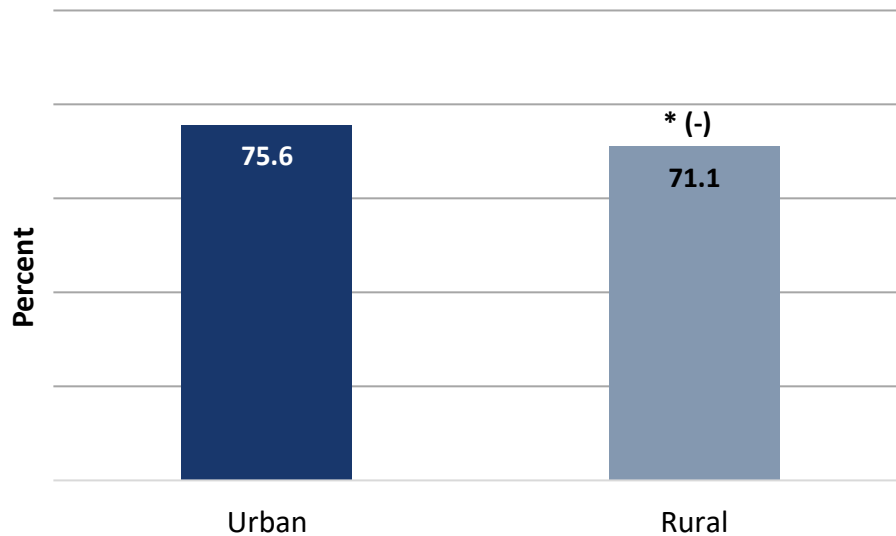
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Medication Adherence for Cardiovascular Disease— Statins

Percentage of male MA enrollees aged 21 to 75 years and female MA enrollees aged 40 to 75 years who had clinical atherosclerotic cardiovascular disease (ASCVD) and were dispensed a statin medication during the measurement year who remained on the medication for at least 80 percent of the treatment period, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents with ASCVD were less likely than urban residents with ASCVD to have had proper statin medication adherence. The difference between rural and urban residents was greater than 3 percentage points.

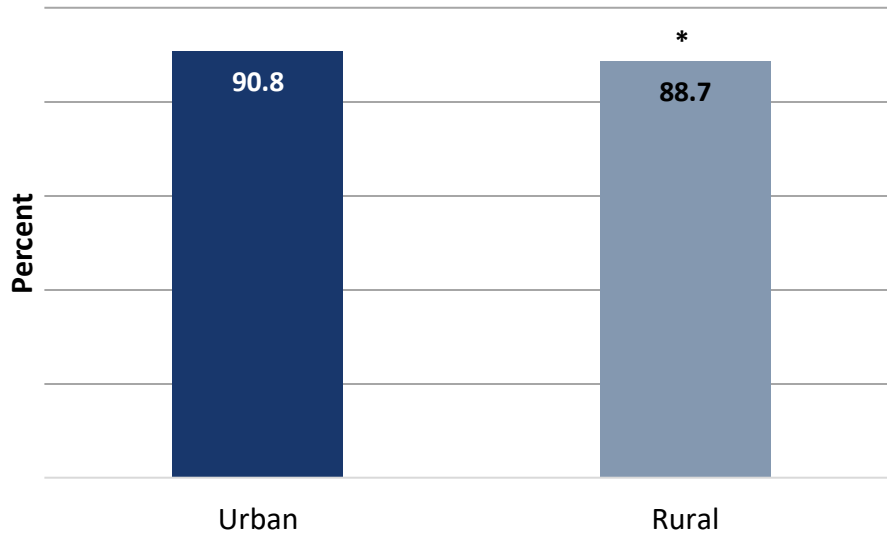
* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

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- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Continuous Beta-Blocker Treatment

Percentage of MA enrollees aged 18 years and older who were hospitalized and discharged alive with a diagnosis of acute myocardial infarction (AMI) and who received persistent beta-blocker treatment for six months after discharge, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents who were hospitalized for a heart attack were less likely than urban residents who were hospitalized for a heart attack to have received persistent beta-blocker treatment. The difference between rural and urban residents was less than 3 percentage points.

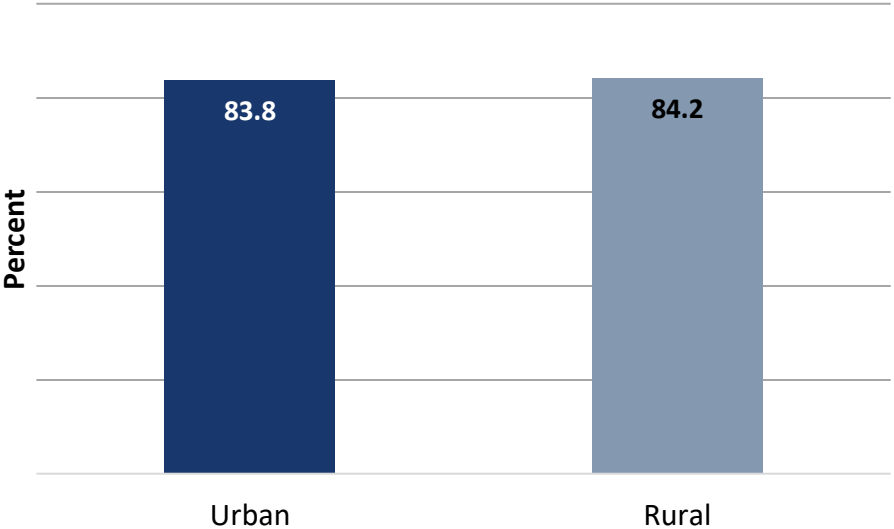
* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

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- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Asthma Medication Ratio in Older Adults

Percentage of MA enrollees aged 65 to 85 years who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the past year, by rurality, 2017



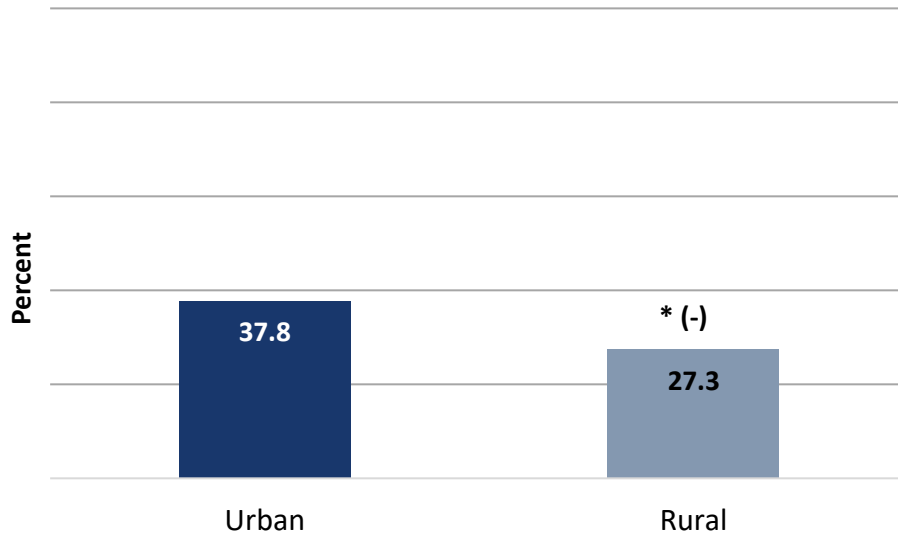
SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural older adults with persistent asthma were about as likely as urban older adults with persistent asthma to have had appropriate asthma medication management during the past year.

Clinical Care: Testing to Confirm COPD

Percentage of MA enrollees aged 40 years and older with a new diagnosis of chronic obstructive pulmonary disease (COPD) or newly active COPD who received appropriate spirometry testing to confirm the diagnosis, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents with a new diagnosis of COPD or newly active COPD were less likely than urban residents with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis. The difference between rural and urban residents was greater than 3 percentage points.

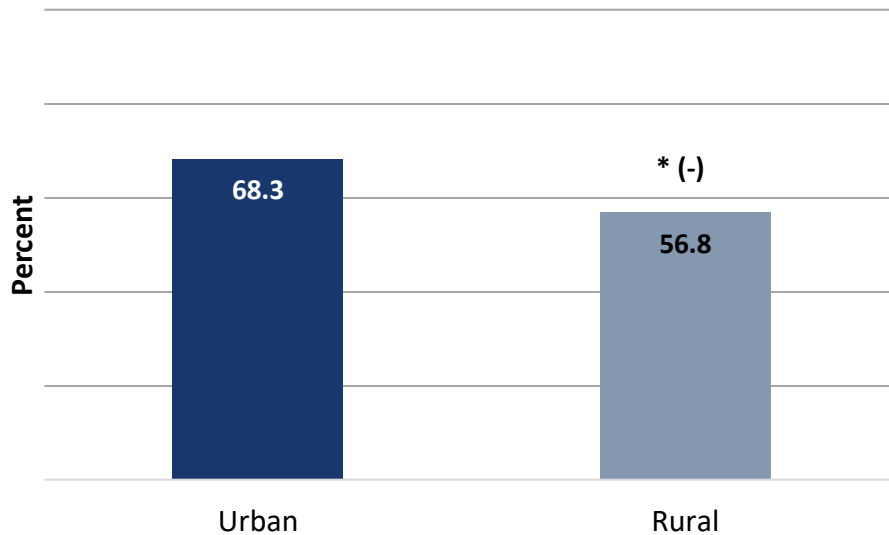
* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Pharmacotherapy Management of COPD Exacerbation—Systemic Corticosteroid

Percentage of COPD exacerbations for MA enrollees aged 40 years and older who had an acute inpatient discharge or emergency department encounter in the past year who were dispensed a systemic corticosteroid within 14 days of the event, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents who experienced a COPD exacerbation were less likely than urban residents who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

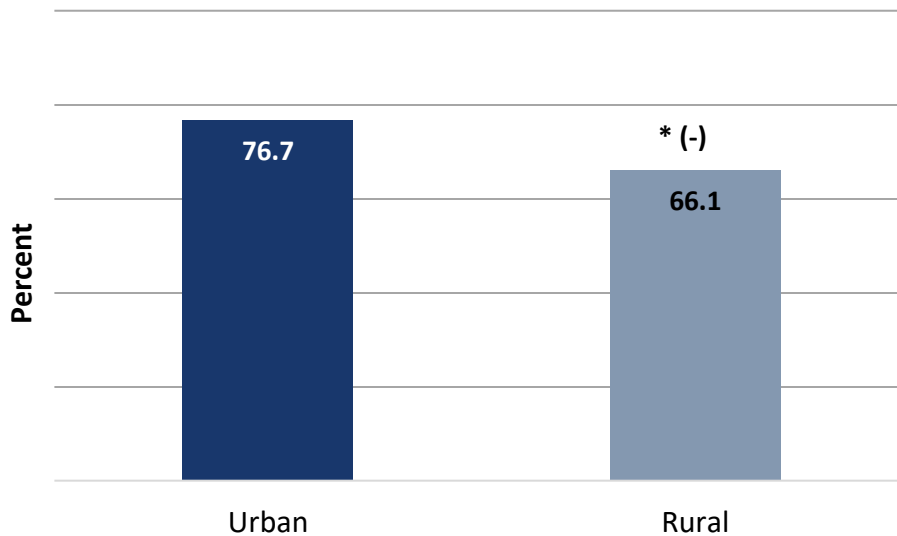
For differences that are statistically significant, the following symbols are also used when applicable:

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Clinical Care: Pharmacotherapy Management of COPD Exacerbation—Bronchodilator

Percentage of MA enrollees aged 40 years and older who had an acute inpatient discharge or emergency department encounter for COPD exacerbation in the past year who were dispensed a bronchodilator within 30 days of experiencing the event, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare Advantage plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents who experienced a COPD exacerbation were less likely than urban residents who experienced a COPD exacerbation to have been dispensed a bronchodilator within 30 days of the event. The difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

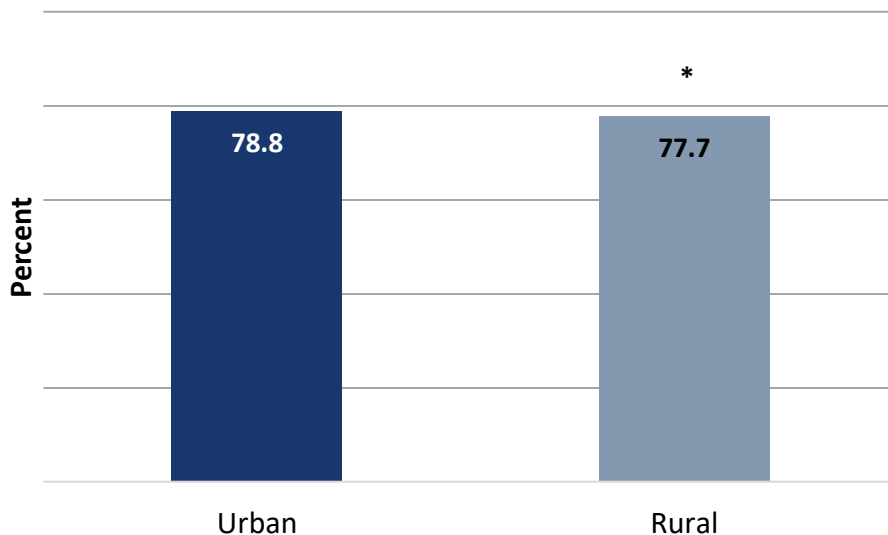
For differences that are statistically significant, the following symbols are also used when applicable:

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(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Rheumatoid Arthritis Management

Percentage of MA enrollees aged 18 years and older who were diagnosed with rheumatic arthritis during the past year and who were dispensed at least one ambulatory prescription for a disease-modifying antirheumatic drug (DMARD), by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents who were diagnosed with rheumatic arthritis were less likely than urban residents who were diagnosed with rheumatic arthritis to have been dispensed at least one DMARD. The difference between rural and urban residents was less than 3 percentage points.

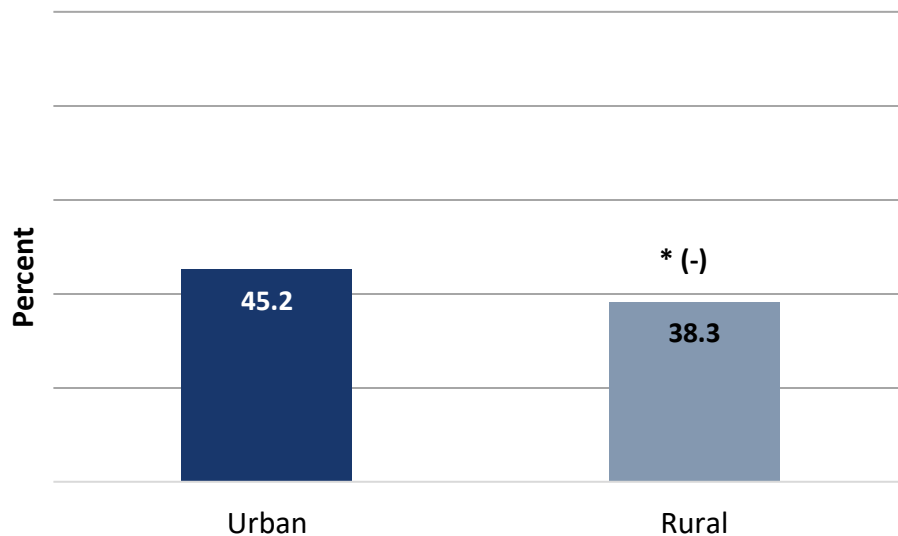
* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

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- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Osteoporosis Management in Women Who Had a Fracture

Percentage of MA enrollees (women) aged 67 to 85 years who suffered a fracture and who had either a bone mineral density test or a prescription for a drug to treat osteoporosis in the six months after the fracture, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare Advantage plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural women who suffered a fracture were less likely than urban women who suffered a fracture to have had either a bone mineral density test or a prescription for a drug to treat osteoporosis. The difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

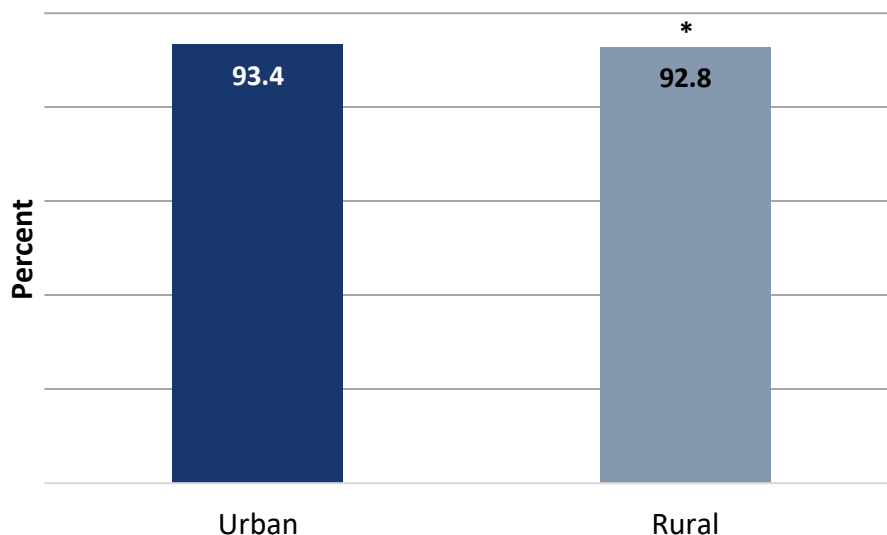
For differences that are statistically significant, the following symbols are also used when applicable:

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(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Appropriate Monitoring of Patients Taking Long-Term Medications

Percentage of MA enrollees aged 18 years and older who received at least 180 treatment days of ambulatory medication therapy for a selected therapeutic agent[†] during the past year and at least one therapeutic monitoring event for the therapeutic agent during the year, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents were less likely than urban residents to have had their long-term medication use monitored. The difference between rural and urban residents was less than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

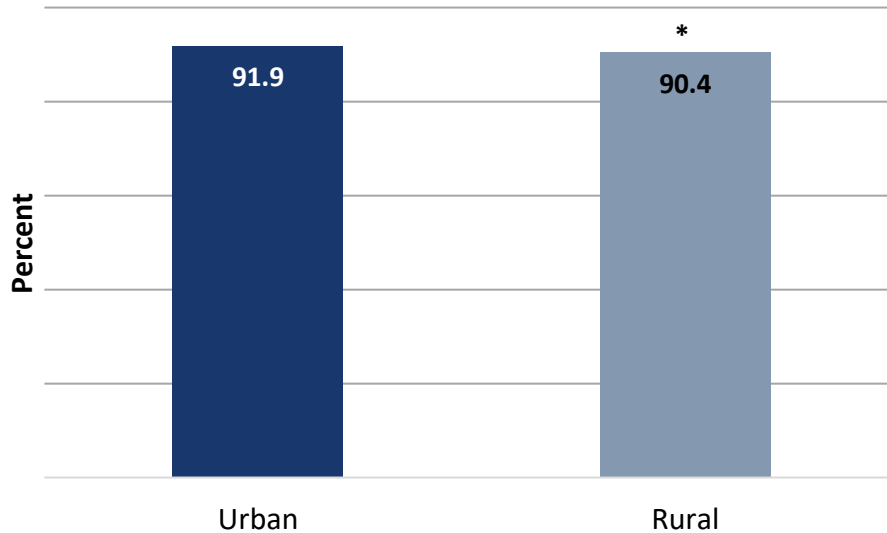
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] This measure is limited to those who had a prescription for one or more of the following drugs for six months or longer: angiotensin-converting enzyme (ACE) inhibitors, angiotensin II receptor blockers (ARBs), digoxin, diuretics, anticonvulsants, and statins. These drugs are known to have possibly harmful side effects if used long term.

