



# Rural-Urban Disparities in Health Care in Medicare

November 2019



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# Executive Summary



This report describes the quality of health care received in 2018 by Medicare beneficiaries nationwide. Specifically, the report highlights rural-urban<sup>1</sup> differences in health care experiences and clinical care and looks at how rural-urban differences vary by race and ethnicity and how racial and ethnic differences vary between rural and urban areas.

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 the Centers for Medicare & Medicaid Services (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 is comprised of information collected 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 Medicare fee-for-service (FFS) 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, both FFS and MA beneficiaries living in rural areas reported health care experiences that were similar to the experiences reported by FFS and MA beneficiaries living in urban areas (see Figure 1). The exception pertained to the annual flu vaccination rates, which were higher for urban than for rural FFS beneficiaries (among MA beneficiaries rates were similar for urban and rural residents). In contrast, rural-urban disparities in clinical care were widespread: MA beneficiaries living in rural areas received worse clinical care than MA beneficiaries living in urban areas for 22 of 44 measures, similar care for 20 measures, and better care for just two measures.<sup>2</sup> Deficits for rural residents were largest in the areas of colorectal screening (a 13-percentage-point deficit), medication reconciliation for patients after a hospital discharge (a 12-percentage-point deficit), and avoiding potentially harmful drug-disease interactions in elderly patients with dementia (a 12-percentage-point deficit).

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

The overall pattern of rural and urban residents reporting similar experiences with care generally held across racial and ethnic groups (American Indian or Alaska Native [AI/AN], Asian or Pacific Islander [API], Black, Hispanic, and White) and coverage types (Medicare FFS and MA). One notable exception involved API beneficiaries enrolled in MA. In that group, rural residents reported better experiences with care than urban residents for four of seven measures, similar experiences for two measures, and worse experiences for one measure (see Figure 2).

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<sup>1</sup> 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 associated with at least one core urban area plus adjacent counties having a high degree of social and economic integration with the core. Metropolitan statistical areas contain a core urban area of 50,000 or more population. Micropolitan statistical areas contain a core urban area of at least 10,000 but less than 50,000 population. For this report, any beneficiary residing within a metropolitan statistical area was classified as an urban resident; any beneficiary living in a micropolitan statistical area or outside of a CBSA was classified as a rural resident.

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

While the pattern of generally worse clinical care in rural than urban areas held for all racial and ethnic groups,<sup>3</sup> the pattern was more consistent for Hispanic beneficiaries than for other groups (see Figure 3). Among API, Black, and White beneficiaries, rural beneficiaries received worse care on about 40 percent of clinical care measures and better care on 5–8 percent of clinical care measures. In contrast, among Hispanic beneficiaries, rural residents received worse care on 70 percent of clinical measures and better care on 11 percent of clinical care measures.

### ***Racial and Ethnic Disparities in Health Care in Medicare Within Urban and Rural Areas***

Patterns of racial and ethnic disparities in patient experience were largely similar for urban and rural residents except for API-White disparities among MA enrollees and Black-White disparities among Medicare FFS enrollees (see Figures 4 and 5). Among urban residents, API MA beneficiaries reported worse experiences of care than White MA beneficiaries on six of seven measures and better care on one measure (annual flu vaccine). Among rural residents, API MA and White MA beneficiaries reported similar care on all patient experience measures. The opposite was true for Black-White disparities among FFS enrollees. Among urban residents, Black FFS and White FFS beneficiaries reported similar care on six of seven patient experience measures and worse care on one measure (annual flu vaccine); among rural residents, Black FFS beneficiaries reported worse experiences of care than White FFS beneficiaries on three of seven measures and similar experiences on four measures.

Regardless of geography or coverage type, AI/AN beneficiaries typically reported worse experiences of care than White beneficiaries. Regardless of geography, API FFS beneficiaries reported worse care than White beneficiaries on about 60 percent of patient experience measures. Regardless of geography, Black MA beneficiaries typically reported care that was similar to the care reported by White MA beneficiaries. Regardless of geography or coverage type, Hispanic beneficiaries typically reported care that was similar to the care reported by White beneficiaries.

Patterns of racial and ethnic differences in clinical care were similar in urban vs. rural areas for API and Black beneficiaries but not for Hispanic beneficiaries (see Figure 6). Regardless of geography, API beneficiaries received worse care than White beneficiaries on about one-tenth of the clinical care measures and better care on about a third of the clinical care measures. Regardless of geography, Black beneficiaries received worse care than White beneficiaries on about half of the clinical care measures and better care on about one-tenth of the clinical care measures. In urban areas, Hispanic beneficiaries received worse care than White beneficiaries on 27 percent of the clinical care measures and better care on 18 percent of the clinical care measures. In rural areas, Hispanic beneficiaries received worse care than White beneficiaries on 57 percent of the clinical care measures and better care on 18 percent of the clinical care measures.

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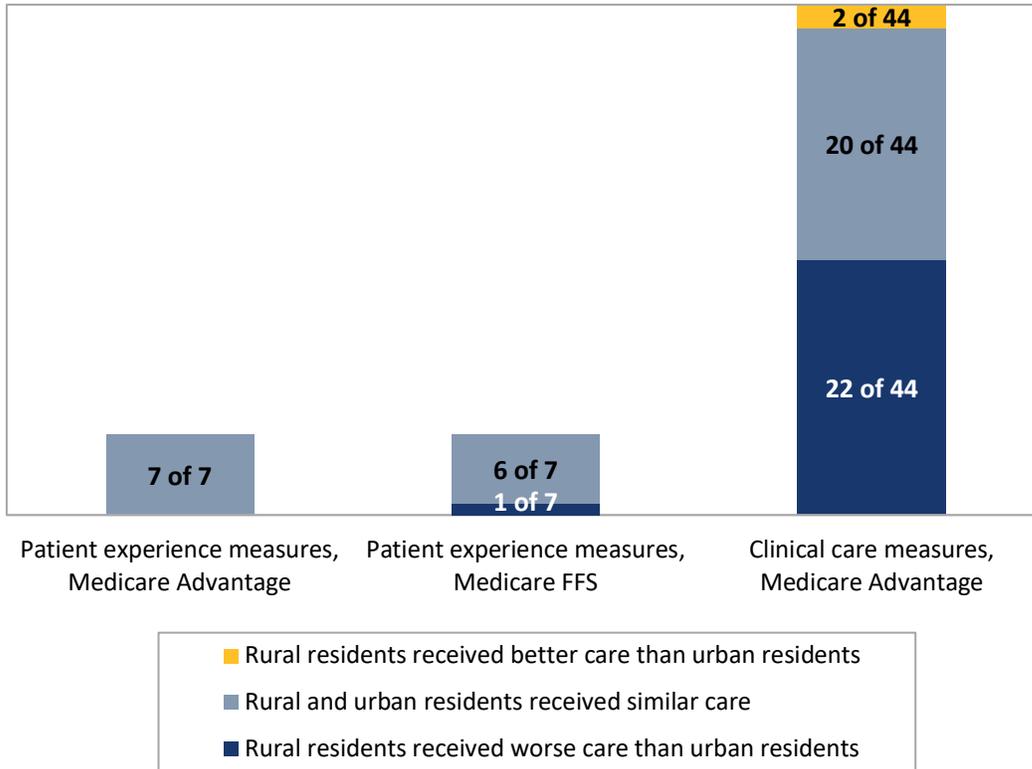
<sup>3</sup> For reporting clinical care (HEDIS) data stratified by race and ethnicity, racial and ethnic group membership is estimated using a methodology that combines information from CMS administrative data, surname, and residential location. Estimates of membership in AI/AN group are less accurate than for other racial and ethnic groups; thus, this report does not show scores for AI/AN beneficiaries on the clinical care measures.

## ***Conclusion***

In evaluating rural-urban differences in the quality of health care received in 2018 by Medicare beneficiaries at the national level, this report found that rural residents, regardless of race or ethnicity, often 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, difficulty accessing care in rural areas, or some other cause. The difference between rural and urban residents in quality of clinical care received was most pronounced among Hispanic beneficiaries. Rural-urban differences in experiences of care were much more limited, both overall and for each racial and ethnic group. Finally, this analysis revealed notable variation in Hispanic-White disparities in clinical care by geography. Specifically, whereas Hispanic beneficiaries generally received worse clinical care than White beneficiaries received, the difference between these groups was evident far more often in rural areas than in urban areas. The results suggest that quality improvement efforts should focus on improving clinical care for all rural residents and put special emphasis on addressing the clinical care needs of rural Hispanics.

## Figure 1. Rural-Urban Disparities in Care: All Patient Experience and Clinical Care Measures

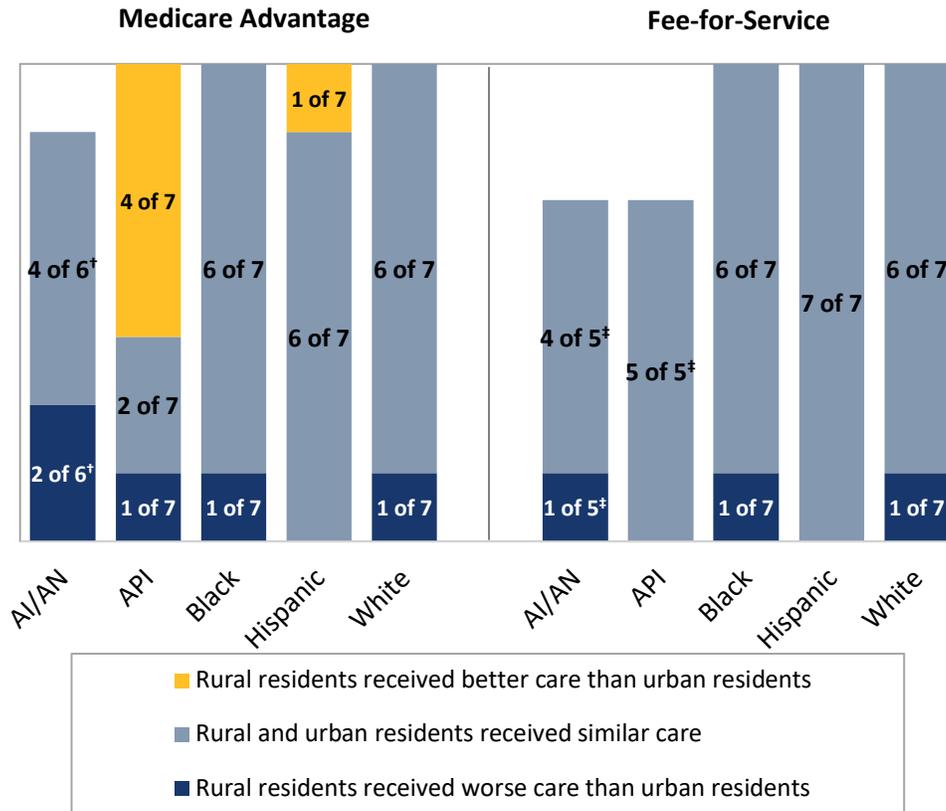
**Number of patient experience measures and clinical care measures for which rural residents received care that was worse than, similar to, or better than the care received by urban residents in 2018**



**SOURCES:** The bar on the left summarizes patient experience data from all MA beneficiaries nationwide who participated in the 2018 Medicare CAHPS survey. The bar in the middle summarizes patient experience data from all Medicare FFS beneficiaries nationwide who participated in the 2018 Medicare CAHPS survey. The bar on the right summarizes clinical quality (HEDIS) data collected in 2018 from MA plans nationwide.

## Figure 2. Rural-Urban Disparities in Care by Racial and Ethnic Group: 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 2018



**SOURCE:** This chart summarizes data from all Medicare FFS and MA beneficiaries nationwide who participated in the 2018 Medicare CAHPS survey.

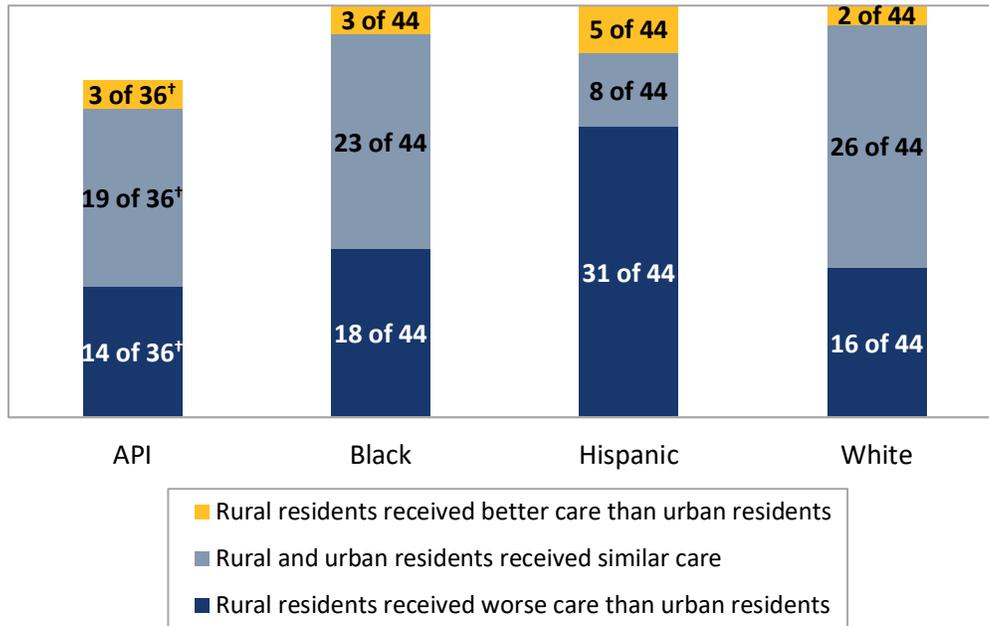
**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of race.

<sup>†</sup> There were not enough data from rural MA AI/AN beneficiaries to make a rural-urban comparison on one patient experience measure.

<sup>‡</sup> There were not enough data from rural and urban FFS AI/AN beneficiaries or from rural API beneficiaries to make rural-urban comparisons for these groups on two patient experience measures.

### Figure 3. Rural-Urban Disparities in Care by Racial and Ethnic Group: 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 2018



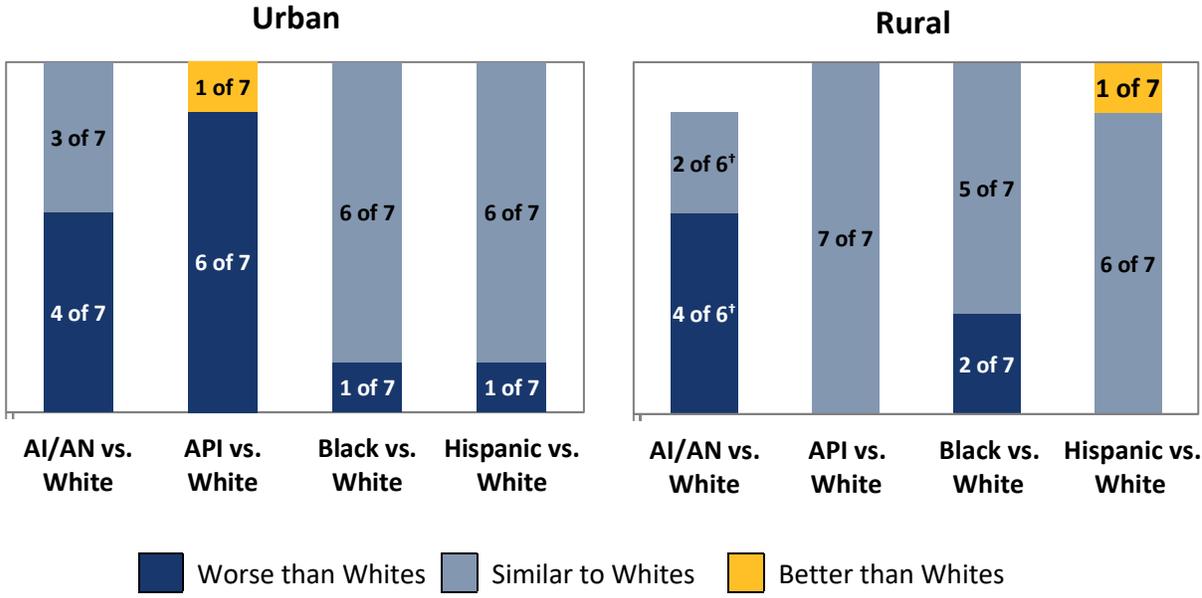
**SOURCE:** This chart summarizes clinical quality (HEDIS) data collected in 2018 from MA plans nationwide.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of race.

† There were only enough data from API beneficiaries to make rural-urban comparisons on 36 of the 44 clinical care measures.

# Figure 4. Racial and Ethnic Disparities in Care Within Urban and Rural Areas: All Patient Experience Measures, Medicare Advantage

Number of patient experience measures for which urban and rural residents of selected racial and ethnic minority groups reported experiences that were worse than, similar to, or better than the experiences reported by White urban and rural residents in 2018

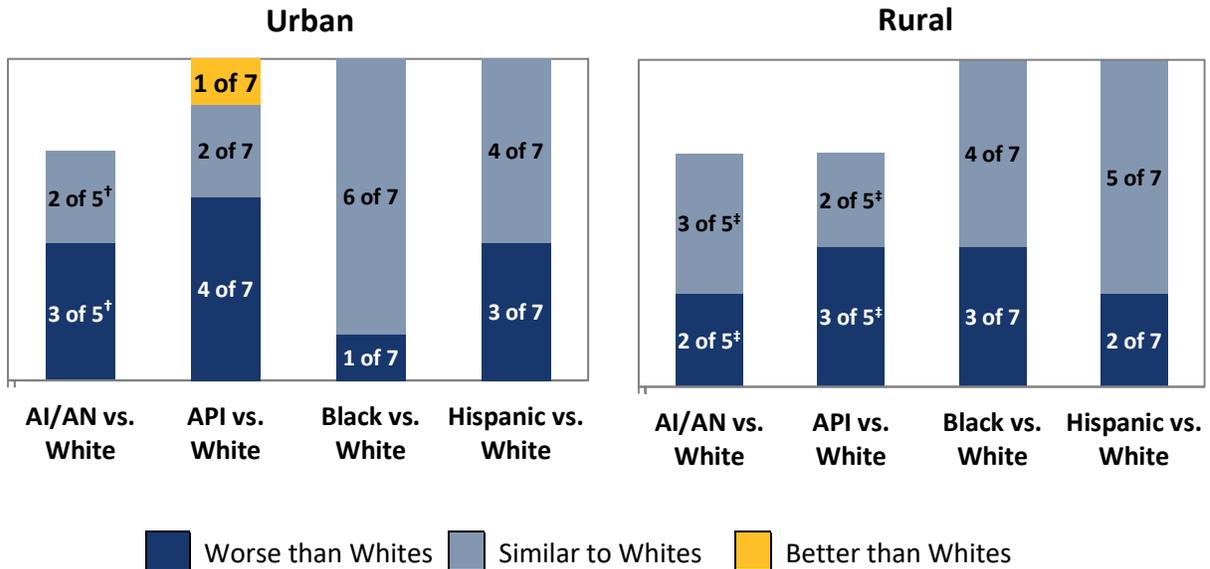


**SOURCE:** Data from the 2018 Medicare CAHPS survey.  
**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of race.

<sup>†</sup> For one patient experience measure, there were not enough data from rural MA AI/AN beneficiaries to compare their experiences to those of rural MA White beneficiaries.

## Figure 5. Racial and Ethnic Disparities in Care Within Urban and Rural Areas: All Patient Experience Measures, Fee-for-Service

Number of patient experience measures for which urban and rural residents of selected racial and ethnic minority groups reported experiences that were worse than, similar to, or better than the experiences reported by White urban and rural residents in 2018



**SOURCE:** Data from the 2018 Medicare CAHPS survey.

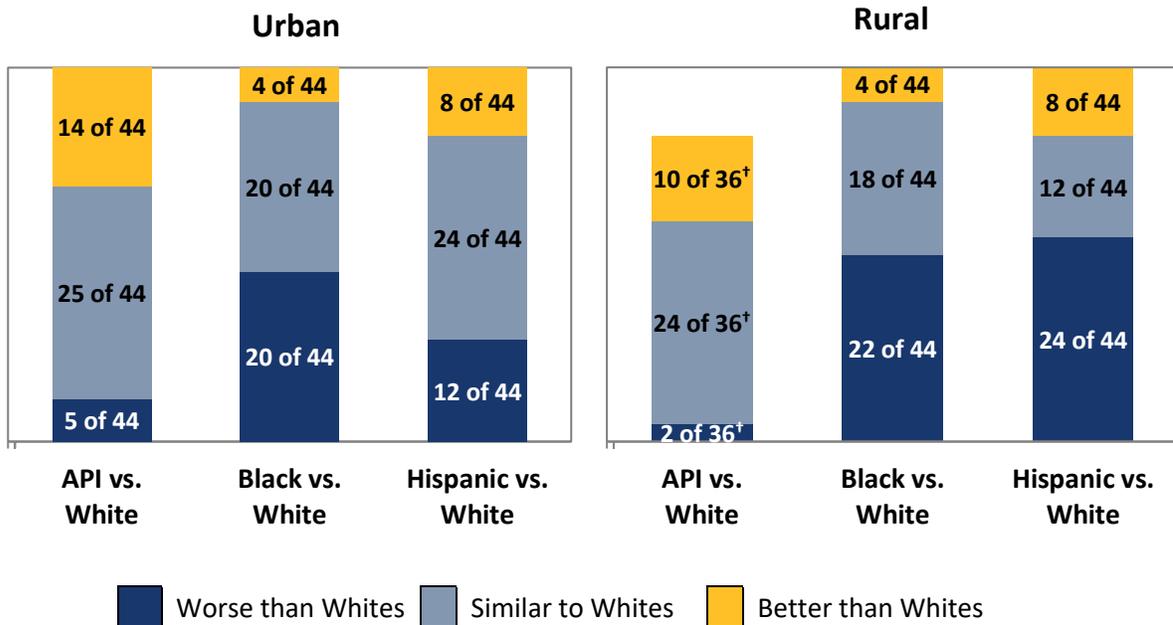
**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of race.

<sup>†</sup> For two patient experience measures, there were not enough data from urban FFS AI/AN beneficiaries to compare their experiences to those of urban FFS White beneficiaries.

<sup>‡</sup> For two patient experience measures, there were not enough data from rural FFS AI/AN beneficiaries or from rural FFS API beneficiaries to compare their experiences to those of rural FFS White beneficiaries.

## Figure 6. Racial and Ethnic Disparities in Care Within Urban and Rural Areas: All Clinical Care Measures

Number of clinical care measures for which urban and rural residents of selected racial and ethnic minority groups experienced care that was worse than, similar to, or better than the care experienced by White urban and rural residents in 2018



**SOURCE:** This chart summarizes clinical quality (HEDIS) data collected in 2018 from MA plans nationwide.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of race.

<sup>†</sup> There were only enough data from rural API beneficiaries to make rural-urban comparisons on 36 of the 44 clinical care measures.

# Patient Experience and Clinical Care Measures Included in This Report

## Patient Experience Measures

- Getting needed care
- Getting appointments and care quickly
- Customer service
- Doctors who communicate well
- Care coordination
- Getting needed prescription drugs
- Annual flu vaccine

## Clinical Care Measures

### Prevention and Screening

- Adult body mass index (BMI) assessment
- Breast cancer screening
- Colorectal cancer screening

### Respiratory Conditions

- Testing to confirm chronic obstructive pulmonary disease (COPD)
- Pharmacotherapy management of COPD exacerbation—systemic corticosteroid
- Pharmacotherapy management of COPD exacerbation—bronchodilator

### Cardiovascular Conditions

- Controlling high blood pressure
- Persistence of beta-blocker treatment
- Statin use in patients with cardiovascular disease
- Medication adherence for cardiovascular disease—statins

### Diabetes

- Diabetes care—blood sugar testing
- Diabetes care—eye exam
- Diabetes care—kidney disease monitoring
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Statin use in patients with diabetes
- Medication adherence for diabetes—statins

### Musculoskeletal Conditions

- Rheumatoid arthritis management
- Osteoporosis management in women who had a fracture

### Behavioral Health

- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- Follow-up after emergency department (ED) visit for mental illness (within seven days of discharge)
- Follow-up after ED visit for mental illness (within 30 days of discharge)
- Follow-up after ED visit for alcohol and other drug abuse or dependence (within 7 days of discharge)
- Follow-up after ED visit for alcohol and Other Drug abuse or dependence (within 30 days of discharge)
- Initiation of Alcohol and Other Drug dependence treatment
- Engagement of Alcohol and Other Drug dependence treatment

### Medication Management and Care Coordination

- Medication reconciliation after hospital discharge
- Transitions of care—notification of inpatient admission
- Transitions of care—receipt of discharge information
- Transitions of care—patient engagement after inpatient discharge
- Transitions of care—medication reconciliation after inpatient discharge
- Follow-up after ed visit for people with high-risk multiple chronic conditions

# Patient Experience and Clinical Care Measures Included in This Report (cont.)

## Clinical Care Measures

### Overuse/Appropriate Use

- 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
- Avoiding use of high-risk medications in the elderly
- Avoiding use of opioids at high dosage
- Avoiding use of opioids from multiple prescribers
- Avoiding use of opioids from multiple pharmacies
- Avoiding use of opioids from multiple prescribers and pharmacies

### Access/Availability of Care

- Older adults' access to preventive/ambulatory services



# Overview, Methods, and Summary of Results



## **Overview**

This report presents summary information on the quality of health care received in 2018 by Medicare beneficiaries nationwide. A previous version of this report presented information on the quality of health care received in 2017 by Medicare beneficiaries nationwide. Two types of quality of care data are included: (1) 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 (2) 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 Medicare fee-for-service (FFS) 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 (IOM, 2001). Assessing equity of care delivery requires making comparisons of quality by patient characteristics such as urban or 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 (Meit et al., 2014). 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, and that racial and ethnic disparities are sometimes greater in rural than in urban areas. This may be because living in a rural area exacerbates exposure to unequal social conditions that foster disparities in health care (Caldwell et al., 2016). Given these prior findings, three 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. In the third, quality of care for racial and ethnic minority groups is compared with quality of care for Whites separately within rural and urban areas. The focus of this report is on differences in quality of care that exist at the national level. Interested readers can find information about health care quality for specific Medicare plans at <https://www.medicare.gov/find-a-plan/questions/home.aspx>.

## **Data Sources**

In all, this report provides data regarding seven patient experience measures and 44 clinical care measures. The set of patient experience measures presented in this report is the same as the set reported on in the 2018 report. The set of clinical care measures presented in this report differs from the set presented in the 2018 report. Two clinical measures presented in the previous report (Appropriate Monitoring of Patients Taking Long-Term Medications and Asthma Medication Ratio in Older Adults) were discontinued and thus are not presented in this report. Thirteen clinical measures are included in this report that were not included in the 2018 report. The newly included measures consist of four behavioral health measures, five measures about medication management and care coordination, and four measures about overuse of opioids.

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 Medicare FFS and MA beneficiaries. The data in this report are from the 2018 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.

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 nationwide, are part of the Healthcare Effectiveness Data and Information Set (HEDIS). HEDIS data are not available for FFS beneficiaries. In this report, clinical care measures are grouped into nine categories: prevention and screening, respiratory conditions, cardiovascular conditions, diabetes, musculoskeletal conditions, behavioral health, medication management and care coordination, overuse/appropriateness, and access/availability of care. 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 2018. 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 urban area 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. Metropolitan statistical areas contain a core urban area of 50,000 or more population. Micropolitan statistical areas contain a core urban area of at least 10,000 but less than 50,000 population. For this report, any beneficiary residing within a metropolitan statistical area was classified as an urban resident; any beneficiary living in a micropolitan statistical area or outside of a CBSA was classified as a rural resident. This definition differs from the one used in the 2018 report. In that report, beneficiaries living either in a metropolitan statistical area or in a micropolitan statistical areas were classified as urban residents. This change in definition increased the proportion of beneficiaries classified as rural residents and thus allowed for reporting on more racial and ethnic groups in Sections II and III of the report (see below). Because of this change in definition, results presented in the 2018 report are not directly comparable to the results presented in this report. By the definition used in this report, 15.1 percent (approximately 2.5 million) of MA beneficiaries and 21.5 percent (approximately 7.8 million) of FFS beneficiaries were rural residents in 2018. Of all Medicare beneficiaries residing in rural areas in 2018, 24.5 percent were enrolled in MA; of beneficiaries residing in urban areas, 33.3 percent were enrolled in MA.

### ***Reportability of Information***

Sample size criteria were used to determine whether a score on a measure was reportable for a particular group. Scores based on 400 or more observations were considered sufficiently precise for reporting unflagged. Scores based on more than 99 but fewer than 400 observations were considered low in precision and were flagged as such. In this report, flagged scores—which should be regarded as tentative information—are shown unbolded with a superscript symbol appended; the symbol links to a note at the bottom of the chart that cautions about the precision of the score. Scores based on 99 or fewer observations are suppressed (i.e., not reported). When a score is suppressed for a particular group, a note appears at the bottom of the relevant chart saying that there were not enough data from that group to make a rural-urban or racial/ethnic comparison on the measure.

### ***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 seven) and the number of clinical care measures (out of 44) for which rural residents reported experiences of care that were worse than, similar to, or better than the experiences reported

by urban residents.<sup>1</sup> In this chart, information on patient experience is presented separately for Medicare FFS and MA 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 FFS and MA 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 American Indian or Alaska Native (AI/AN), Asian or Pacific Islander (API), Black, Hispanic, and White Medicare FFS and MA beneficiaries, the number of patient experience 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 FFS and MA beneficiaries, and from API MA beneficiaries, to compare rural and urban residents on all seven measures. Rural-urban comparisons among AI/AN MA beneficiaries were possible for six measures. Rural-urban comparisons among AI/AN and API FFS beneficiaries were possible for five measures. Following these stacked bar charts are separate, unstacked bar charts for each patient experience measure. These charts show, separately for AI/AN, API, Black, Hispanic, and White FFS and MA 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 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 44 clinical care measures. Rural-urban comparisons among API beneficiaries were possible for 36 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.

### ***Racial and Ethnic Disparities in Health Care in Medicare Within Urban and Rural Areas***

Section III of the report begins with four stacked bar charts that show, separately for rural and urban Medicare FFS and MA beneficiaries, the number of patient experience measures for which members of each racial and ethnic minority group reported experiences of care that were worse than, similar to, or better than the experiences reported by Whites. There was enough information from rural and urban MA and FFS beneficiaries to compare Blacks and Hispanics to Whites on all seven measures. There was also enough information from urban AI/AN MA beneficiaries, urban API MA beneficiaries, rural API MA beneficiaries, and urban API FFS beneficiaries to compare them to Whites on all seven measures. There was only enough information from rural AI/AN MA beneficiaries to compare them to Whites on six measures. There was only enough information from urban AI/AN FFS beneficiaries, rural AI/AN FFS beneficiaries, and rural API FFS beneficiaries to compare them to Whites on five measures. Following

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<sup>1</sup> Here, “similar” is used to characterize differences that are not statistically significant, fall below a magnitude threshold, or both, as described in the Appendix. “Worse” and “better” are used to characterize differences that are statistically significant and exceed a magnitude threshold.

these stacked bar charts are separate, unstacked bar charts for each patient experience measure. These charts show, separately for rural and urban MA and FFS beneficiaries, the average score for each racial and ethnic group on a 0–100 scale. After the patient experience measures, Section III presents a pair of stacked bar charts that show, separately for rural and urban MA beneficiaries, the number of clinical care measures for which members of each racial and ethnic minority group experienced care that was worse than, similar to, or better than the care experienced by Whites. There was enough information from rural and urban Black and Hispanic beneficiaries and from urban API beneficiaries to compare them to Whites on all 44 measures. Rural API-White comparisons were possible for 36 measures. Following these stacked bar charts are separate, unstacked bar charts for each clinical care measure that show, separately for rural and urban MA beneficiaries, the percentage of beneficiaries in each racial and ethnic group whose care met the standard called for by the specific measure.

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

### ***Summary of Results and Conclusions***

Rural residents, regardless of race or ethnicity, often received worse clinical care than urban residents in 2018. 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. The difference between rural and urban residents in quality of clinical care received was most pronounced among Hispanic beneficiaries. Future research is therefore also needed to determine why rural Hispanics are at especially high risk for poor clinical care. Rural-urban differences in experiences of care were much more limited, both overall and for each racial and ethnic group. Finally, Hispanic-White disparities in clinical care varied greatly by geography: whereas Hispanic beneficiaries generally received worse clinical care than White beneficiaries received, the difference between these groups was evident far more often in rural areas than in urban areas. The results suggest that quality improvement efforts should focus on improving clinical care for all rural residents and put special emphasis on addressing the clinical care needs of rural Hispanics.