Clinical Care: Avoiding Use of High-Risk Medications in the Elderly

Percentage of MA enrollees aged 65 years and older who were not prescribed a high-risk medication, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Long-term use of high-risk medication should be avoided in the elderly. In the 2017 data, it was observed that this standard of care was met less often for rural residents than for urban residents. The difference between rural and urban residents was less than 3 percentage points.

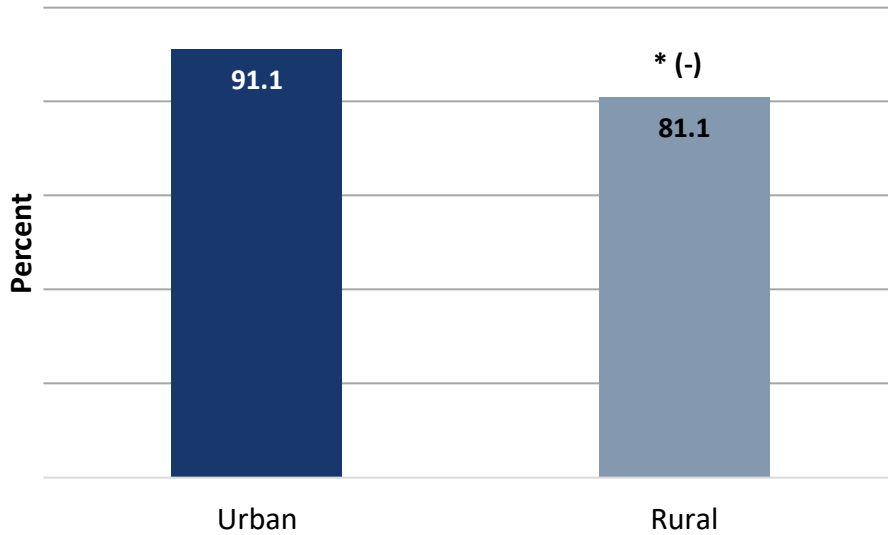
* Significantly different from the score for urban residents ($p < 0.05$).

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Clinical Care: Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with Chronic Renal Failure

Percentage of MA enrollees aged 65 years and older with chronic renal failure who were not dispensed a prescription for a potentially harmful medication,[†] by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Potentially harmful medication[†] should be avoided among elderly adults with chronic renal failure. In the 2017 data, it was observed that this standard of care was met less often for elderly rural residents with chronic renal failure than for elderly urban residents with chronic renal failure. The difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

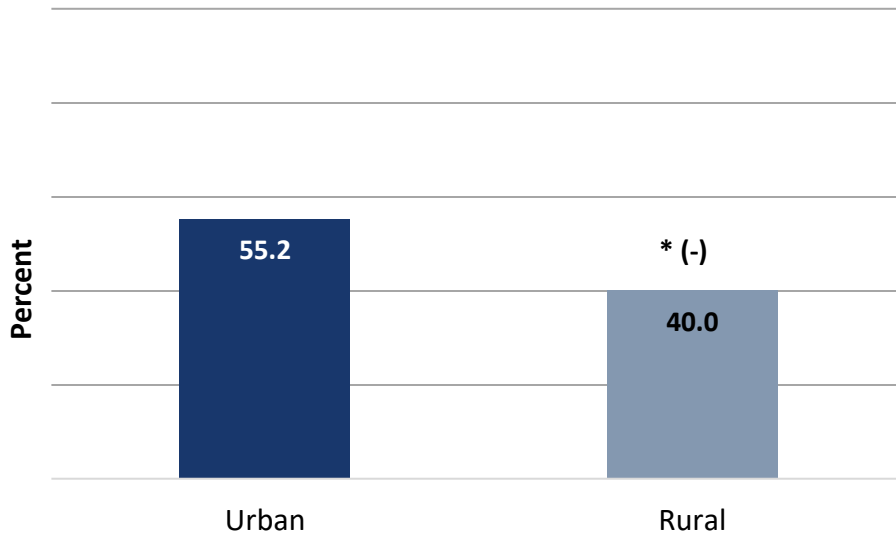
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] This includes cyclooxygenase-2 (COX-2) selective nonsteroidal anti-inflammatory drugs (NSAIDs) or nonaspirin NSAIDs.

Clinical Care: Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with Dementia

Percentage of MA enrollees aged 65 years and older with dementia who were not dispensed a prescription for a potentially harmful medication,[†] by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Potentially harmful medication[†] should be avoided among elderly adults with dementia. In the 2017 data, it was observed that this standard of care was met less often for elderly rural residents with dementia than for elderly urban residents with dementia. The difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

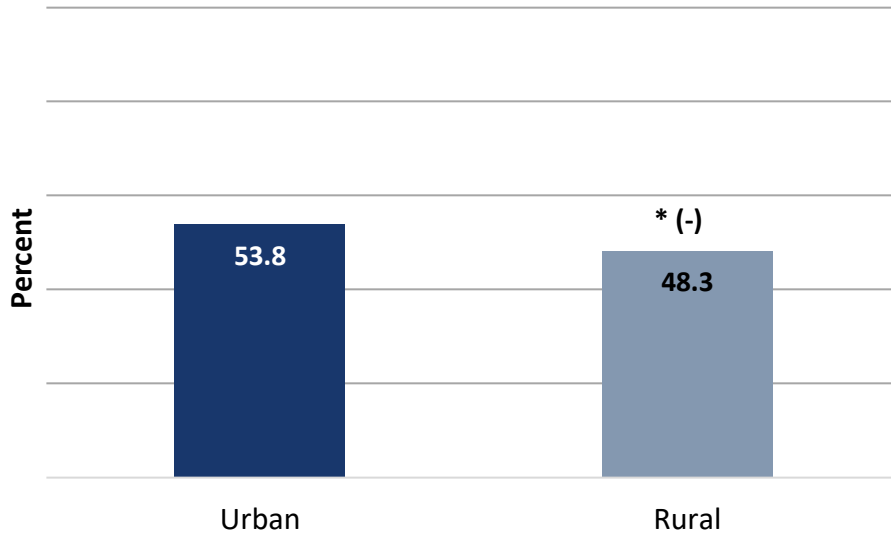
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] This includes antiemetics, antipsychotics, benzodiazepines, tricyclic antidepressants, H2 receptor antagonists, nonbenzodiazepine hypnotics, and anticholinergic agents.

Clinical Care: Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with a History of Falls

Percentage of MA enrollees aged 65 years and older with a history of falls who were not dispensed a prescription for a potentially harmful medication,[†] by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Potentially harmful medication[†] should be avoided among elderly adults with a history of falls. In the 2017 data, it was observed that this standard of care was met less often for elderly rural residents with a history of falls than for elderly urban residents with a history of falls. The difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

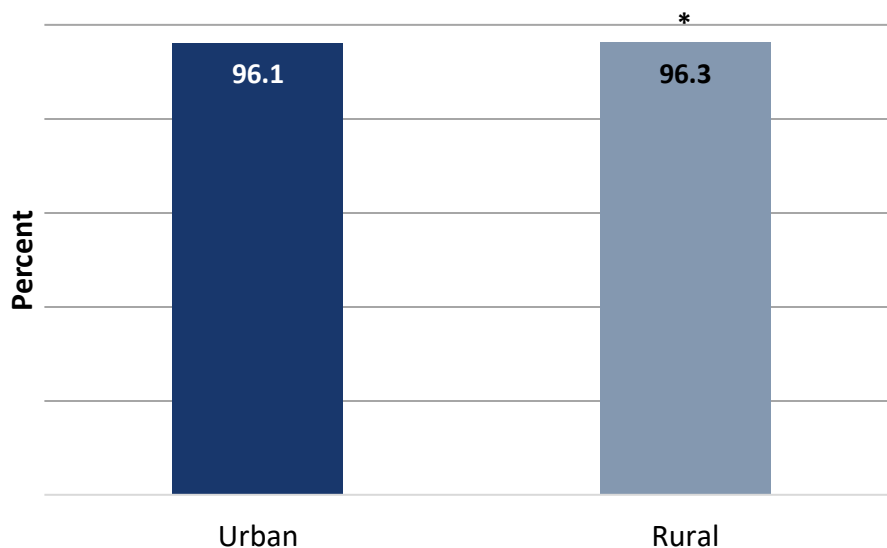
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] This includes anticonvulsants, nonbenzodiazepine hypnotics, selective serotonin reuptake inhibitors (SSRIs), antiemetics, antipsychotics, benzodiazepines, and tricyclic antidepressants.

Clinical Care: Older Adults' Access to Preventive/Ambulatory Services

Percentage of MA enrollees aged 65 years and older who had an ambulatory or preventive care visit, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents were more likely than urban residents to have had an ambulatory or preventive care visit. The difference between rural and urban residents was less than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

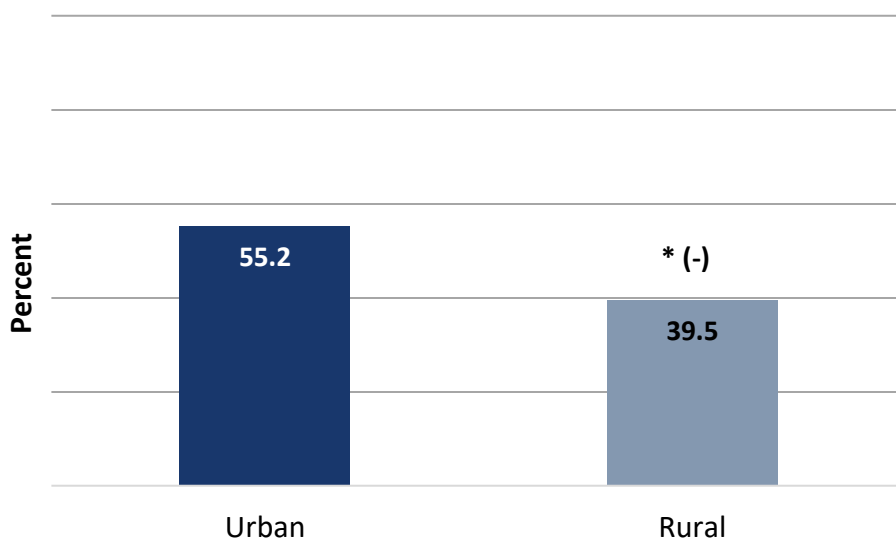
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Medication Reconciliation After Hospital Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility and had their medications reconciled within 30 days, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents who were discharged from an inpatient facility were less likely than urban residents who were discharged from an inpatient facility to have had their medications reconciled within 30 days. The difference between rural and urban residents was greater than 3 percentage points.

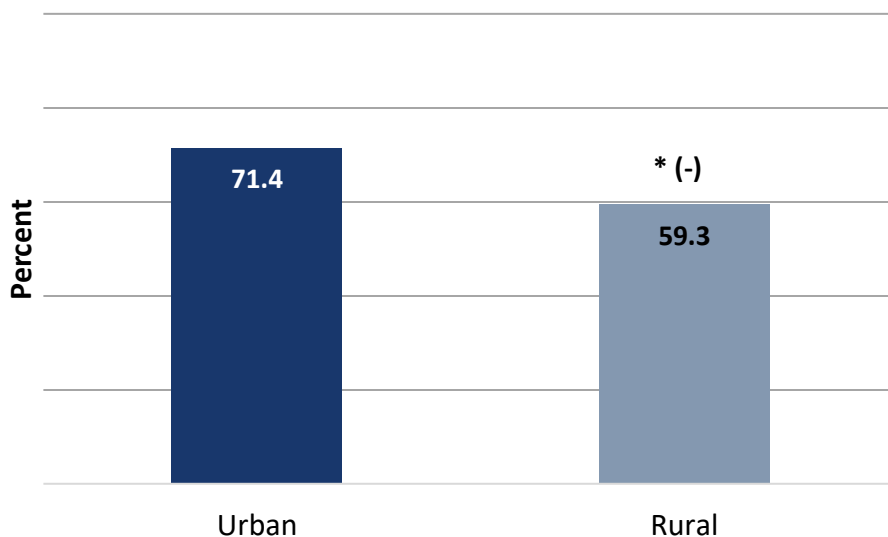
* Significantly different from the score for urban residents ($p < 0.05$).

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- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Antidepressant Medication Management— Acute Phase Treatment

Percentage of MA enrollees aged 18 years and older who were diagnosed with a new episode of major depression and remained on antidepressant medication for at least 84 days, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents who were diagnosed with a new episode of major depression were less likely than urban residents who were diagnosed with a new episode of major depression to have remained on antidepressant medication for at least 84 days. The difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

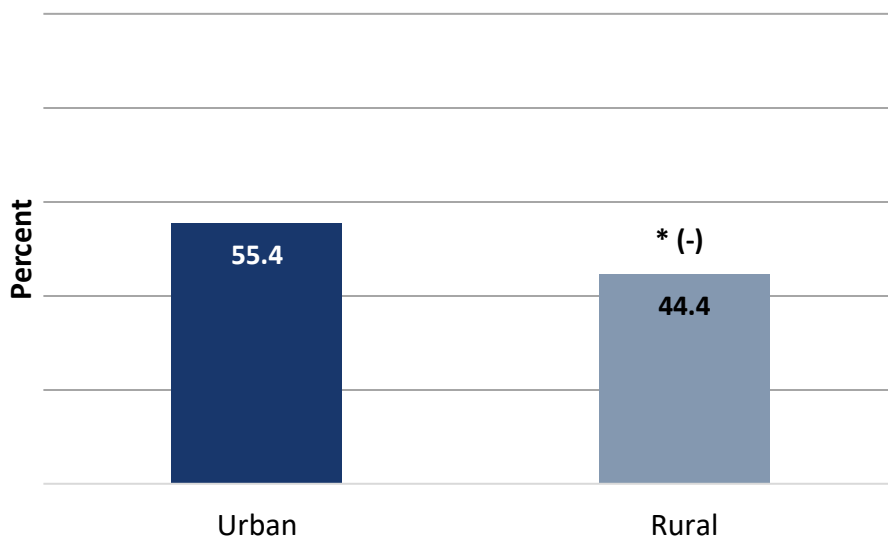
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Antidepressant Medication Management— Continuation Phase Treatment

Percentage of MA enrollees aged 18 years and older with a new diagnosis of major depression who were newly treated with antidepressant medication and remained on antidepressant medication for at least 180 days, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents who were diagnosed with a new episode of major depression were less likely than urban residents who were diagnosed with a new episode of major depression to have been treated with and to have remained on antidepressant medication for at least 180 days. The difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

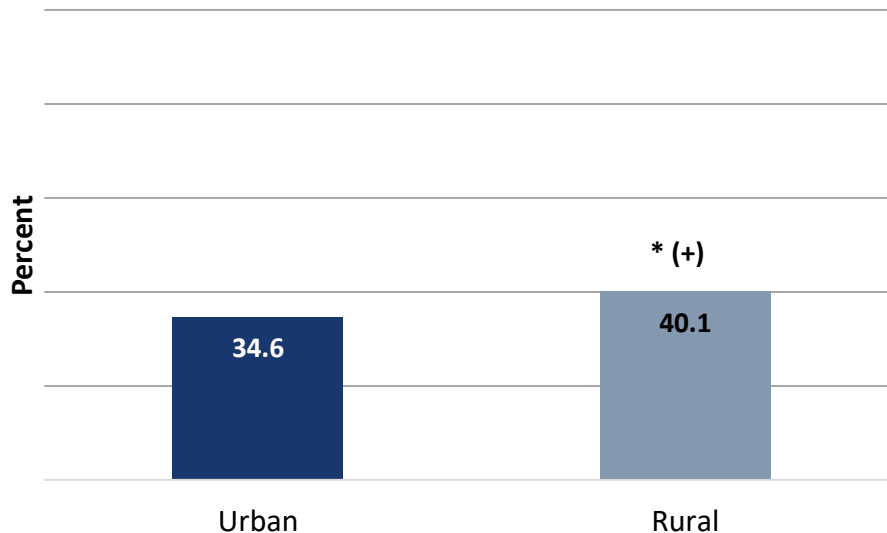
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Follow-Up Visit After Hospital Stay for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older† who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of discharge, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents who were hospitalized for a mental health disorder were more likely than urban residents who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of being discharged. The difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

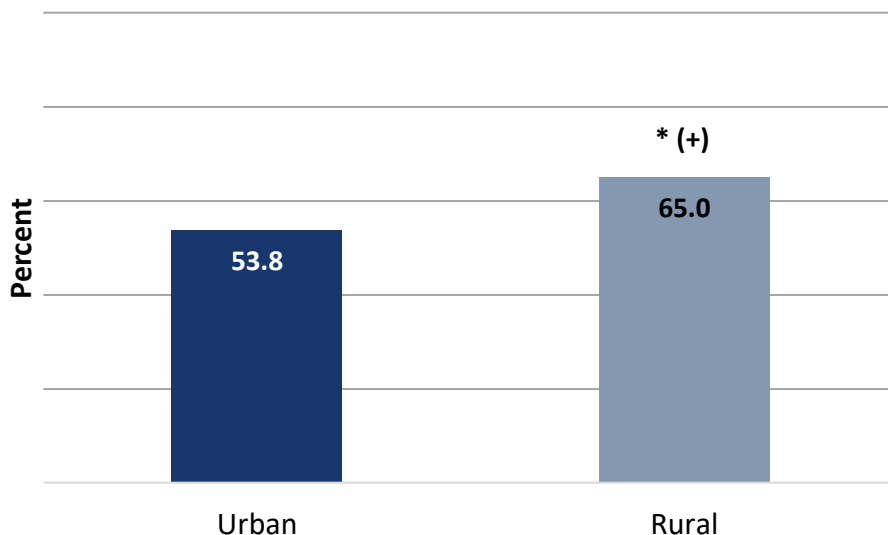
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

† Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.

Clinical Care: Follow-Up Visit After Hospital Stay for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older[†] who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of discharge, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents who were hospitalized for a mental health disorder were more likely than urban residents who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of discharge. The difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

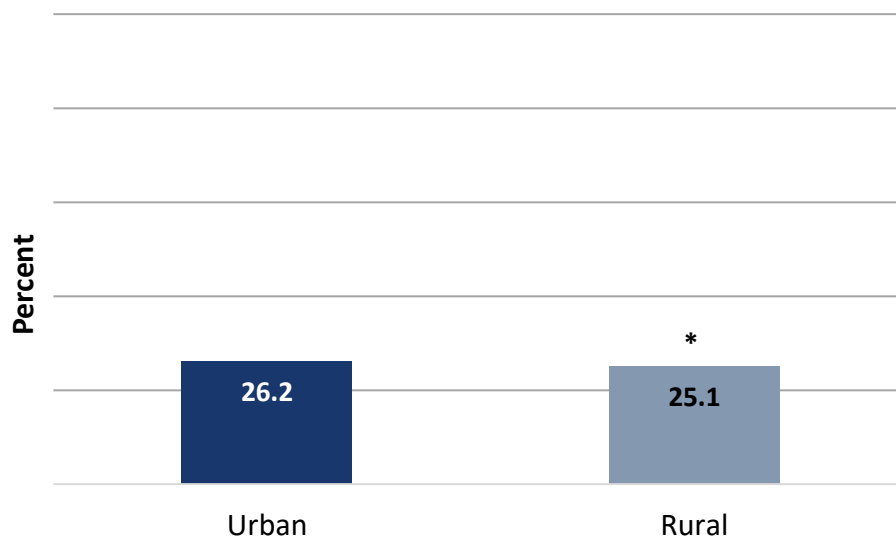
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.

Clinical Care: Initiation of Alcohol or Other Drug Treatment

Percentage of MA enrollees aged 18 years and older[†] with a new episode of alcohol or other drug (AOD) dependence who initiate[‡] treatment within 14 days of the diagnosis, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Rural residents with a new episode of AOD dependence were less likely than urban residents with a new episode of AOD dependence to have initiated treatment within 14 days of the diagnosis. The difference between rural and urban residents was less than 3 percentage points.

* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

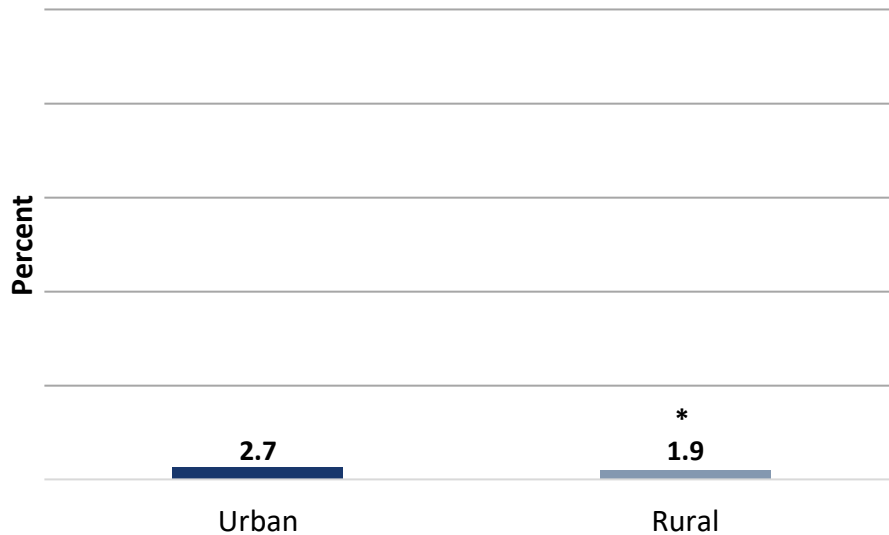
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

[‡] Initiation may occur through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization.

Clinical Care: Engagement of Alcohol or Other Drug Treatment

Percentage of MA enrollees aged 18 years and older[†] with a new episode of alcohol or other drug (AOD) dependence who initiated treatment and who had two or more additional services after a diagnosis of AOD within 30 days of the initiation visit, by rurality, 2017



SOURCE: Clinical quality data collected in 2017 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

Disparities

- Overall performance on this measure was poor: Less than 3 percent of those who initiated treatment for AOD dependence received two or more additional services within 30 days of their initial visit for treatment. Rural residents with a new episode of AOD dependence who initiated treatment were less likely than urban residents with a new episode of AOD dependence who initiated treatment to have had two or more additional services within 30 days of their initial visit for treatment. The difference between rural and urban residents was less than 3 percentage points.

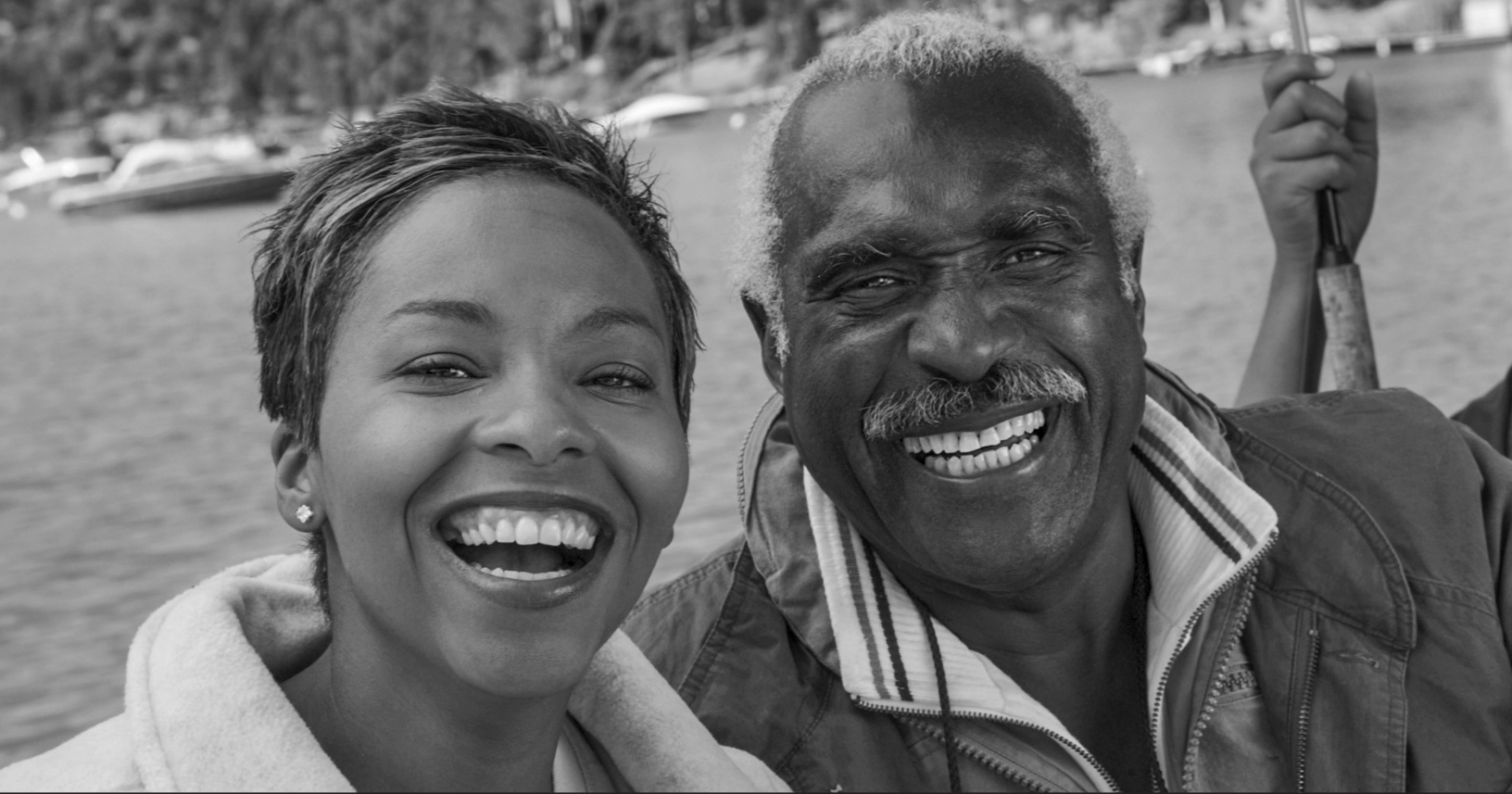
* Significantly different from the score for urban residents ($p < 0.05$).

For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

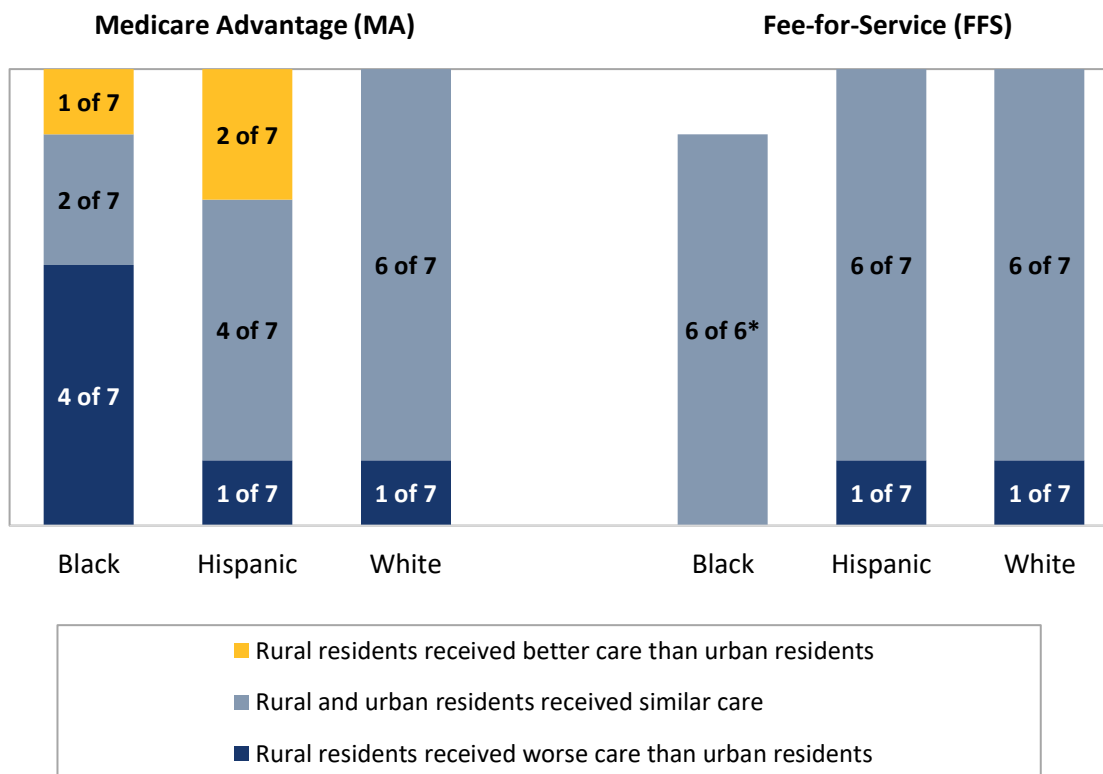


Section 2: Rural-Urban Disparities in Health Care in Medicare by Racial/Ethnic Group



Disparities in Care: All Patient Experience Measures

Number of patient experience measures for which rural Black, Hispanic, and White beneficiaries reported experiences that were worse than, similar to, or better than the experiences reported by urban Black, Hispanic, and White beneficiaries in 2017



SOURCE: This chart summarizes data from all MA and FFS beneficiaries nationwide who participated in the 2017 Medicare CAHPS survey.

NOTES: Blacks and Whites are non-Hispanic. Hispanic ethnicity includes all races.

* For one patient experience measure, there was not enough data from rural FFS Blacks to make a rural-urban comparison.

Within each racial or ethnic group, the relative difference between rural and urban residents is used to assess disparities.

- **Better** = Rural residents received better care than urban residents. Differences are statistically significant ($p < 0.05$), are equal to or larger than 3 points[†] on a 0–100 scale, and favor rural residents.
- **Similar** = Rural and urban residents received care of similar quality. Differences are less than 3 points on a 0–100 scale and/or not statistically significant.
- **Worse** = Rural residents received worse care than urban residents. Differences are statistically significant, are equal to or larger than 3 points on a 0–100 scale, and favor urban residents.

[†] A difference that is considered to be of moderate magnitude (Paddison et al., 2013).

Black MA beneficiaries residing in rural areas received worse care than Black MA beneficiaries residing in urban areas

- Getting appointments and care quickly
- Customer service
- Doctors who communicate well
- Care coordination

Black MA beneficiaries residing in rural areas received better care than Black MA beneficiaries residing in urban areas

- Annual flu vaccine

Hispanic MA beneficiaries residing in rural areas received worse care than Hispanic MA beneficiaries residing in urban areas

- Annual flu vaccine

Hispanic FFS beneficiaries residing in rural areas received worse care than Hispanic FFS beneficiaries residing in urban areas

- Customer service

Hispanic MA beneficiaries residing in rural areas received better care than Hispanic MA beneficiaries residing in urban areas

- Getting needed care
- Doctors who communicate well

White MA beneficiaries residing in rural areas received worse care than White MA beneficiaries residing in urban areas

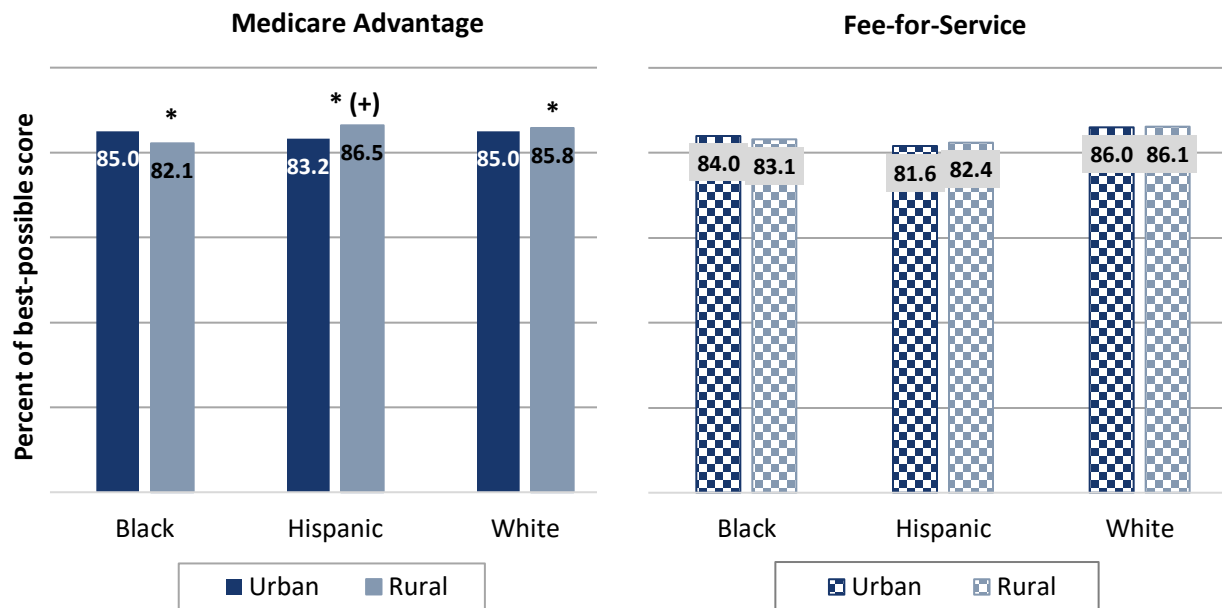
- Annual flu vaccine

White FFS beneficiaries residing in rural areas received worse care than White FFS beneficiaries residing in urban areas

- Annual flu vaccine

Patient Experience: Getting Needed Care

Percentage of the best possible score (on a 0–100 scale) earned on how easy it is for patients to get needed care,[†] by rurality within racial and ethnic group, 2017



SOURCE: Data from the Medicare CAHPS survey, 2017. Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races.

Disparities

- Black MA beneficiaries residing in rural areas reported worse^{††} experiences getting needed care than Black MA beneficiaries residing in urban areas. The difference between rural and urban Black MA beneficiaries was less than 3 points on a 0–100 scale. Black FFS beneficiaries residing in rural areas reported experiences getting needed care that were similar to the experiences reported by Black FFS beneficiaries residing in urban areas.
- Hispanic MA beneficiaries residing in rural areas reported better experiences getting needed care than Hispanic MA beneficiaries residing in urban areas. The difference between rural and urban Hispanic MA beneficiaries was greater than 3 points on a 0–100 scale. Hispanic FFS beneficiaries residing in rural areas reported experiences getting needed care that were similar to the experiences reported by Hispanic FFS beneficiaries residing in urban areas.
- White MA beneficiaries residing in rural areas reported better experiences getting needed care than White MA beneficiaries residing in urban areas. The difference between rural and urban White MA beneficiaries was less than 3 points on a 0–100 scale. White FFS beneficiaries residing in rural areas reported experiences getting needed care that were similar to the experiences reported by White FFS beneficiaries residing in urban areas.

* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

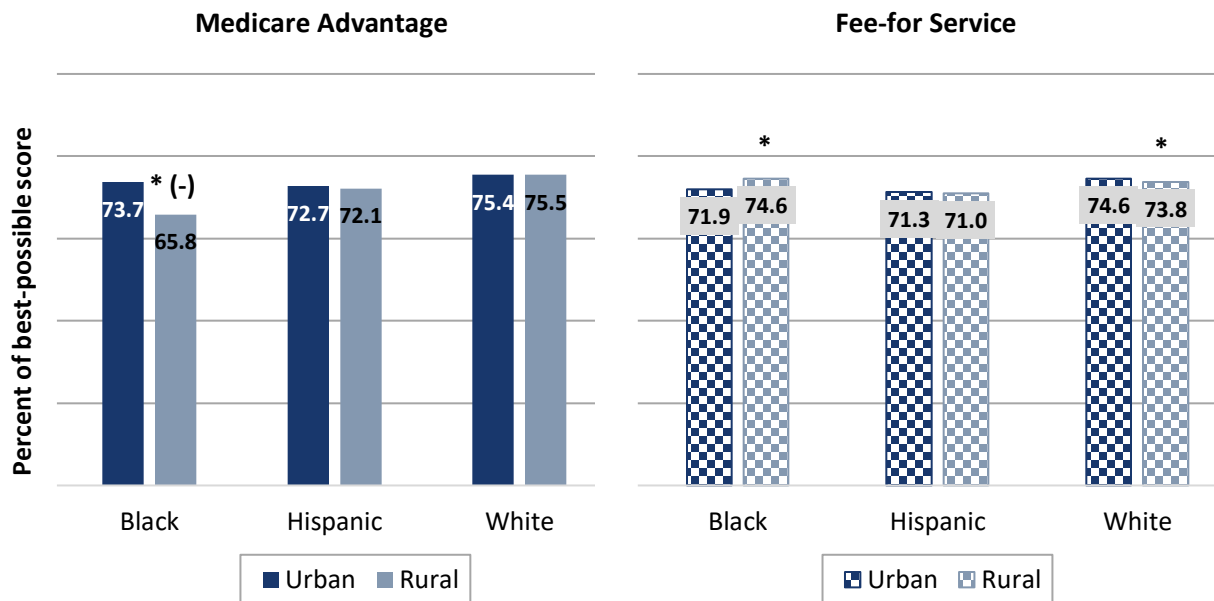
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

† This includes how often in the last 6 months patients got appointments with specialists as soon as they needed them and how easy it was to get needed care, tests, or treatment.