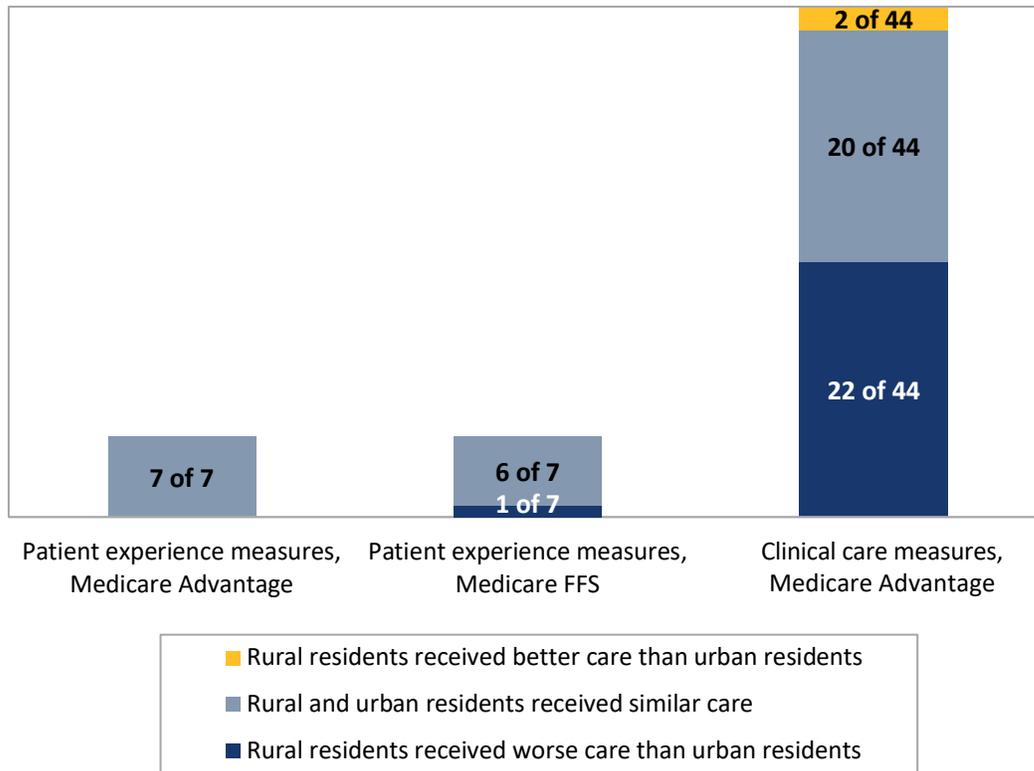


# Section I: Rural Urban Disparities in Health Care in Medicare



## 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 2018**



**SOURCE:** The bar on the left summarizes patient experience data from all MA beneficiaries nationwide who participated in the 2018 Medicare CAHPS survey. The bar in the middle summarizes patient experience data from all Medicare FFS beneficiaries nationwide who participated in the 2018 Medicare CAHPS survey. The bar on the right summarizes clinical quality (HEDIS) data collected in 2018 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<sup>†</sup> 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.

<sup>†</sup> 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 FFS Medicare only)
- Adult body mass index assessment
- Colorectal cancer screening
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of systemic corticosteroid
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Medication adherence for cardiovascular disease—statins
- 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
- Osteoporosis management in women who had a fracture
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Initiation of alcohol and other drug dependence treatment
- Medication reconciliation after hospital discharge
- Transitions of care—medication reconciliation after inpatient discharge
- Follow-up after emergency department visit for people with high-risk multiple chronic conditions
- 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

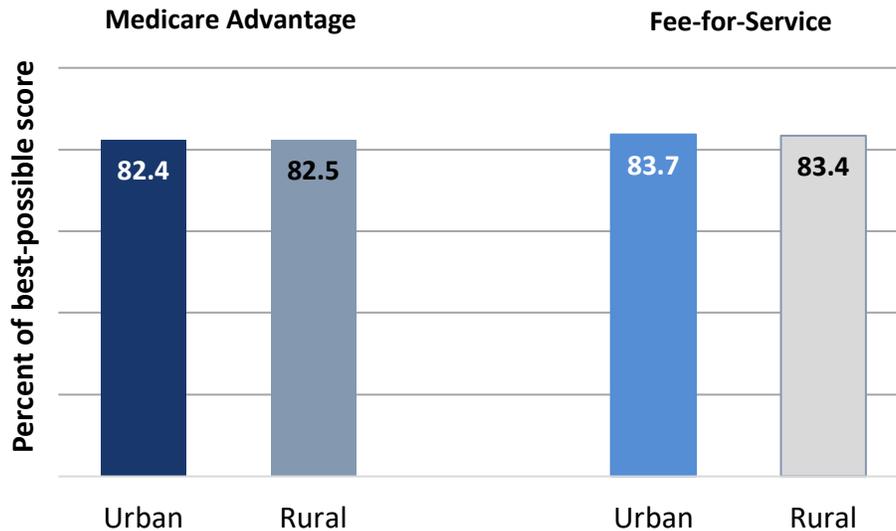
### **Rural residents received better care than urban residents**

- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- Avoiding use of opioids from multiple prescribers

## Patient Experience

### 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,<sup>†</sup> by geography within coverage type, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

#### Disparities

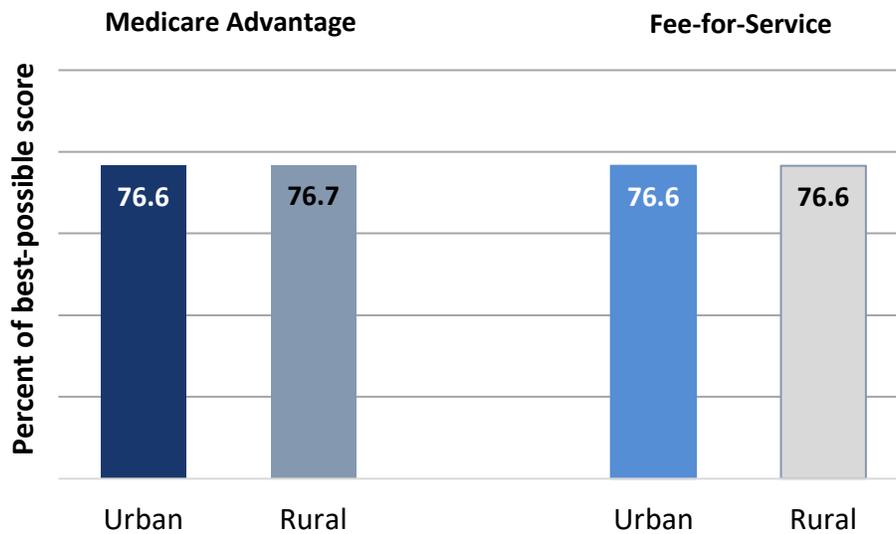
- Among both MA and FFS beneficiaries, rural and urban residents reported similar experiences with getting needed care.

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

## 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,<sup>†</sup> by geography within coverage type, 2018



SOURCE: Data from the Medicare CAHPS survey, 2018.

### Disparities

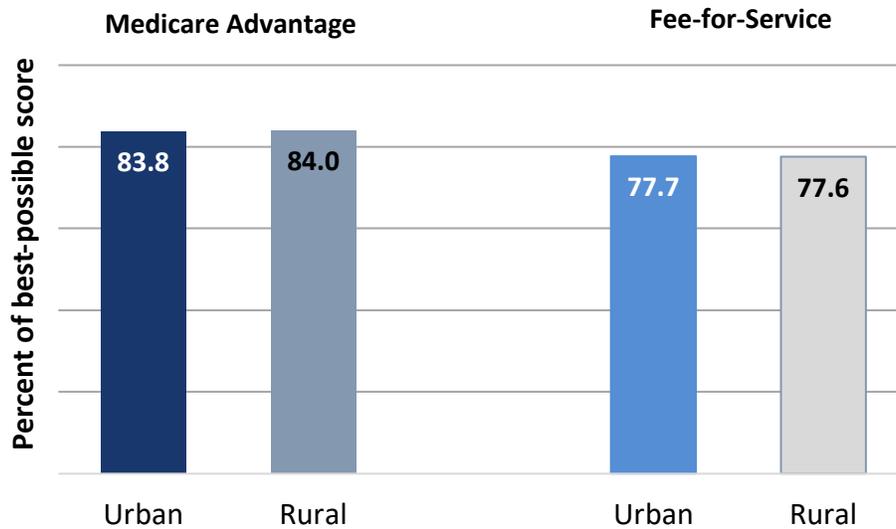
- Among both MA and FFS beneficiaries, rural and urban residents reported similar experiences with getting appointments and care quickly.

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<sup>†</sup> This includes how often in the last six 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,<sup>†</sup> by geography within coverage type, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

### Disparities

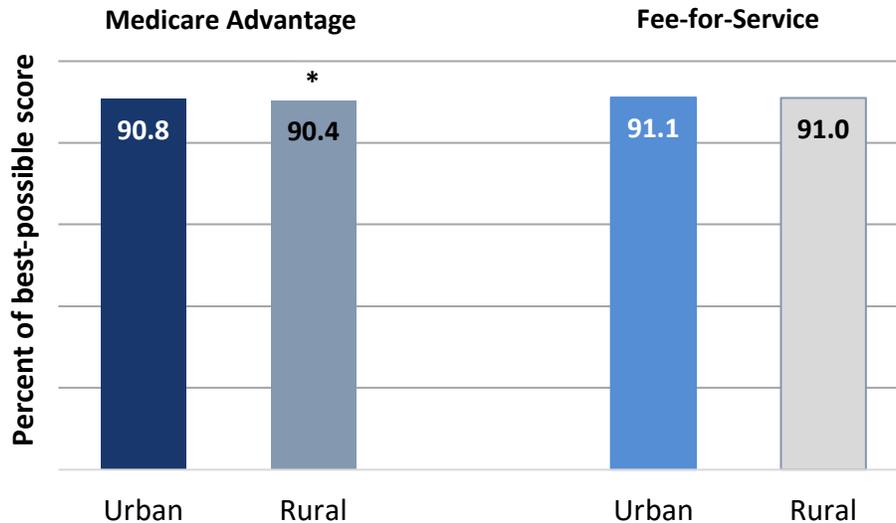
- Among both MA and FFS beneficiaries, rural and urban residents reported similar experiences with customer service.

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<sup>†</sup> This includes how often in the last six 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,<sup>†</sup> by geography within coverage type, 2018



SOURCE: Data from the Medicare CAHPS survey, 2018.

### Disparities

- Among MA beneficiaries, rural residents reported worse<sup>‡</sup> 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.

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\* 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.

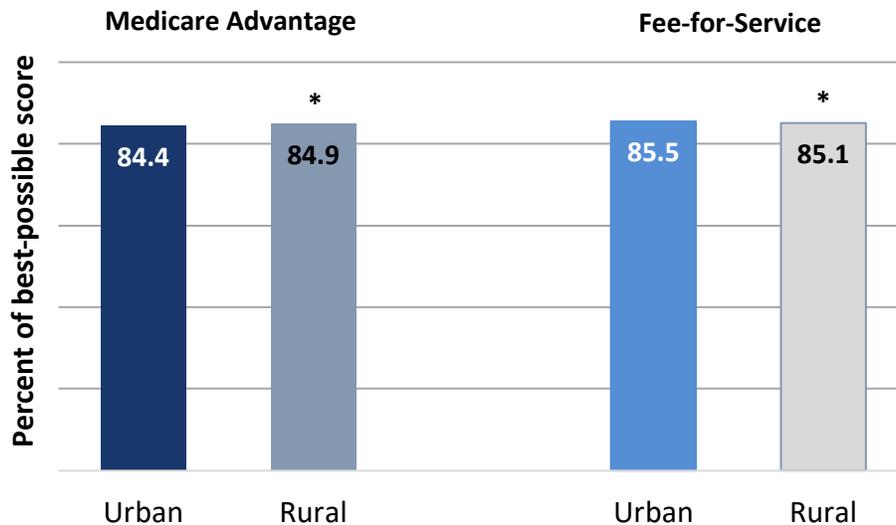
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes how often in the last six 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.

<sup>‡</sup> Unlike on pages 4–5, 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: Care Coordination

Percentage of the best possible score (on a 0–100 scale) earned on how well patient care is coordinated,<sup>†</sup> by geography within coverage type, 2018



SOURCE: Data from the Medicare CAHPS survey, 2018.

### Disparities

- Among MA beneficiaries, rural residents reported better experiences with care coordination 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 worse experiences with care coordination than urban residents reported. The difference between rural and urban residents was less than 3 points on a 0–100 scale.

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\* 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:

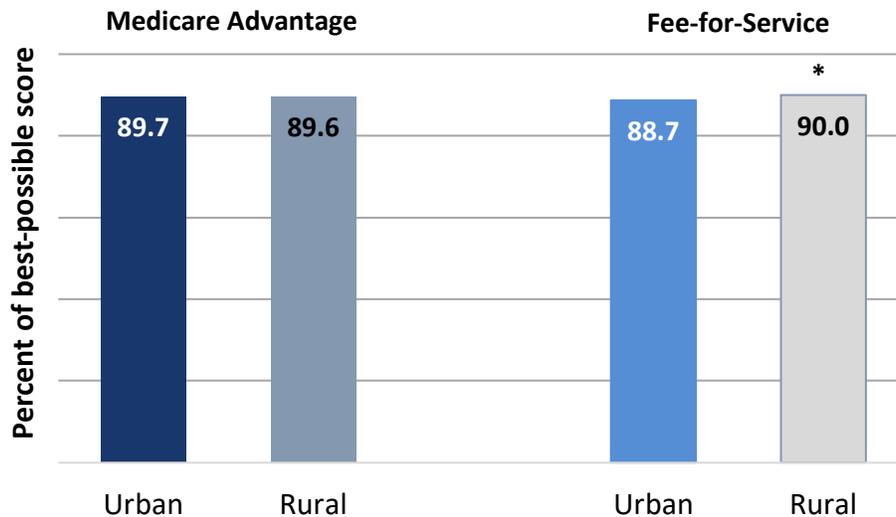
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> This includes how often in the last six 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,<sup>†</sup> by geography within coverage type, 2018



SOURCE: Data from the Medicare CAHPS survey, 2018.

### Disparities

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

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

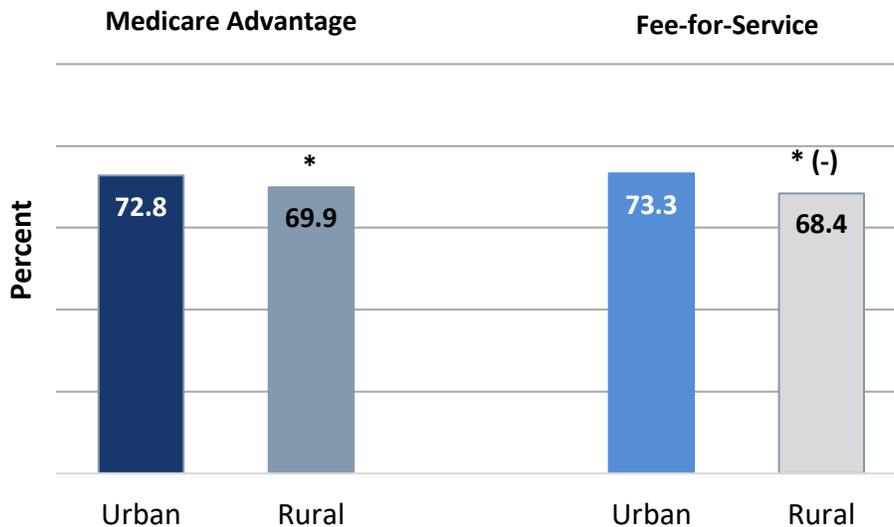
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) 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.

<sup>†</sup> This includes how often in the last six 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 geography within coverage type, 2018



**SOURCENOTE:** Data from the Medicare CAHPS survey, 2018.

### Disparities

- Among MA beneficiaries, rural residents were less likely than urban residents to have received the flu vaccine. The difference between rural and urban residents was less than 3 percentage points.
- Among FFS beneficiaries, rural residents were less likely than urban residents to have received the flu vaccine. The difference between rural and urban residents was greater than 3 percentage points.

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\* 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:

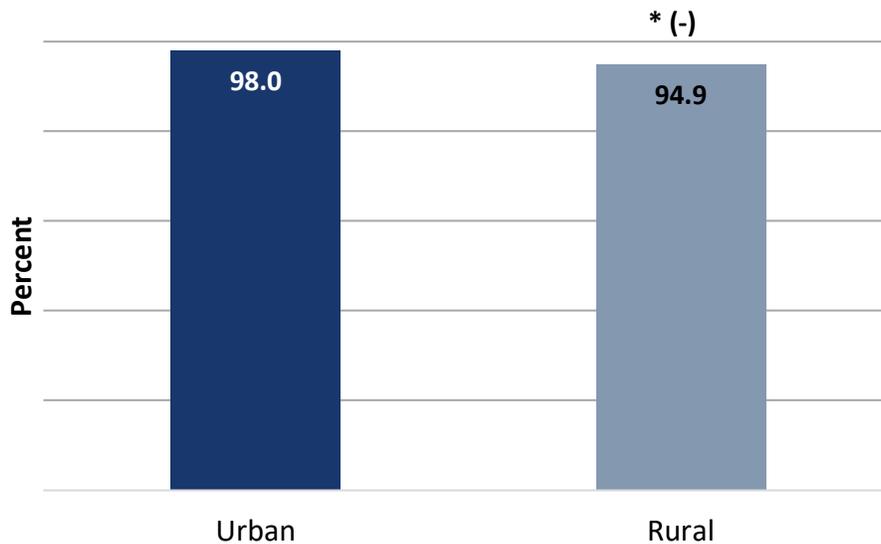
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

## Clinical Care: Prevention and Screening

### Adult BMI Assessment

Percentage of MA enrollees aged 18 to 74 years who had an outpatient visit whose body mass index (BMI) was documented in the past two years, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

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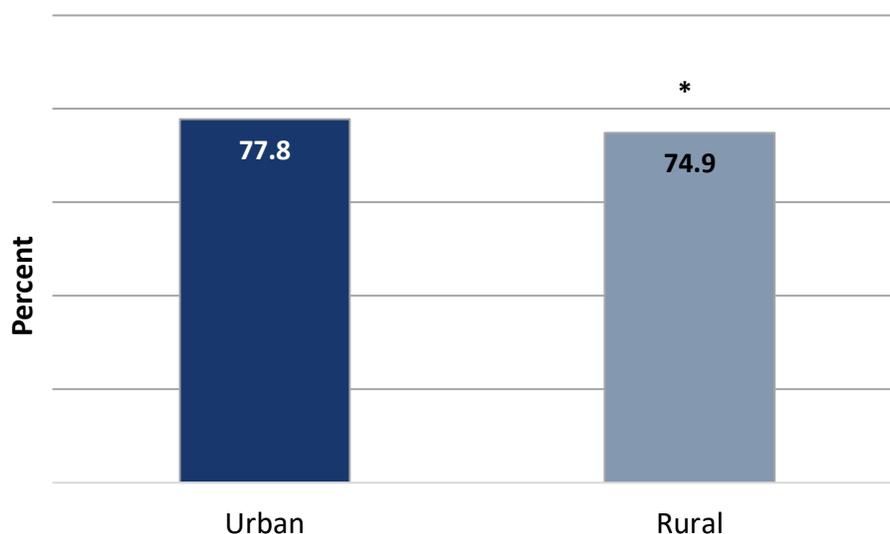
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

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.

## Breast Cancer Screening

Percentage of MA enrollees (women) aged 50 to 74 years who had appropriate screening for breast cancer, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

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

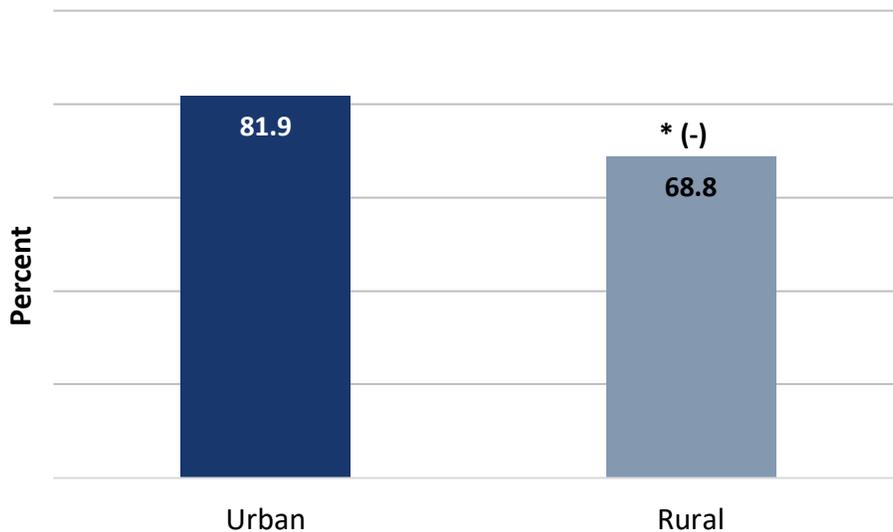
For differences that are statistically significant, the following symbols are also used when applicable:

(+) 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.

## Colorectal Cancer Screening

Percentage of MA enrollees aged 50 to 75 years who had appropriate screening for colorectal cancer, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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:

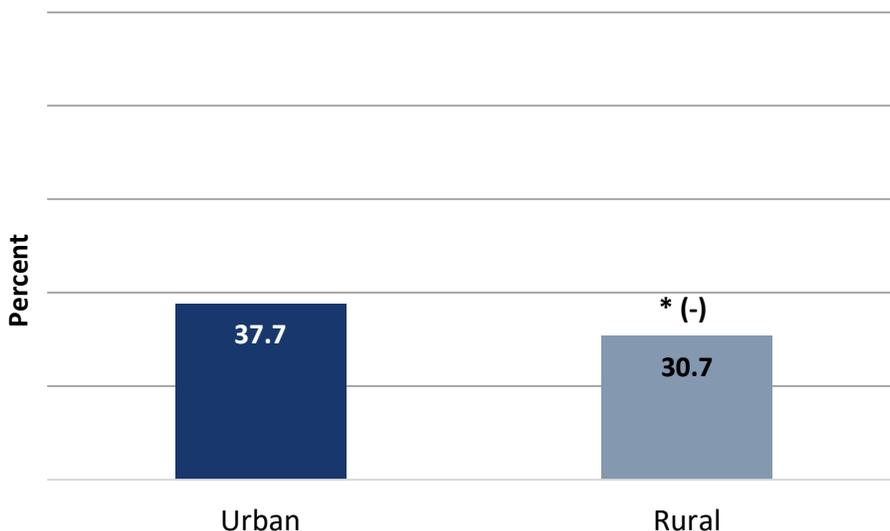
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

## Clinical Care: Respiratory Conditions

### 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 geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

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

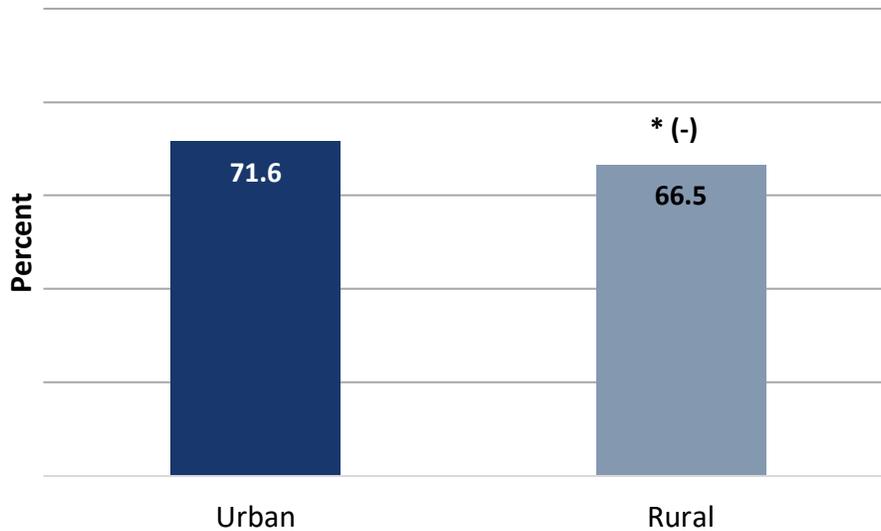
For differences that are statistically significant, the following symbols are also used when applicable:

(+) 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.

## Pharmacotherapy Management of COPD Exacerbation— Systemic Corticosteroid

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 systemic corticosteroid within 14 days of the event, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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 ( $p < 0.05$ ).

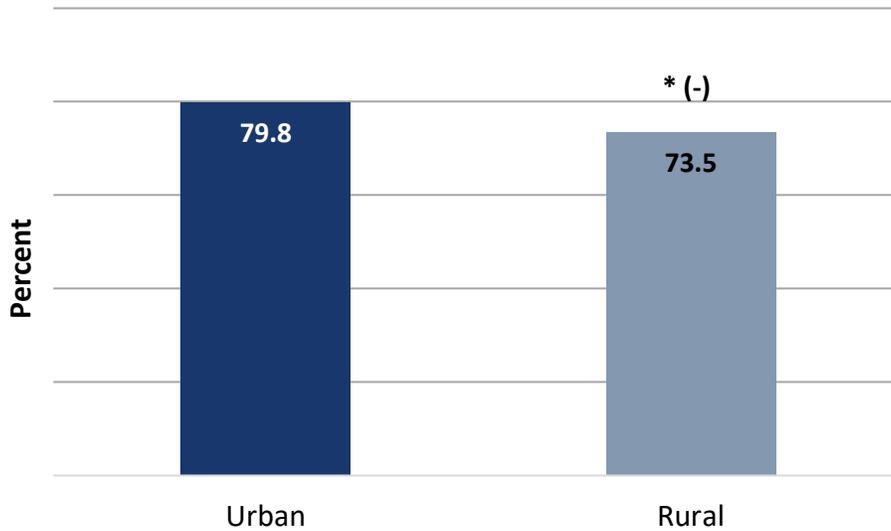
For differences that are statistically significant, the following symbols are also used when applicable:

(+) 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.

## 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 geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

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

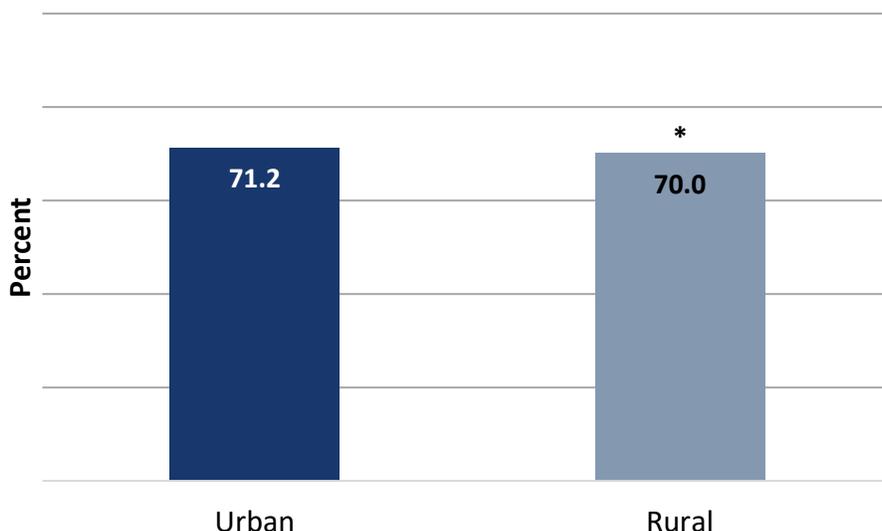
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) 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: Cardiovascular Conditions

### Controlling High Blood Pressure

Percentage of MA enrollees aged 18 to 85 years who had a diagnosis of hypertension whose blood pressure was adequately controlled<sup>†</sup> during the past year, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Rural residents who had a diagnosis of hypertension were less likely than urban residents who had a diagnosis of hypertension to have had their blood pressure adequately controlled. The difference between rural and urban residents was less than 3 percentage points.

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

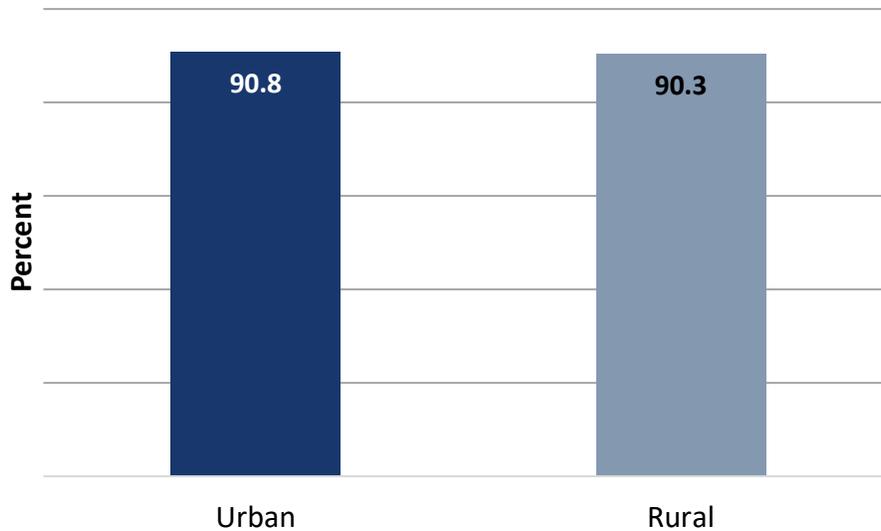
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) 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.

<sup>†</sup> 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.

## 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) who received persistent beta-blocker treatment for six months after discharge, by geography, 2018



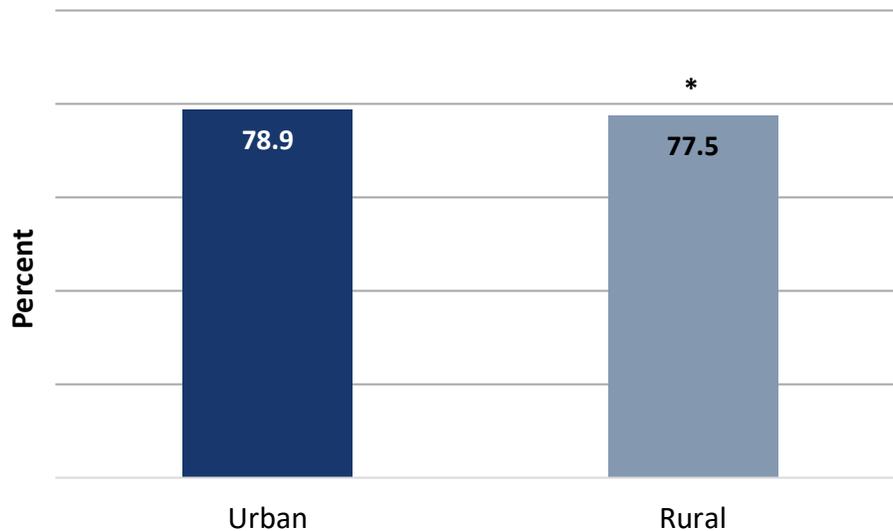
**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents who were hospitalized for a heart attack were about as likely as urban residents who were hospitalized for a heart attack to have received persistent beta-blocker treatment.

## 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 with clinical atherosclerotic cardiovascular disease (ASCVD) who received statin therapy, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

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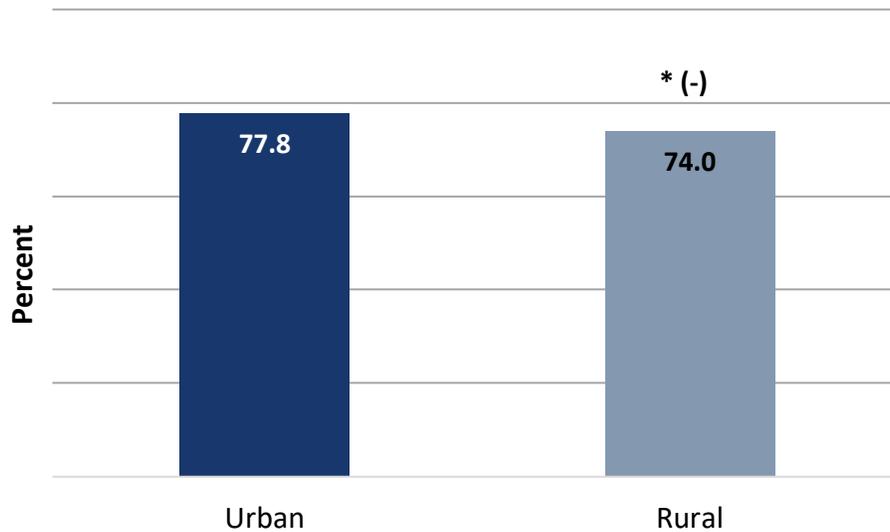
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

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.

## 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 with clinical atherosclerotic cardiovascular disease (ASCVD) 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 geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

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

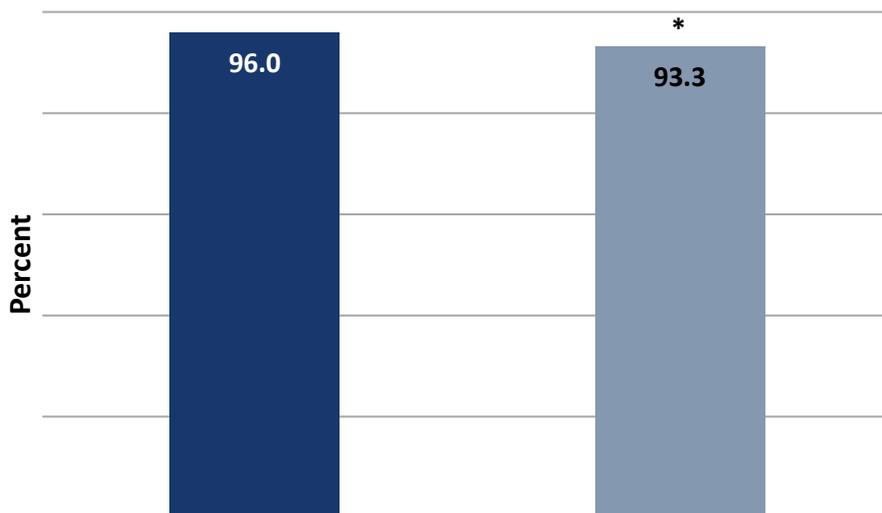
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) 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

### 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 geography, 2018



SOURCE: Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

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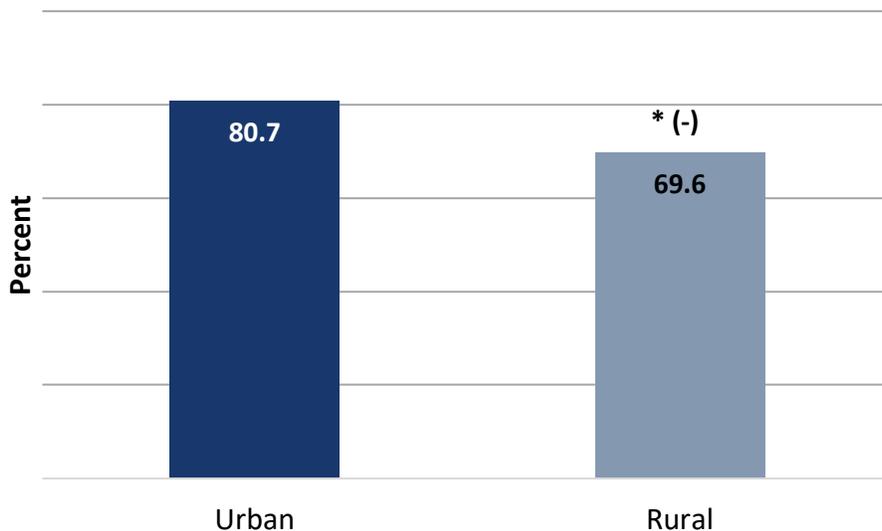
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

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.

## 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 geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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 ( $p < 0.05$ ).

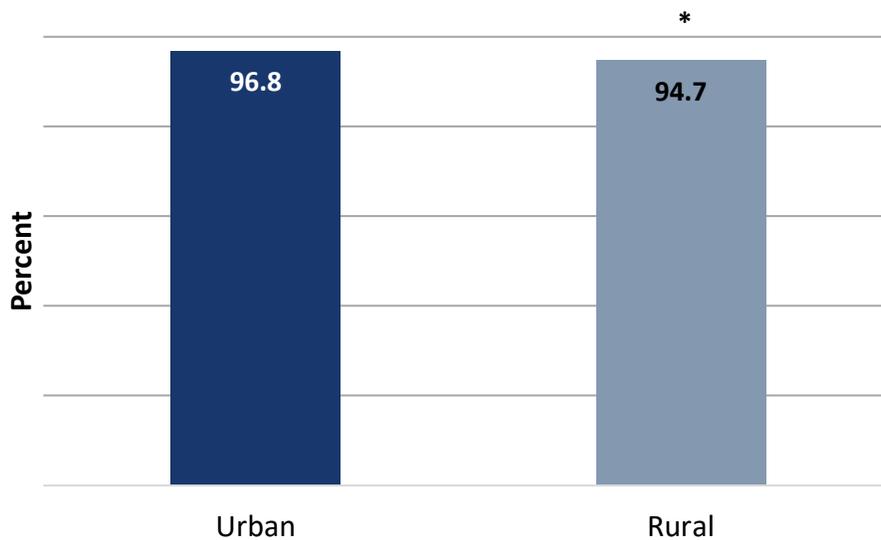
For differences that are statistically significant, the following symbols are also used when applicable:

(+) 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.

## 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 geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have had medical attention for nephropathy in the past year. The difference between rural and urban residents was less than 3 percentage points.

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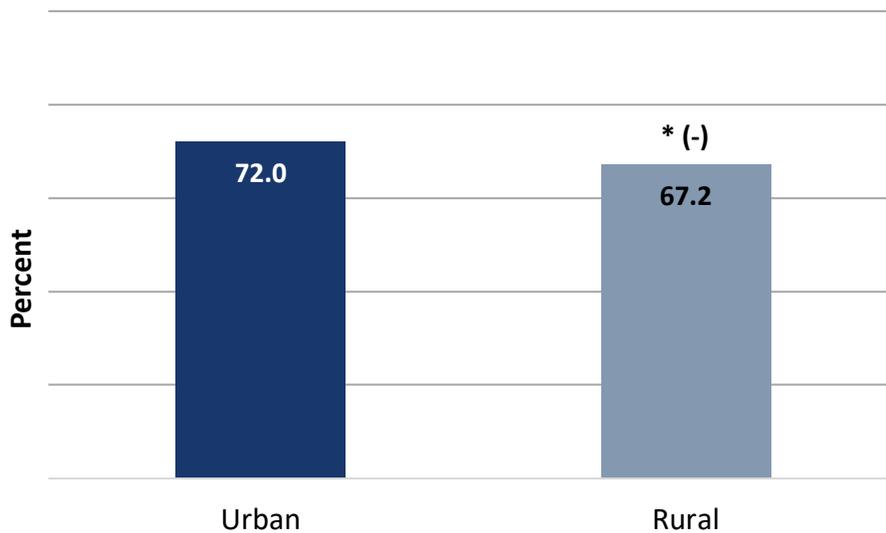
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

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.

## 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 geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

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

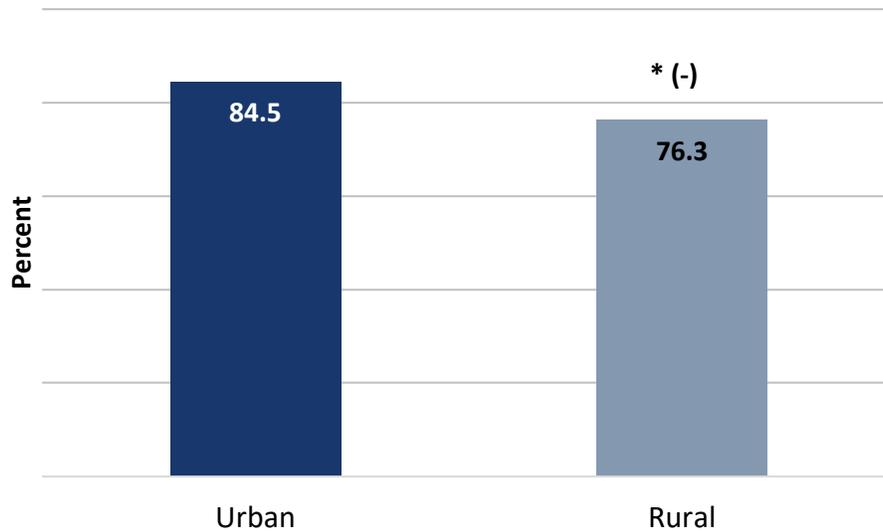
For differences that are statistically significant, the following symbols are also used when applicable:

(+) 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.

## 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 geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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 ( $p < 0.05$ ).

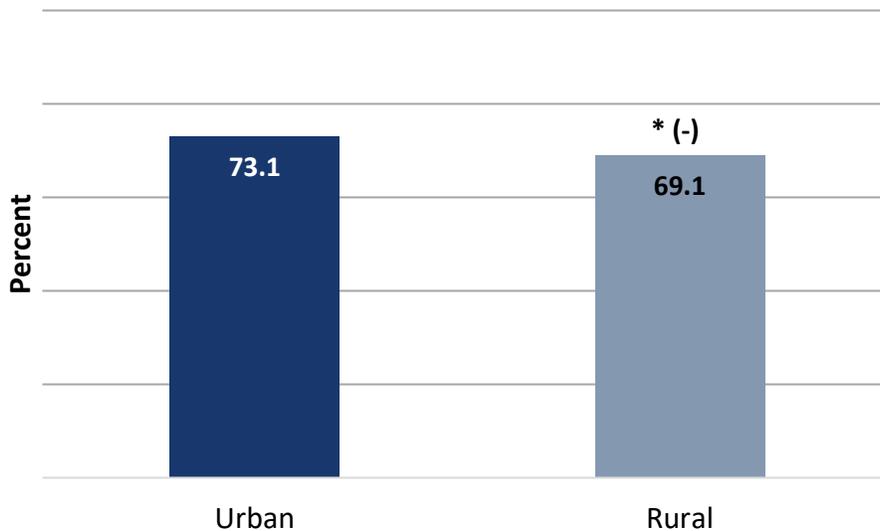
For differences that are statistically significant, the following symbols are also used when applicable:

(+) 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.

## Statin Use in Patients with Diabetes

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)<sup>†</sup> who received statin therapy, by geography, 2018



SOURCE: Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

---

\* 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:

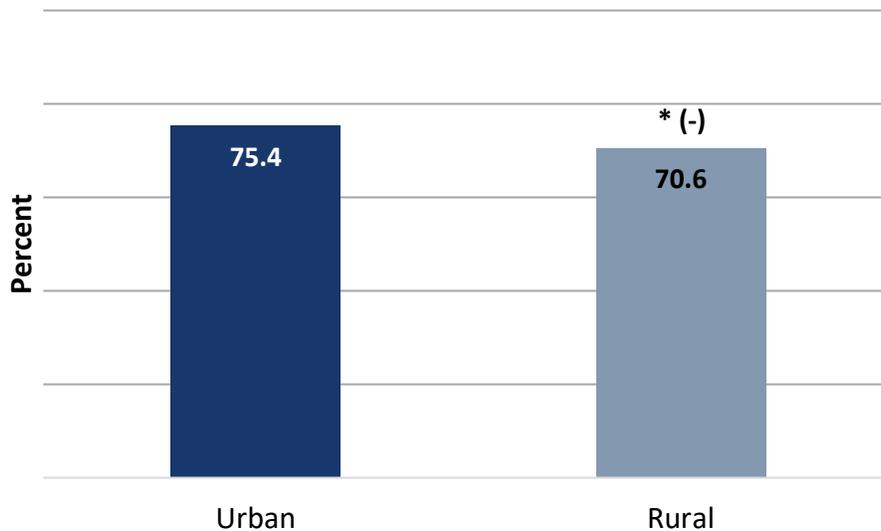
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> Excludes those who also have clinical atherosclerotic cardiovascular disease.

## Medication Adherence for Diabetes—Statins

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)<sup>†</sup> 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 geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

---

\* 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.

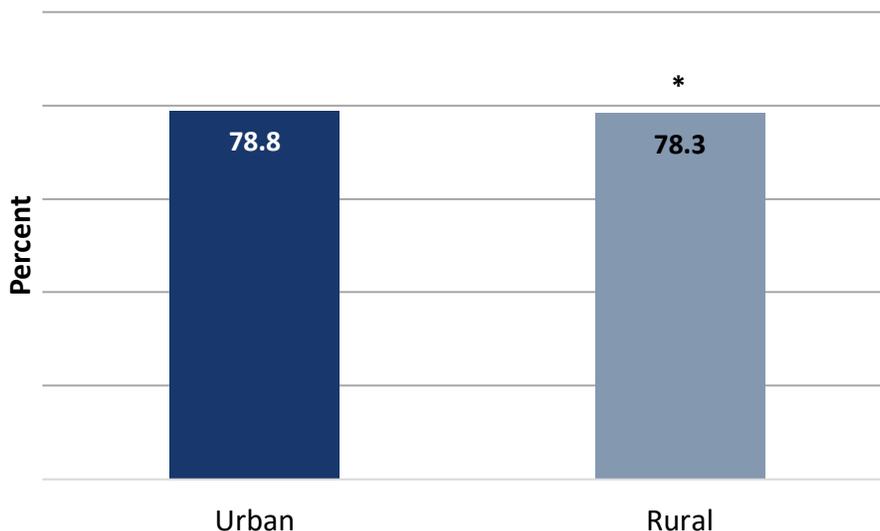
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Excludes those who also have clinical atherosclerotic cardiovascular disease.

## Clinical Care: Musculoskeletal Conditions

### Rheumatoid Arthritis Management

Percentage of MA enrollees aged 18 years and older who were diagnosed with rheumatoid arthritis during the past year who were dispensed at least one ambulatory prescription for a disease-modifying antirheumatic drug (DMARD), by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Rural residents who were diagnosed with rheumatoid arthritis were less likely than urban residents who were diagnosed with rheumatoid 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 ( $p < 0.05$ ).

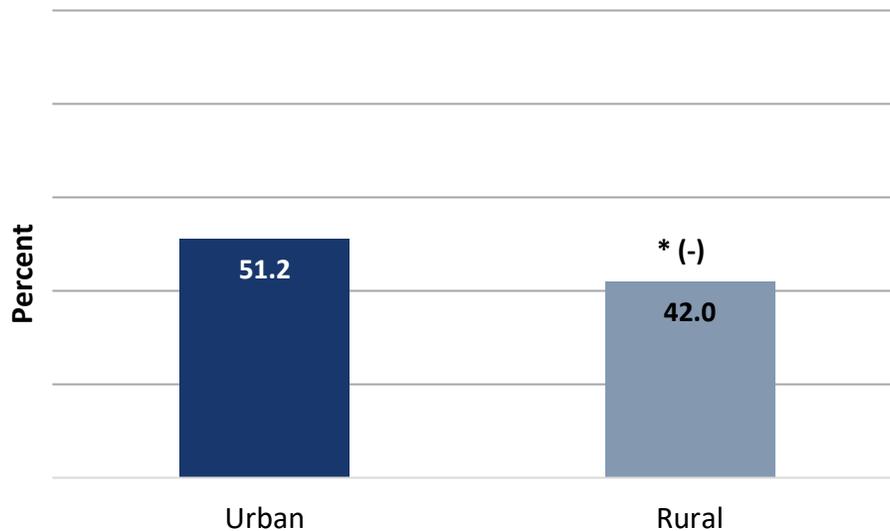
For differences that are statistically significant, the following symbols are also used when applicable:

(+) 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.

## Osteoporosis Management in Women Who Had a Fracture

Percentage of MA enrollees (women) aged 67 to 85 years who suffered a fracture 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 geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

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\* 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:

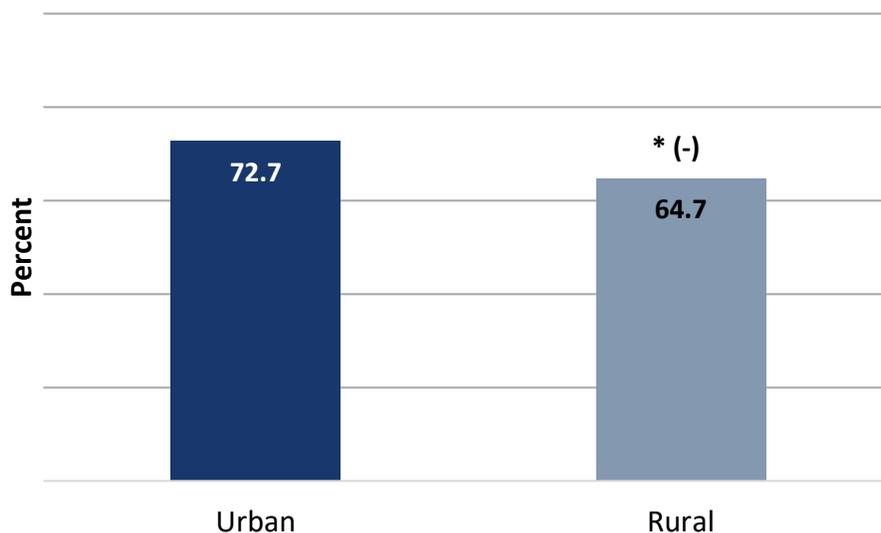
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

## Clinical Care: Behavioral Health

### 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 who remained on antidepressant medication for at least 84 days, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

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

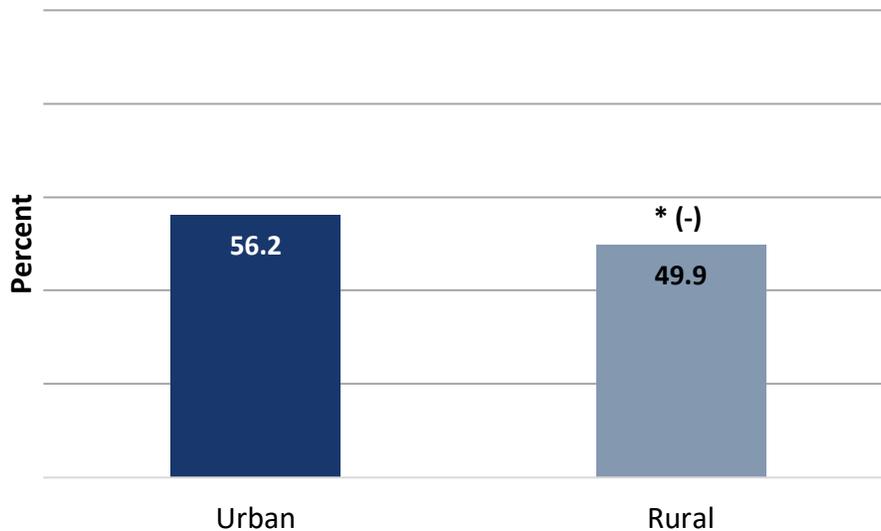
For differences that are statistically significant, the following symbols are also used when applicable:

(+) 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.

## 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 who remained on antidepressant medication for at least 180 days, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

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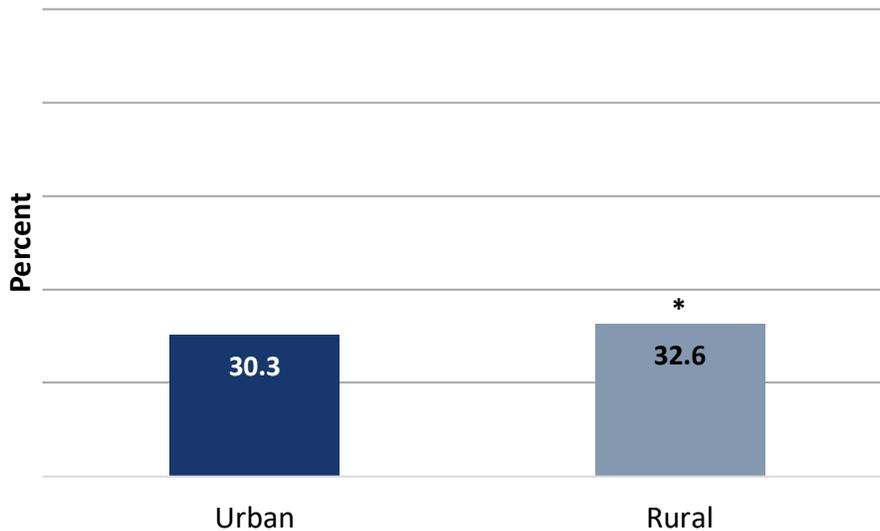
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

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.

## Follow-up After Hospital Stay for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who were hospitalized for treatment of selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of discharge, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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 less than 3 percentage points.

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

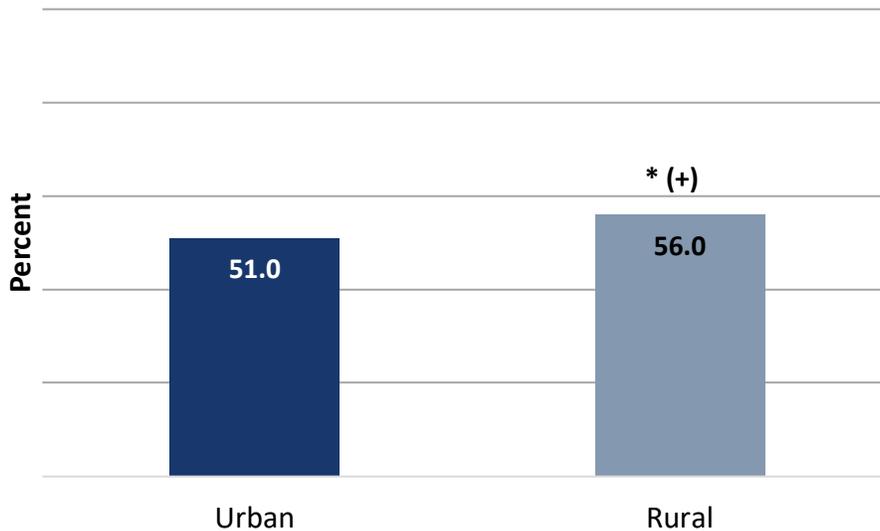
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) 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.

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

## Follow-up After Hospital Stay for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who were hospitalized for treatment of selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of discharge, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

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\* 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:

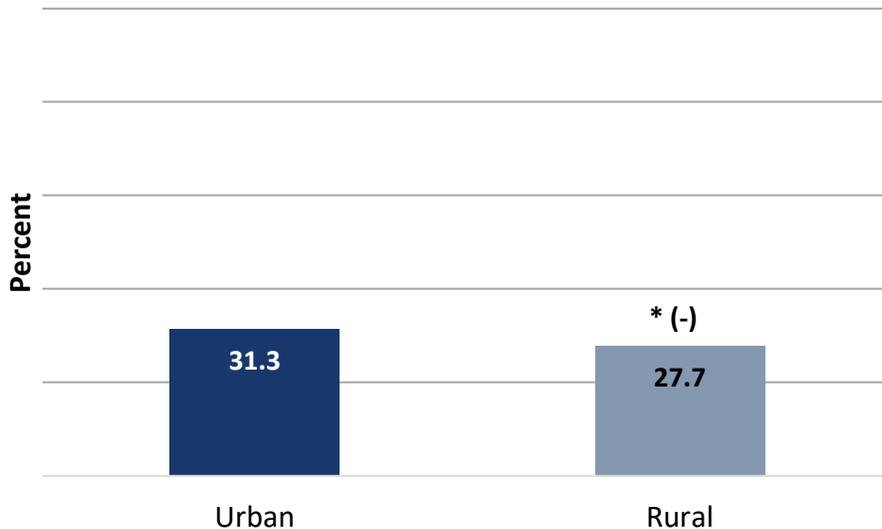
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

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

## Follow-up After Emergency Department (ED) Visit for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of the ED visit, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

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

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\* 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:

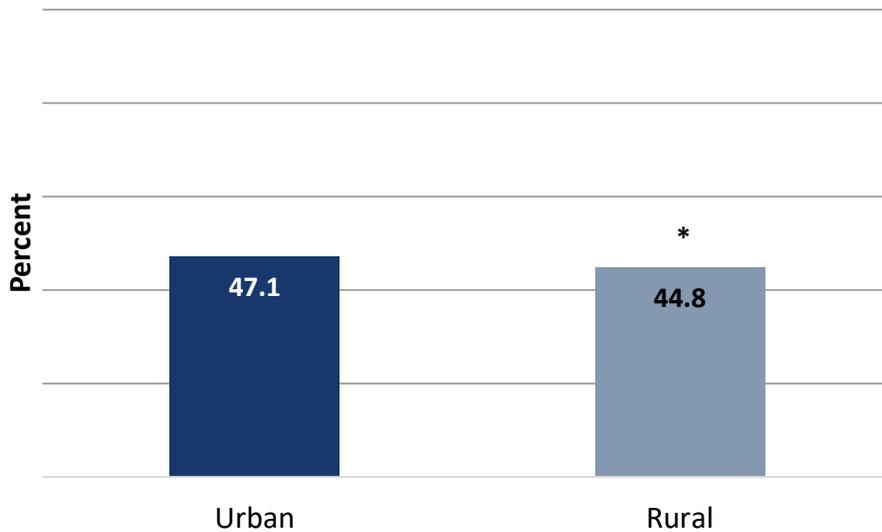
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

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

## Follow-up After Emergency Department (ED) Visit for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of the ED visit, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

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

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

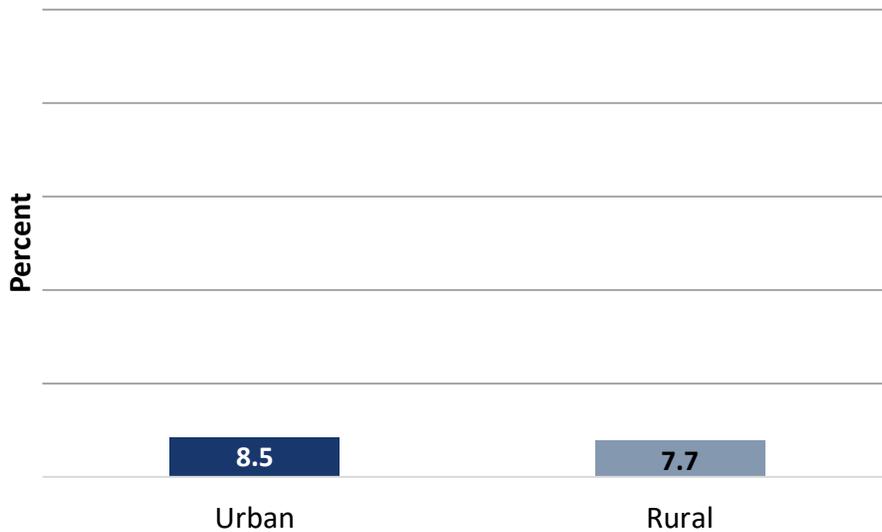
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) 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.

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

## Follow-up After Emergency Department (ED) Visit for Alcohol and Other Drug (AOD) Abuse or Dependence (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence within seven days of the ED visit, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

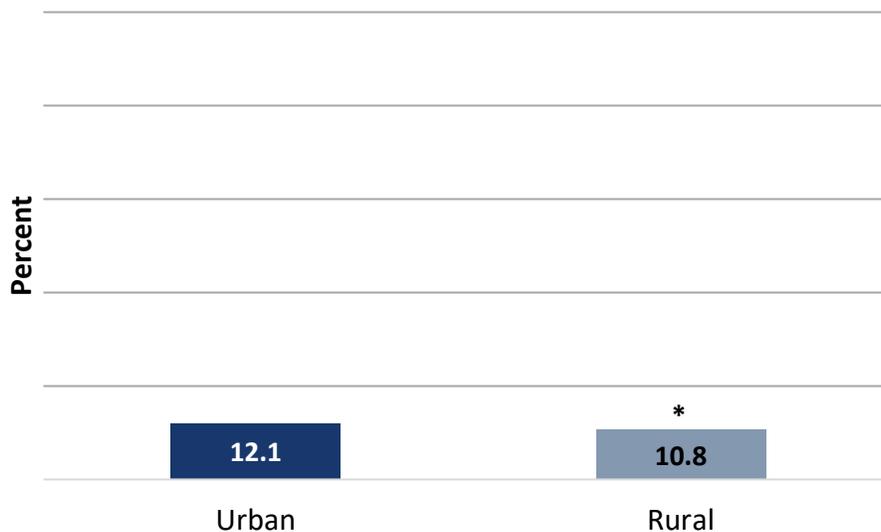
### Disparities

- Rural residents who had an ED visit for AOD abuse or dependence were about as likely as urban residents who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of being discharged.

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

## Follow-up After Emergency Department (ED) Visit for Alcohol and Other Drug (AOD) Abuse or Dependence (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents who had an ED visit for AOD abuse or dependence were less likely than urban residents who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of being discharged. The difference between rural and urban residents was less than 3 percentage points.

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\* 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:

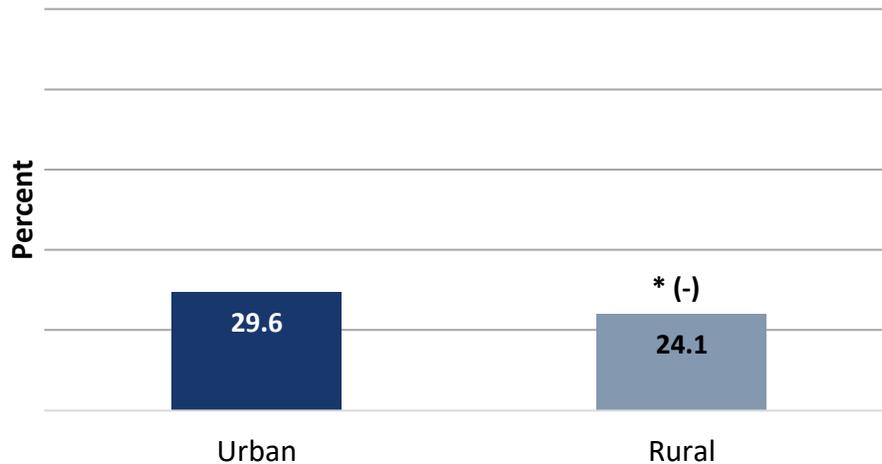
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> 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 of Alcohol and Other Drug Dependence Treatment

Percentage of MA enrollees aged 18 years and older<sup>†</sup> with a new episode of alcohol or other drug (AOD) dependence who initiated<sup>‡</sup> treatment within 14 days of the diagnosis, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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 greater than 3 percentage points.

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\* 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.

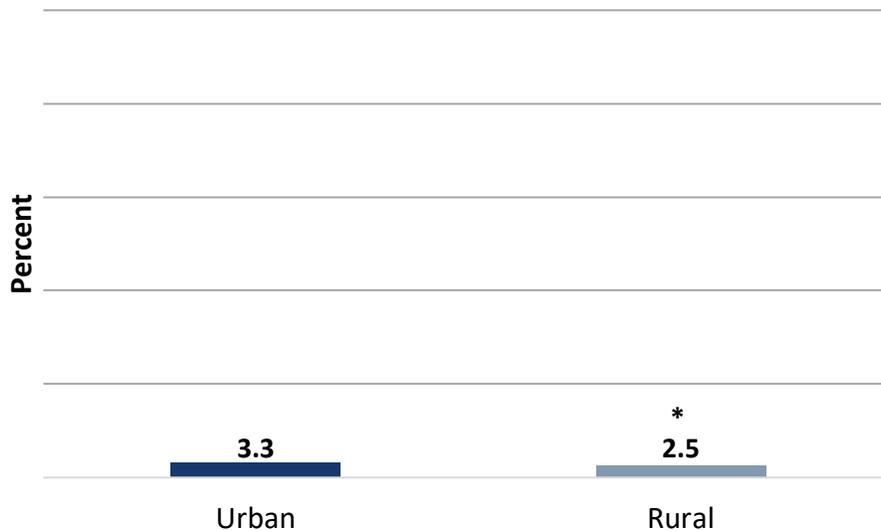
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

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

<sup>‡</sup> Initiation may occur through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization.

## Engagement of Alcohol and Other Drug Dependence Treatment

Percentage of MA enrollees aged 18 years and older<sup>†</sup> with a new episode of alcohol or other drug (AOD) dependence who initiated treatment and who had two or more additional services within 30 days of the initiation visit, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Overall performance on this measure was lower than on any other measure: Less than 4 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.

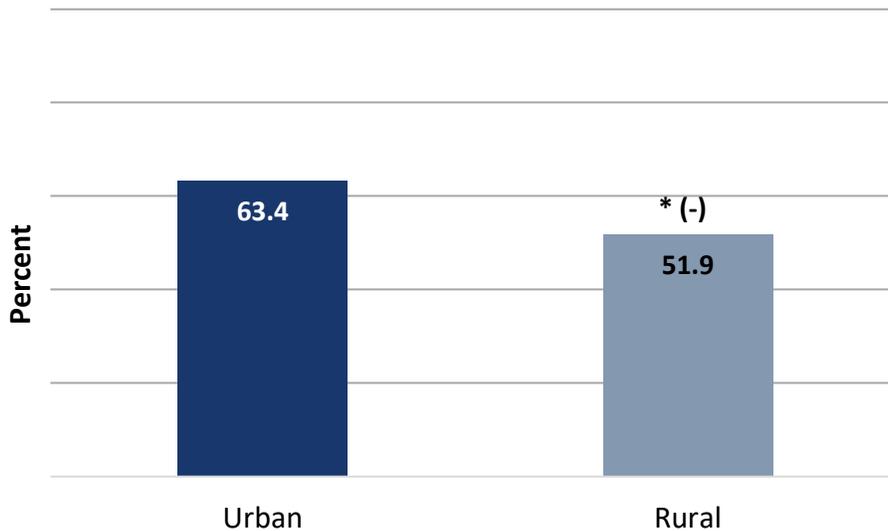
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

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

## Clinical Care: Medication Management and Care Coordination

### 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 geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

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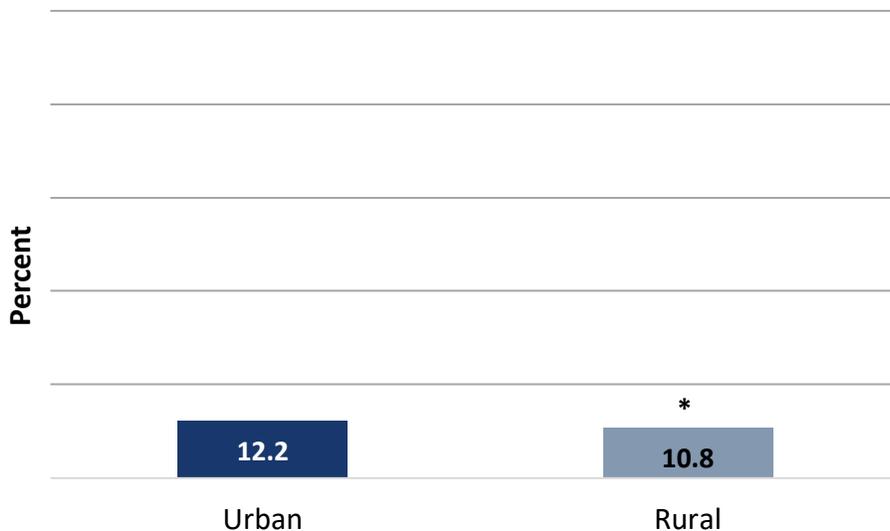
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

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.

## Transitions of Care—Notification of Inpatient Admission

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility whose primary or ongoing care providers were notified of the inpatient admission on the day of or the day following admission, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- The primary or ongoing care providers of rural residents who were discharged from an inpatient facility were less likely than the primary or ongoing care providers of urban residents who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was less than 3 percentage points.

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

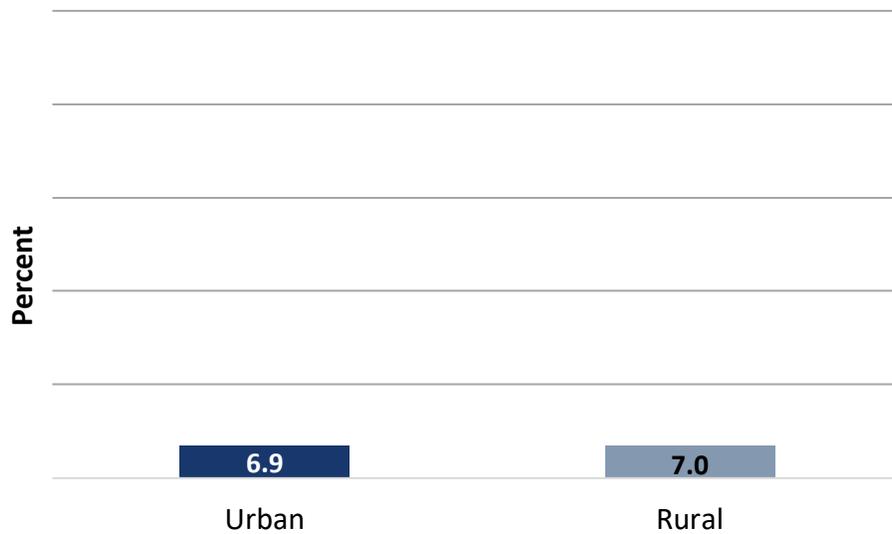
For differences that are statistically significant, the following symbols are also used when applicable:

(+) 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.