†† Unlike on pages 60-61, we use the terms “better” or “worse” to describe all statistically significant differences on individual patient experience measures. We note in the “Disparities” section for each of these measures where differences are greater or less than 3 points.

Patient Experience: Getting Appointments and Care Quickly

Percentage of the best possible score (on a 0–100 scale) earned on how quickly patients get appointments and care,[†] by rurality within racial and ethnic group, 2017



SOURCE: Data from the Medicare CAHPS survey, 2017. Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races.

Disparities

- Black MA beneficiaries residing in rural areas reported worse experiences getting appointments and care quickly than Black MA beneficiaries residing in urban areas. The difference between rural and urban Black MA beneficiaries was greater than 3 points on a 0–100 scale. Black FFS beneficiaries residing in rural areas reported better experiences getting appointments and care quickly than Black FFS beneficiaries residing in urban areas. The difference between rural and urban Black FFS beneficiaries was less than 3 points on a 0–100 scale.
- Hispanics residing in rural areas reported experiences getting appointments and care that were similar to the experiences reported by Hispanics residing in urban areas. This was the case for both MA and FFS beneficiaries.
- White MA beneficiaries residing in rural areas reported experiences getting appointments and care that were similar to the experiences reported by White MA beneficiaries residing in urban areas. White FFS beneficiaries residing in rural areas reported worse experiences getting appointments and care quickly than White FFS beneficiaries residing in urban areas. The difference between rural and urban White FFS beneficiaries was less than 3 points on a 0–100 scale.

* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

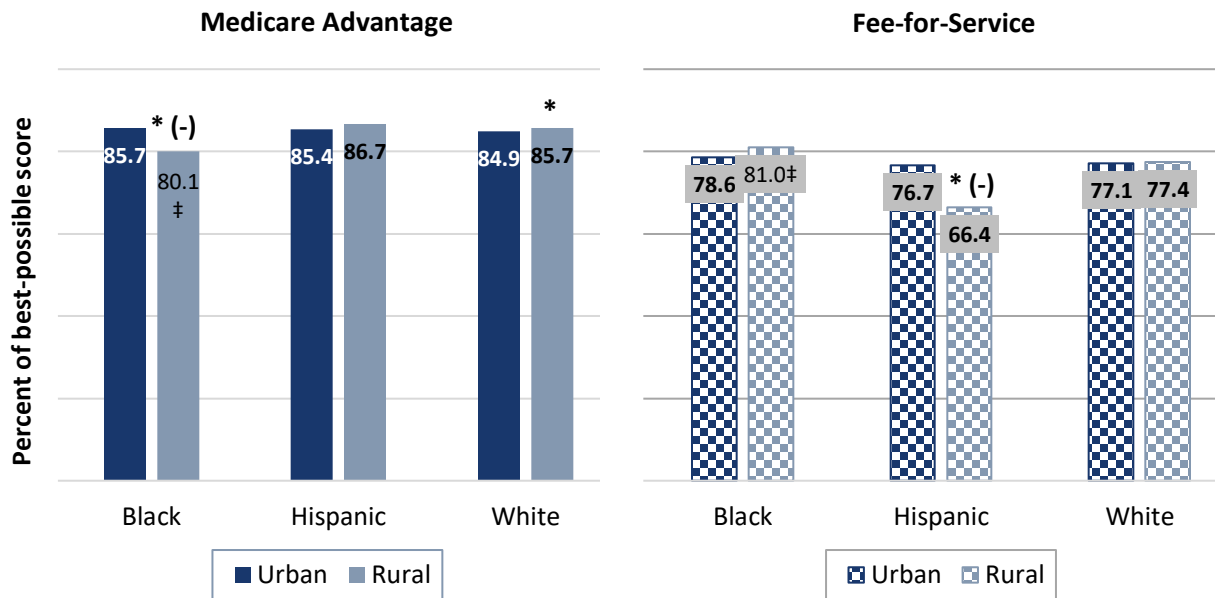
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

† This includes how often in the last 6 months patients got care that was needed right away, as well as how easy it was to get appointments for checkups and routine care.

Patient Experience: Customer Service

Percentage of the best possible score (on a 0–100 scale) earned on three aspects of customer service,[†] by rurality within racial and ethnic group, 2017



SOURCE: Data from the Medicare CAHPS survey, 2017.

NOTES: Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races.

‡ This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Black MA beneficiaries residing in rural areas reported worse experiences with customer service than Black MA beneficiaries residing in urban areas. The difference between rural and urban Black MA beneficiaries was greater than 3 points on a 0–100 scale. Black FFS beneficiaries residing in rural areas reported experiences with customer service that were similar to the experiences reported by Black FFS beneficiaries residing in urban areas.
- Hispanic MA beneficiaries residing in rural areas reported experiences with customer service that were similar to the experiences reported by Hispanic MA beneficiaries residing in urban areas. Hispanic FFS beneficiaries residing in rural areas reported worse experiences with customer service than Hispanic FFS beneficiaries residing in urban areas. The difference between rural and urban Hispanic FFS beneficiaries was greater than 3 points on a 0–100 scale.
- White MA beneficiaries residing in rural areas reported better experiences with customer service than White MA beneficiaries residing in urban areas. The difference between rural and urban White MA beneficiaries was less than 3 points on a 0–100 scale. White FFS beneficiaries residing in rural areas reported experiences with customer service that were similar to the experiences reported by White FFS beneficiaries residing in urban areas.

* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

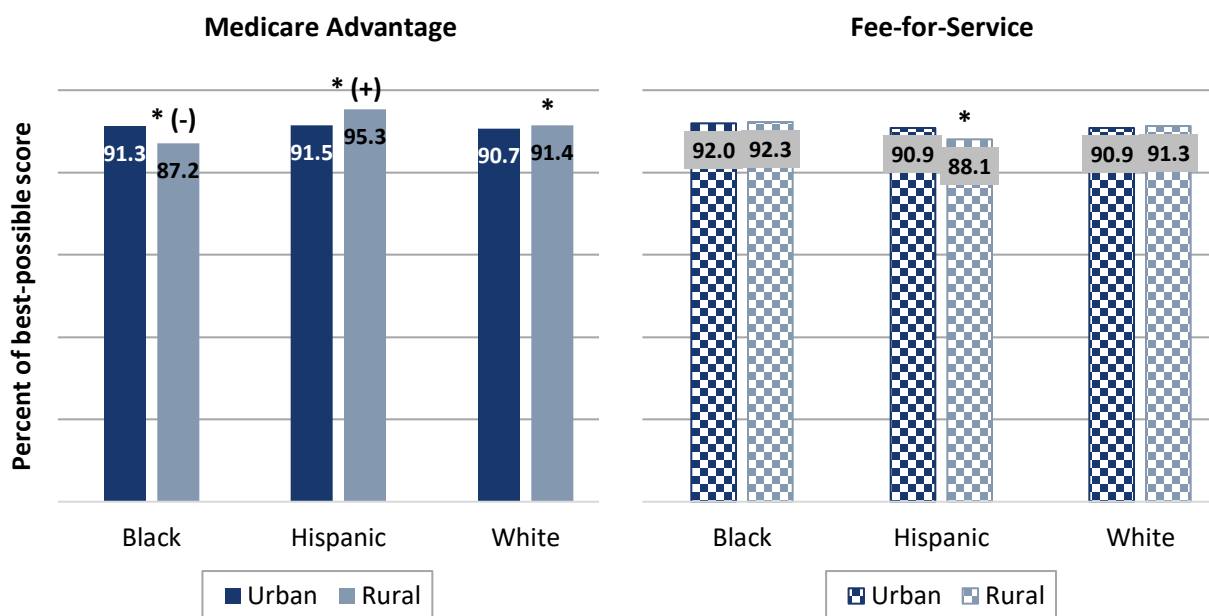
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

† This includes how often in the last 6 months health plan customer service staff provided the information or help that beneficiaries needed, how often beneficiaries were treated with courtesy and respect, and how often forms from the health plan were easy to fill out.

Patient Experience: Doctors Who Communicate Well

Percentage of the best possible score (on a 0–100 scale) earned on how well doctors communicate with patients,[†] by rurality within racial and ethnic group, 2017



SOURCE: Data from the Medicare CAHPS survey, 2017.

NOTE: Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races.

Disparities

- Black MA beneficiaries residing in rural areas reported worse doctor communication than Black MA beneficiaries residing in urban areas. The difference between rural and urban Black MA beneficiaries was greater than 3 points on a 0–100 scale. Black FFS beneficiaries residing in rural areas reported experiences with doctor communication that were similar to the experiences reported by Black FFS beneficiaries residing in urban areas.
- Hispanic MA beneficiaries residing in rural areas reported better doctor communication than Hispanic MA beneficiaries residing in urban areas. The difference between rural and urban Hispanic MA beneficiaries was greater than 3 points on a 0–100 scale. Hispanic FFS beneficiaries residing in rural areas reported worse doctor communication than Hispanic FFS beneficiaries residing in urban areas. The difference between rural and urban Hispanic FFS beneficiaries was less than 3 points on a 0–100 scale.
- White MA beneficiaries residing in rural areas reported better doctor communication than White MA beneficiaries residing in urban areas. The difference between rural and urban White MA beneficiaries was less than 3 points on a 0–100 scale. White FFS beneficiaries residing in rural areas reported experiences with doctor communication that were similar to the experiences reported by White FFS beneficiaries residing in urban areas.

* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

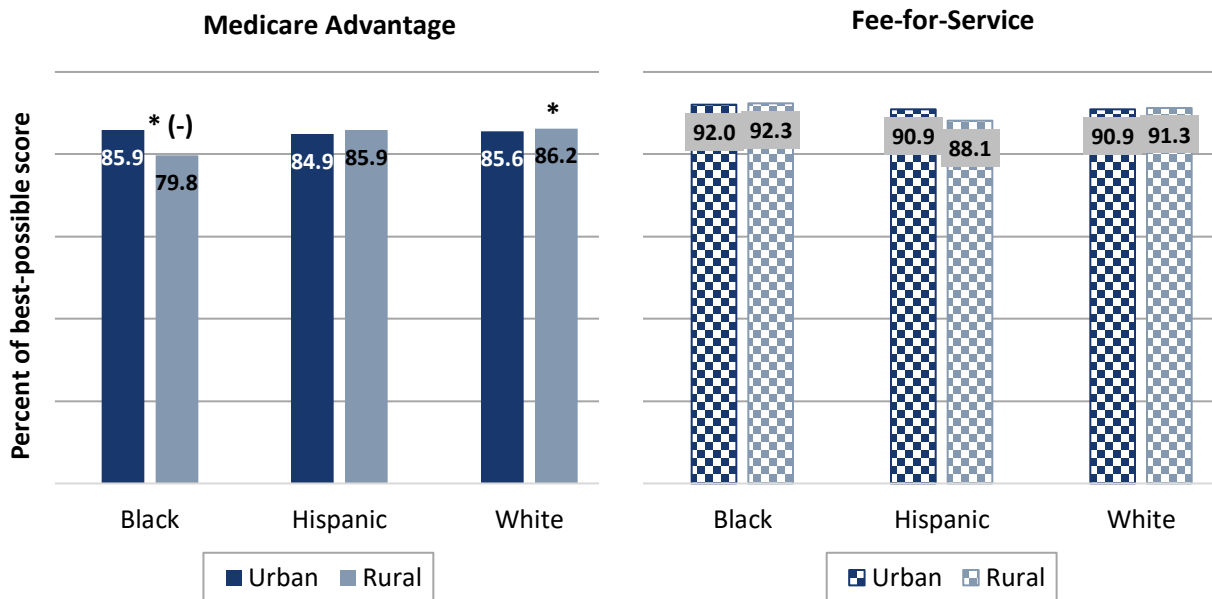
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

† This includes how often in the last 6 months doctors explained things in a way that was easy to understand, listened carefully, showed respect for what patients had to say, and spent time with patients.

Patient Experience: Care Coordination

Percentage of the best possible score (on a 0–100 scale) earned on how well patient care was coordinated,[†] by rurality within racial and ethnic group, 2017



SOURCE: Data from the Medicare CAHPS survey, 2017.

NOTE: Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races.

Disparities

- Black MA beneficiaries residing in rural areas reported worse experiences with care coordination than Black MA beneficiaries residing in urban areas. The difference between rural and urban Black MA beneficiaries was greater than 3 points on a 0–100 scale. Black FFS beneficiaries residing in rural areas reported experiences with care coordination that were similar to the experiences reported by Black FFS beneficiaries residing in urban areas.
- Hispanics residing in rural areas reported experiences with care coordination that were similar to the experiences reported by Hispanics residing in urban areas. This was the case for both MA and FFS beneficiaries.
- White MA beneficiaries residing in rural areas reported better experiences with care coordination than White MA beneficiaries residing in urban areas. The difference between rural and urban White MA beneficiaries was less than 3 points on a 0–100 scale. White FFS beneficiaries residing in rural areas reported experiences with care coordination that were similar to the experiences reported by White FFS beneficiaries residing in urban areas.

* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

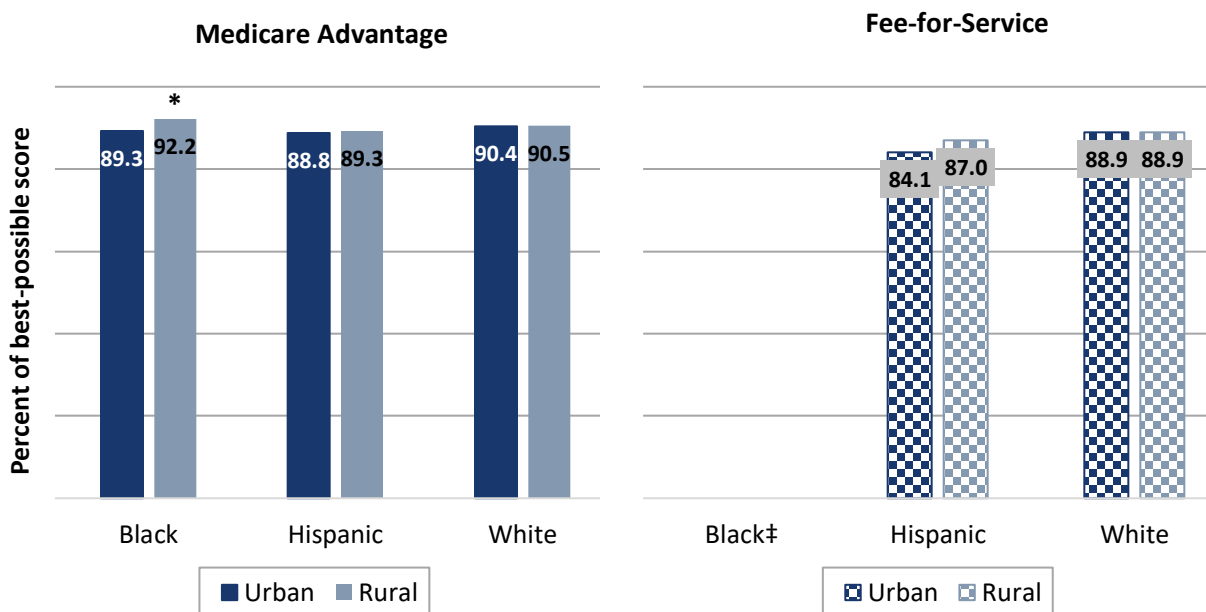
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

† This includes how often in the last 6 months doctors had medical records and other information about patients' care at patients' scheduled appointments and how quickly patients received their test results.

Patient Experience: Getting Needed Prescription Drugs

Percentage of the best possible score (on a 0–100 scale) earned on how easy it is for beneficiaries to get the prescription drugs they need using their plans,[†] by rurality within racial and ethnic group, 2017



SOURCE: Data from the Medicare CAHPS survey, 2017.

NOTES: Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races.

[‡]There were not enough data from Black FFS beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Black MA beneficiaries residing in rural areas reported better experiences getting needed prescription drugs than Black MA beneficiaries residing in urban areas. The difference between rural and urban Black MA beneficiaries was less than 3 points on a 0–100 scale. There was not enough data from rural Black FFS beneficiaries to make a rural-urban comparison on this measure.
- Hispanics residing in rural areas reported experiences getting needed prescription drugs that were similar to the experiences reported by Hispanics residing in urban areas. This was the case for both MA and FFS beneficiaries.
- Whites residing in rural areas reported experiences getting needed prescription drugs that were similar to the experiences reported by Whites residing in urban areas. This was the case for both MA and FFS beneficiaries.

* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ($p < 0.05$).

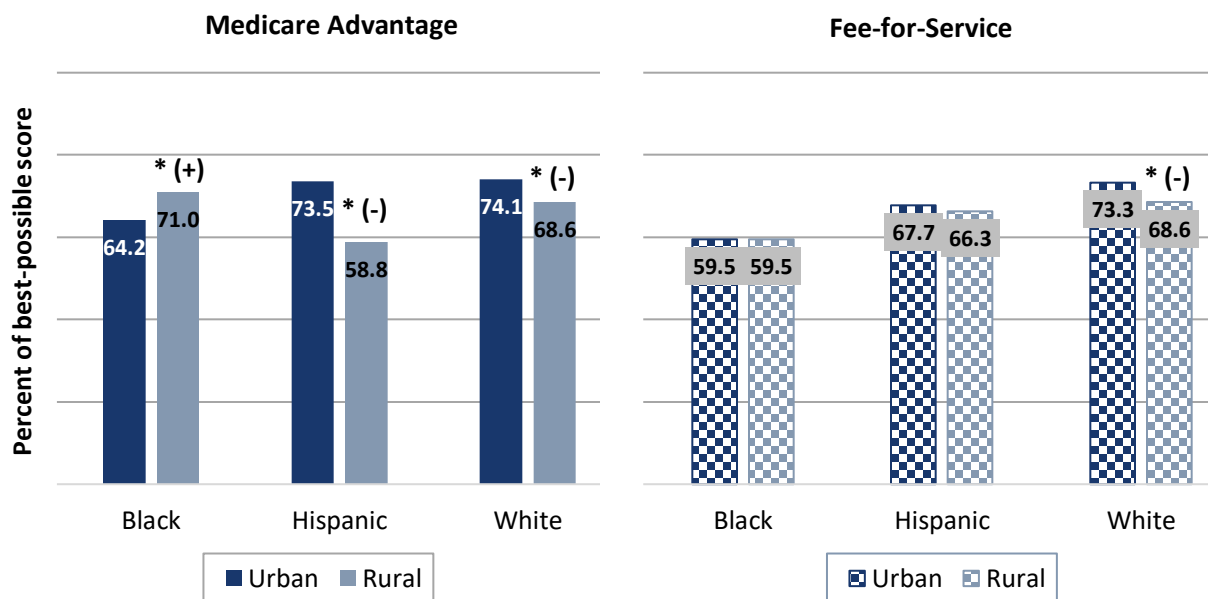
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

† This includes how often in the last 6 months it was easy to use the plan to get prescribed medications and how easy it was to fill prescriptions at a pharmacy or by mail.