## Transitions of Care—Receipt of Discharge Information

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility who received discharge information on the day of or the day following discharge, by geography, 2018



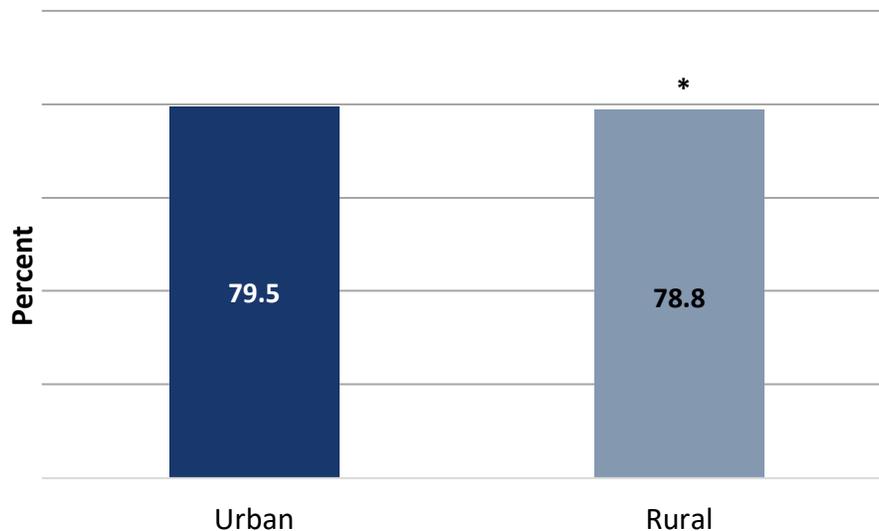
**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents who were discharged from an inpatient facility were about as likely as urban residents who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge.

## Transitions of Care—Patient Engagement After Inpatient Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility for whom patient engagement (office visit, home visit, telehealth) was provided within 30 days of discharge, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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 an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between rural and urban residents was less than 3 percentage points.

---

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

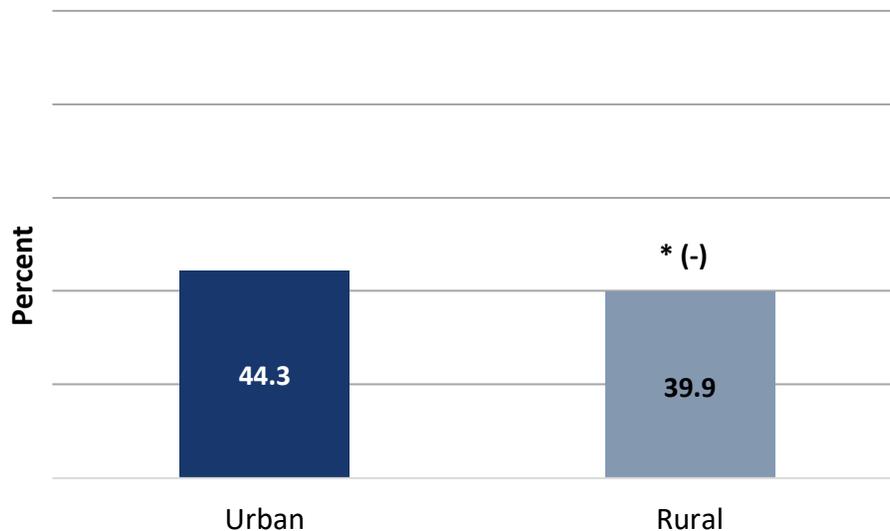
For differences that are statistically significant, the following symbols are also used when applicable:

(+) 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.

## Transitions of Care—Medication Reconciliation After Inpatient Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility for whom medications were reconciled within 30 days of discharge,<sup>†</sup> by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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 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:

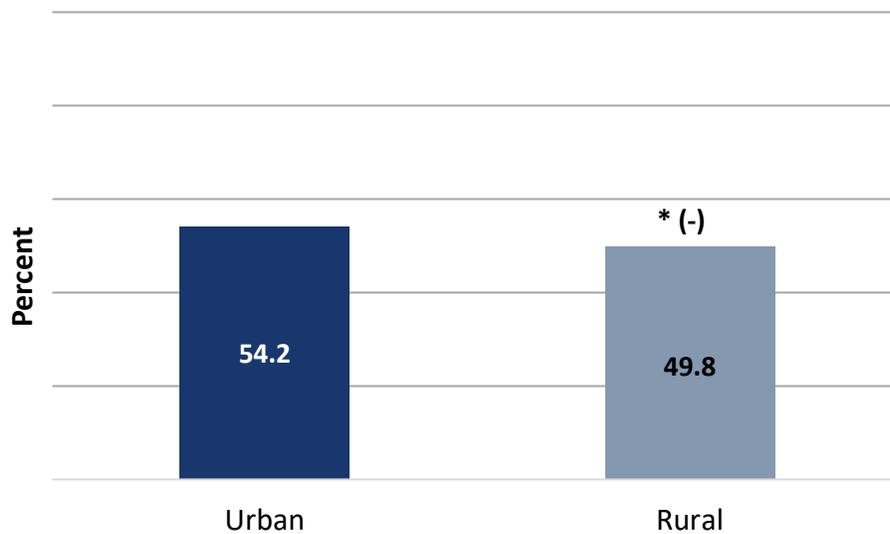
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> Scores on this measure may differ from scores on the medication reconciliation measure presented on page 45 because of different rules governing the collection of the data.

## Follow-Up After Emergency Department (ED) Visit for People with High-Risk Multiple Chronic Conditions

Percentage of MA enrollees aged 18 years and older with multiple high-risk chronic conditions<sup>†</sup> who received follow-up care within seven days of an ED visit, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents with multiple high-risk chronic conditions<sup>†</sup> were less likely than urban residents with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. 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.

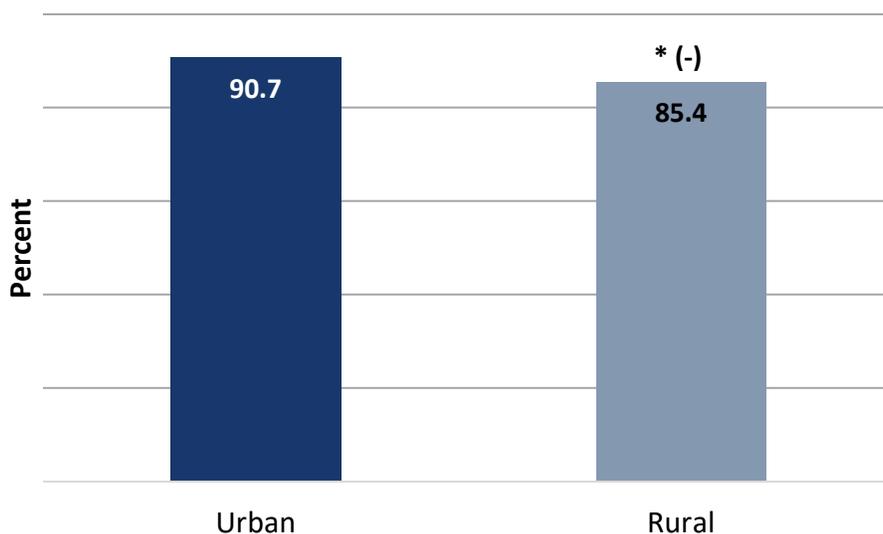
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Conditions include COPD and asthma, Alzheimer's disease and related disorders, chronic kidney disease, depression, heart failure, acute myocardial infarction, atrial fibrillation, and stroke and transient ischemic attack.

## Clinical Care: Overuse/Appropriateness

### 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,<sup>†</sup> by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Use of potentially harmful medication<sup>†</sup> was avoided 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.

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\* 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:

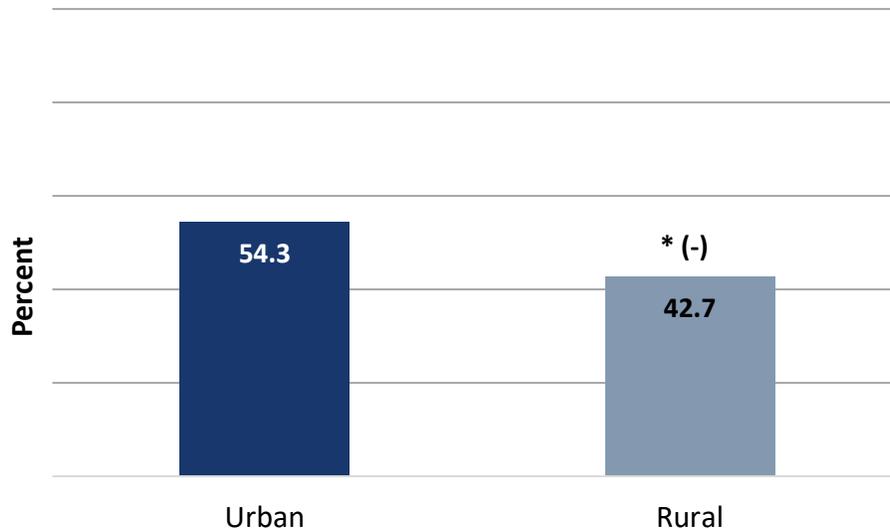
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> This includes cyclooxygenase-2 (COX-2) selective nonsteroidal anti-inflammatory drugs (NSAIDs) or nonaspirin NSAIDs.

## 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,<sup>†</sup> by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Use of potentially harmful medication<sup>†</sup> was avoided 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.

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\* 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:

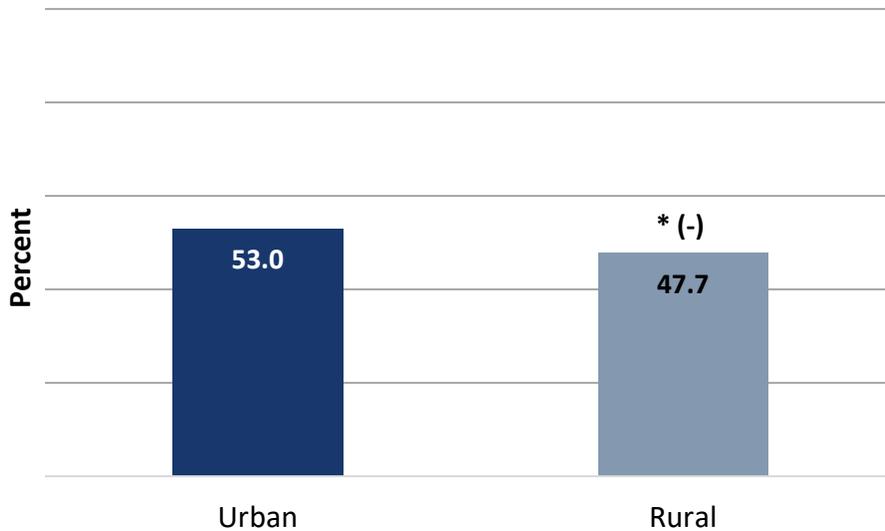
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> This includes antiemetics, antipsychotics, benzodiazepines, tricyclic antidepressants, H2 receptor antagonists, nonbenzodiazepine hypnotics, and anticholinergic agents.

## 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,<sup>†</sup> by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Use of potentially harmful medication<sup>†</sup> was avoided 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:

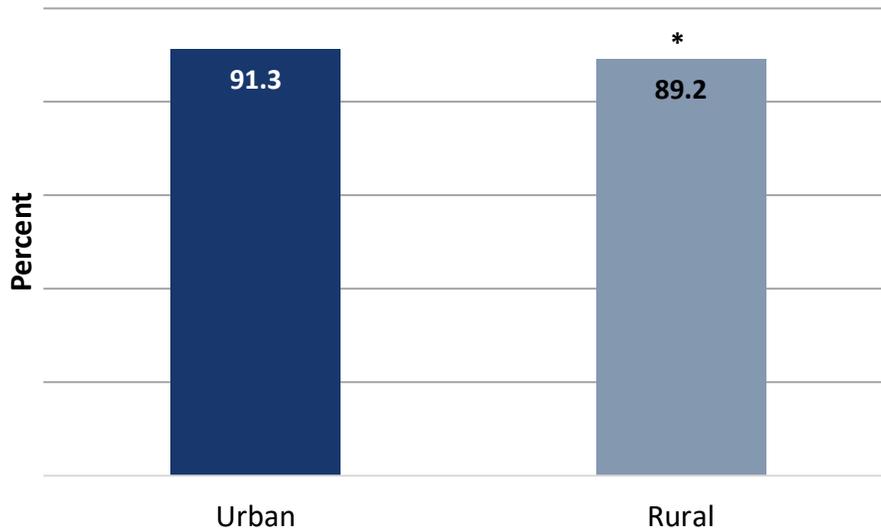
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> This includes anticonvulsants, nonbenzodiazepine hypnotics, selective serotonin reuptake inhibitors (SSRIs), antiemetics, antipsychotics, benzodiazepines, and tricyclic antidepressants.

## 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 geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Use of high-risk medication was avoided less often for rural residents than for urban residents. The difference between rural and urban residents was less than 3 percentage points.

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

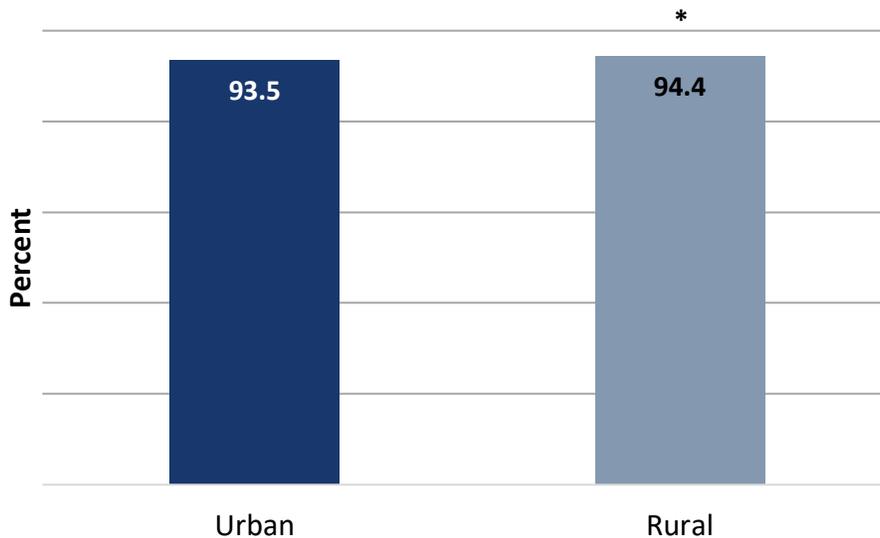
For differences that are statistically significant, the following symbols are also used when applicable:

(+) 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.

## Avoiding Use of Opioids at High Dosage

Percentage of MA enrollees aged 18 years and older who were not prescribed opioids at a high dosage<sup>†</sup> for more than 14 days, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Use of opioids at a high dosage<sup>†</sup> for more than 14 days was avoided more 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 ( $p < 0.05$ ).

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

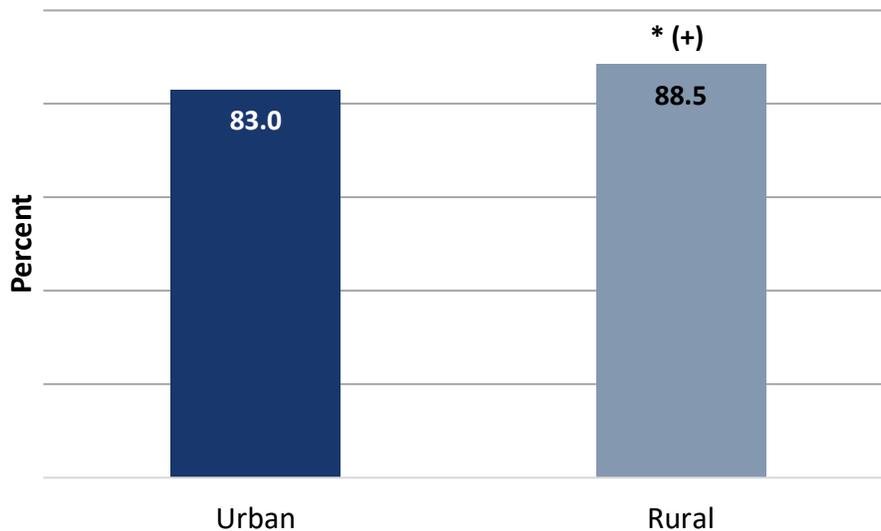
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> Average morphine equivalent dose > 120 mg

## Avoiding Use of Opioids from Multiple Prescribers

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more prescribers in the past year, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Use of opioids from multiple prescribers was avoided more often for rural residents than for urban residents. The difference between rural and urban residents was greater than 3 percentage points.

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

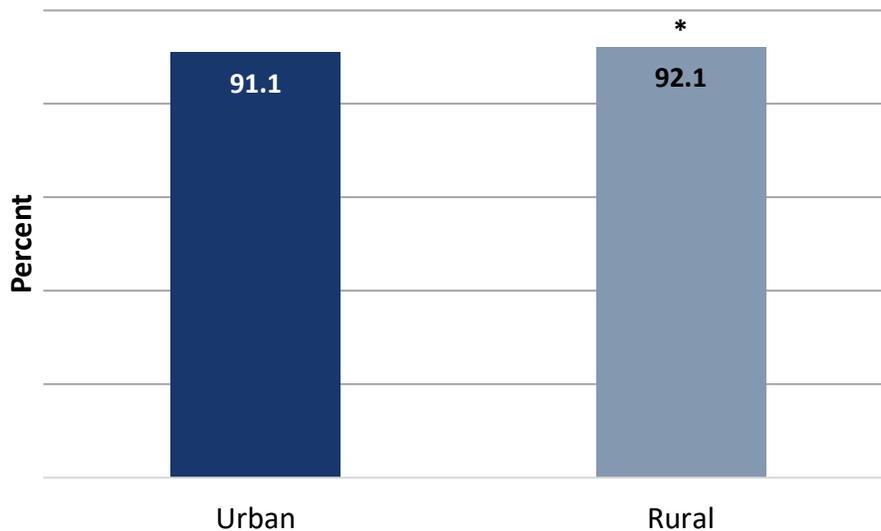
For differences that are statistically significant, the following symbols are also used when applicable:

(+) 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.

## Avoiding Use of Opioids from Multiple Pharmacies

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more pharmacies in the past year, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Use of opioids from multiple pharmacies was avoided more often for rural residents than for urban residents. The difference between rural and urban residents was less than 3 percentage points.

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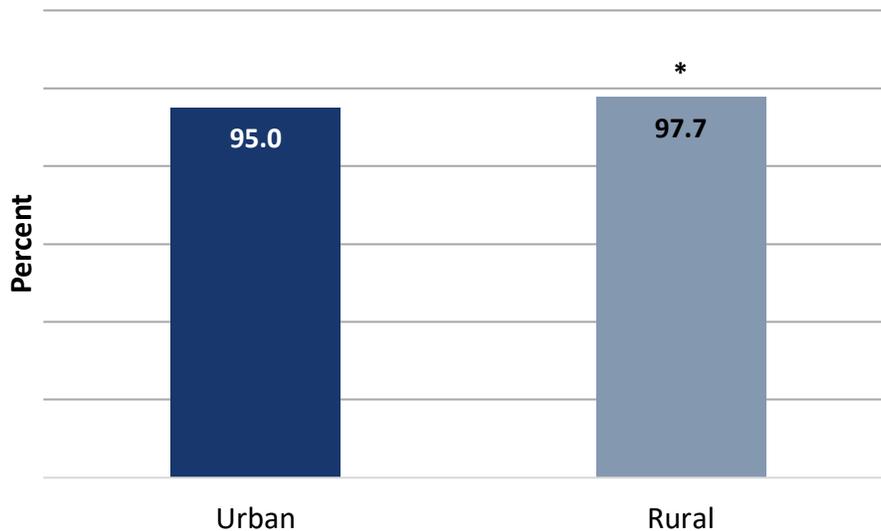
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

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.

## Avoiding Use of Opioids from Multiple Prescribers and Pharmacies

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more prescribers and four or more pharmacies in the past year, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Use of opioids from multiple prescribers and pharmacies was avoided more often for rural residents than for urban residents. The difference between rural and urban residents was less than 3 percentage points.

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

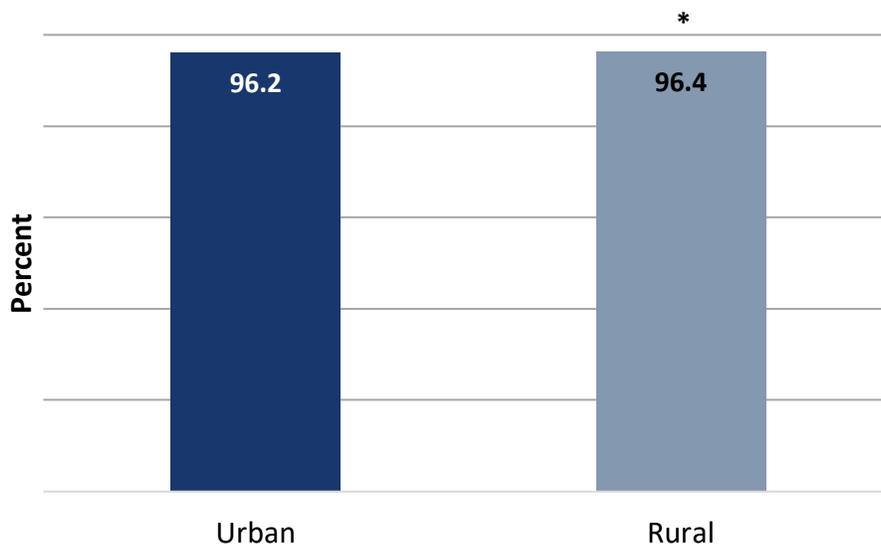
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) 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: Access/Availability of 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 geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS 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.

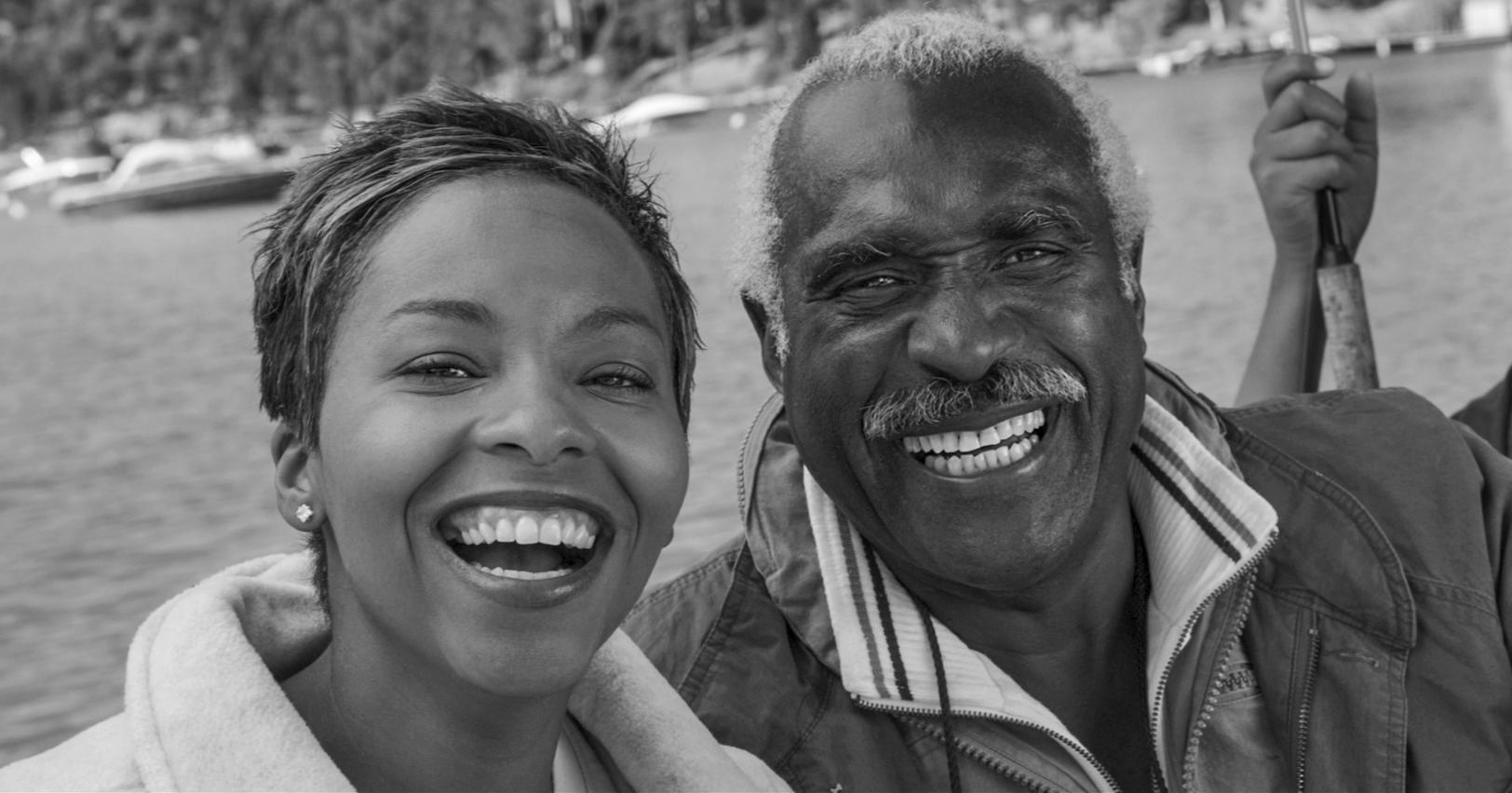
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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

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.

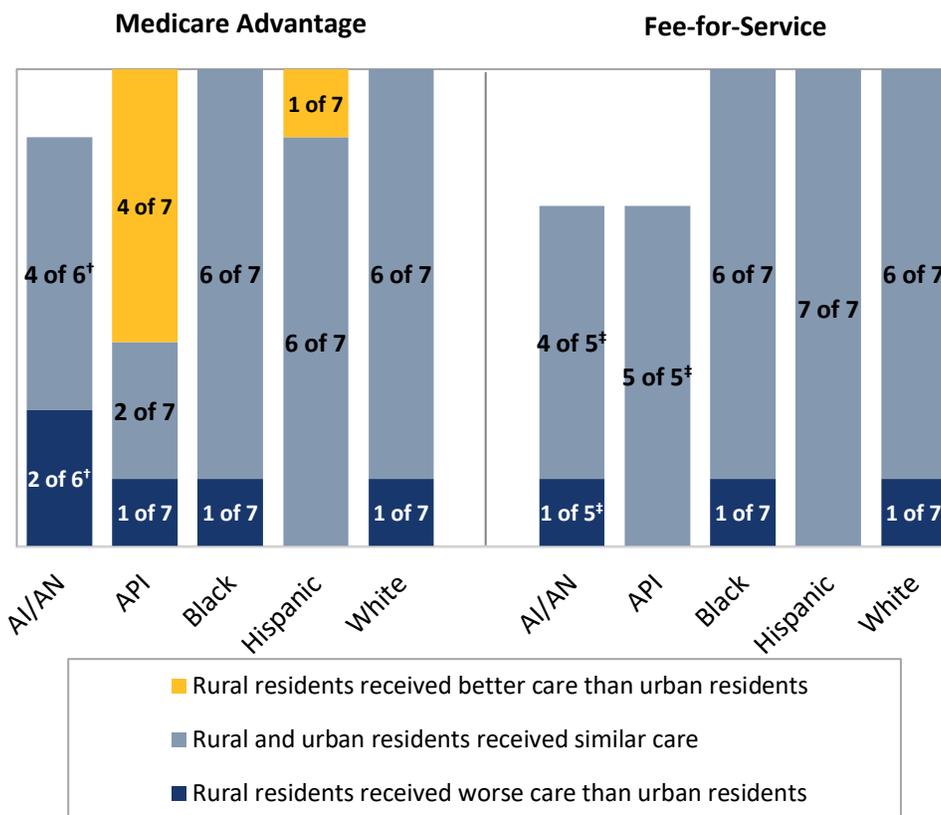


## **Section II: Rural-Urban Disparities in Health Care in Medicare by Racial and Ethnic Group**



## Rural-Urban Disparities in Care by Racial and Ethnic Group: All Patient Experience Measures

Number of patient experience measures for which rural AI/AN, API, Black, Hispanic, and White beneficiaries reported experiences that were worse than, similar to, or better than the experiences reported by urban AI/AN, API, Black, Hispanic, and White beneficiaries in 2018



**SOURCE:** This chart summarizes data from all FFS Medicare and MA beneficiaries nationwide who participated in the 2018 Medicare CAHPS survey.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> There were not enough data from rural MA AI/AN beneficiaries to make a rural-urban comparison on one patient experience measure.

<sup>‡</sup> There were not enough data from rural and urban FFS AI/AN beneficiaries or from rural API beneficiaries to make rural-urban comparisons for these groups on two patient experience 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<sup>††</sup> 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.

**Rural AI/AN MA beneficiaries received worse care than urban AI/AN MA beneficiaries**

- Getting needed care
- Doctors who communicate well

**Rural API MA beneficiaries received worse care than urban API MA beneficiaries**

- Annual flu vaccine

**Rural API MA beneficiaries received better care than urban API MA beneficiaries**

- Getting needed care
- Getting appointments and care quickly
- Customer service
- Getting needed prescription drugs

**Rural Black MA beneficiaries received worse care than urban Black MA beneficiaries**

- Getting appointments and care quickly

**Rural Hispanic MA beneficiaries received better care than urban Hispanic MA beneficiaries**

- Getting needed prescription drugs

**Rural White MA beneficiaries received worse care than urban White MA beneficiaries**

- Annual flu vaccine

**Rural AI/AN FFS beneficiaries received worse care than urban AI/AN FFS beneficiaries**

- Getting needed care

**Rural Black FFS beneficiaries received worse care than urban Black FFS beneficiaries**

- Annual flu vaccine

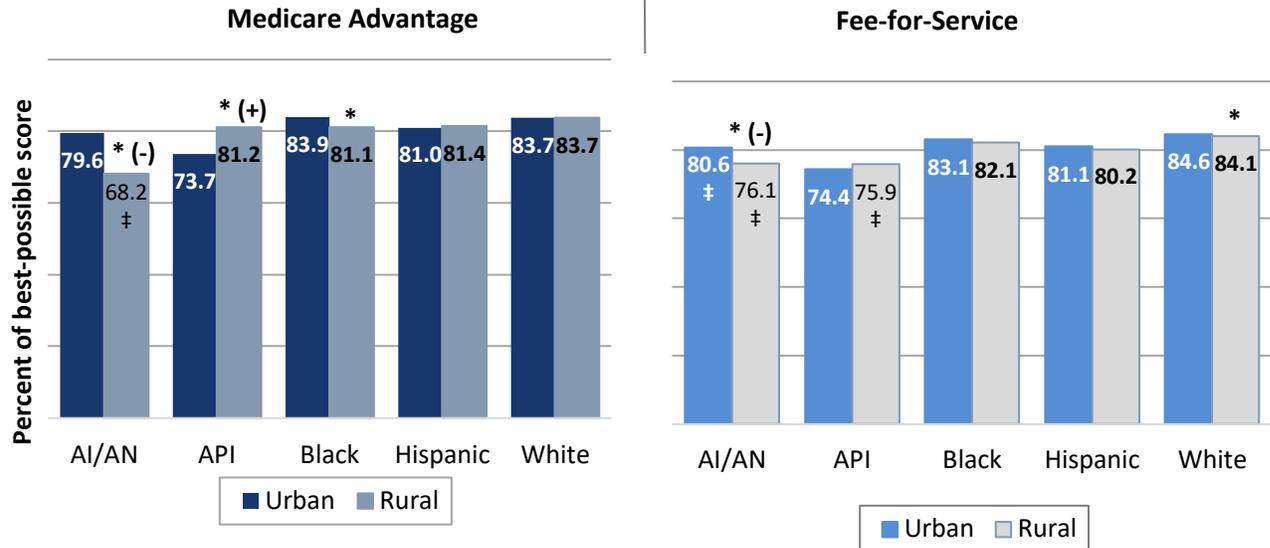
**Rural White FFS beneficiaries received worse care than urban White FFS beneficiaries**

- Annual flu vaccine

# Patient Experience

## 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,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTE:** = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- In both MA and FFS, AI/AN beneficiaries residing in rural areas reported worse<sup>††</sup> experiences getting needed care than AI/AN beneficiaries residing in urban areas. In each case, the difference between rural and urban AI/AN beneficiaries was greater than 3 points on a 0–100 scale.
- API MA beneficiaries residing in rural areas reported better experiences getting needed care than API MA beneficiaries residing in urban areas. The difference between rural and urban API MA beneficiaries was greater than 3 points on a 0–100 scale. API FFS beneficiaries residing in rural areas reported experiences getting needed care that were similar to the experiences reported by API FFS beneficiaries residing in urban areas.
- 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.
- In both MA and FFS, Hispanic beneficiaries residing in rural areas reported experiences getting needed care that were similar to the experiences reported by Hispanic beneficiaries residing in urban areas.

- White MA beneficiaries residing in rural areas reported experiences getting needed 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 needed care 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.

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\* 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 and coverage type, the following symbols are also used when applicable:

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

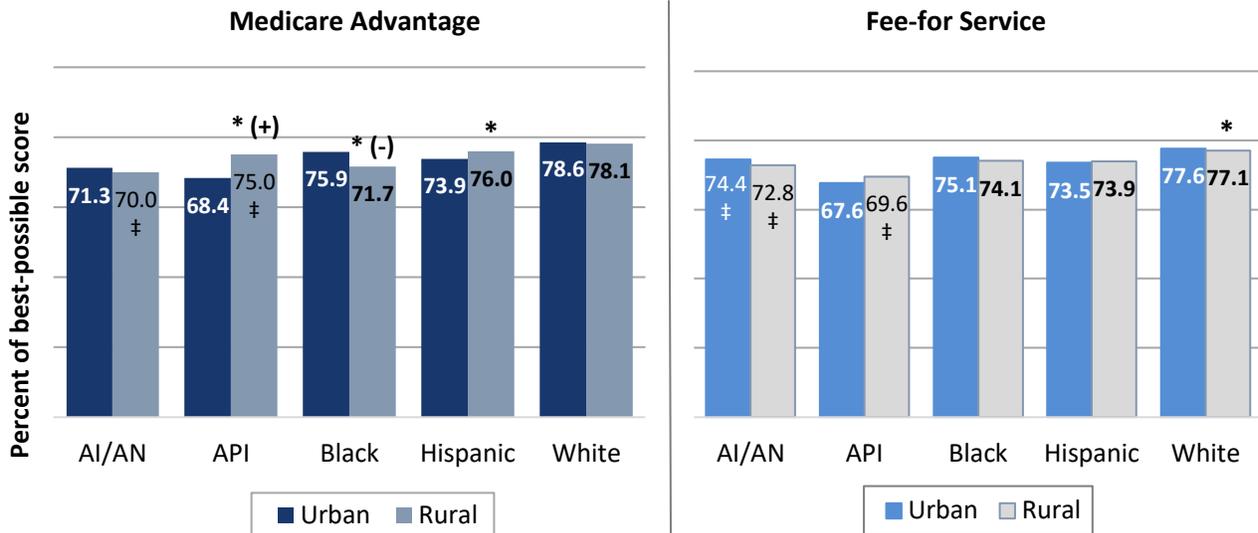
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

† This includes how often in the last six 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 the previous two pages, 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,<sup>‡</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- In both MA and FFS, AI/AN beneficiaries residing in rural areas reported experiences getting appointments and care quickly that were similar to the experiences reported by AI/AN beneficiaries residing in urban areas.
- API MA beneficiaries residing in rural areas reported better experiences getting appointments and care quickly than API MA beneficiaries residing in urban areas. The difference between rural and urban API MA beneficiaries was greater than 3 points on a 0–100 scale. API FFS beneficiaries residing in rural areas reported experiences getting appointments and care quickly that were similar to the experiences reported by API FFS beneficiaries residing in urban areas.
- 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 experiences getting appointments and care quickly 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 appointments and care quickly than Hispanic MA beneficiaries residing in urban areas. The difference between rural and urban Hispanic MA beneficiaries was less than 3 points on a 0–100 scale. Hispanic FFS beneficiaries residing in rural areas reported experiences getting

appointments and care quickly that were similar to the experiences reported by Hispanic FFS beneficiaries residing in urban areas.

- White MA beneficiaries residing in rural areas reported experiences getting appointments and care quickly 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.

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\* 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 and coverage type, the following symbols are also used when applicable:

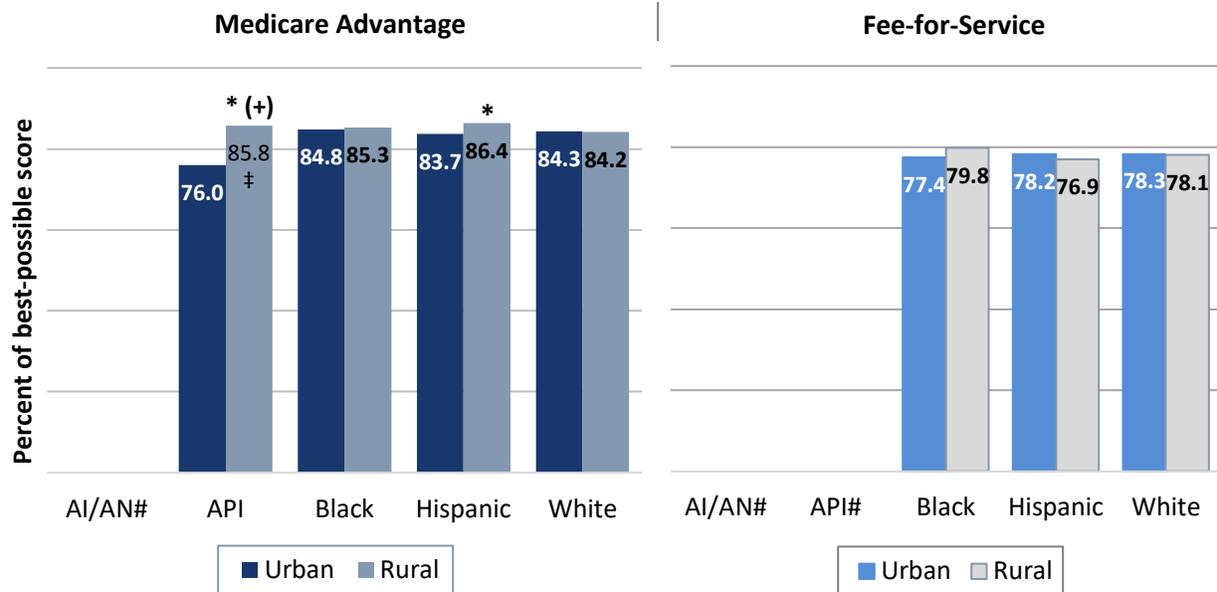
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

† This includes how often in the last six 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,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

<sup>#</sup> There were not enough data from AI/AN MA beneficiaries, AI/AN FFS beneficiaries, or API FFS beneficiaries to make rural-urban comparisons on this measure.

### Disparities

- There were not enough data from AI/AN beneficiaries to make rural-urban comparisons on this measure.
- API MA beneficiaries residing in rural areas reported better experiences with customer service than API 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. There were not enough data from API FFS beneficiaries to make a rural-urban comparison on this measure.
- In both MA and FFS, Black beneficiaries residing in rural areas reported experiences with customer service that were similar to the experiences reported by Black beneficiaries residing in urban areas.
- Hispanic MA beneficiaries residing in rural areas reported better experiences with customer service than Hispanic MA beneficiaries residing in urban areas. The difference between rural and urban Hispanic MA beneficiaries was less than 3 points on a 0–100 scale. Hispanic FFS beneficiaries residing in rural areas reported experiences with customer service that were similar to the experiences reported by Hispanic FFS beneficiaries residing in urban areas.

- In both MA and FFS, White beneficiaries residing in rural areas reported experiences with customer service that were similar to the experiences reported by White beneficiaries residing in urban areas.

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\* 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 and coverage type, the following symbols are also used when applicable:

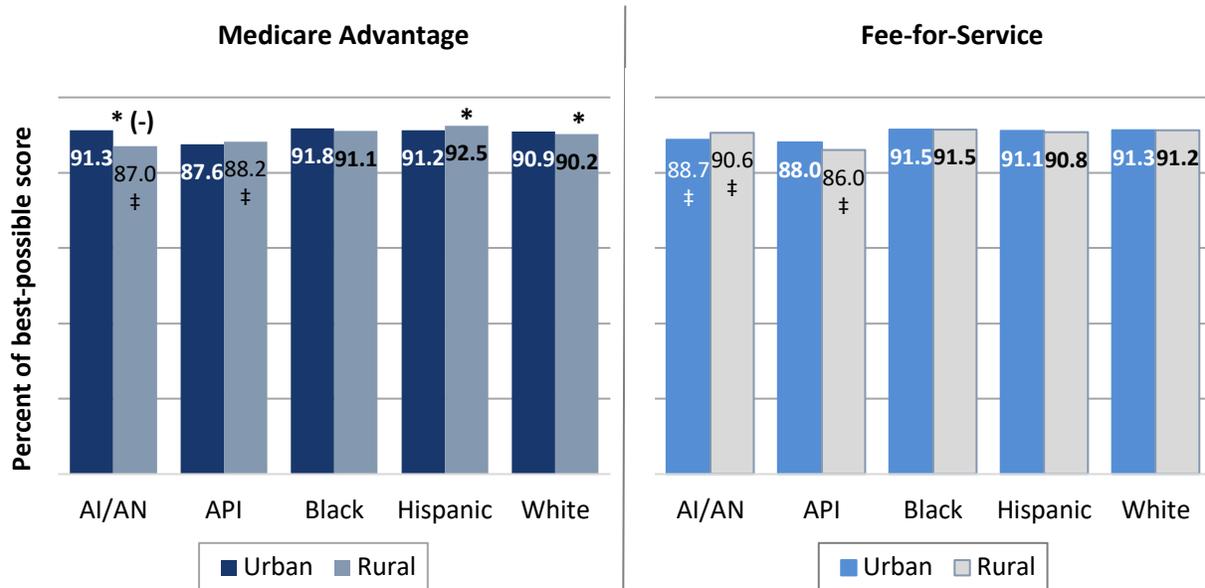
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

† This includes how often in the last six 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,<sup>‡</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTE:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

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

- White MA beneficiaries residing in rural areas reported worse 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.

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

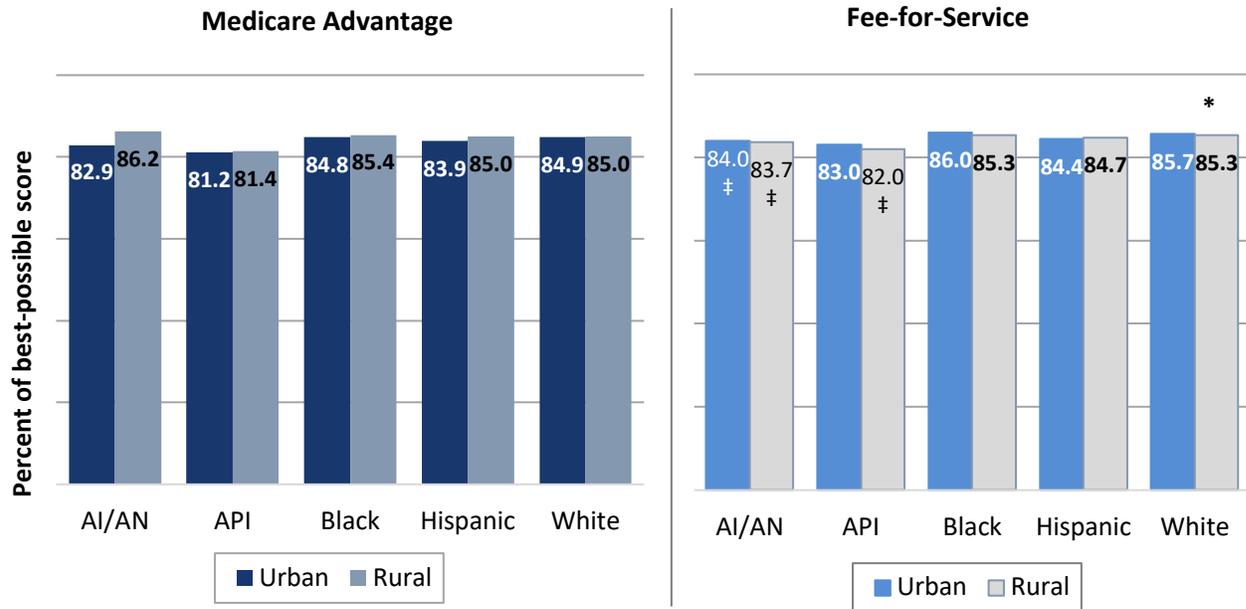
For statistically significant differences between rural and urban residents of the same race or ethnicity and coverage type, the following symbols are also used when applicable:

- (+) 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 six 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,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- In both MA and FFS, AI/AN beneficiaries residing in rural areas reported experiences with care coordination that were similar to the experiences reported by AI/AN beneficiaries residing in urban areas.
- In both MA and FFS, API beneficiaries residing in rural areas reported experiences with care coordination that were similar to the experiences reported by API beneficiaries residing in urban areas.
- In both MA and FFS, Black beneficiaries residing in rural areas reported experiences with care coordination that were similar to the experiences reported by Black beneficiaries residing in urban areas.
- In both MA and FFS, Hispanic beneficiaries residing in rural areas reported experiences with care coordination that were similar to the experiences reported by Black beneficiaries residing in urban areas.
- White MA beneficiaries residing in rural areas reported experiences with care coordination 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 with care

coordination 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.

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\* 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 and coverage type, the following symbols are also used when applicable:

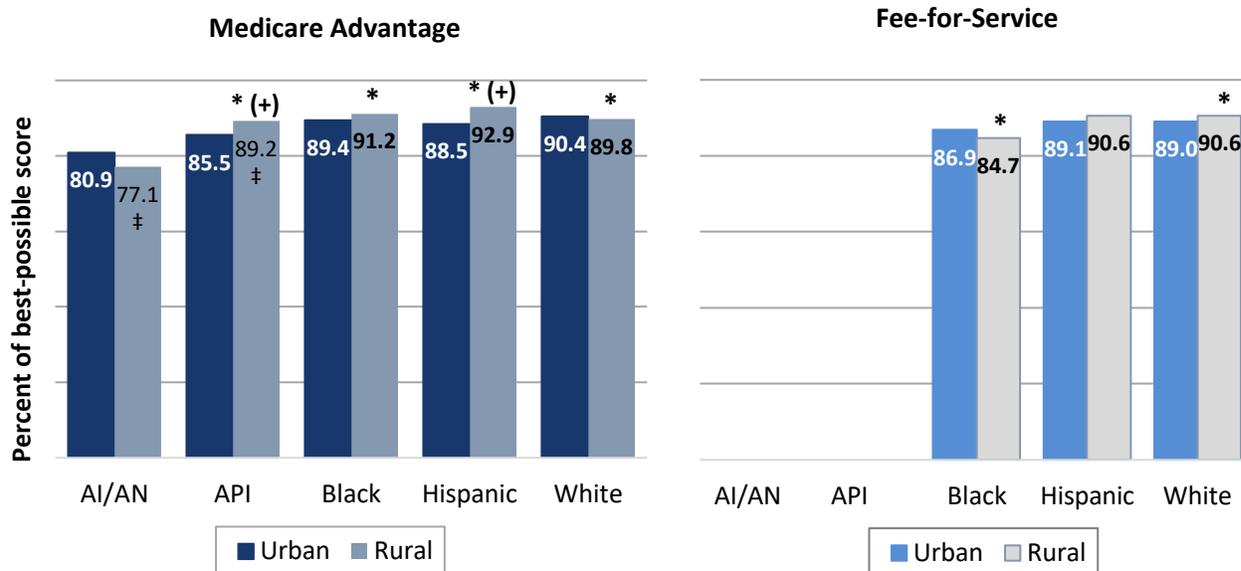
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

† This includes how often in the last six 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,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>#</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

<sup>#</sup> There were not enough data from AI/AN FFS beneficiaries or API FFS beneficiaries to make rural-urban comparisons on this measure.

### Disparities

- AI/AN MA beneficiaries residing in rural areas reported experiences getting needed prescription drugs that were similar to the experiences reported by AI/AN MA beneficiaries residing in urban areas. There were not enough data from AI/AN FFS beneficiaries to make a rural-urban comparison on this measure.
- API MA beneficiaries residing in rural areas reported better experiences getting needed prescription drugs than API MA beneficiaries residing in urban areas. The difference between rural and urban API MA beneficiaries was greater than 3 points on a 0–100 scale. There were not enough data from API FFS beneficiaries to make a rural-urban comparison on this measure.
- 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. Black FFS beneficiaries residing in rural areas reported worse experiences getting needed prescription drugs 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.

- Hispanic MA beneficiaries residing in rural areas reported better experiences getting needed prescription drugs than Hispanic 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 prescription drugs that were similar to the experiences reported by Hispanic FFS beneficiaries residing in urban areas.
- White MA beneficiaries residing in rural areas reported worse experiences getting needed prescription drugs than White MA beneficiaries residing in urban areas. White FFS beneficiaries residing in rural areas reported better experiences getting needed prescription drugs than White FFS beneficiaries residing in urban areas. In each case, the difference was less than 3 points on a 0–100 scale.

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\* 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 and coverage type, the following symbols are also used when applicable:

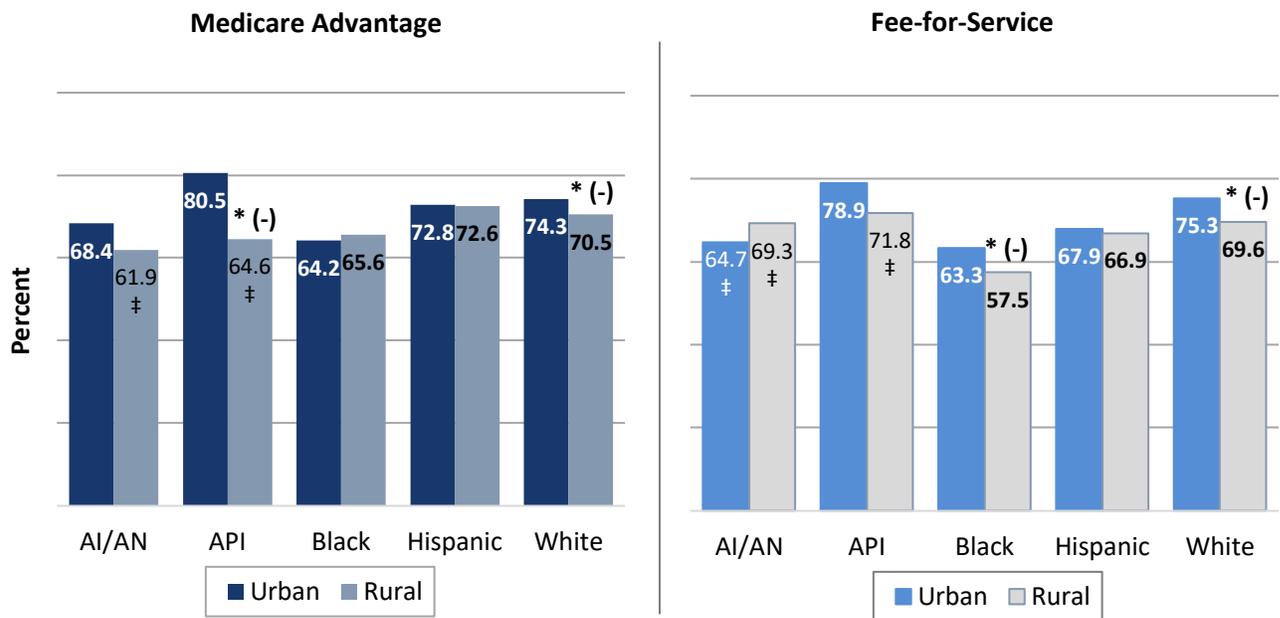
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

† This includes how often in the last six 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 geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- In both MA and FFS, AI/AN beneficiaries residing in rural areas were about as likely as AI/AN beneficiaries residing in urban areas to have received the flu vaccine.
- API MA beneficiaries residing in rural areas were less likely than API MA beneficiaries residing in urban areas to have received the flu vaccine. The difference between rural and urban API MA beneficiaries was greater than 3 percentage points. API FFS beneficiaries residing in rural areas were about as likely as API FFS beneficiaries residing in urban areas to have received the flu vaccine.
- Black MA beneficiaries residing in rural areas were about as likely as Black MA beneficiaries residing in urban areas to have received the flu vaccine. Black FFS beneficiaries residing in rural areas were less likely than Black FFS beneficiaries residing in urban areas to have received the flu vaccine. The difference between rural and urban Black FFS beneficiaries was greater than 3 percentage points.
- In both MA and FFS, Hispanic beneficiaries residing in rural areas were about as likely as Hispanic beneficiaries residing in urban areas to have received the flu vaccine.

- In both MA and FFS, White beneficiaries residing in rural areas were less likely than White beneficiaries residing in urban areas to have received the flu vaccine. In each case, the difference between rural and urban White beneficiaries was greater than 3 percentage points.

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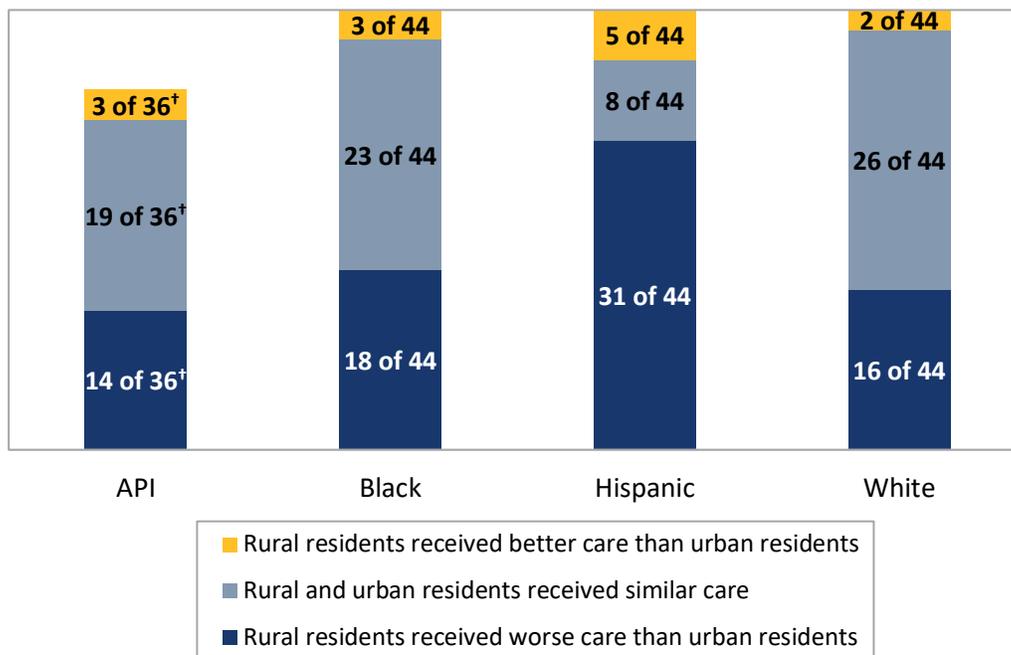
\* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity and coverage type, 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.

## Rural-Urban Disparities in Care by Racial and Ethnic Group: 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 2018



**SOURCE:** This chart summarizes clinical quality (HEDIS) data collected in 2018 from MA plans nationwide.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> There were only enough data from rural API beneficiaries to make rural-urban comparisons on 36 of the 44 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<sup>‡</sup> 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.

<sup>‡</sup> 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
- Colorectal cancer screening
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of systemic corticosteroid
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- 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
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Medication reconciliation after hospital discharge
- Follow-up after emergency department visit for people with high-risk multiple chronic conditions

### **Rural Asians and Pacific Islanders received better care than urban Asians and Pacific Islanders**

- Initiation of alcohol and other drug dependence treatment
- Transitions of care—patient engagement after inpatient discharge
- Avoiding use of opioids from multiple prescribers and pharmacies

### **Rural Blacks received worse care than urban Blacks**

- Colorectal cancer screening
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Continuous beta-blocker treatment after a heart attack
- Diabetes care—eye exam
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Medication adherence for diabetes—statins
- Osteoporosis management in women who had a fracture
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for mental illness (within 30 days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within 30 days of discharge)
- 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
- Avoiding use of high-risk medication in the elderly

### **Rural Blacks received better care than urban Blacks**

- Avoiding use of opioids from multiple prescribers
- Avoiding use of opioids from multiple pharmacies
- Avoiding use of opioids from multiple prescribers and pharmacies

### **Rural Hispanics received worse care than urban Hispanics**

- Adult body mass index assessment
- Colorectal cancer screening
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of systemic corticosteroid
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Controlling high blood pressure
- Continuous beta-blocker treatment after a heart attack
- Statin use in patients with cardiovascular disease
- Medication adherence for cardiovascular disease—statins
- Diabetes care—blood sugar testing
- 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
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within seven days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within 30 days of discharge)
- Initiation of alcohol and other drug dependence treatment
- Medication reconciliation after hospital discharge
- Transitions of care—notification of inpatient admission
- Transitions of care—receipt of discharge information
- Transitions of care—patient engagement after inpatient discharge
- Transitions of care—medication reconciliation after inpatient discharge
- Follow-up after emergency department visit for people with high-risk multiple chronic conditions
- 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
- Avoiding use of opioids from multiple pharmacies

### **Rural Hispanics received better care than urban Hispanics**

- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- Avoiding use of opioids at high dosage
- Avoiding use of opioids from multiple prescribers
- Avoiding use of opioids from multiple prescribers and pharmacies

#### **Rural Whites received worse care than urban Whites**

- Breast cancer screening
- Colorectal cancer screening
- Testing to confirm COPD
- 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
- Osteoporosis management in women who had a fracture
- Antidepressant medication management—acute phase treatment
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Medication reconciliation after hospital discharge
- Transitions of care—medication reconciliation after inpatient discharge
- 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

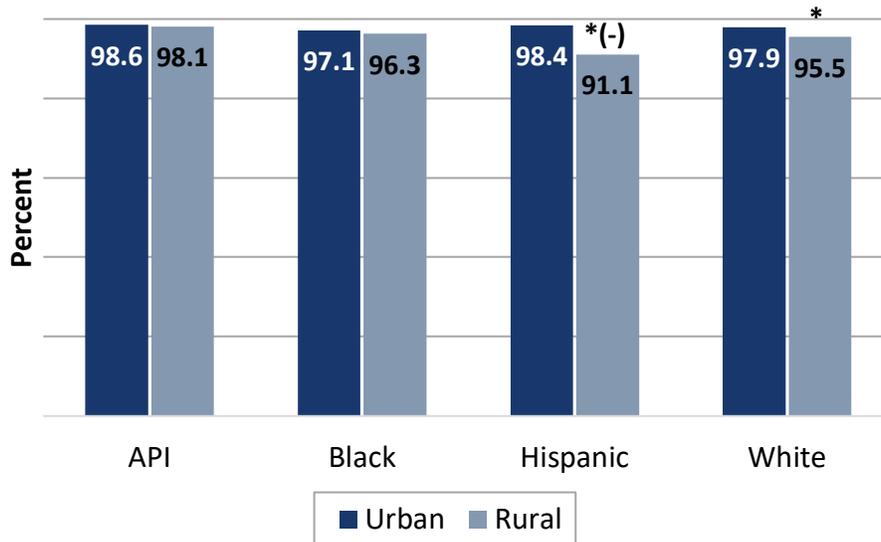
#### **Rural Whites received better care than urban Whites**

- Initiation of alcohol and other drug dependence treatment
- Avoiding use of opioids from multiple prescribers

## Clinical Care: Prevention and Screening

### Adult BMI Assessment

Percentage of MA enrollees aged 18 to 74 years who had an outpatient visit whose body mass index (BMI) was documented in the past two years, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

#### Disparities

- Among API and Black beneficiaries, rural residents were about as likely as urban residents to have had their BMIs documented. Among Hispanic and White beneficiaries, rural residents were less likely than urban residents to have had their BMIs documented. For Hispanic beneficiaries, the difference between rural and urban residents was greater than 3 percentage points. For White beneficiaries, the difference between rural and urban residents was less than 3 percentage points.

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

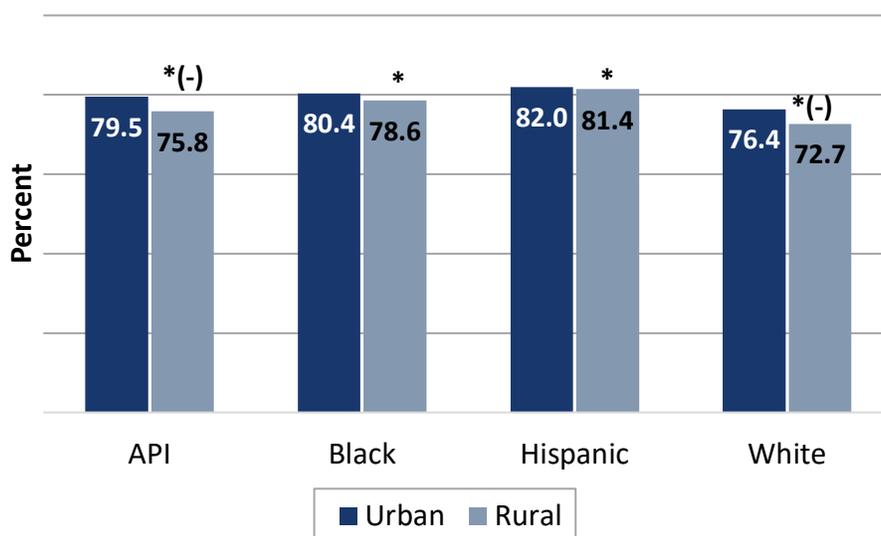
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## Breast Cancer Screening

Percentage of MA enrollees (women) aged 50 to 74 years who had appropriate screening for breast cancer, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, 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, as was the difference between rural and urban Hispanic women.

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

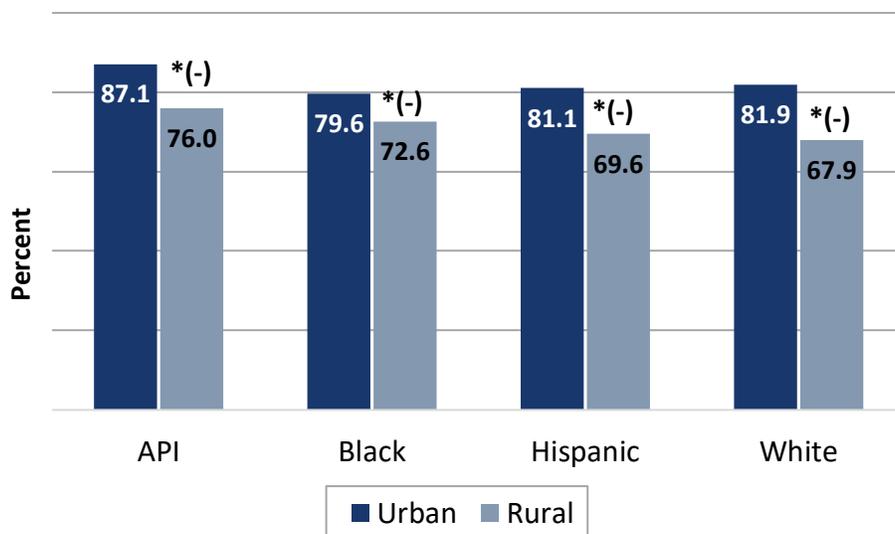
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## Colorectal Cancer Screening

Percentage of MA enrollees aged 50 to 75 years who had appropriate screening for colorectal cancer, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, 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.

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

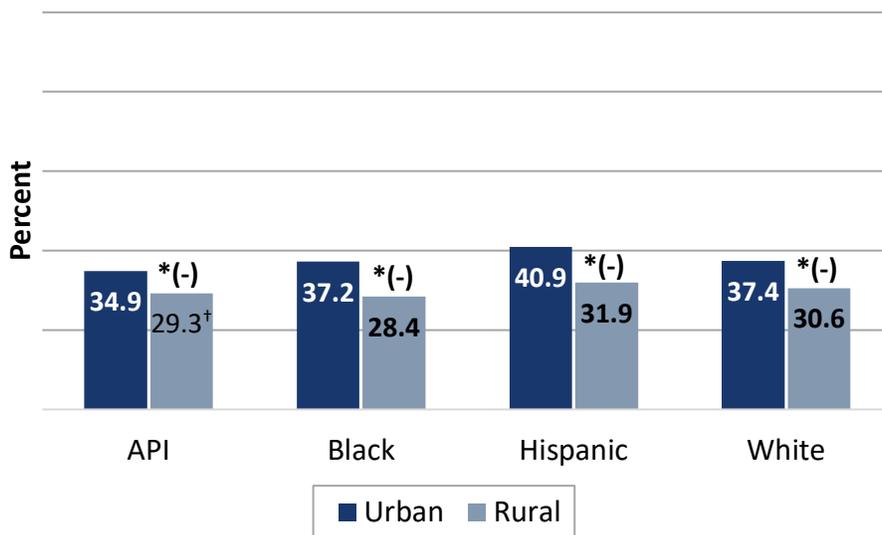
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

- (+) 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: Respiratory Conditions

### 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 geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> 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 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.

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

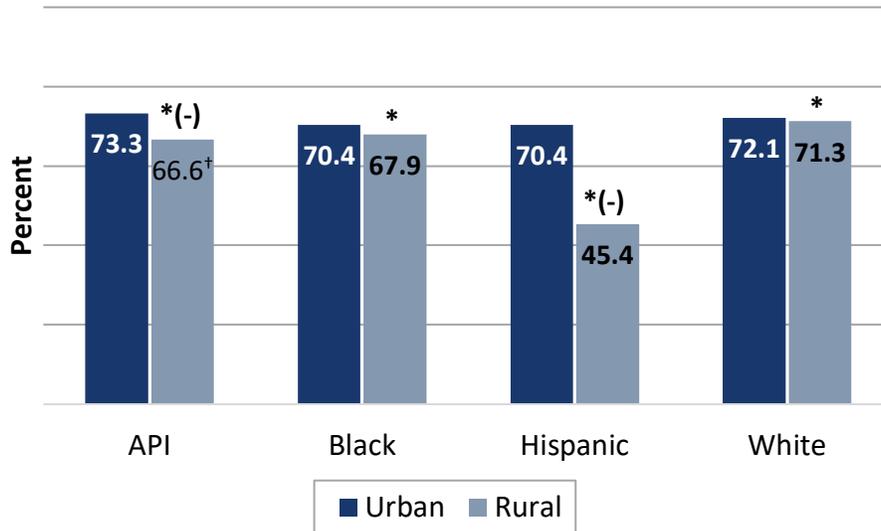
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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 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 systemic corticosteroid within 14 days of the event, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> 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 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 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.