Patient Experience: Annual Flu Vaccine

Percentage of Medicare enrollees who got a vaccine (flu shot), by rurality within racial and ethnic group, 2017



SOURCE: Data from the Medicare CAHPS survey, 2017.

NOTE: Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races.

Disparities

- Black MA beneficiaries residing in rural areas were more likely than Black MA beneficiaries residing in urban areas to have received the flu vaccine. The difference between rural and urban Blacks was greater than 3 percentage points. Black FFS beneficiaries residing in rural areas were as likely to have received the flu vaccine as Black FFS beneficiaries residing in urban areas.
- Hispanic MA beneficiaries residing in rural areas were less likely than Hispanic MA beneficiaries residing in urban areas to have received the flu vaccine. The difference between rural and urban Hispanic MA beneficiaries was greater than 3 percentage points. Hispanic FFS beneficiaries residing in rural areas were as likely to have received the flu vaccine as Hispanic FFS beneficiaries residing in urban areas.
- Whites residing in rural areas were less likely than Whites residing in urban areas to have received the flu vaccine. The difference between rural and urban Whites was greater than 3 percentage points. This was the case for both MA and FFS beneficiaries.

* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ($p < 0.05$).

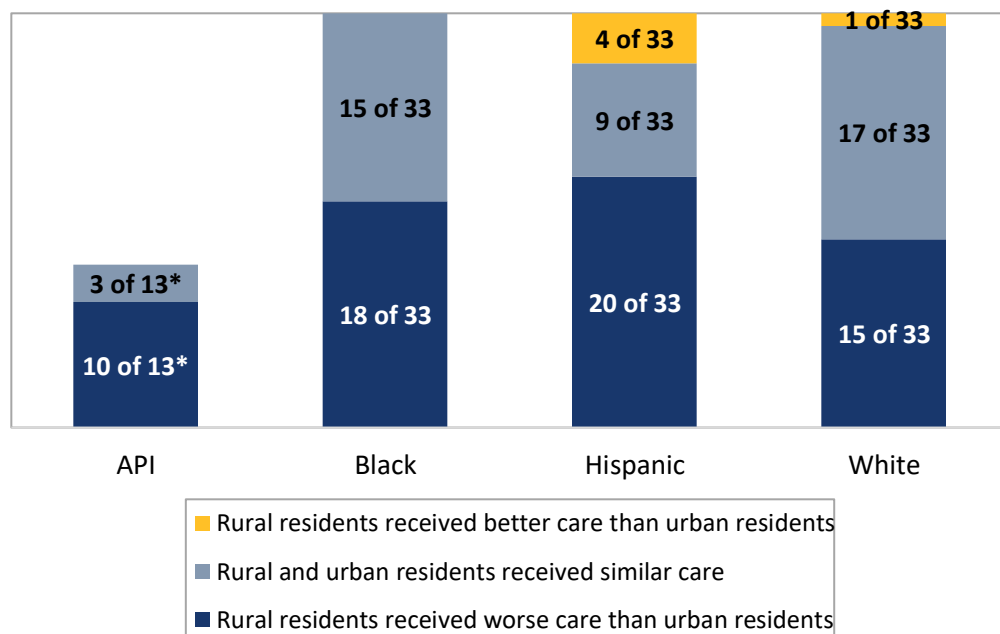
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Disparities in Care: All Clinical Care Measures

Number of clinical care measures (out of 33) for which rural Asian and Pacific Islander (API), Black, Hispanic, and White MA beneficiaries experienced care that was worse than, similar to, or better than the care experienced by urban API, Black, Hispanic, and White MA beneficiaries in 2017



SOURCE: This chart summarizes clinical quality (HEDIS) data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races.

* There were only enough data from rural API beneficiaries to make rural-urban comparisons on 13 of the 33 clinical care measures.

Within each racial or ethnic group, the relative difference between rural and urban residents is used to assess disparities.

- **Better** = Rural residents received better care than urban residents. Differences are statistically significant ($p < 0.05$), are equal to or larger than 3 points[†] on a 0–100 scale, and favor rural residents.
- **Similar** = Rural and urban residents received care of similar quality. Differences are less than 3 points on a 0–100 scale and/or not statistically significant.
- **Worse** = Rural residents received worse care than urban residents. Differences are statistically significant, are equal to or larger than 3 points on a 0–100 scale, and favor urban residents.

[†] A difference that is considered to be of moderate magnitude (Paddison et al., 2013).

Rural Asians and Pacific Islanders received worse care than urban Asians and Pacific Islanders

- Breast cancer screening
- Statin use in patients with diabetes
- Medication adherence for diabetes—statins
- Statin use in patients with cardiovascular disease
- Medication adherence for cardiovascular disease—statins
- Avoiding use of high-risk medication in the elderly
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment

Rural Blacks received worse care than urban Blacks

- Colorectal cancer screening
- Diabetes care—eye exam
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Adult body mass index assessment
- Continuous beta-blocker treatment after a heart attack
- Asthma medication ratio in older adults
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of systemic corticosteroids
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Osteoporosis management in women who had a fracture
- Avoiding use of high-risk medication in the elderly
- Avoiding potentially harmful drug-disease interactions in elderly patients with chronic renal failure
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls
- Medication reconciliation after hospital discharge
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment

Rural Hispanics received worse care than urban Hispanics

- Colorectal cancer screening
- Diabetes care—blood sugar testing
- Diabetes care—eye exam
- Diabetes care—blood sugar controlled
- Statin use in patients with diabetes
- Medication adherence for diabetes—statins
- Adult body mass index assessment
- Statin use in patients with cardiovascular disease
- Medication adherence for cardiovascular disease—statins
- Continuous beta-blocker treatment after a heart attack
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of systemic corticosteroids
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Avoiding potentially harmful drug-disease interactions in elderly patients with chronic renal failure
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls
- Medication reconciliation after hospital discharge
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Initiation of alcohol or other drug treatments

Rural Hispanics received better care than urban Hispanics

- Controlling high blood pressure
- Asthma medication ratio in older adults
- Follow-up after hospital stay for mental illness (within 7 days of discharge)
- Follow-up after hospital stay for mental illness (within 30 days of discharge)

Rural Whites received worse care than urban Whites

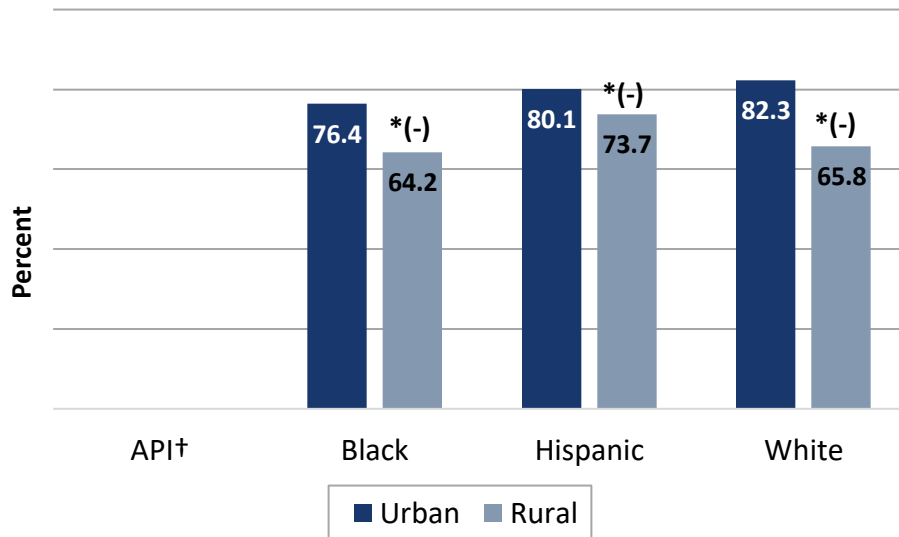
- Colorectal cancer screening
- Breast cancer screening
- Diabetes care—eye exam
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Statin use in patients with diabetes
- Adult body mass index assessment
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Osteoporosis management in women who had a fracture
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls
- Medication reconciliation after hospital discharge
- Antidepressant medication management—acute phase treatment
- Follow-up after hospital stay for mental illness (within 7 days of discharge)

Rural Whites received better care than urban Whites

- Initiation of alcohol or other drug treatment

Clinical Care: Colorectal Cancer Screening

Percentage of MA enrollees aged 50 to 75 years who had appropriate screening for colorectal cancer, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for fee-for-service Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Among Black, Hispanic, and White beneficiaries, rural residents were less likely than urban residents to have been appropriately screened for colorectal cancer. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

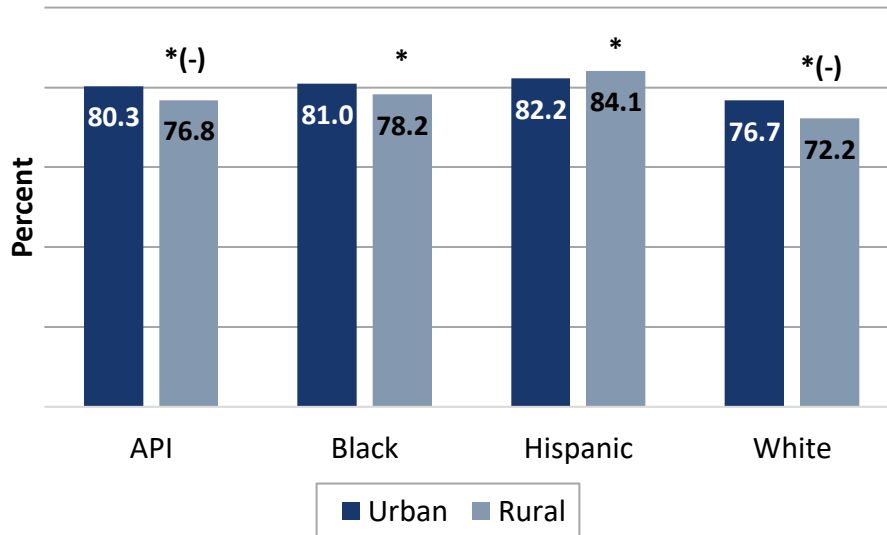
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Breast Cancer Screening

Percentage of MA enrollees (women) aged 50 to 74 years who had appropriate screening for breast cancer, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

Disparities

- Among API, Black, and White women, rural residents were less likely than urban residents to have been appropriately screened for breast cancer. The difference between rural and urban API women was greater than 3 percentage points, as was the difference between rural and urban White women. The difference between rural and urban Black women was less than 3 percentage points.
- Rural Hispanic women were more likely than urban Hispanic women to have been appropriately screened for breast cancer. The difference between rural and urban Hispanic women was less than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

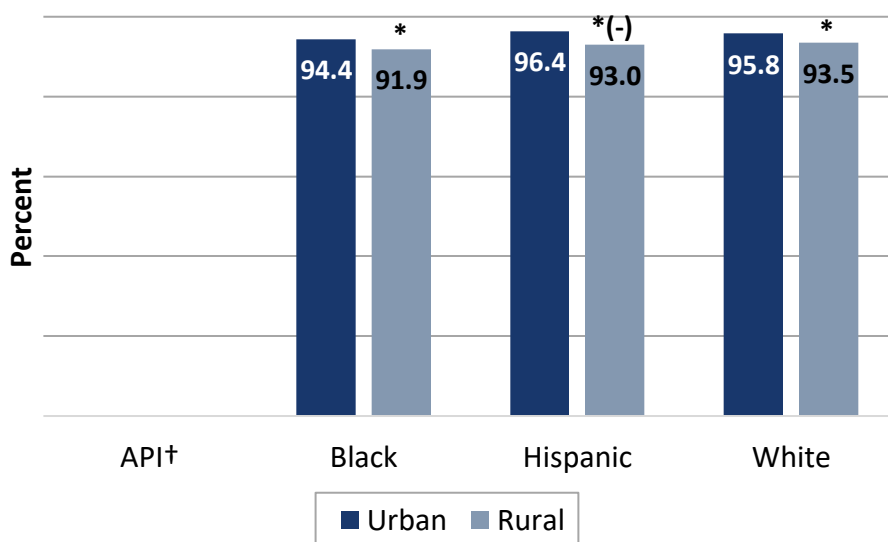
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Diabetes Care—Blood Sugar Testing

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had one or more HbA1c tests in the past year, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Among Black, Hispanic, and White beneficiaries, rural residents with diabetes were less likely than urban residents with diabetes to have had their blood sugar tested at least once in the past year. The difference between rural and urban Blacks was less than 3 percentage points, as was the difference between rural and urban Whites. The difference between rural and urban Hispanics was greater than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

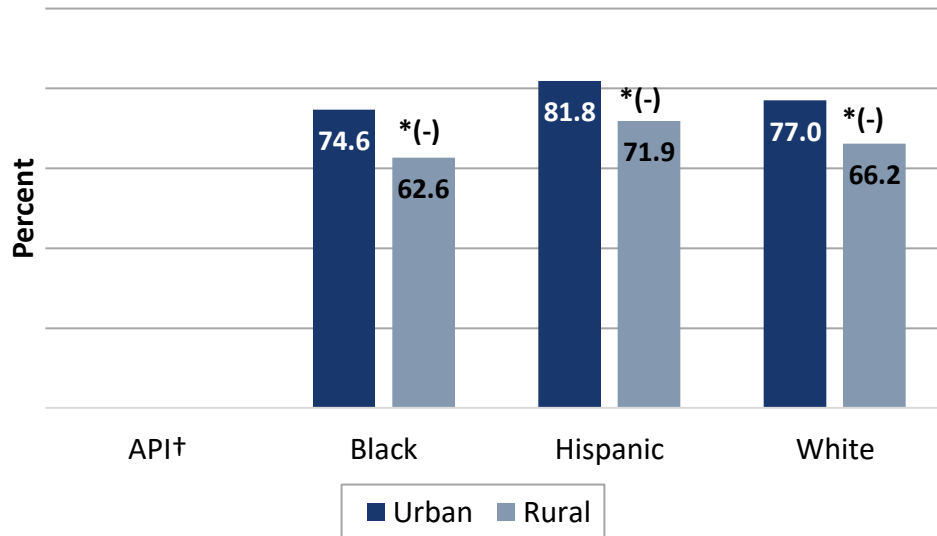
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Diabetes Care—Eye Exam

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had an eye exam (retinal) in the past year, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Among Black, Hispanic, and White beneficiaries, rural residents with diabetes were less likely than urban residents with diabetes to have had an eye exam in the past year. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

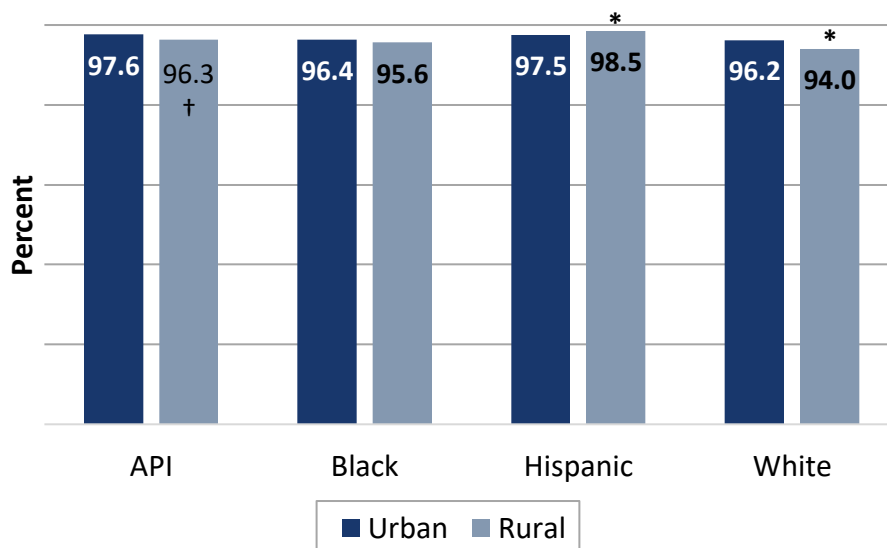
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Diabetes Care—Kidney Disease Monitoring

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had medical attention for nephropathy in the past year, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Among API and Black beneficiaries, rural residents with diabetes were about as likely as urban residents with diabetes to have had medical attention for nephropathy in the past year.
- Rural Hispanics with diabetes were more likely than urban Hispanics with diabetes to have had medical attention for nephropathy in the past year. The difference between rural and urban Hispanics was less than 3 percentage points.
- Rural Whites with diabetes were less likely than urban Whites with diabetes to have had medical attention for nephropathy in the past year. The difference between rural and urban Whites was less than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

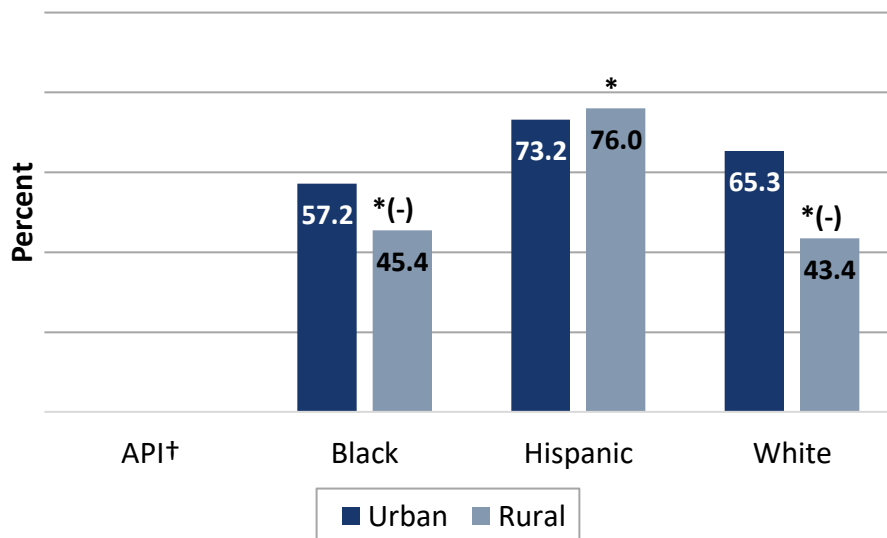
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Diabetes Care—Blood Pressure Controlled

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) whose most recent blood pressure was less than 140/90, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Among Black and White beneficiaries, rural residents with diabetes were less likely than urban residents with diabetes to have their blood pressure under control. The difference between rural and urban Blacks was greater than 3 percentage points, as was the difference between rural and urban Whites.
- Rural Hispanics with diabetes were more likely than urban Hispanics with diabetes to have their blood pressure under control. The difference between rural and urban Hispanics was less than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

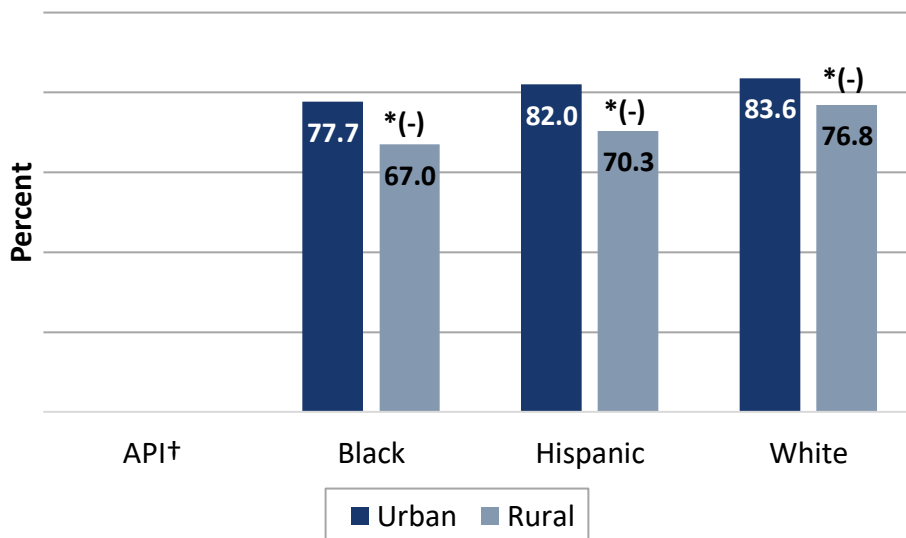
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Diabetes Care—Blood Sugar Controlled

Percentage of Medicare Advantage enrollees aged 18 to 75 years with diabetes (type 1 and type 2) whose most recent HbA1c level was 9 percent or less, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Among Black, Hispanic, and White beneficiaries, rural residents with diabetes were less likely than urban residents with diabetes to have their blood sugar levels under control. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

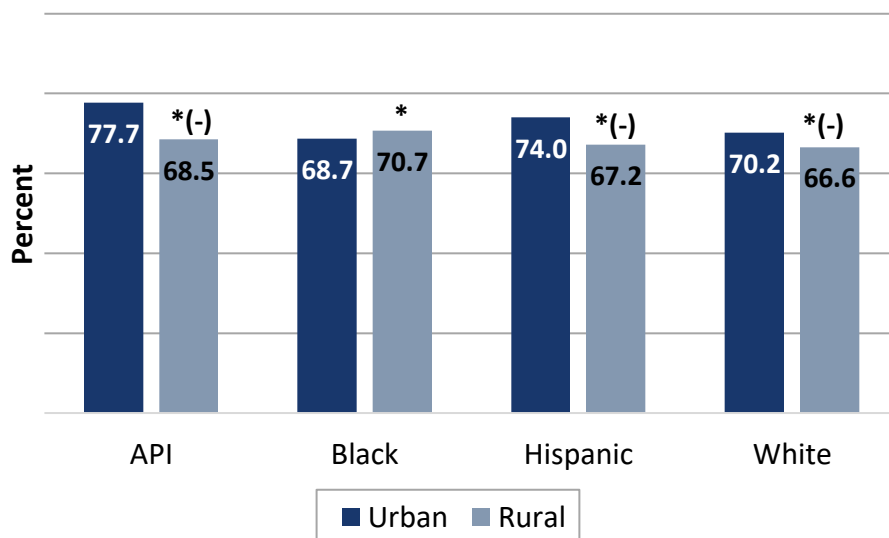
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Statin Use in Patients with Diabetes

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)[†] who received statin therapy, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

Disparities

- Among API, Hispanic, and White beneficiaries, rural residents with diabetes were less likely than urban residents with diabetes to have received statin therapy. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.
- Rural Blacks with diabetes were more likely than urban Blacks with diabetes to have received statin therapy. The difference between rural and urban Blacks was less than 3 percentage points.

[†] Excludes those who also have clinical atherosclerotic cardiovascular disease.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

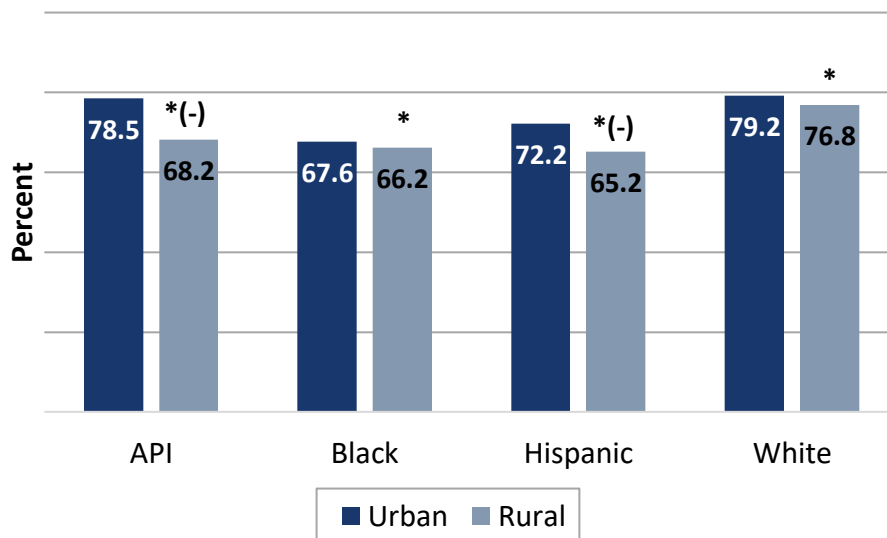
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Medication Adherence for Diabetes—Statins

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)[†] who were dispensed a statin medication during the measurement year who remained on the medication for at least 80 percent of the treatment period, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents with diabetes were less likely than urban residents with diabetes to have had proper statin medication adherence. The difference between rural and urban APIs was greater than 3 percentage points, as was the difference between rural and urban Hispanics. The difference between rural and urban Blacks was less than 3 percentage points, as was the difference between rural and urban Whites.

[†] Excludes those who also have clinical atherosclerotic cardiovascular disease.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

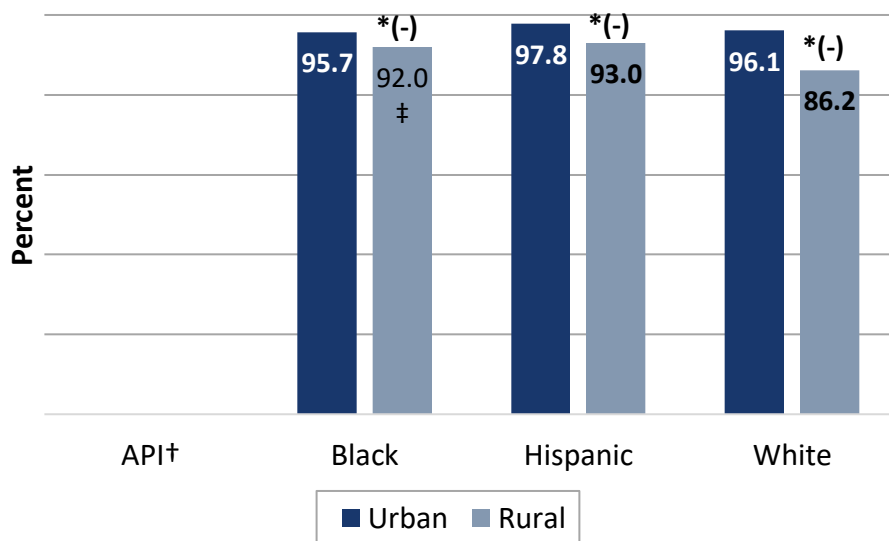
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Adult BMI Assessment

Percentage of MA enrollees aged 18 to 74 years who had an outpatient visit and whose BMI was documented in the past two years, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

‡ This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Among Black, Hispanic, and White beneficiaries, rural residents were less likely than urban residents to have had their BMIs documented. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

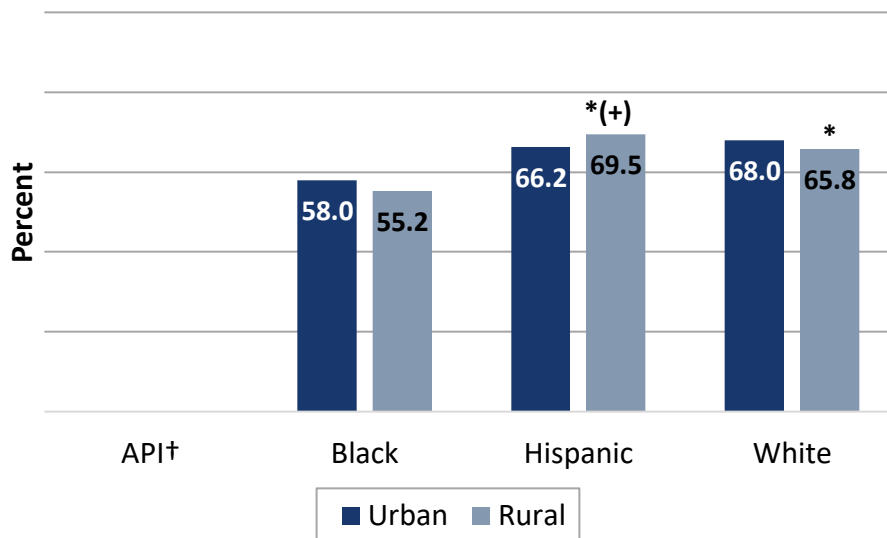
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Controlling Blood Pressure

Percentage of MA enrollees aged 18 to 85 years who had a diagnosis of hypertension and whose blood pressure was adequately controlled[†] during the past year, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

[†] There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Rural Blacks with a diagnosis of hypertension were about as likely as urban Blacks with a diagnosis of hypertension to have had their blood pressure adequately controlled.
- Rural Hispanics with a diagnosis of hypertension were more likely than urban Hispanics with a diagnosis of hypertension to have had their blood pressure adequately controlled. The difference between rural and urban Hispanics was greater than 3 percentage points.
- Rural Whites with a diagnosis of hypertension were less likely than urban Whites with a diagnosis of hypertension to have had their blood pressure adequately controlled. The difference between rural and urban Whites was less than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

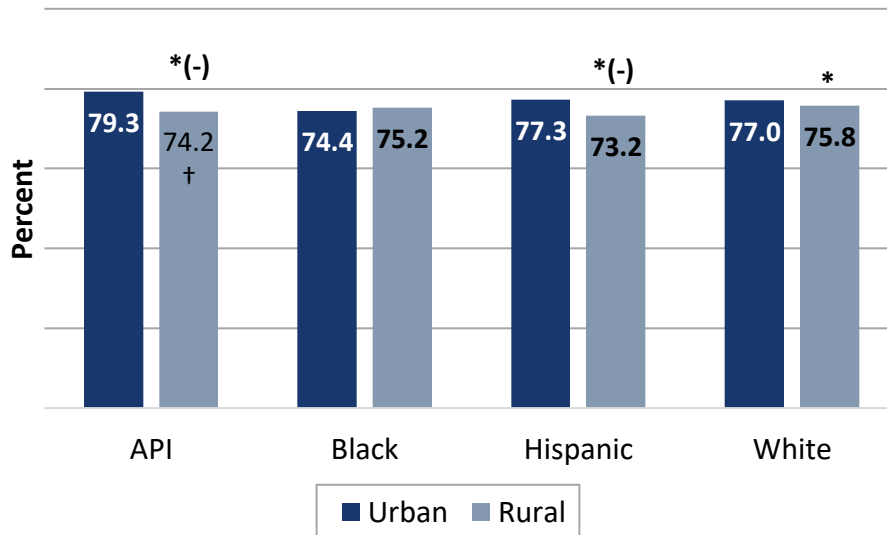
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] Less than 140/90 for enrollees 18 to 59 years of age and for enrollees 60 to 85 years of age with a diagnosis of diabetes, or less than 150/90 for members 60 to 85 years of age without a diagnosis of diabetes.

Clinical Care: Statin Use in Patients with Cardiovascular Disease

Percentage of male MA enrollees aged 21 to 75 years and female MA enrollees aged 40 to 75 years who have clinical atherosclerotic cardiovascular disease (ASCVD) and who received statin therapy, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Among API, Hispanic, and White beneficiaries, rural residents with ASCVD were less likely than urban residents with ASCVD to have received statin therapy. The difference between rural and urban APIs was greater than 3 percentage points, as was the difference between rural and urban Hispanics. The difference between rural and urban Whites was less than 3 percentage points.
- Rural Blacks with ASCVD were about as likely as urban Blacks with ASCVD to have received statin therapy.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

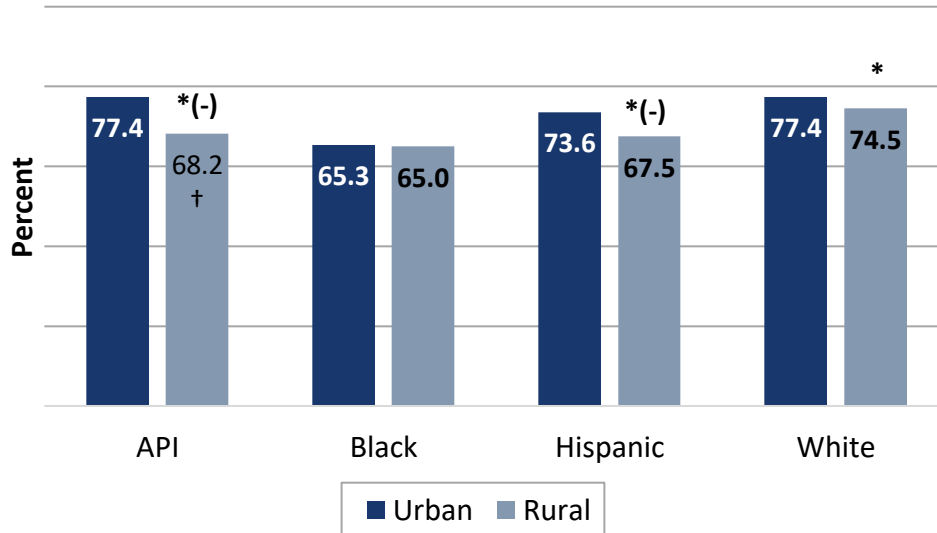
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Medication Adherence for Cardiovascular Disease— Statins

Percentage of male MA enrollees aged 21 to 75 years and female MA enrollees aged 40 to 75 years who had clinical atherosclerotic cardiovascular disease (ASCVD) and were dispensed a statin medication during the measurement year who remained on the medication for at least 80 percent of the treatment period, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Among API, Hispanic, and White beneficiaries, rural residents with ASCVD were less likely than urban residents with ASCVD to have had proper statin medication adherence. The difference between rural and urban APIs was greater than 3 percentage points, as was the difference between rural and urban Hispanics. The difference between rural and urban Whites was less than 3 percentage points.
- Rural Blacks with ASCVD were about as likely as urban Blacks with ASCVD to have had proper statin medication adherence.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

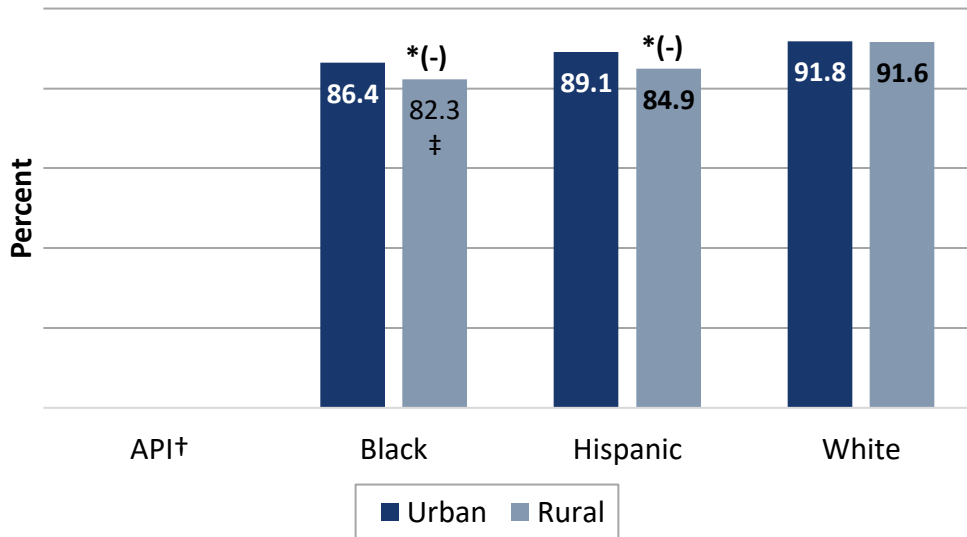
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Continuous Beta-Blocker Treatment

Percentage of MA enrollees aged 18 years and older who were hospitalized and discharged alive with a diagnosis of AMI and who received persistent beta-blocker treatment for six months after discharge, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

‡ This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Among Black and Hispanic beneficiaries, rural residents who were hospitalized for a heart attack were less likely than urban residents who were hospitalized for a heart attack to have received persistent beta-blocker treatment. The difference between rural and urban Blacks was greater than 3 percentage points, as was the difference between rural and urban Hispanics.
- Rural Whites who were hospitalized for a heart attack were about as likely as urban Whites who were hospitalized for a heart attack to have received persistent beta-blocker treatment.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

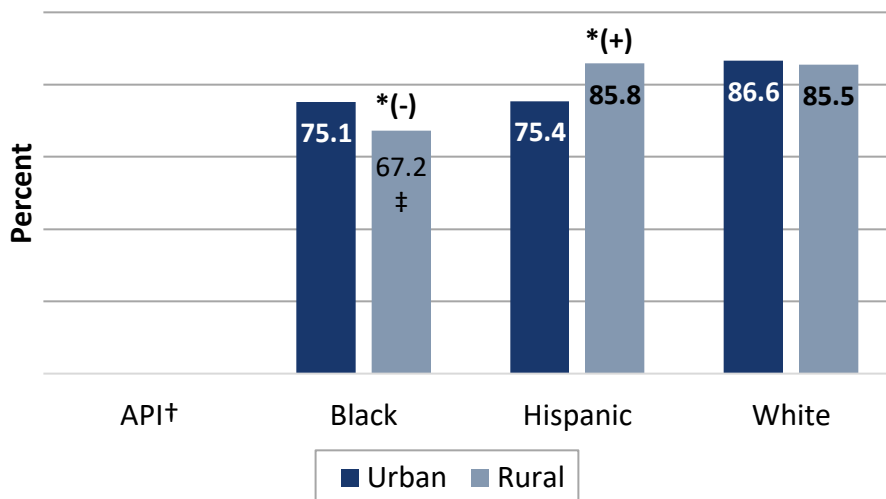
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Asthma Medication Ratio in Older Adults

Percentage of MA enrollees aged 65 to 85 years who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the past year, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

‡ This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Rural Black older adults with persistent asthma were less likely than urban Black older adults with persistent asthma to have had appropriate asthma medication management during the past year. The difference between rural and urban Black older adults was greater than 3 percentage points.
- Rural Hispanic older adults with persistent asthma were more likely than urban Hispanic older adults with persistent asthma to have had appropriate asthma medication management during the past year. The difference between rural and urban Hispanics was greater than 3 percentage points.
- Rural White older adults with persistent asthma were about as likely as urban White older adults with persistent asthma to have had appropriate asthma medication management during the past year.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