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

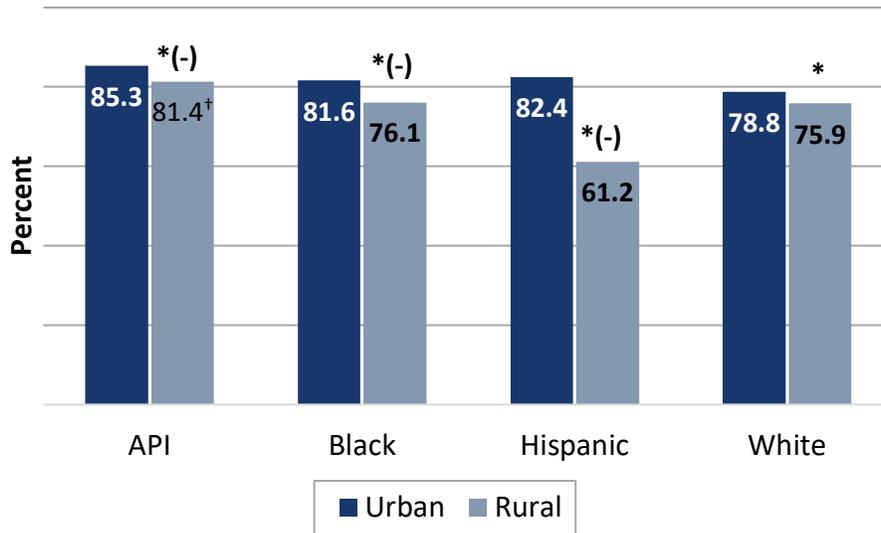
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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 geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> 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 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 API, Black, and Hispanic beneficiaries, the difference between rural and urban residents was greater than 3 percentage points. For White beneficiaries, the difference between rural and urban residents was less than 3 percentage points.

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\* 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:

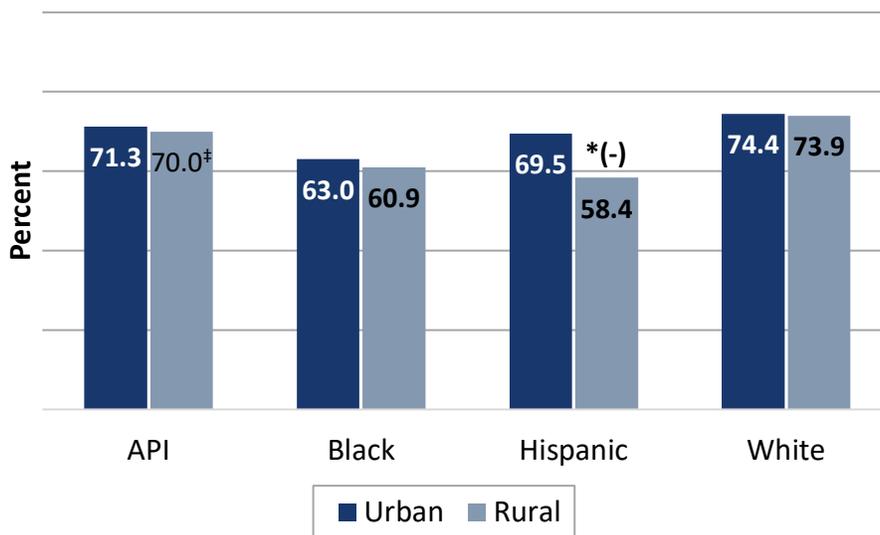
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

## Clinical Care: Cardiovascular Conditions

### Controlling High Blood Pressure

Percentage of MA enrollees aged 18 to 85 years who had a diagnosis of hypertension whose blood pressure was adequately controlled<sup>†</sup> during the past year, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

#### Disparities

- Among API, Black, and White beneficiaries, rural residents with a diagnosis of hypertension were about as likely as urban residents with a diagnosis of hypertension to have had their blood pressure adequately controlled.
- Rural Hispanics with a diagnosis of hypertension were less 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.

\* 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:

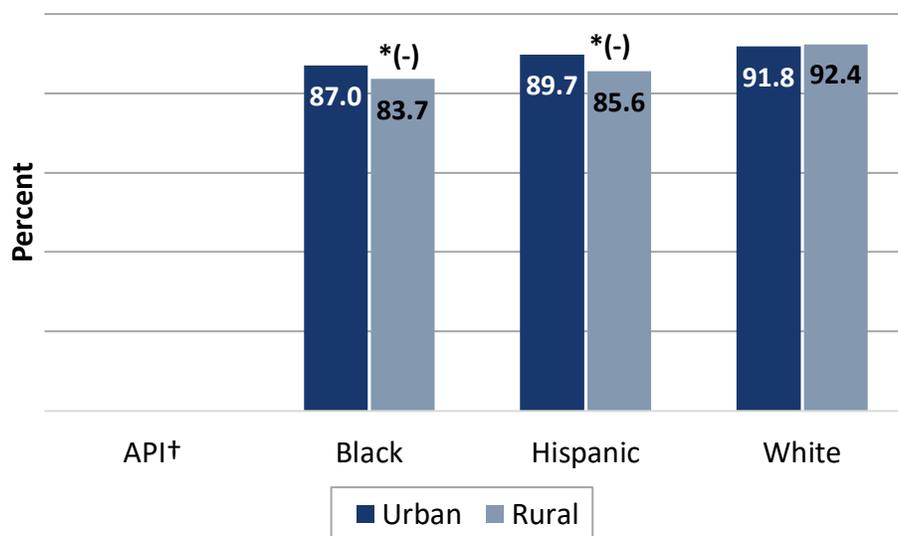
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> 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.

## 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) who received persistent beta-blocker treatment for six months after discharge, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

† 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 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.

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

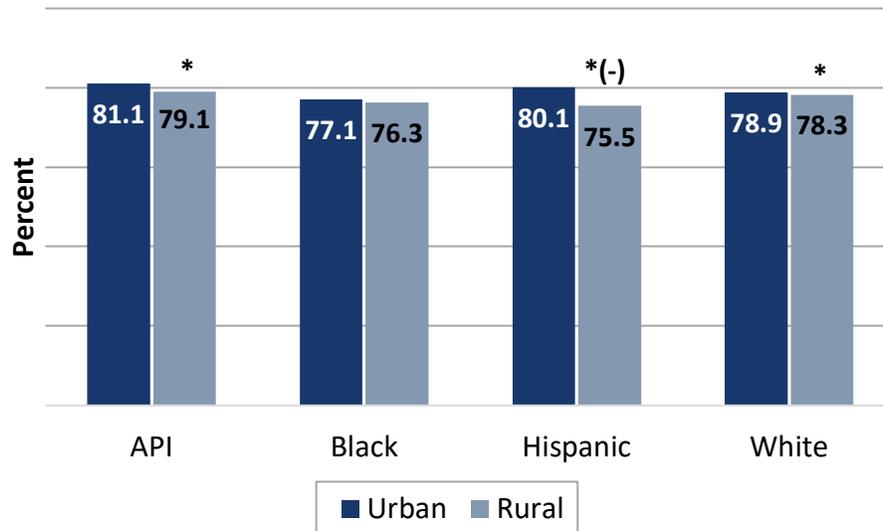
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## 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 with clinical atherosclerotic cardiovascular disease (ASCVD) who received statin therapy, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### 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 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.
- Rural Blacks with ASCVD were about as likely as urban Blacks with ASCVD to have received statin therapy.

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

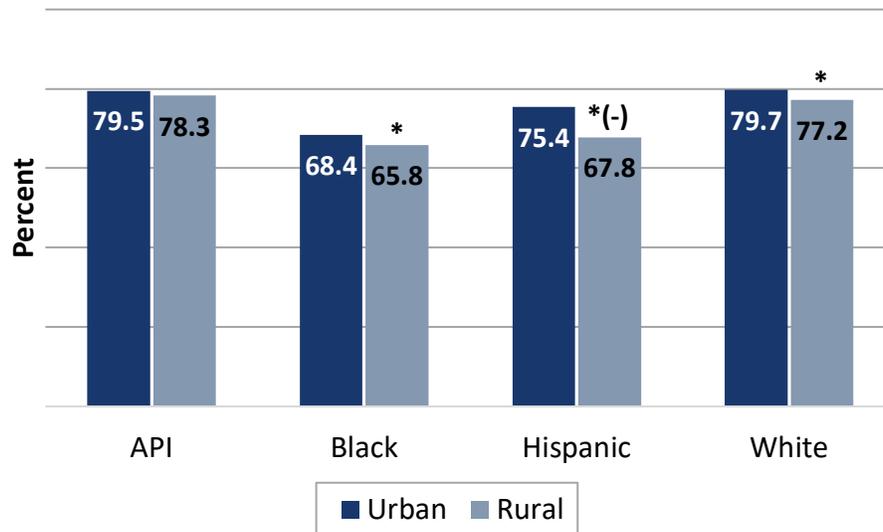
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## 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 with clinical atherosclerotic cardiovascular disease (ASCVD) 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 geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Rural APIs with ASCVD were about as likely as urban APIs with ASCVD to have had proper statin medication adherence.
- Among Black, 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 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 ( $p < 0.05$ ).

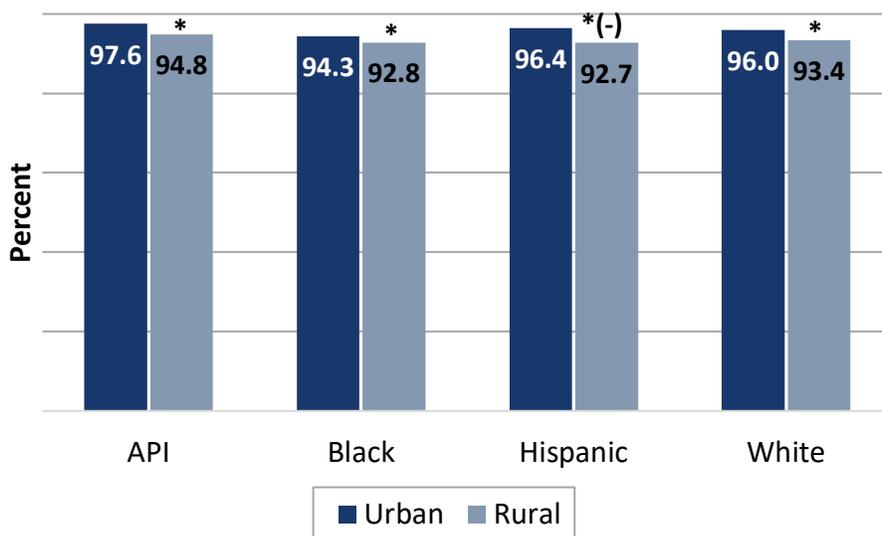
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

- (+) 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

### 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 geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

#### Disparities

- Among API, 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 APIs was less than 3 percentage points, as were the differences between rural and urban Blacks and rural and urban Whites. The difference between rural and urban Hispanics was greater than 3 percentage points.

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

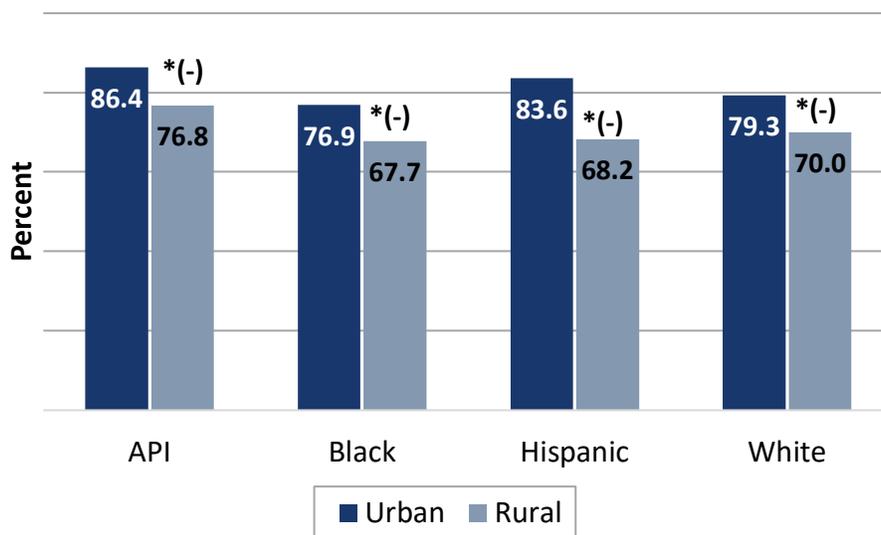
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## 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 geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, 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.

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

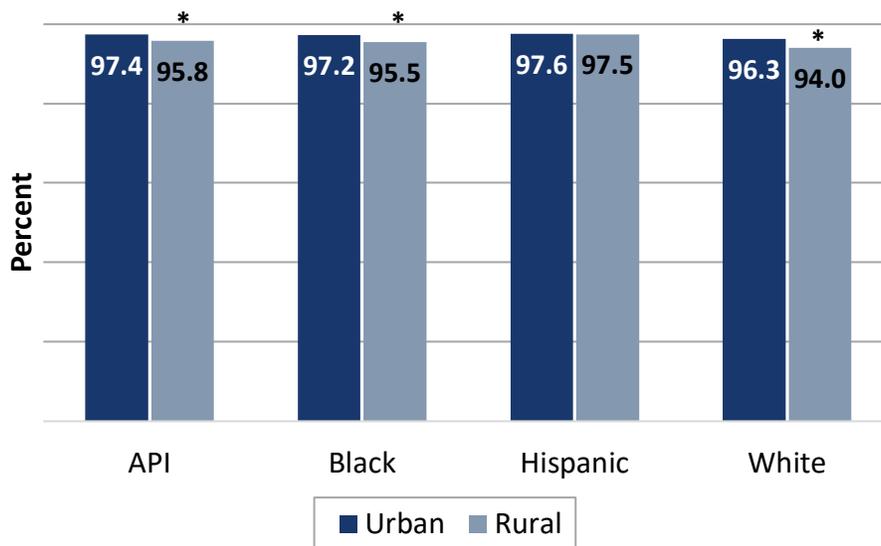
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## 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 geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

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

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

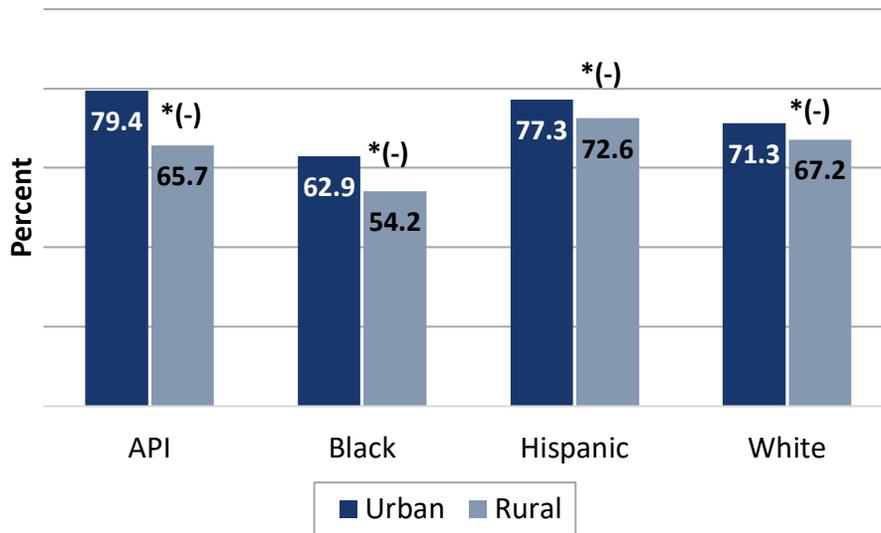
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## 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 geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

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

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

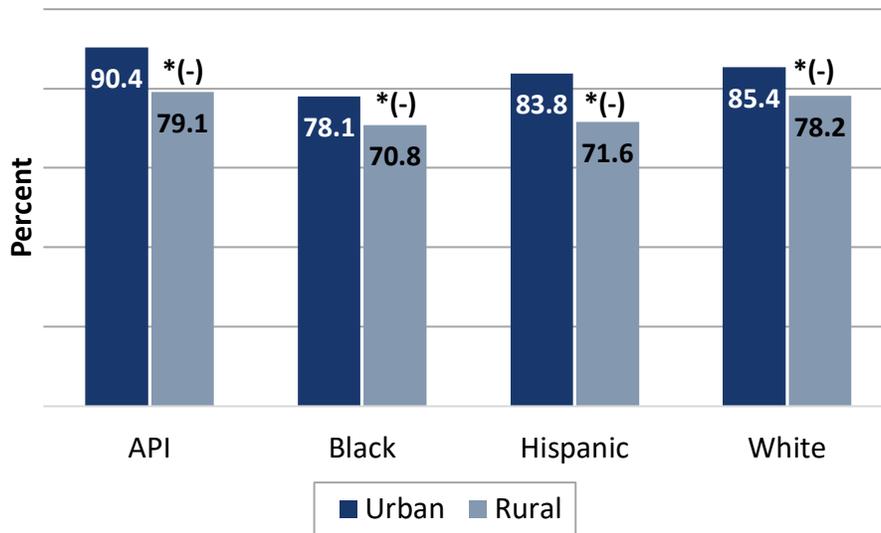
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## 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 geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, 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, difference between rural and urban residents was greater than 3 percentage points.

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

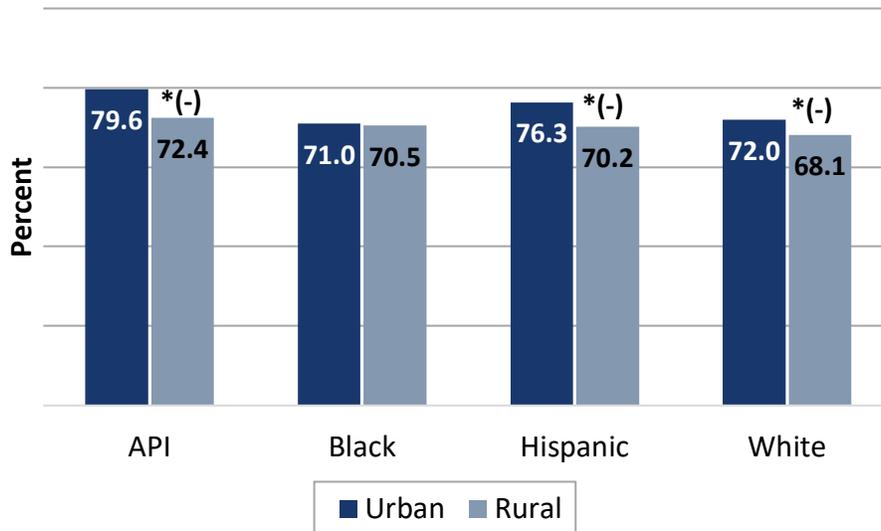
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## Statin Use in Patients with Diabetes

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)<sup>†</sup> who received statin therapy, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### 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 about as likely as urban Blacks with diabetes to have received statin therapy.

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\* 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:

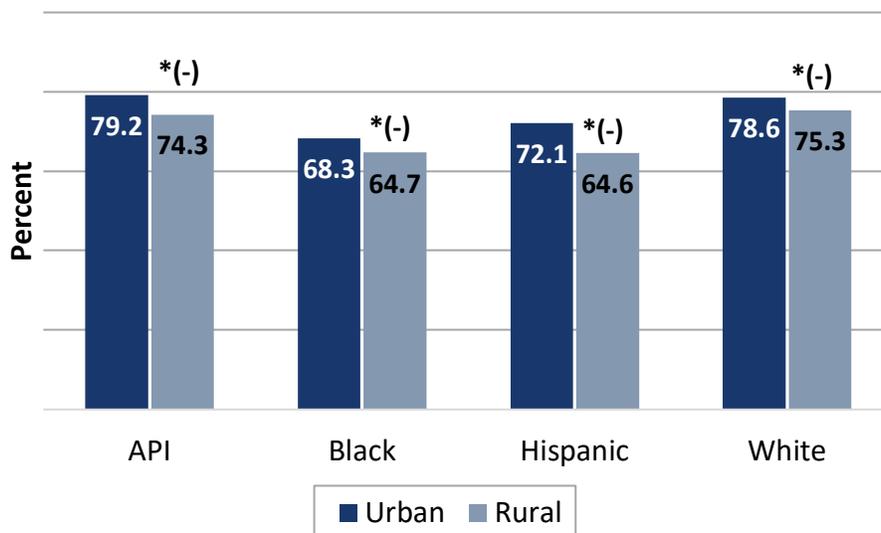
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> Excludes those who also have clinical atherosclerotic cardiovascular disease.

## Medication Adherence for Diabetes—Statins

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)<sup>†</sup> 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 geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### 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. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

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\* 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.

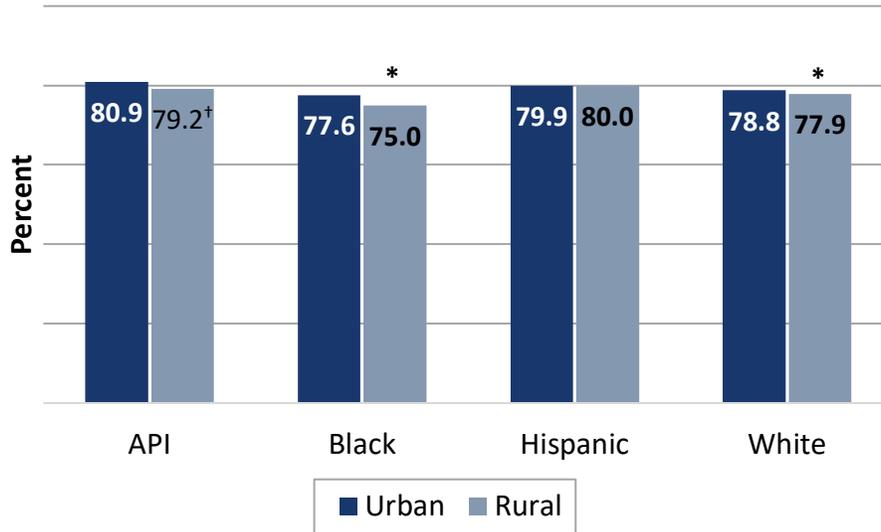
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Excludes those who also have clinical atherosclerotic cardiovascular disease.

# Clinical Care: Musculoskeletal Conditions

## Rheumatoid Arthritis Management

Percentage of MA enrollees aged 18 years and older who were diagnosed with rheumatoid arthritis during the past year who were dispensed at least one ambulatory prescription for a disease-modifying antirheumatic drug (DMARD), by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- Among API and Hispanic beneficiaries, rural residents diagnosed with rheumatoid arthritis were about as likely as urban residents diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD.
- Among Black and White beneficiaries, rural residents diagnosed with rheumatoid arthritis were less likely than urban residents diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD. In each case, the difference between rural and urban residents was less than 3 percentage points.

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

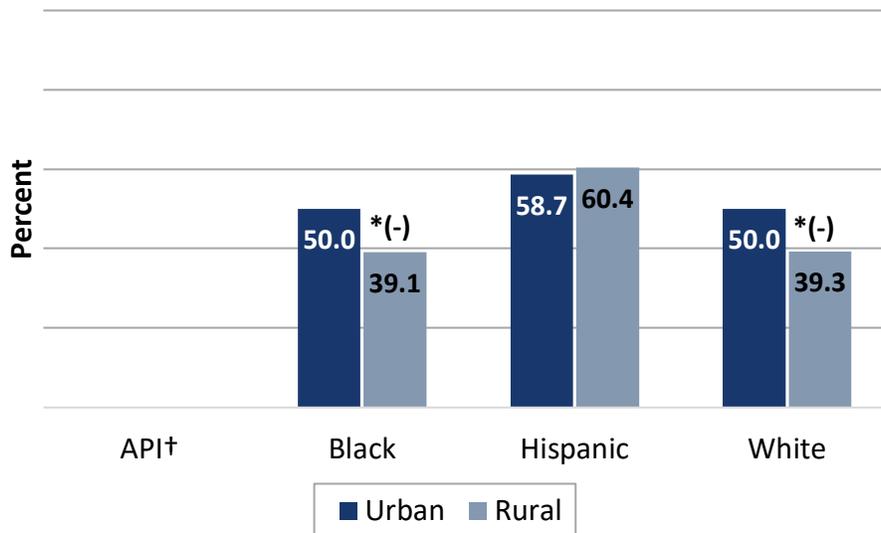
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## Osteoporosis Management in Women Who Had a Fracture

Percentage of MA enrollees (women) aged 67 to 85 years who suffered a fracture 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 geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- Among Black and White women, rural residents who suffered a fracture were less likely than urban residents 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.

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\* 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:

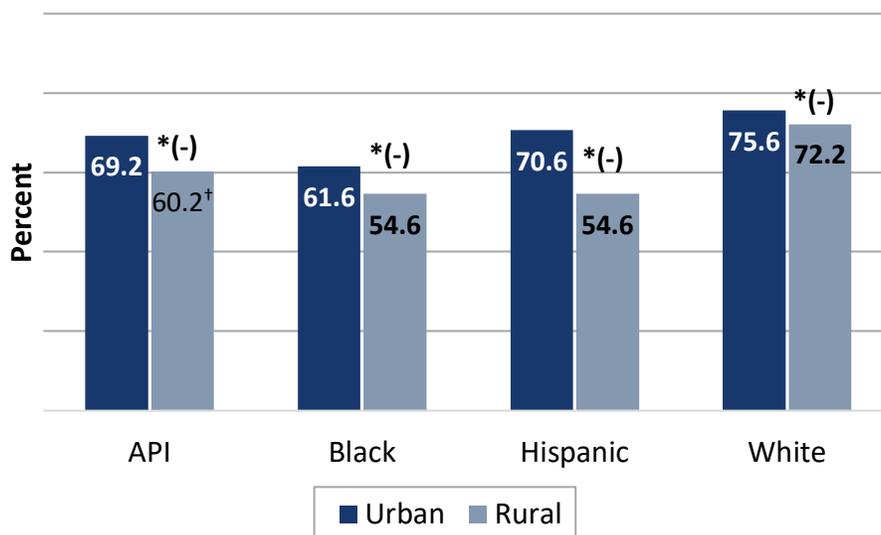
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

## Clinical Care: Behavioral Health

### 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 who remained on antidepressant medication for at least 84 days, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> 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.

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

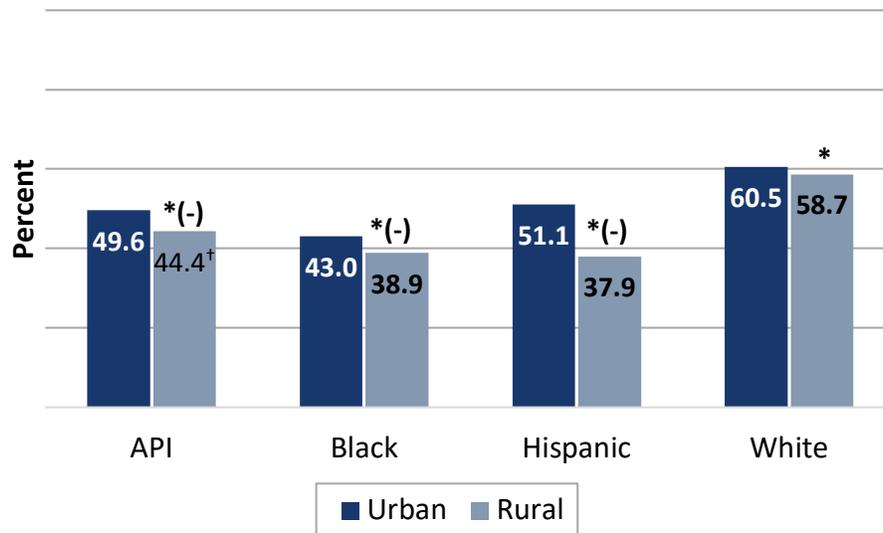
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## 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 who remained on antidepressant medication for at least 180 days, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> 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 been treated with and 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 rural and urban Hispanics. The difference between rural and urban Whites was less than 3 percentage points.

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

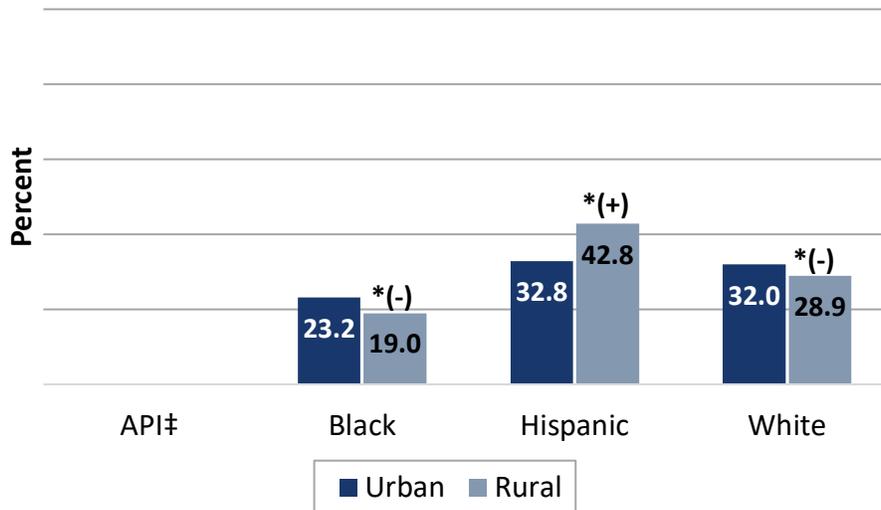
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## Follow-up After Hospital Stay for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who were hospitalized for treatment of selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of discharge, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> 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 who were hospitalized for a mental health disorder were less 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 discharge. For each of these groups, the difference between rural and urban residents was greater than 3 percentage points.
- 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.

\* 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:

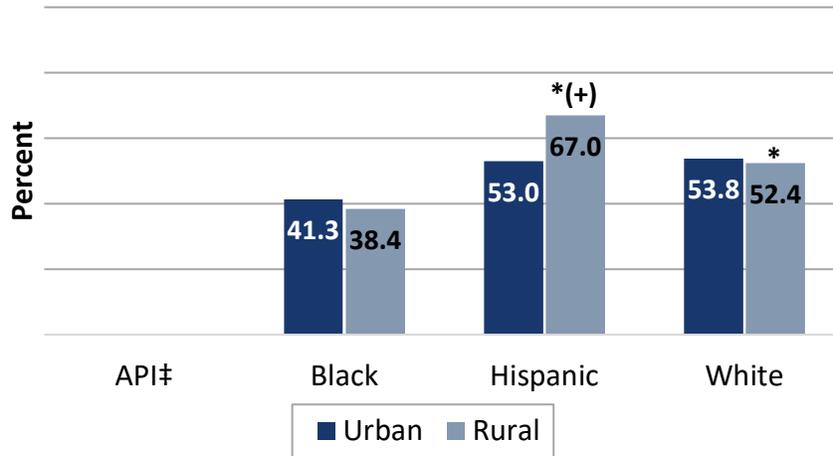
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

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

## Follow-up After Hospital Stay for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who were hospitalized for treatment of selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of discharge, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

### 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.

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\* 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:

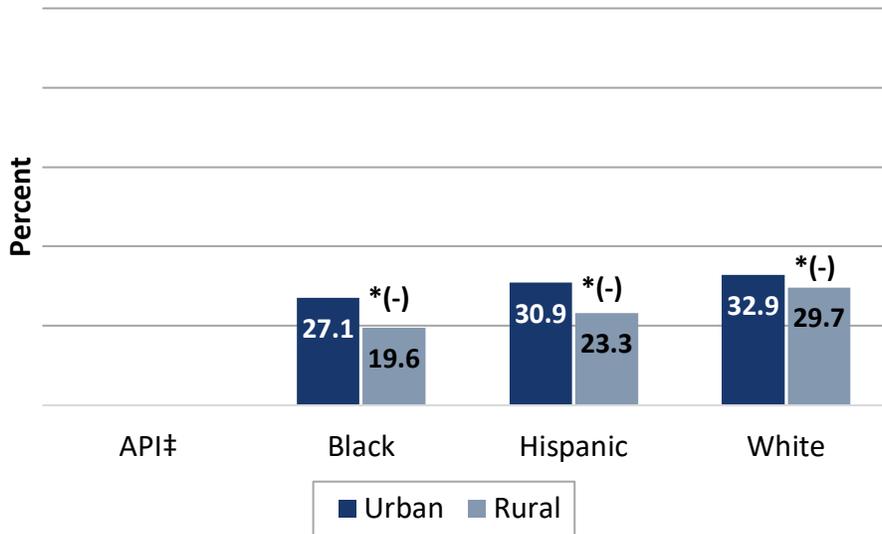
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

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

## Follow-up After Emergency Department (ED) Visit for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of the ED visit, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> 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 had an ED visit for a mental health disorder were less likely than urban residents who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of the ED visit. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

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\* 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:

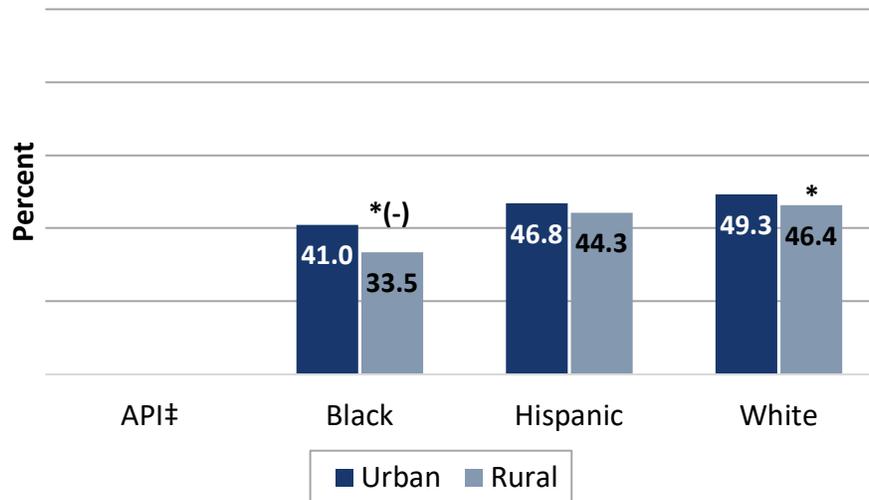
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

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

## Follow-up After Emergency Department (ED) Visit for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of the ED visit, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> 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 who had an ED visit for a mental health disorder were less likely than urban residents who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit. The difference between rural and urban Blacks was greater than 3 percentage points. The difference between rural and urban Whites was less than 3 percentage points.
- Rural Hispanics who had an ED visit for a mental health disorder were about as likely as urban Hispanics who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit.