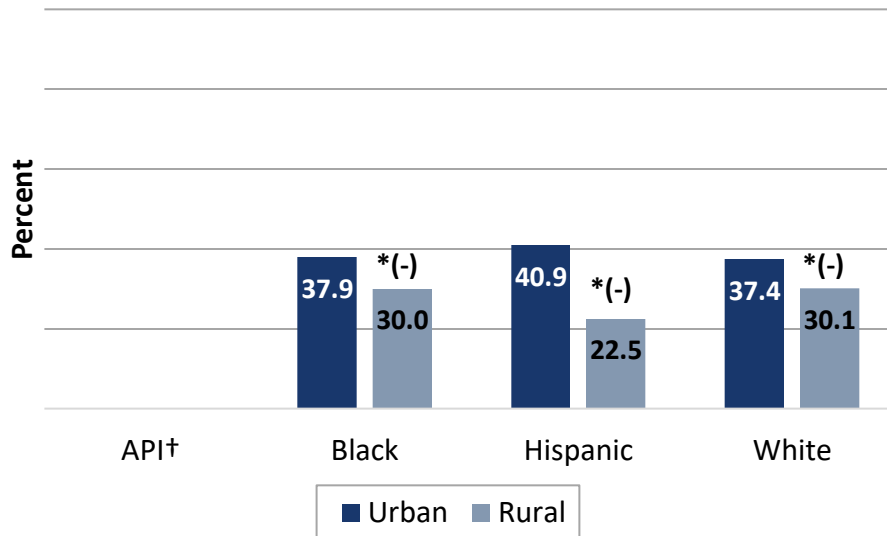
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Testing to Confirm COPD

Percentage of MA enrollees aged 40 years and older with a new diagnosis of COPD or newly active COPD who received a spirometry test to confirm the diagnosis, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Among Black, Hispanic, and White beneficiaries, rural residents with a new diagnosis of COPD or newly active COPD were less likely than urban residents with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

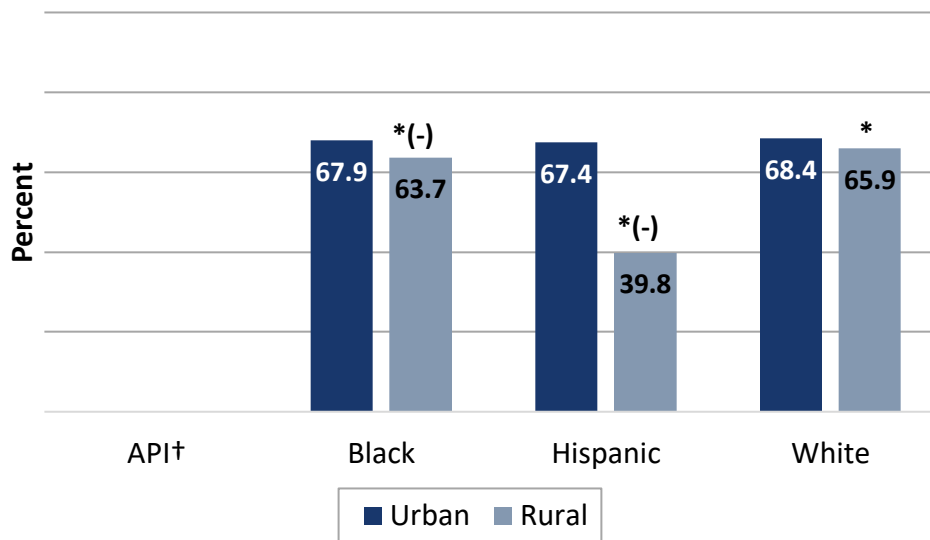
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Pharmacotherapy Management of COPD Exacerbation Systemic Corticosteroid

Percentage of COPD exacerbations for MA enrollees aged 40 years and older who had an acute inpatient discharge or emergency department encounter in the past year who were dispensed a systemic corticosteroid within 14 days of the event, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Among Black, Hispanic, and White beneficiaries, rural residents who experienced a COPD exacerbation were less likely than urban residents who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between rural and urban Blacks was greater than 3 percentage points, as was the difference between rural and urban Hispanics. The difference between rural and urban Whites was less than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

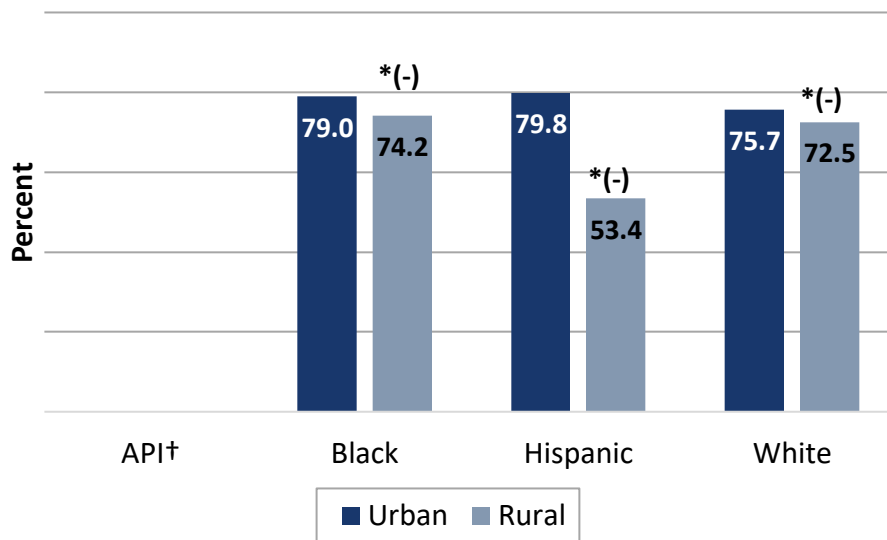
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Pharmacotherapy Management of COPD Exacerbation Bronchodilator

Percentage of MA enrollees aged 40 years and older who had an acute inpatient discharge or emergency department encounter for COPD exacerbation in the past year who were dispensed a bronchodilator within 30 days of experiencing the event, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Among Black, Hispanic, and White beneficiaries, rural residents who experienced a COPD exacerbation were less likely than urban residents who experienced a COPD exacerbation to have been dispensed a bronchodilator within 30 days of the event. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

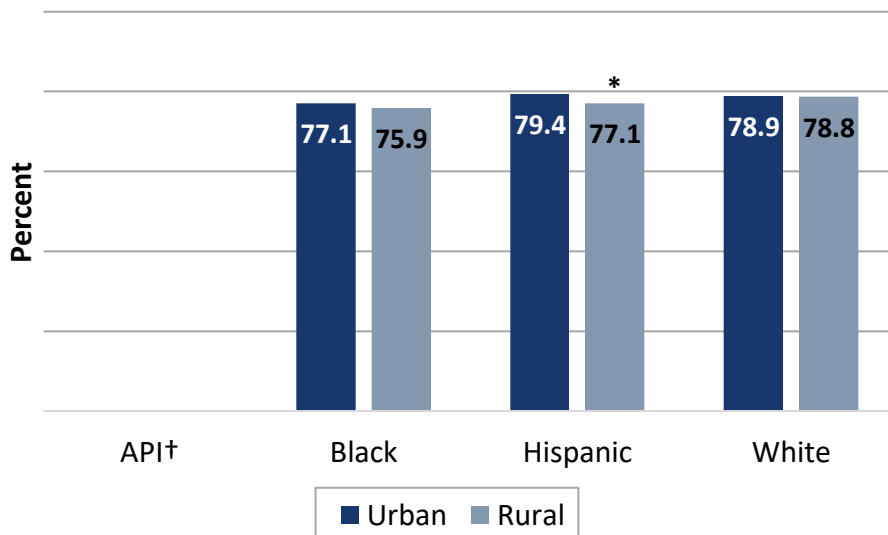
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Rheumatoid Arthritis Management

Percentage of MA enrollees aged 18 years and older who were diagnosed with rheumatic arthritis during the past year and who were dispensed at least one ambulatory prescription for a disease-modifying anti-rheumatic drug (DMARD), by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Among Black and White beneficiaries, rural residents diagnosed with rheumatic arthritis were about as likely as urban residents diagnosed with rheumatic arthritis to have been dispensed at least one DMARD.
- Rural Hispanics diagnosed with rheumatic arthritis were less likely than urban Hispanics diagnosed with rheumatic arthritis to have been dispensed at least one DMARD. The difference between rural and urban Hispanics was less than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

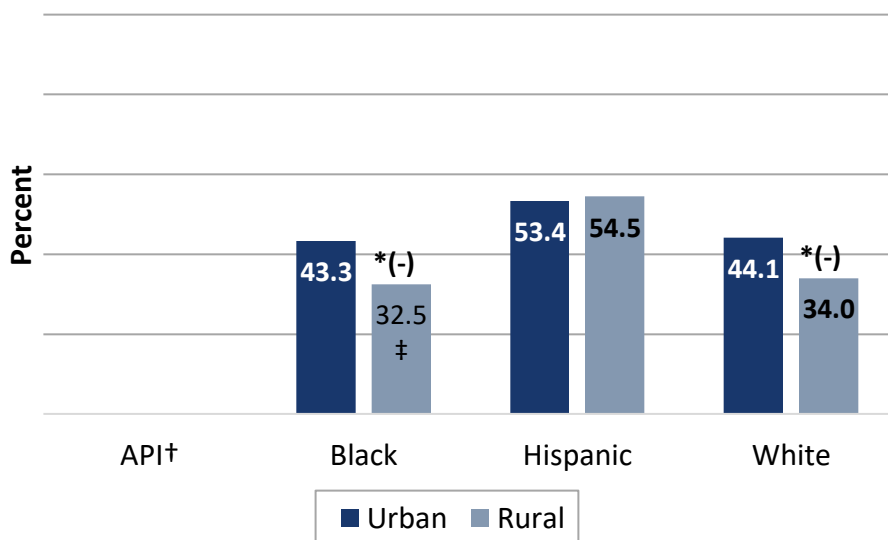
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Osteoporosis Management in Women Who Had a Fracture

Percentage of MA enrollees (women) aged 67 to 85 years who suffered a fracture and who had either a bone mineral density test or a prescription for a drug to treat osteoporosis in the six months after the fracture, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

‡ This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Among Black and White beneficiaries, rural women who suffered a fracture were less likely than urban women who suffered a fracture to have had either a bone mineral density test or a prescription for a drug to treat osteoporosis. The difference between rural and urban Black women was greater than 3 percentage points, as was the difference between rural and urban White women.
- Rural Hispanic women who suffered a fracture were about as likely as urban Hispanic women who suffered a fracture to have had either a bone mineral density test or a prescription for a drug to treat osteoporosis.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

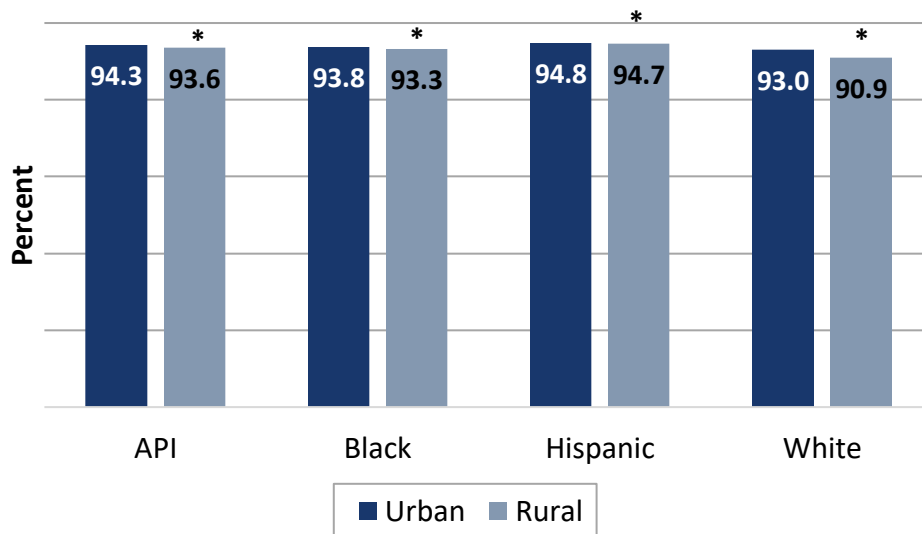
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Appropriate Monitoring of Patients Taking Long-Term Medications

Percentage of MA enrollees aged 18 years and older who received at least 180 treatment days of ambulatory medication therapy for a selected therapeutic agent[†] during the past year and at least one therapeutic monitoring event for the therapeutic agent during the year, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents were less likely than urban residents to have had their long-term medication use monitored. For each of these racial and ethnic groups, the difference between rural and urban residents was less than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

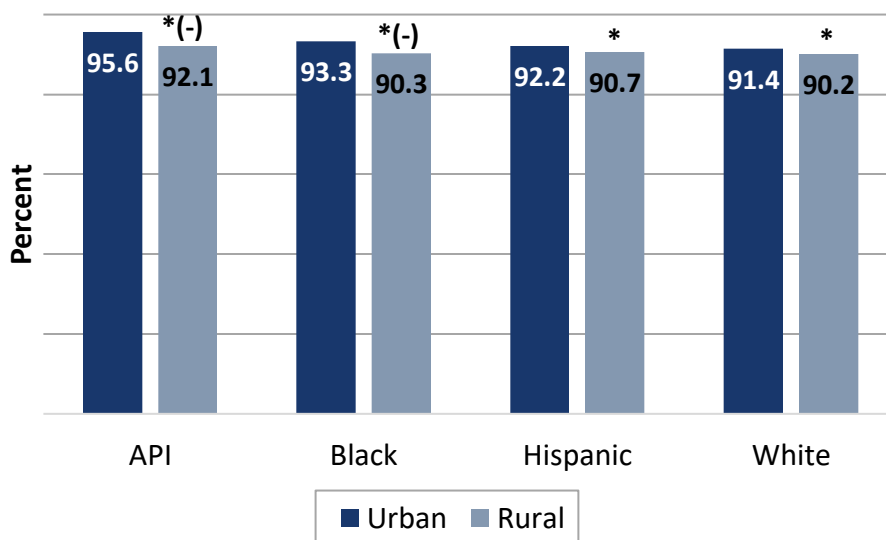
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] This measure is limited to those who had a prescription for one or more of the following drugs for six months or longer: ACE inhibitors, ARBs, digoxin, diuretics, anticonvulsants, and statins. These drugs are known to have possibly harmful side effects if used long term.

Clinical Care: Avoiding Use of High-Risk Medications in the Elderly

Percentage of MA enrollees aged 65 years and older who were not prescribed a high-risk medication, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

Disparities

- Long-term use of high-risk medication should be avoided in the elderly. Among API, Black, Hispanic, and White beneficiaries, this standard of care was met less often for rural elderly residents than for urban elderly residents. The difference between rural and urban elderly APIs was greater than 3 percentage points, as was the difference between rural and urban elderly Blacks. The difference between rural and urban elderly Hispanics was less than 3 percentage points, as was the difference between rural and urban elderly Whites.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

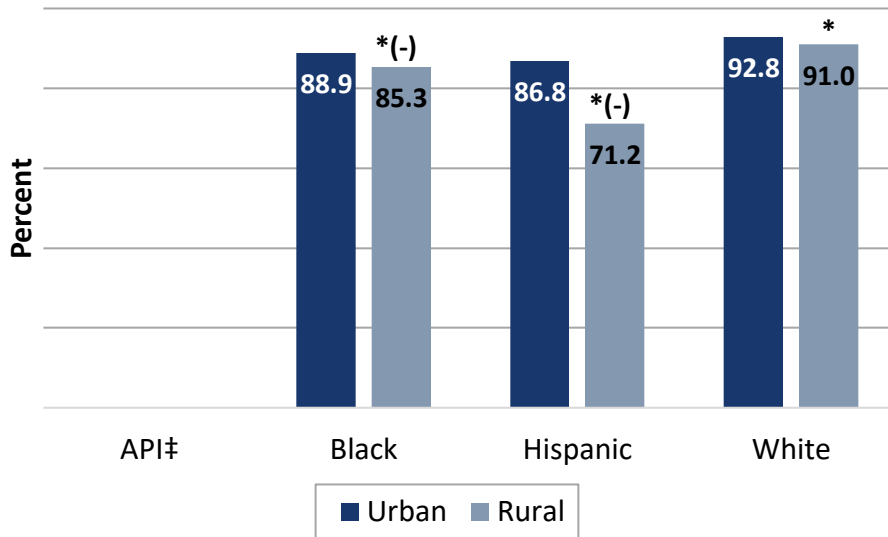
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with Chronic Renal Failure

Percentage of MA enrollees aged 65 years and older with chronic renal failure who were not dispensed a prescription for a potentially harmful medication,[†] by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

[‡] There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Potentially harmful medication[†] should be avoided among elderly adults with chronic renal failure. For Black, Hispanic, and White beneficiaries, this standard of care was met less often for rural elderly residents with chronic renal failure than for urban elderly residents with chronic renal failure. The difference between rural and urban elderly Blacks was greater than 3 percentage points, as was the difference between rural and urban elderly Hispanics. The difference between rural and urban elderly Whites was less than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

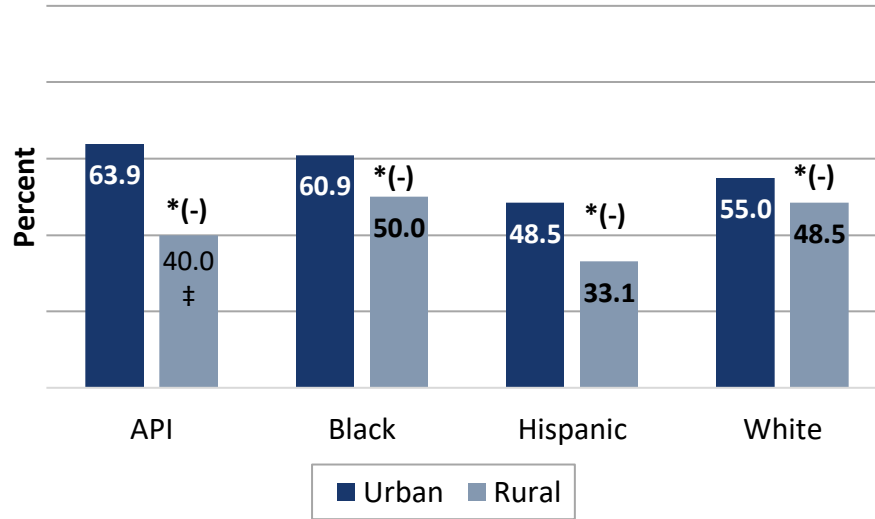
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] This includes COX-2 selective NSAIDs and nonaspirin NSAIDs.

Clinical Care: Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with Dementia

Percentage of MA enrollees aged 65 years and older with dementia who were not dispensed a prescription for a potentially harmful medication,[†] by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

‡ This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Potentially harmful medication[†] should be avoided among elderly adults with dementia. For API, Black, Hispanic, and White beneficiaries, this standard of care was met less often for rural elderly residents with dementia than for urban elderly residents with dementia. For each of these racial and ethnic groups, the difference between rural and urban elderly residents was greater than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

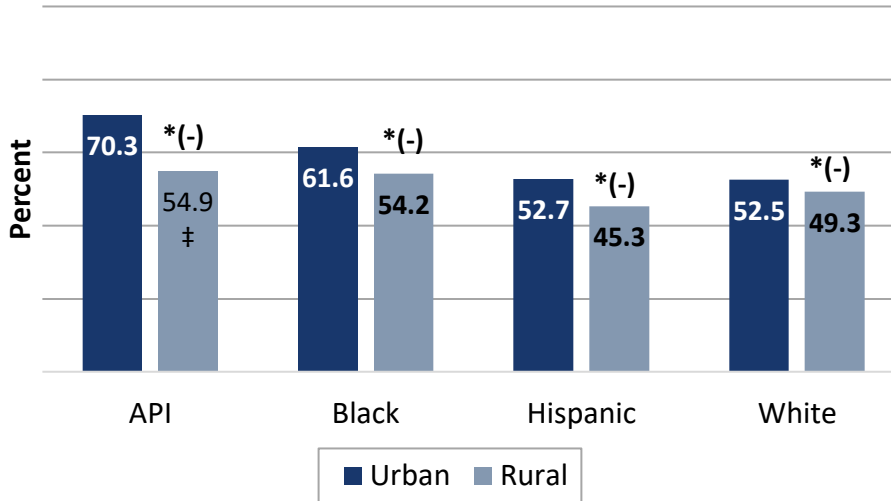
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] This includes antiemetics, antipsychotics, benzodiazepines, tricyclic antidepressants, H2 receptor antagonists, nonbenzodiazepine hypnotics, and anticholinergic agents.

Clinical Care: Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with a History of Falls

Percentage of MA enrollees aged 65 years and older with a history of falls who were not dispensed a prescription for a potentially harmful medication,[†] by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

‡ This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Potentially harmful medication[†] should be avoided among elderly adults with a history of falls. Among API, Black, Hispanic, and White beneficiaries, this standard of care was met less often for rural elderly residents with a history of falls than for urban elderly residents with a history of falls. For each of these racial and ethnic groups, the difference between rural and urban elderly residents was greater than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

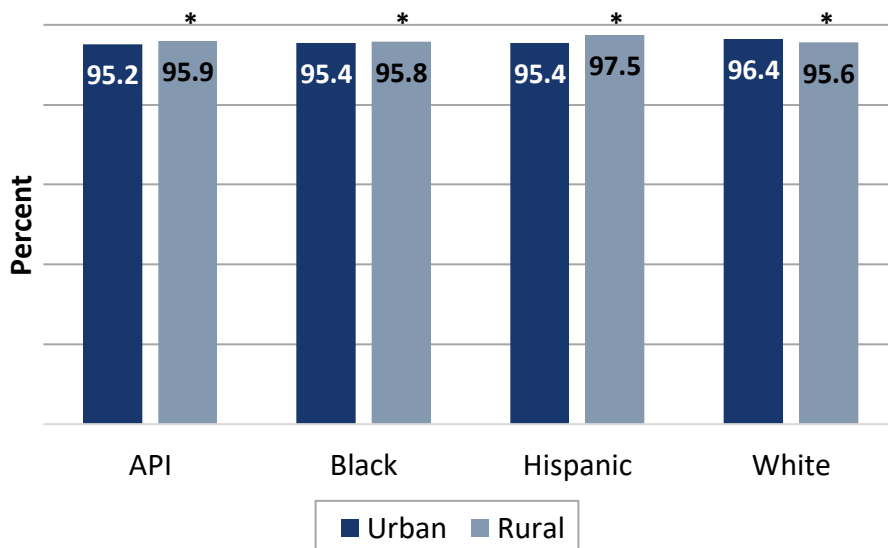
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] This includes anticonvulsants, nonbenzodiazepine hypnotics, SSRIs, antiemetics, antipsychotics, benzodiazepines, and tricyclic antidepressants.

Clinical Care: Older Adults' Access to Preventive/Ambulatory Services

Percentage of MA enrollees aged 65 years and older who had an ambulatory or preventive care visit, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

Disparities

- Among API, Black, and Hispanic beneficiaries, rural residents were more likely than urban residents to have had an ambulatory or preventive care visit. For each of these racial and ethnic groups, the difference between rural and urban residents was less than 3 percentage points.
- Among White beneficiaries, rural residents were more likely than urban residents to have had an ambulatory or preventive care visit. The difference between White rural and urban residents was less than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

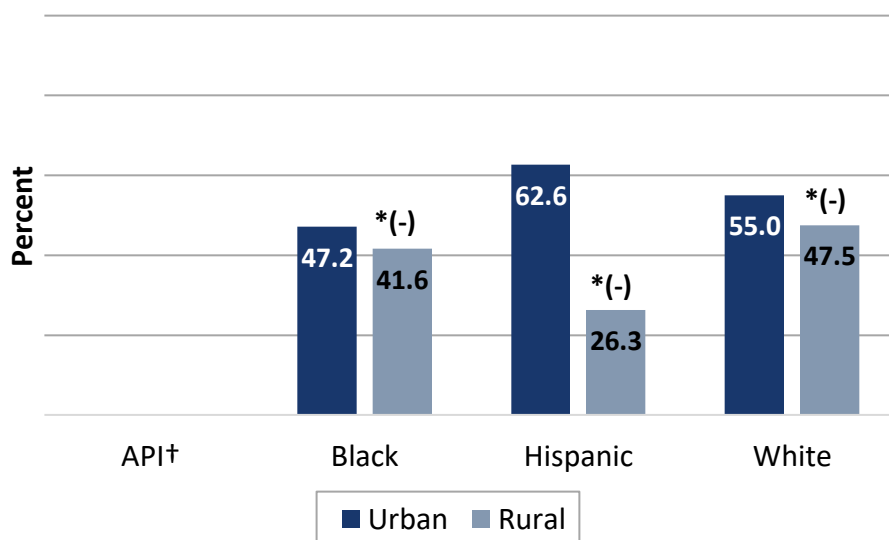
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Medication Reconciliation After Hospital Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility and had their medications reconciled within 30 days, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Among Black, Hispanic, and White beneficiaries, rural residents who were discharged from an inpatient facility were less likely than urban residents who were discharged from an inpatient facility to have had their medications reconciled within 30 days. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

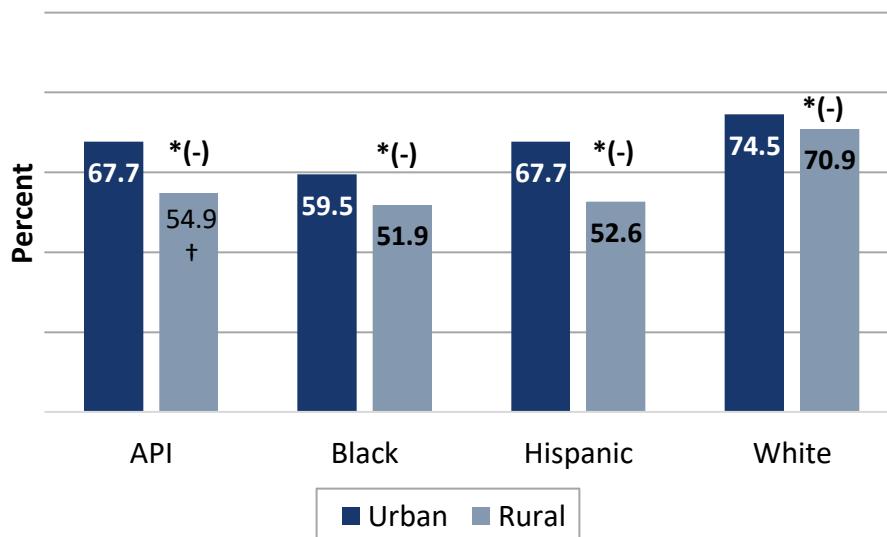
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Antidepressant Medication Management— Acute Phase Treatment

Percentage of MA enrollees aged 18 years and older who were diagnosed with a new episode of major depression and remained on antidepressant medication for at least 84 days, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents who were diagnosed with a new episode of major depression were less likely than urban residents who were diagnosed with a new episode of major depression to have remained on antidepressant medication for at least 84 days. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

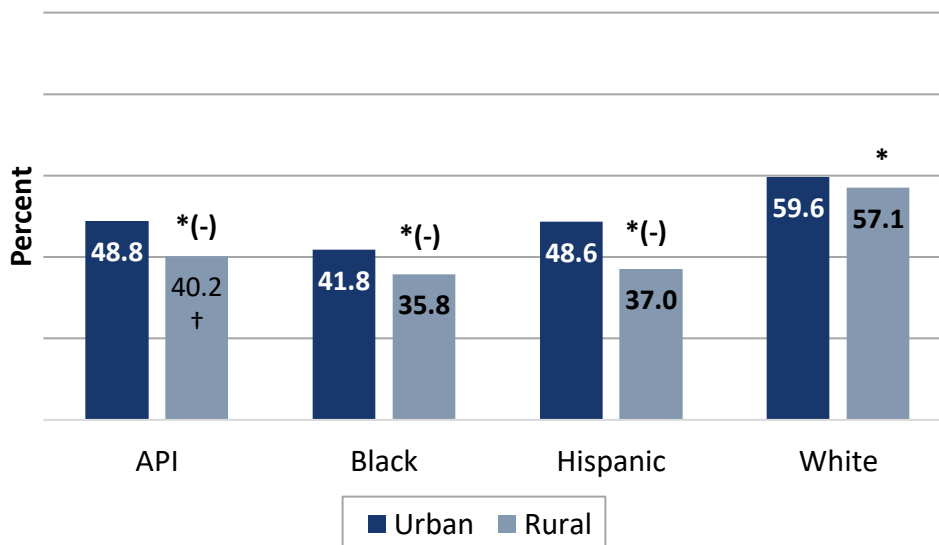
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Antidepressant Medication Management— Continuation Phase Treatment

Percentage of MA enrollees aged 18 years and older with a new diagnosis of major depression who were newly treated with antidepressant medication and remained on antidepressant medication for at least 180 days, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

† This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents who were diagnosed with a new episode of major depression were less likely than urban residents who were diagnosed with a new episode of major depression to have remained on antidepressant medication for at least 180 days. The difference between rural and urban APIs was greater than 3 percentage points, as were the differences between rural and urban Blacks and between rural and urban Hispanics. The difference between rural and urban Whites was less than 3 percentage points.

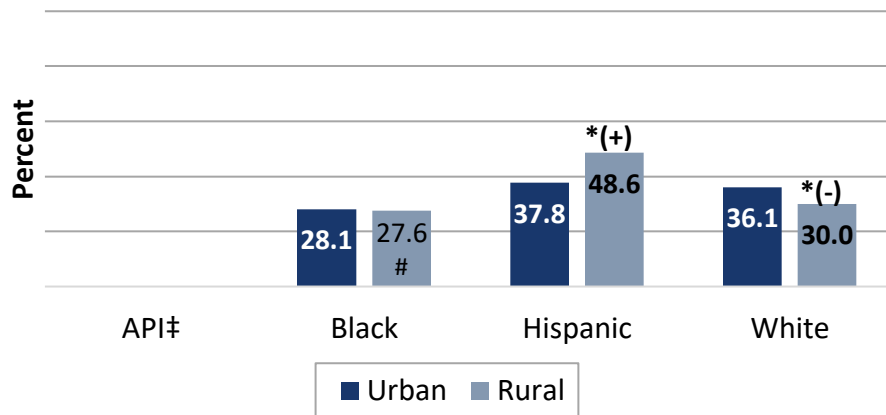
* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

Clinical Care: Follow-Up Visit After Hospital Stay for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older[†] who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of discharge, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

[‡] There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

[#] This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Rural Blacks who were hospitalized for a mental health disorder were about as likely as urban Blacks who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of discharge.
- Rural Hispanics who were hospitalized for a mental health disorder were more likely than urban Hispanics who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of discharge. The difference between rural and urban Hispanics was greater than 3 percentage points.
- Rural Whites who were hospitalized for a mental health disorder were less likely than urban Whites who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of discharge. The difference between rural and urban Whites was greater than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

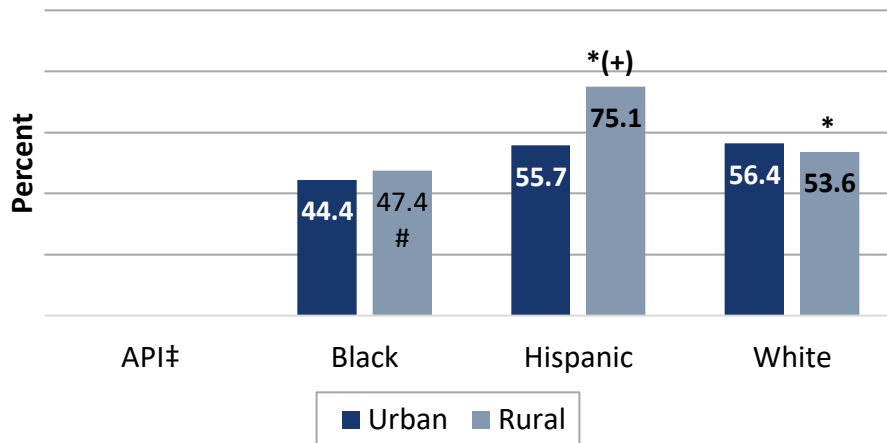
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.

Clinical Care: Follow-Up Visit After Hospital Stay for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older[†] who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of discharge, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

[‡]There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Rural Blacks who were hospitalized for a mental health disorder were about as likely as urban Blacks who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of discharge.
- Rural Hispanics who were hospitalized for a mental health disorder were more likely than urban Hispanics who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of discharge. The difference between rural and urban Hispanics was greater than 3 percentage points.
- Rural Whites who were hospitalized for a mental health disorder were less likely than urban Whites who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of discharge. The difference between rural and urban Whites was less than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

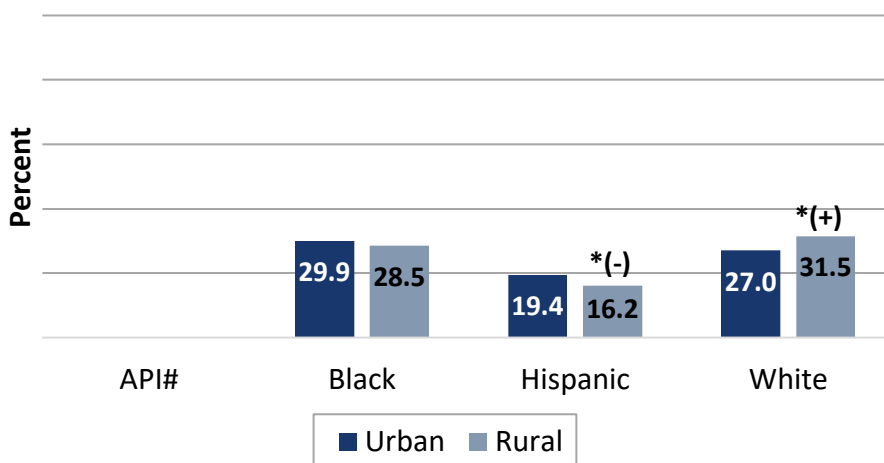
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.

Clinical Care: Initiation of Alcohol or Other Drug Treatment

Percentage of MA enrollees aged 18 years and older[†] with a new episode of alcohol or other drug (AOD) dependence who initiate[‡] treatment within 14 days of the diagnosis, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide. A

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Rural Blacks with a new episode of AOD dependence were about as likely as urban Blacks with a new episode of AOD dependence to have initiated treatment within 14 days of diagnosis.
- Rural Hispanics with a new episode of AOD dependence were less likely than urban Hispanics with a new episode of AOD dependence to have initiated treatment within 14 days of diagnosis. This difference between rural and urban Hispanics was more than 3 percentage points.
- Rural Whites with a new episode of AOD dependence were more likely than urban Whites with a new episode of AOD dependence to have initiated treatment within 14 days of diagnosis. This difference between rural and urban Whites was more than 3 percentage points.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

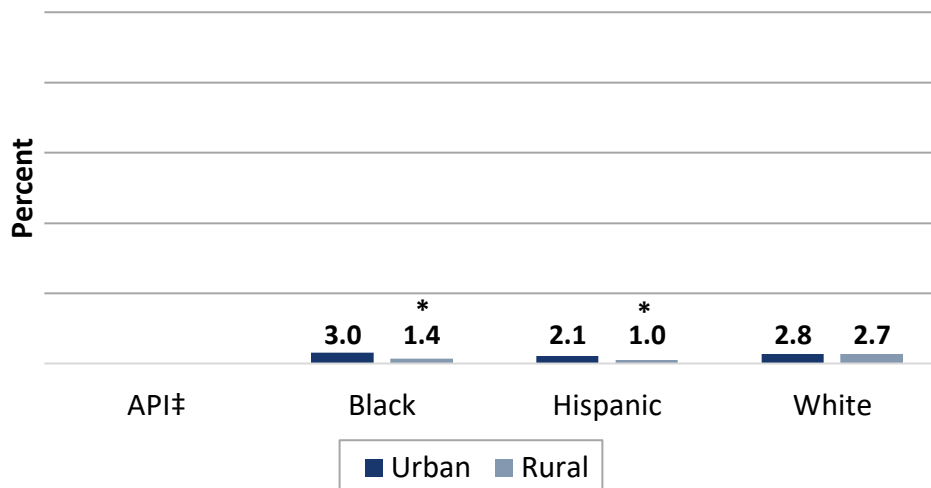
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

[‡] Initiation may occur through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization.

Clinical Care: Engagement of Alcohol or Other Drug Treatment

Percentage of MA enrollees aged 18 years and older[†] with a new episode of alcohol or other drug (AOD) dependence who initiated treatment and who had two or more additional services with a diagnosis of AOD within 30 days of the initiation visit, by rurality within racial and ethnic group, 2017



SOURCE: Clinical quality data collected in 2017 from Medicare health plans nationwide.

NOTES: API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races. Clinical quality data are not available for FFS Medicare beneficiaries.

[‡] There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

Disparities

- Among Black and Hispanic beneficiaries, rural residents with a new episode of AOD dependence who initiated treatment were less likely than urban residents with a new episode of AOD dependence who initiated treatment to have had two or more additional services within 30 days of their initial visit for treatment. The difference between rural and urban Blacks was less than 3 percentage points, as was the difference between rural and urban Hispanics.
- Rural Whites with a new episode of AOD dependence and initiated treatment were about as likely as urban Whites with a new episode of AOD dependence who initiated treatment to have had two or more additional services within 30 days of their initial visit for treatment.

* Significantly different from the score for urban residents of the same racial and ethnic group ($p < 0.05$).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

[†] Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

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