\* 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:

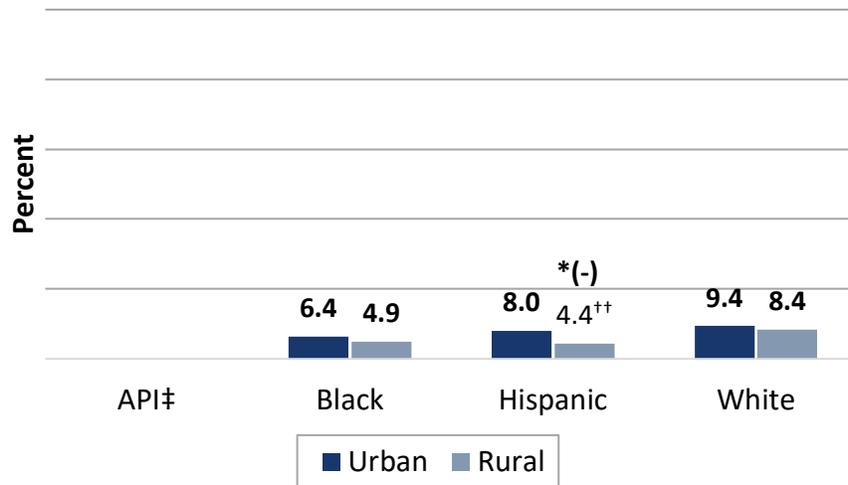
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

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

## Follow-up After Emergency Department (ED) Visit for Alcohol and Other Drug (AOD) Abuse or Dependence (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence within seven days of the ED visit, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

<sup>\*\*</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Among Black and White beneficiaries, rural residents who had an ED visit for AOD abuse or dependence were about as likely as urban residents who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit.
- Rural Hispanics who had an ED visit for AOD abuse or dependence were less likely than urban Hispanics who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit. 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:

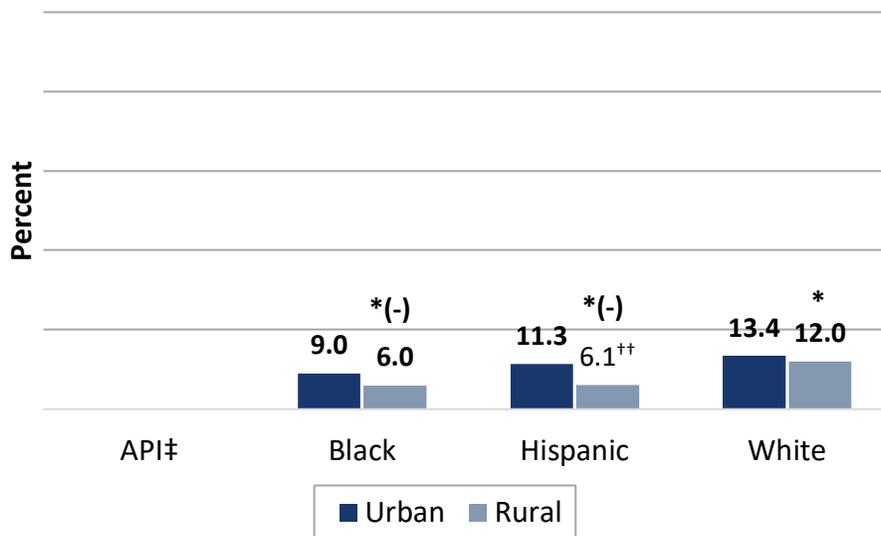
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

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

## Follow-up After Emergency Department (ED) Visit for Alcohol and Other Drug (AOD) Abuse or Dependence (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

<sup>††</sup> 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 who had an ED visit for AOD abuse or dependence were less likely than urban residents who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit. 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:

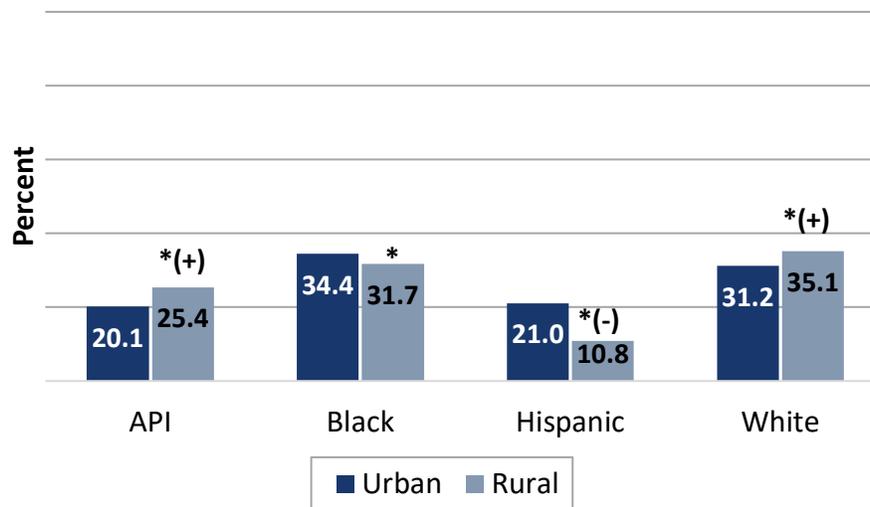
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> 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 of Alcohol and Other Drug Dependence Treatment

Percentage of MA enrollees aged 18 years and older<sup>†</sup> with a new episode of alcohol or other drug (AOD) dependence who initiate<sup>‡</sup> treatment within 14 days of the diagnosis, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API and White beneficiaries, rural residents with a new episode of AOD dependence were more likely than urban residents with a new episode of AOD dependence to have initiated treatment within 14 days of diagnosis. In each case, the difference between rural and urban residents was greater than 3 percentage points.
- Among Black and Hispanic beneficiaries, 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 diagnosis. The difference between rural and urban Blacks was less than 3 percentage points. 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.

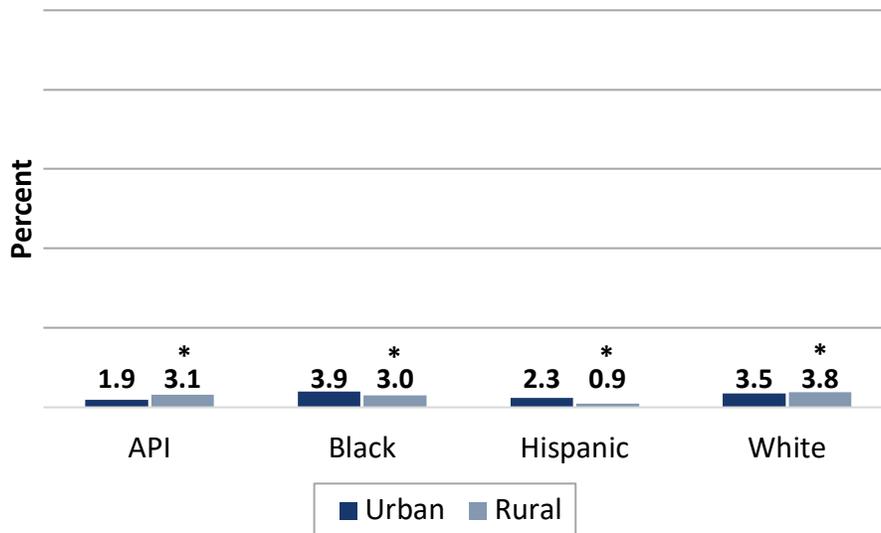
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

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

<sup>‡</sup> Initiation may occur through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization.

## Engagement of Alcohol and Other Drug Dependence Treatment

Percentage of MA enrollees aged 18 years and older<sup>†</sup> with a new episode of alcohol or other drug (AOD) dependence who initiated treatment and who had two or more additional services within 30 days of the initiation visit, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API and White beneficiaries, rural residents with a new episode of AOD dependence who initiated treatment were more 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. In each case, the difference between rural and urban residents was less than 3 percentage points.
- 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. In each case, 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.

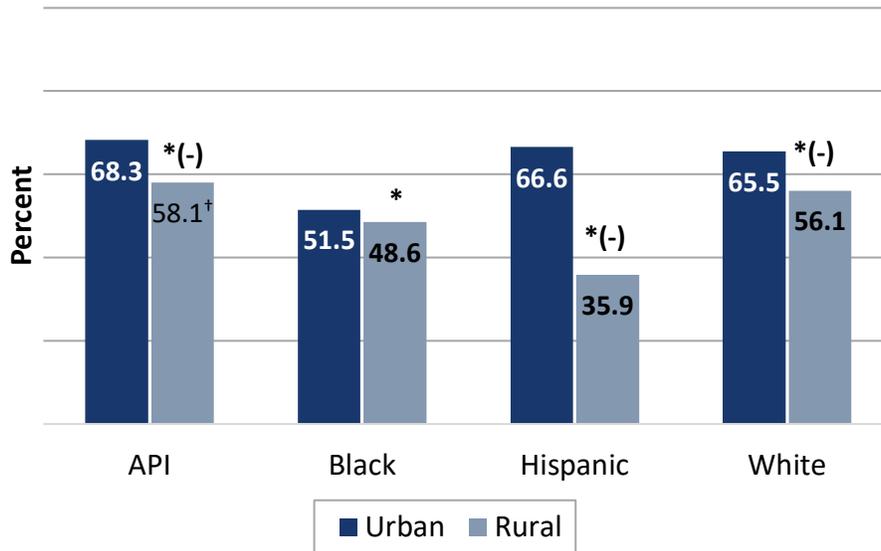
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

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

# Clinical Care: Medication Management and Care Coordination

## 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 geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

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

<sup>†</sup> 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 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 APIs was greater than 3 percentage points, as were the differences between rural and urban Hispanics and rural and urban Whites. The difference between rural and urban Blacks was less than 3 percentage points.

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

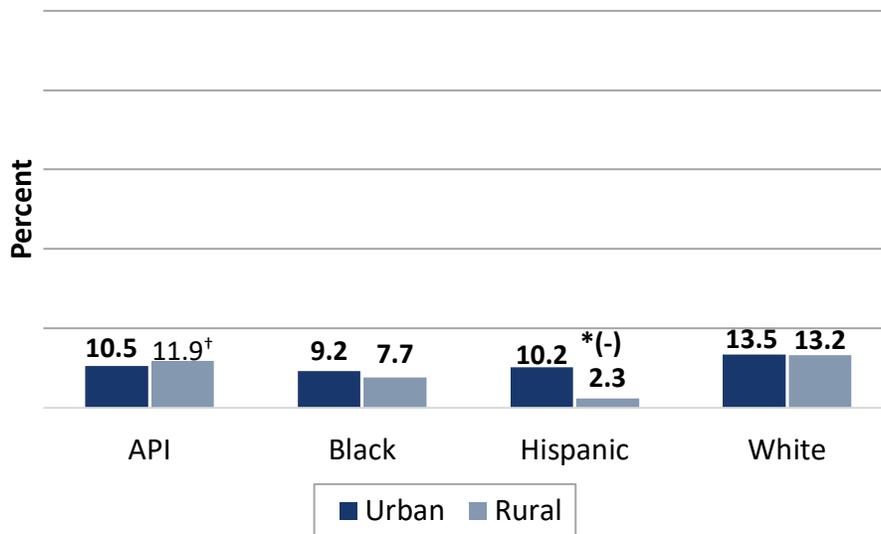
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## Transitions of Care—Notification of Inpatient Admission

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility whose primary or ongoing care providers were notified of the inpatient admission on the day of or the day following admission, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- Among API, Black, and White beneficiaries, the primary or ongoing care providers of rural residents who were discharged from an inpatient facility were about as likely as the primary or ongoing care providers of urban residents who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission.
- The primary or ongoing care providers of rural Hispanics who were discharged from an inpatient facility were less likely than the primary or ongoing care providers of urban Hispanics who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was greater than 3 percentage points.

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

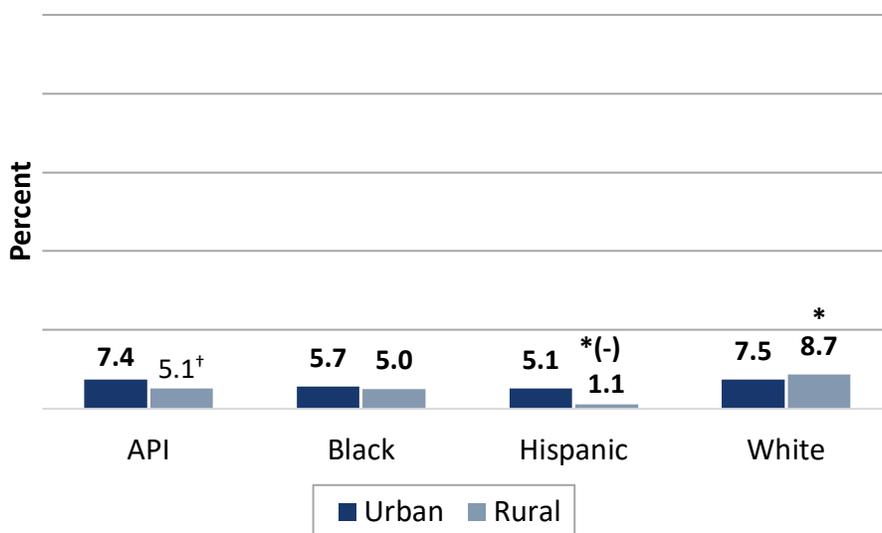
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## Transitions of Care—Receipt of Discharge Information

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility who received discharge information on the day of or the day following discharge, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> 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 who were discharged from an inpatient facility were about as likely as urban residents who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge.
- Rural Hispanics who were discharged from an inpatient facility were less likely than urban Hispanics who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge. The difference between rural and urban Hispanics was greater than 3 percentage points.
- Rural Whites who were discharged from an inpatient facility were more likely than urban Whites who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge. 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 ( $p < 0.05$ ).

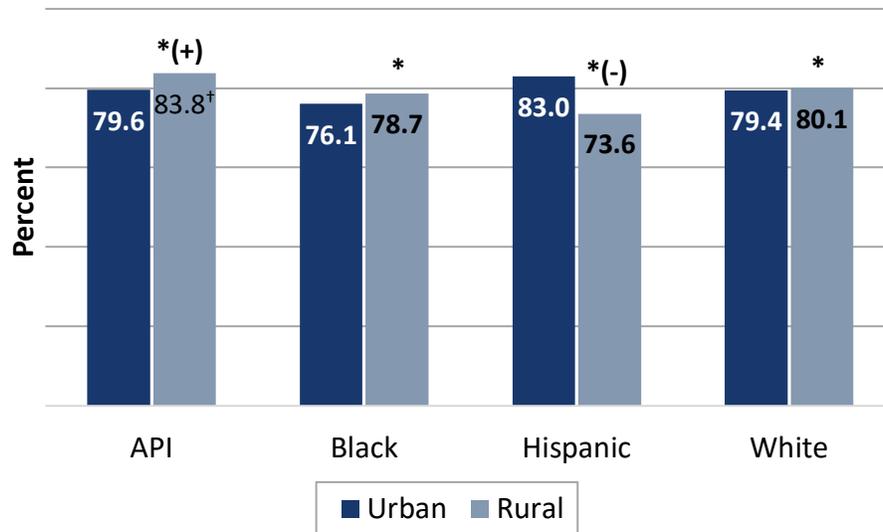
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## Transitions of Care—Patient Engagement After Inpatient Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility for whom patient engagement (office visit, home visit, telehealth) was provided within 30 days of discharge, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- Among API, Black, and White beneficiaries, rural residents who were discharged from an inpatient facility were more likely than urban residents who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between rural and urban APIs was greater than 3 percentage points. The difference between rural and urban Blacks was less than 3 percentage points, as was the difference between rural and urban Whites.
- Rural Hispanics who were discharged from an inpatient facility were less likely than urban Hispanics who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between rural and urban Hispanics was greater than 3 percentage points.

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

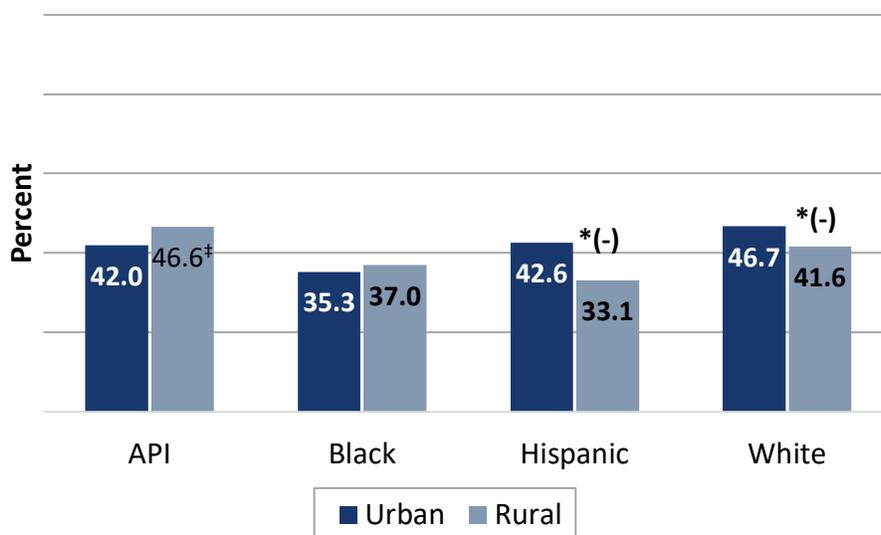
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## Transitions of Care—Medication Reconciliation After Inpatient Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility for whom medications were reconciled within 30 days of discharge,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> 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 who were discharged from an inpatient facility were about as likely as urban residents who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge.
- Among 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 of discharge. For each of these 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:

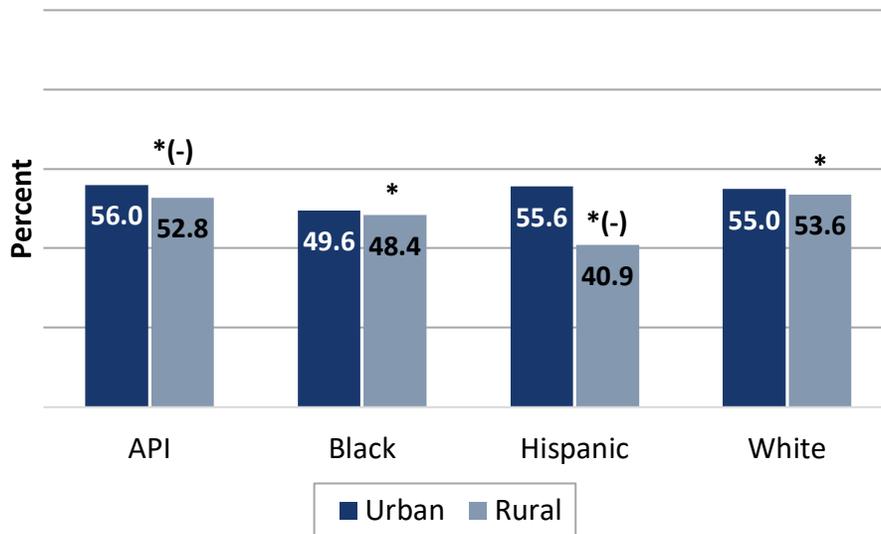
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> Scores on this measure may differ from scores on the medication reconciliation measure presented on page 110 because of different rules governing the collection of the data.

## Follow-Up After Emergency Department (ED) Visit for People with High-Risk Multiple Chronic Conditions

Percentage of MA enrollees aged 18 years and older with multiple high-risk chronic conditions<sup>†</sup> who received follow-up care within seven days of an ED visit, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents with multiple high-risk chronic conditions<sup>†</sup> were less likely than urban residents with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. 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.

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\* 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.

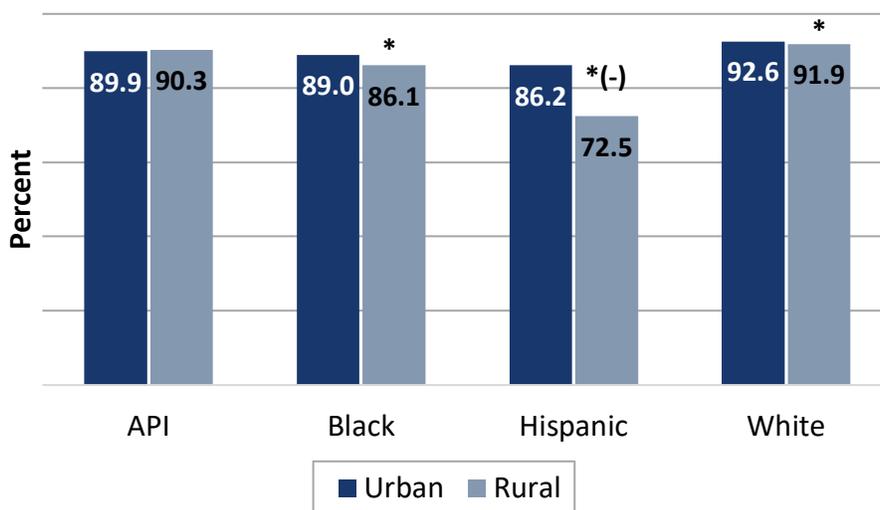
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Conditions include COPD and asthma, Alzheimer's disease and related disorders, chronic kidney disease, depression, heart failure, acute myocardial infarction, atrial fibrillation, and stroke and transient ischemic attack.

## Clinical Care: Overuse/Appropriateness

### 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,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

#### Disparities

- Among API beneficiaries, use of potentially harmful medication<sup>†</sup> was avoided about as often for rural elderly residents with chronic renal failure as for urban elderly residents with chronic renal failure.
- Among Black, Hispanic, and White beneficiaries, use of potentially harmful medication was avoided 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 less than 3 percentage points, as was the difference between rural and urban elderly Whites. The difference between rural and urban elderly 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:

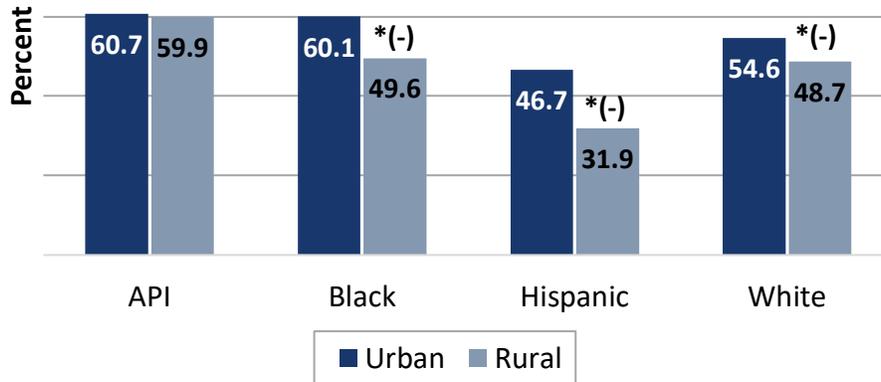
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> This includes cyclooxygenase-2 (COX-2) selective nonsteroidal anti-inflammatory drugs (NSAIDs) or nonaspirin NSAIDs.

## 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,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API beneficiaries, use of potentially harmful medication<sup>†</sup> was avoided about as often for rural elderly residents with chronic renal failure as for urban elderly residents with chronic renal failure.
- Among Black, Hispanic, and White beneficiaries, use of potentially harmful medication was avoided less often for rural elderly residents with chronic renal failure than for urban elderly residents with chronic renal failure. For each of these racial and ethnic groups, the difference between rural elderly residents and urban elderly residents was greater than 3 percentage points.

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\* 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:

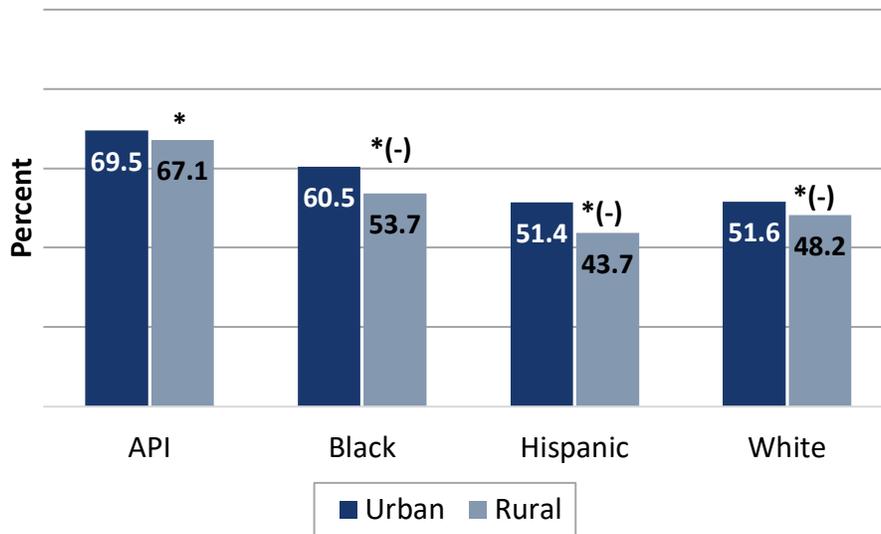
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> This includes antiemetics, antipsychotics, benzodiazepines, tricyclic antidepressants, H2 receptor antagonists, nonbenzodiazepine hypnotics, and anticholinergic agents.

## 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,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, use of potentially harmful medication<sup>†</sup> was avoided 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 APIs was less than 3 percentage points. The difference between rural and urban Blacks was greater than 3 percentage points, as were the differences between rural and urban Hispanics and between rural and urban Whites.

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\* 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:

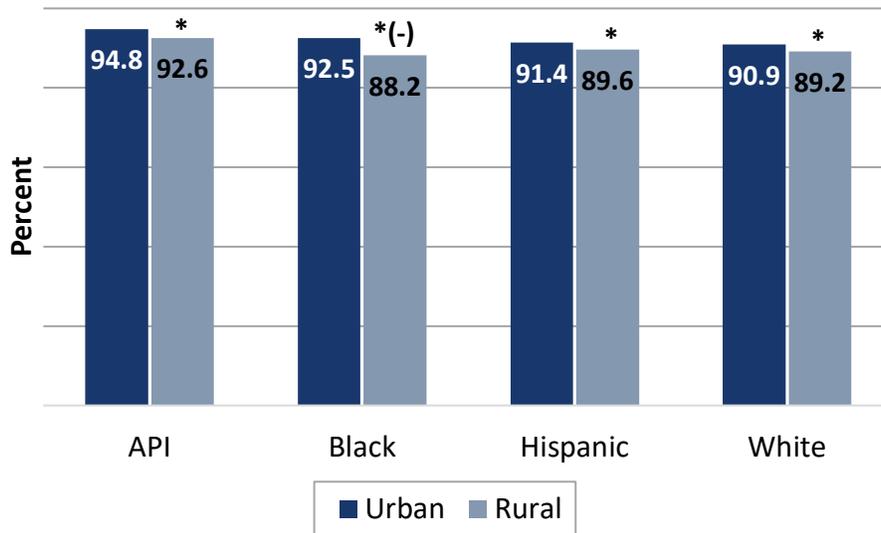
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> This includes anticonvulsants, nonbenzodiazepine hypnotics, selective serotonin reuptake inhibitors (SSRIs), antiemetics, antipsychotics, benzodiazepines, and tricyclic antidepressants.

## 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 geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, use of high-risk medication was avoided less often for rural residents than for urban residents. The difference between rural and urban APIs was less than 3 percentage points, as were the differences between rural and urban Hispanics and between rural and urban Whites. The difference between rural and urban Blacks was greater than 3 percentage points.

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

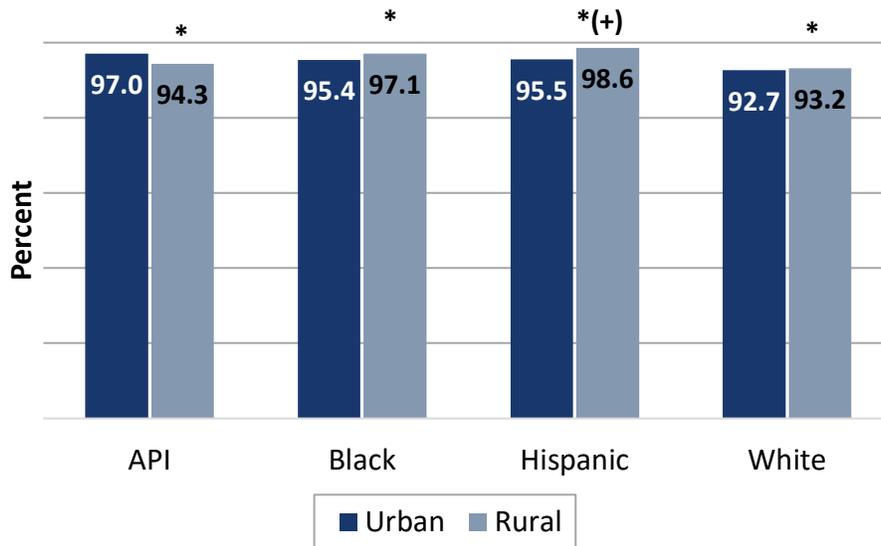
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## Avoiding Use of Opioids at High Dosage

Percentage of MA enrollees aged 18 years and older who were not prescribed opioids at a high dosage<sup>†</sup> for more than 14 days, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API beneficiaries, use of opioids at a high dosage<sup>†</sup> for more than 14 days was avoided less often for rural residents than for urban residents. The difference between rural and urban APIs was less than 3 percentage points.
- Among Black, Hispanic, and White beneficiaries, use of opioids at a high dosage<sup>†</sup> for more than 14 days was avoided more often for rural residents than for urban residents. 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.

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\* 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:

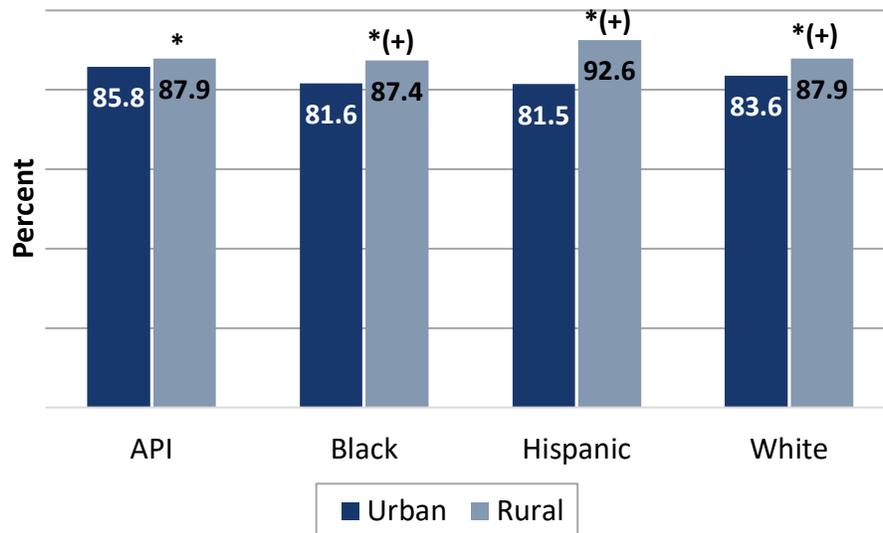
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

<sup>†</sup> Average morphine equivalent dose > 120 mg

## Avoiding Use of Opioids from Multiple Prescribers

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more prescribers in the past year, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, use of opioids from multiple prescribers was avoided more often for rural residents than for urban residents. The difference between rural and urban APIs was less than 3 percentage points. The difference between rural and urban Blacks was greater than 3 percentage points, as were the differences between rural and urban Hispanics and between rural and urban Whites.

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

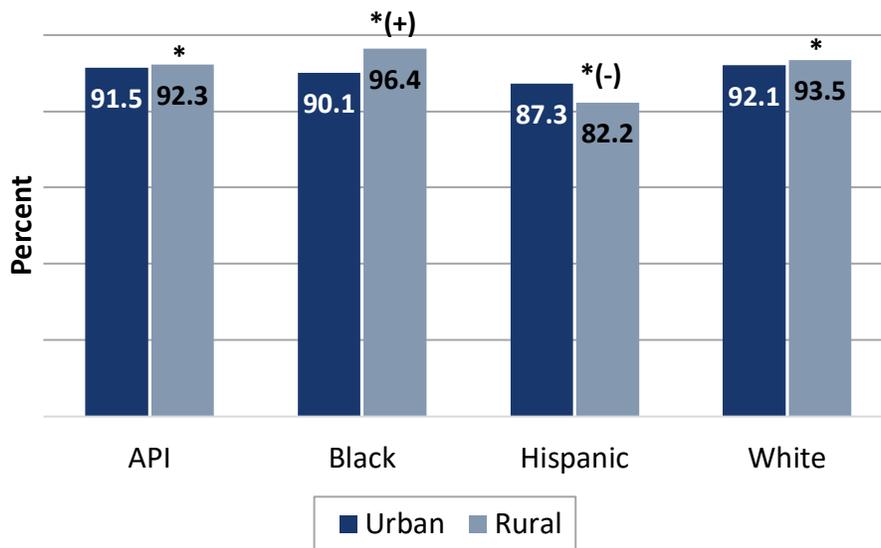
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## Avoiding Use of Opioids from Multiple Pharmacies

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more pharmacies in the past year, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, and White beneficiaries, use of opioids from multiple pharmacies was avoided more often for rural residents than for urban residents. The difference between rural and urban APIs was less than 3 percentage points, as was the difference between rural and urban Whites. The difference between rural and urban Blacks was greater than 3 percentage points.
- Among Hispanic beneficiaries, use of opioids from multiple pharmacies was avoided less often for rural residents than for urban residents. The difference between rural and urban Hispanics was greater than 3 percentage points.

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

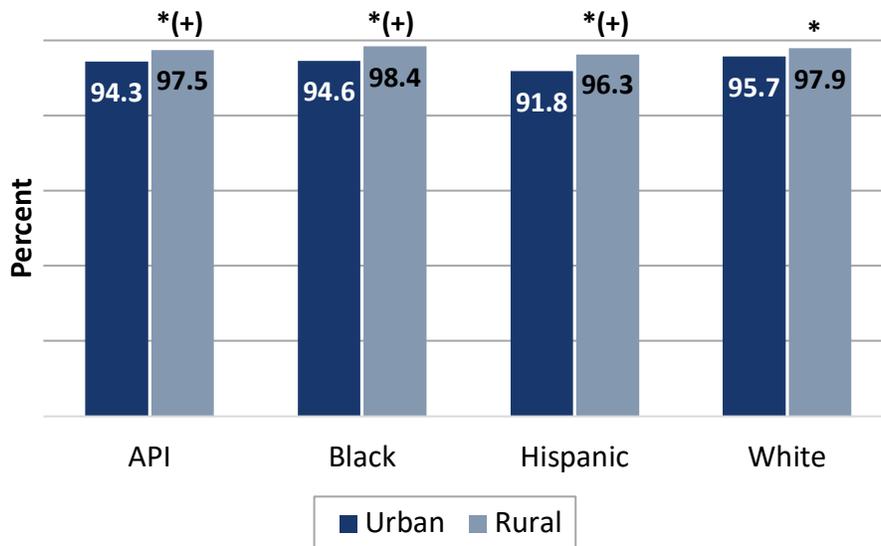
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) 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.

## Avoiding Use of Opioids from Multiple Prescribers and Pharmacies

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more prescribers and four or more pharmacies in the past year, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, use of opioids from multiple prescribers and pharmacies was avoided more often for rural residents than for urban residents. 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.

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\* 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:

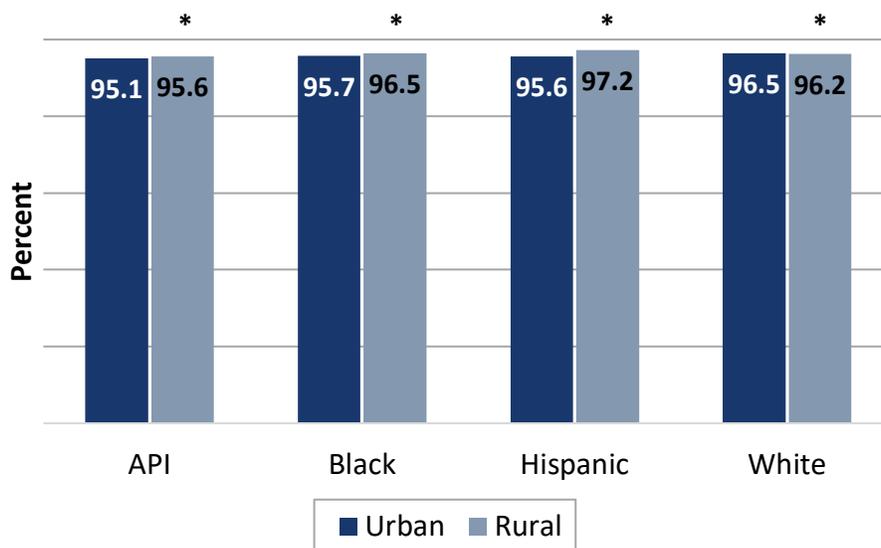
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

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

## Clinical Care: Access/Availability of 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 geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

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\* 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.

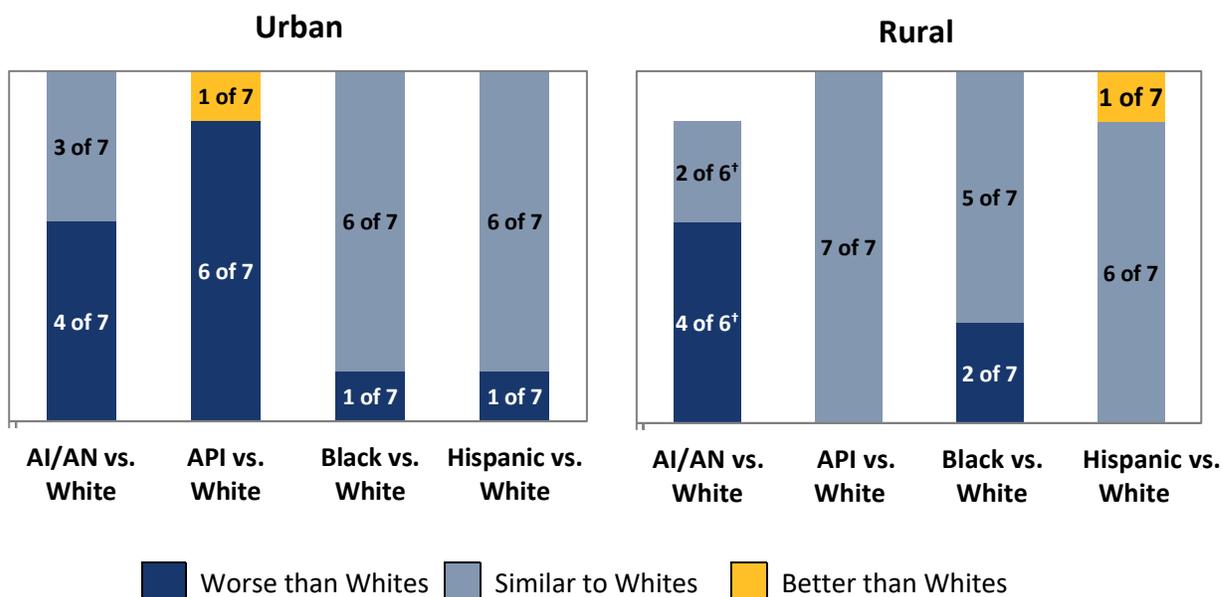


**Section III:  
Racial and Ethnic Disparities in  
Health Care in Medicare Within  
Urban and Rural Areas**



## Racial and Ethnic Disparities in Care Within Urban and Rural Areas: All Patient Experience Measures, Medicare Advantage

Number of patient experience measures for which urban and rural residents of selected racial and ethnic minority groups reported experiences that were worse than, similar to, or better than the experiences reported by White urban and rural residents in 2018



**SOURCE:** Data from the 2018 Medicare CAHPS survey.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> For one patient experience measure, there were not enough data from rural MA AI/AN beneficiaries to compare their experiences to those of rural MA White beneficiaries.

### Urban AI/AN MA beneficiaries received worse care than urban White MA beneficiaries

- Getting needed care
- Getting appointments and care quickly
- Getting needed prescription drugs
- Annual flu vaccine

### Urban API MA beneficiaries received worse care than urban White MA beneficiaries

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

**Urban API MA beneficiaries received better care than urban White MA beneficiaries**

- Annual flu vaccine

**Urban Black MA beneficiaries received worse care than urban White MA beneficiaries**

- Annual flu vaccine

**Urban Hispanic MA beneficiaries received worse care than urban White MA beneficiaries**

- Getting appointments and care quickly

**Rural AI/AN MA beneficiaries received worse care than rural White MA beneficiaries**

- Getting needed care
- Getting appointments and care quickly
- Getting needed prescription drugs
- Annual flu vaccine

**Rural Black MA beneficiaries received worse care than rural White MA beneficiaries**

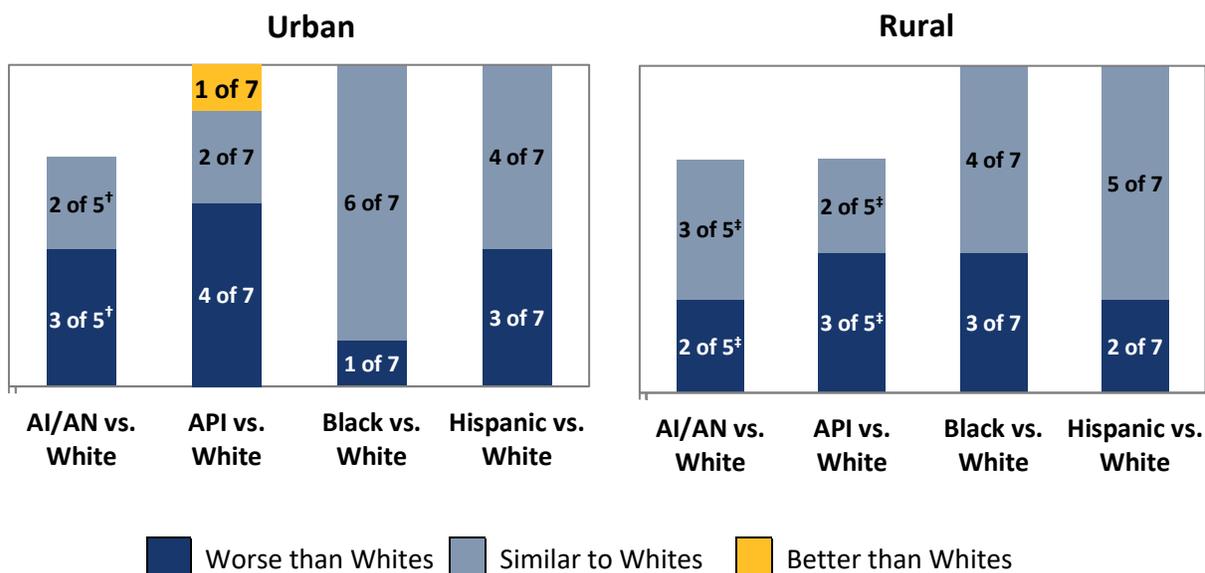
- Getting appointments and care quickly
- Annual flu vaccine

**Rural Hispanic MA beneficiaries received better care than rural White MA beneficiaries**

- Getting needed prescription drugs

## Racial and Ethnic Disparities in Care Within Urban and Rural Areas: All Patient Experience Measures, Fee-for-Service

Number of patient experience measures for which urban and rural residents of selected racial and ethnic minority groups reported experiences that were worse than, similar to, or better than the experiences reported by White urban and rural residents in 2018



**SOURCE:** Data from the 2018 Medicare CAHPS survey.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> For two patient experience measures, there were not enough data from urban FFS AI/AN beneficiaries to compare their experiences to those of urban FFS White beneficiaries.

<sup>‡</sup> For two patient experience measures, there were not enough data from rural FFS AI/AN beneficiaries or from rural FFS API beneficiaries to compare their experiences to those of rural FFS White beneficiaries.

### Urban AI/AN FFS beneficiaries received worse care than urban White FFS beneficiaries

- Getting needed care
- Getting appointments and care quickly
- Annual flu vaccine

### Urban API FFS beneficiaries received worse care than urban White FFS beneficiaries

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

### Urban API FFS beneficiaries received better care than urban White FFS beneficiaries

- Annual flu vaccine

**Urban Black FFS beneficiaries received worse care than urban White FFS beneficiaries**

- Annual flu vaccine

**Urban Hispanic FFS beneficiaries received worse care than urban White FFS beneficiaries**

- Getting needed care
- Getting appointments and care quickly
- Annual flu vaccine

**Rural AI/AN FFS beneficiaries received worse care than rural White FFS beneficiaries**

- Getting needed care
- Getting appointments and care quickly

**Rural API FFS beneficiaries received worse care than rural White FFS beneficiaries**

- Getting needed care
- Getting appointments and care quickly
- Doctors who communicate well

**Rural Black FFS beneficiaries received worse care than rural White FFS beneficiaries**

- Getting appointments and care quickly
- Getting needed prescription drugs
- Annual flu vaccine

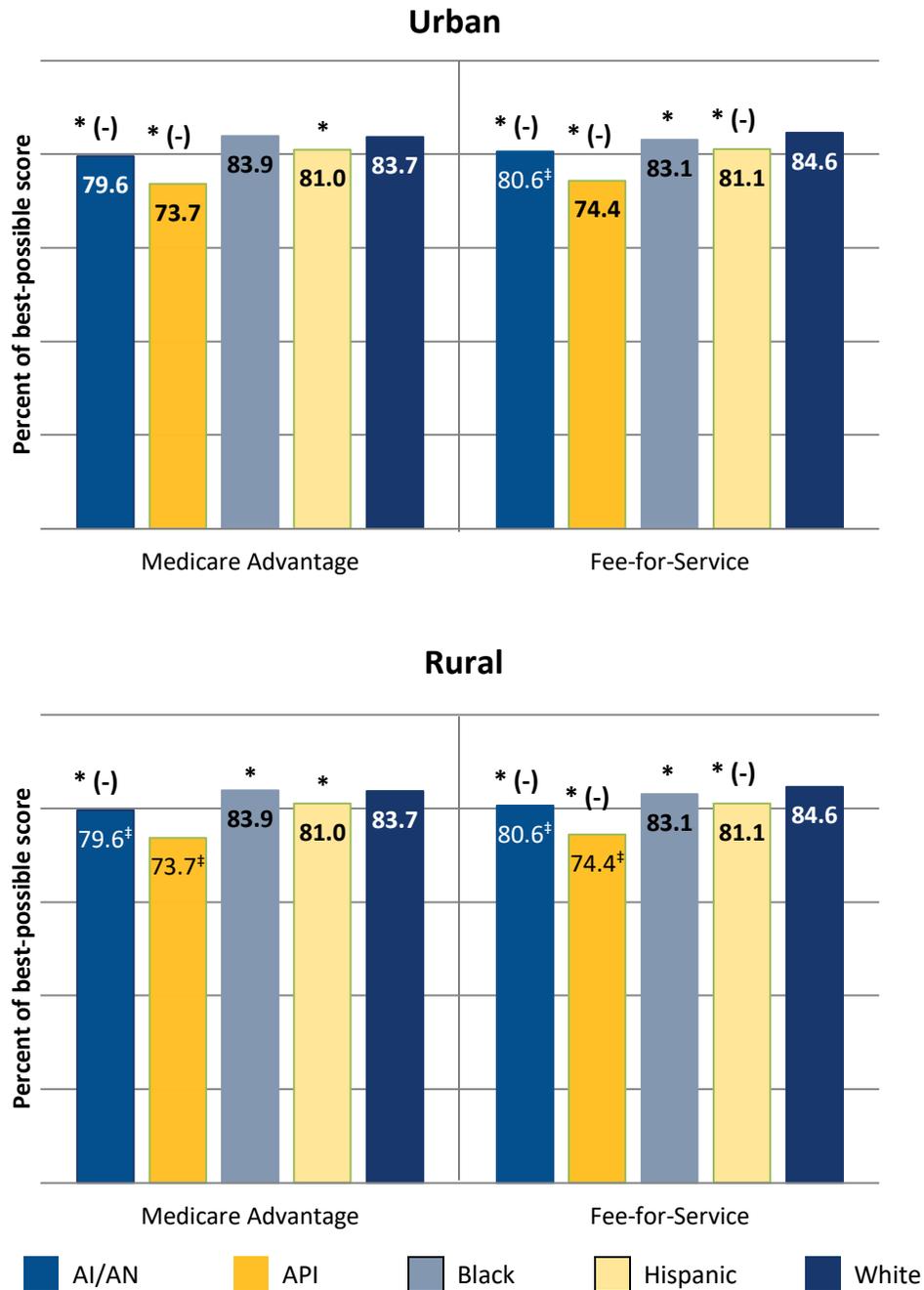
**Rural Hispanic FFS beneficiaries received worse care than rural White FFS beneficiaries**

- Getting needed care
- Getting appointments and care quickly

# Patient Experience

## 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,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

## Disparities

- In both MA and FFS, urban AI/AN beneficiaries reported worse experiences getting needed care than urban White beneficiaries. In each case, the difference between urban AI/AN and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, rural AI/AN beneficiaries reported worse experiences getting needed care than rural White beneficiaries. In each case, the difference between rural AI/AN and rural White beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, urban API beneficiaries reported worse experiences getting needed care than urban White beneficiaries. In each case, the difference between urban API and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- Rural API MA beneficiaries reported experiences getting needed care that were similar to the experiences reported by rural White MA beneficiaries. Rural API FFS beneficiaries reported worse experiences getting needed care than rural White FFS beneficiaries. The difference between rural API and rural White FFS beneficiaries was greater than 3 points on a 0–100 scale.
- Urban Black MA beneficiaries reported experiences getting needed care that were similar to the experiences reported by urban White MA beneficiaries. Urban Black FFS beneficiaries reported worse experiences getting needed care than urban White FFS beneficiaries. The difference between urban Black and urban White FFS beneficiaries was less than 3 points on a 0–100 scale.
- In both MA and FFS, rural Black beneficiaries reported worse experiences getting needed care than rural White beneficiaries. In each case, the difference between rural Black and rural White beneficiaries was less than 3 points on a 0–100 scale.
- In both MA and FFS, urban Hispanic beneficiaries reported worse experiences getting needed care than urban White beneficiaries. The difference between urban Hispanic and urban White MA beneficiaries was less than 3 points on a 0–100 scale. The difference between urban Hispanic and urban White FFS beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, rural Hispanic beneficiaries reported worse experiences getting needed care than rural White beneficiaries. The difference between rural Hispanic and White MA beneficiaries was less than 3 points on a 0–100 scale. The difference between rural Hispanic and rural White FFS beneficiaries was greater than 3 points on a 0–100 scale.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

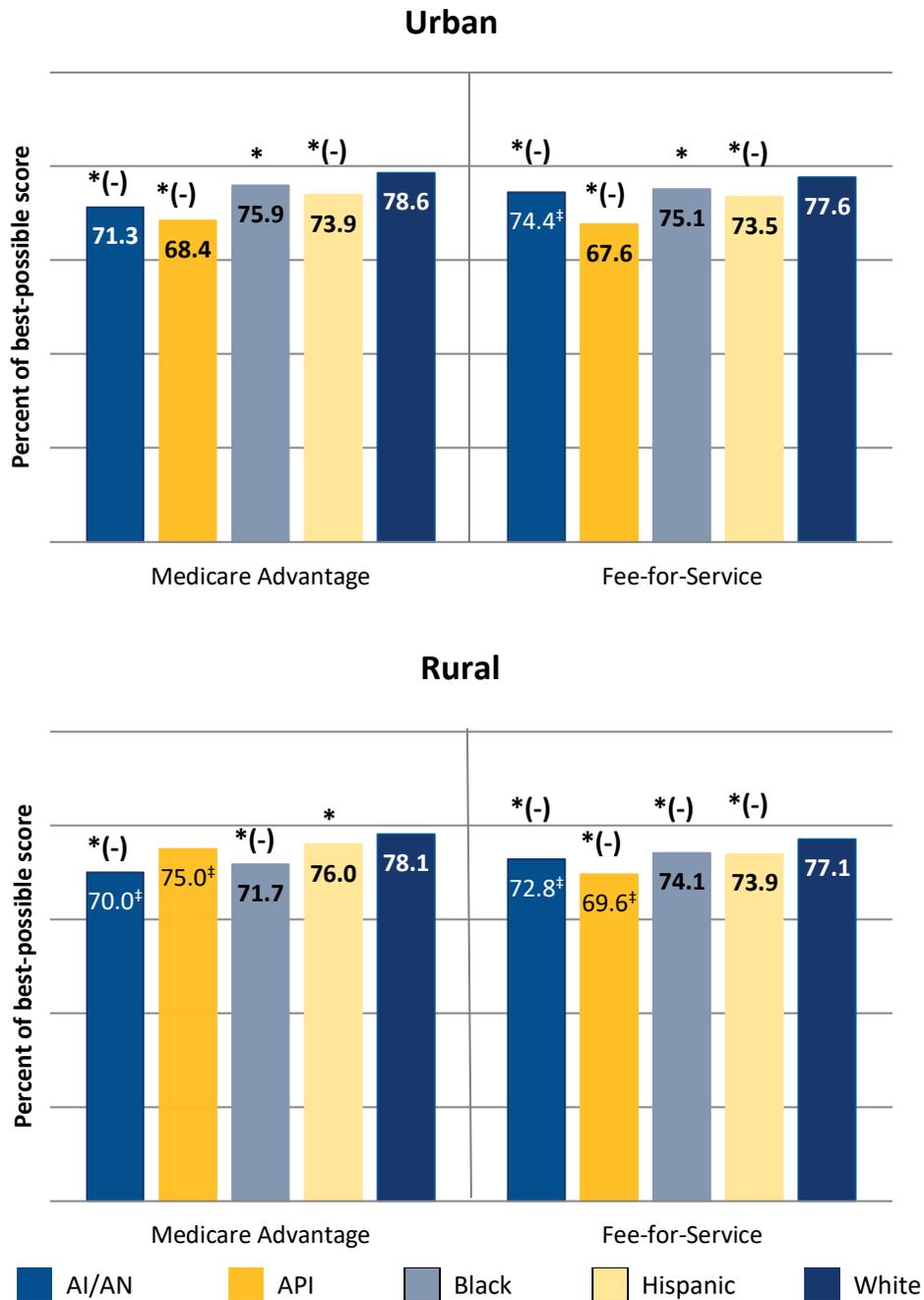
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

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

## 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,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

## Disparities

- In both MA and FFS, urban AI/AN beneficiaries reported worse experiences with getting appointments and care quickly than urban White beneficiaries. In each case, the difference between urban AI/AN and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, rural AI/AN beneficiaries reported worse experiences with getting appointments and care quickly than rural White beneficiaries. In each case, the difference between rural AI/AN and rural White beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, urban API beneficiaries reported worse experiences with getting appointments and care quickly than urban White beneficiaries. In each case, the difference between urban API and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- Rural API MA beneficiaries reported experiences with getting appointments and care quickly that were similar to the experiences reported by rural White MA beneficiaries. Rural API FFS beneficiaries reported worse experiences with getting appointments and care quickly than rural White FFS beneficiaries. The difference between rural API and rural White FFS beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, urban Black beneficiaries reported worse experiences with getting appointments and care quickly than urban White beneficiaries. In each case, the difference between urban Black and urban White beneficiaries was less than 3 points on a 0–100 scale.
- In both MA and FFS, rural Black beneficiaries reported worse experiences with getting appointments and care quickly than rural White beneficiaries. In each case, the difference between rural Black and rural White beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, urban Hispanic beneficiaries reported worse experiences with getting appointments and care quickly than urban White beneficiaries. In each case, the difference between urban Hispanic and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, rural Hispanic beneficiaries reported worse experiences with getting appointments and care quickly than rural White beneficiaries. The difference between rural Hispanic and rural White MA beneficiaries was less than 3 points on a 0–100 scale. The difference between rural Hispanic and rural White FFS beneficiaries was greater than 3 points on a 0–100 scale.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

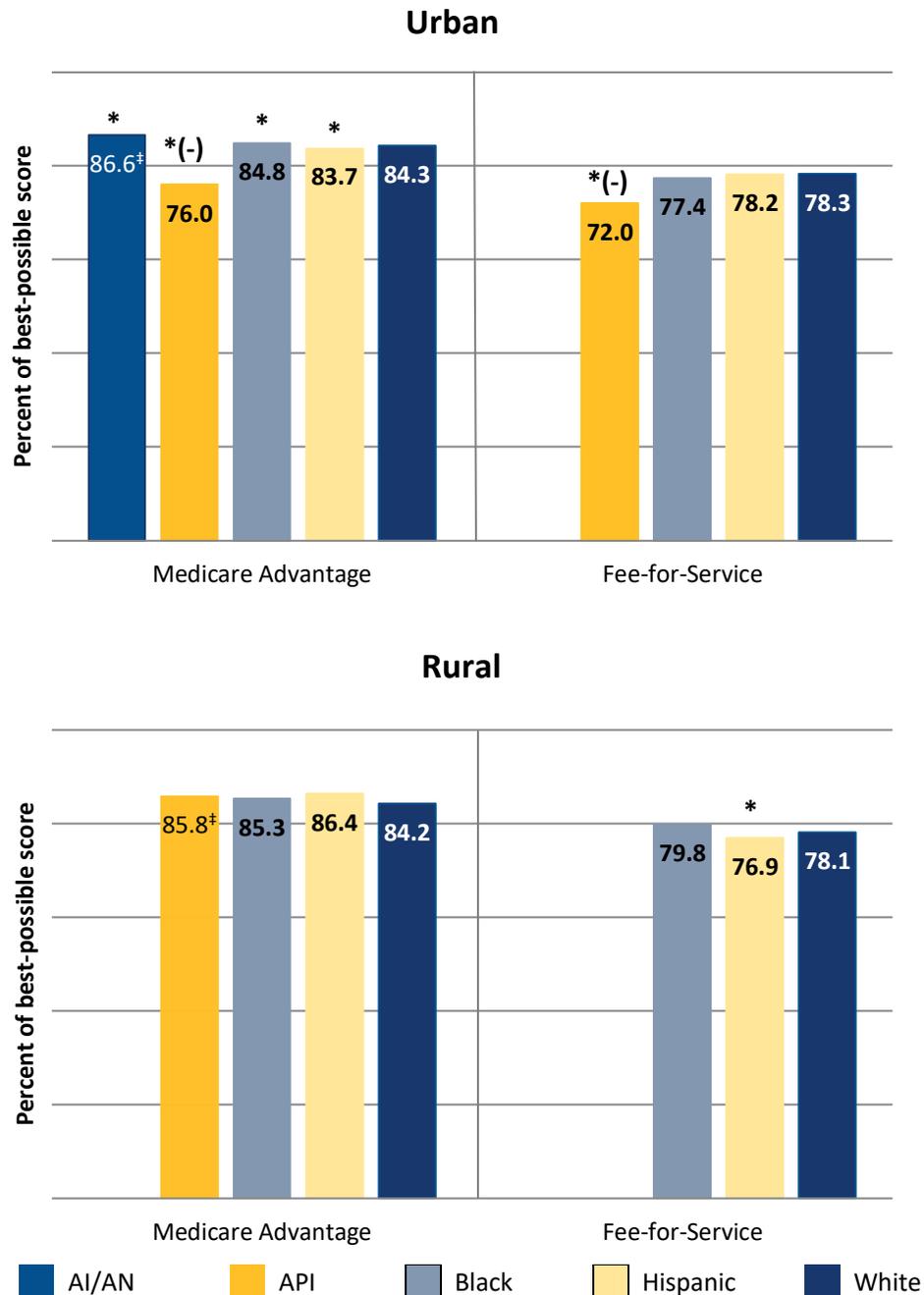
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

† This includes how often in the last six 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,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

<sup>#</sup> There were not enough data from urban AI/AN FFS beneficiaries, rural AI/AN MA beneficiaries, rural AI/AN FFS beneficiaries, or rural API FFS beneficiaries to compare these groups to Whites on this measure.

## Disparities

- Urban AI/AN MA beneficiaries reported better experiences with customer service than urban White beneficiaries. The difference between urban AI/AN and urban White MA beneficiaries was greater than 3 points on a 0–100 scale. There were not enough data from urban AI/AN FFS beneficiaries to compare them to urban White FFS beneficiaries on this measure.
- There were not enough data from rural AI/AN MA or FFS beneficiaries to compare them to rural White beneficiaries on this measure.
- In both MA and FFS, urban API beneficiaries reported worse experiences with customer service than urban White beneficiaries. In each case, the difference between urban API and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- Rural API MA beneficiaries reported experiences with customer service that were similar to the experiences reported by rural White MA beneficiaries. There were not enough data from rural API FFS beneficiaries to compare them to rural White FFS beneficiaries on this measure.
- Urban Black MA beneficiaries reported better experiences with customer service than urban White MA beneficiaries. The difference between urban Black and urban White MA beneficiaries was less than 3 points on a 0–100 scale. Urban Black FFS beneficiaries reported experiences with customer service that were similar to the experiences reported by urban White FFS beneficiaries.
- In both MA and FFS, rural Black beneficiaries reported experiences with customer service that were similar to the experiences reported by rural White beneficiaries.
- Urban Hispanic MA beneficiaries reported worse experiences with customer service than urban White MA beneficiaries. The difference between urban Hispanic and urban White MA beneficiaries was less than 3 points on a 0–100 scale. Urban Hispanic FFS beneficiaries reported experiences with customer service that were similar to the experiences reported by urban White FFS beneficiaries.
- Rural Hispanic MA beneficiaries reported experiences with customer service that were similar to the experiences reported by rural White MA beneficiaries. Rural Hispanic FFS beneficiaries reported worse experiences with customer service than rural White FFS beneficiaries. The difference between rural Hispanic and rural White FFS beneficiaries was less than 3 points on a 0–100 scale.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

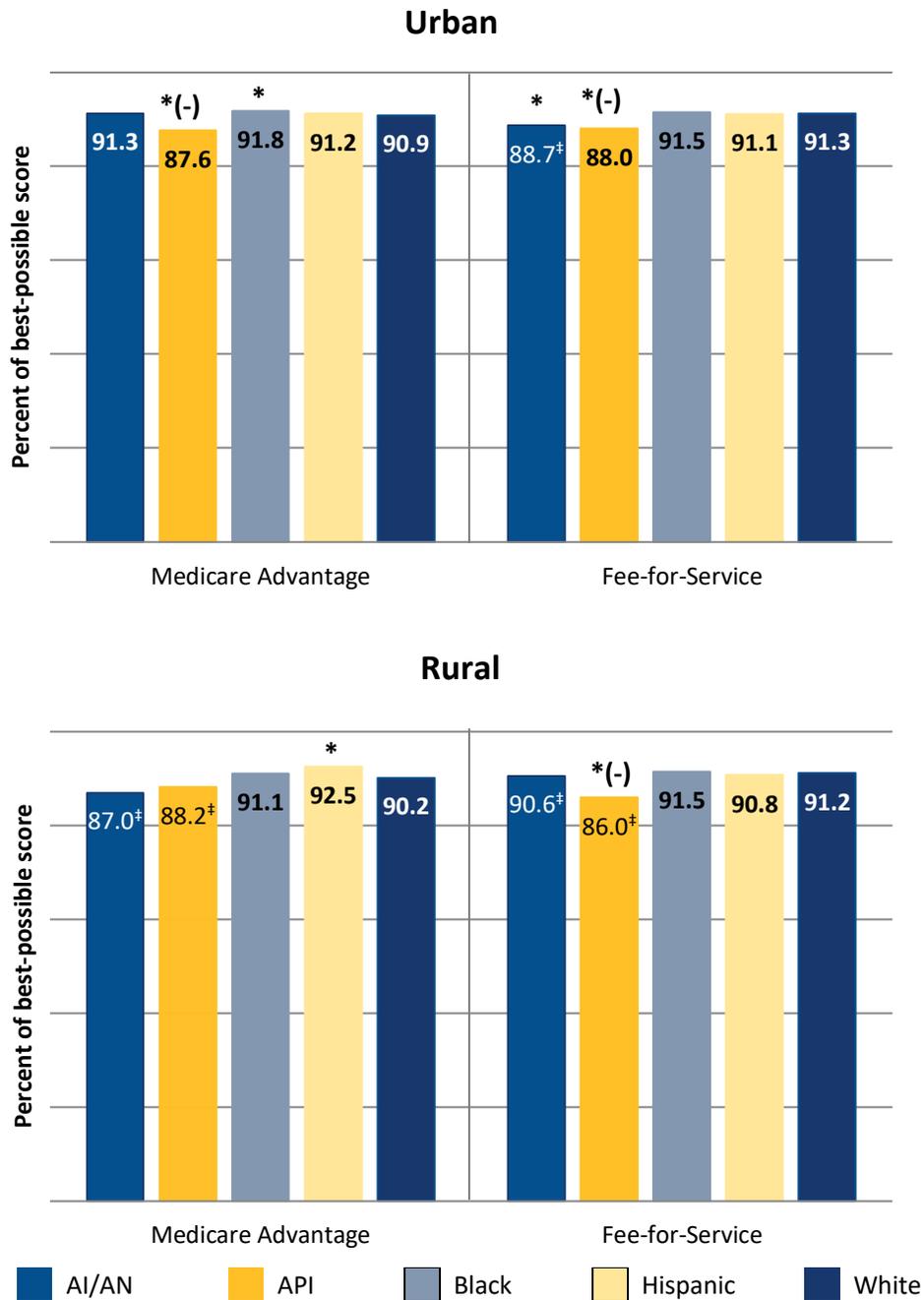
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

† This includes how often in the last six 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,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

## Disparities

- Urban AI/AN MA beneficiaries reported experiences with doctor communication that were similar to the experiences reported by urban White MA beneficiaries. Urban AI/AN FFS beneficiaries reported worse experiences with doctor communication than urban White FFS beneficiaries. The difference between urban AI/AN and urban White FFS beneficiaries was less than 3 points on a 0–100 scale.
- In both MA and FFS, rural AI/AN beneficiaries reported experiences with doctor communication that were similar to the experiences reported by rural White beneficiaries.
- In both MA and FFS, urban API beneficiaries reported worse experiences with doctor communication than urban White beneficiaries. In each case, the difference between urban API and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- Rural API MA beneficiaries reported experiences with doctor communication that were similar to the experiences reported by rural White MA beneficiaries. Rural API FFS beneficiaries reported worse experiences with doctor communication than rural White FFS beneficiaries. The difference between rural API and rural White FFS beneficiaries was greater than 3 points on a 0–100 scale.
- Urban Black MA beneficiaries reported better experiences with doctor communication than urban White MA beneficiaries. The difference between urban Black and urban White MA beneficiaries was less than 3 points on a 0–100 scale. Urban Black FFS beneficiaries reported experiences with doctor communication that were similar to the experiences reported by urban White FFS beneficiaries.
- In both MA and FFS, rural Black beneficiaries reported experiences with doctor communication that were similar to the experiences reported by rural White beneficiaries.
- In both MA and FFS, urban Hispanic beneficiaries reported experiences with doctor communication that were similar to the experiences reported by urban White beneficiaries.
- Rural Hispanic MA beneficiaries reported better experiences with doctor communication than rural White MA beneficiaries. The difference between rural Hispanic and rural White MA beneficiaries was less than 3 points on a 0–100 scale. Rural Hispanic FFS beneficiaries reported experiences with doctor communication that were similar to the experiences reported by rural White FFS beneficiaries.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

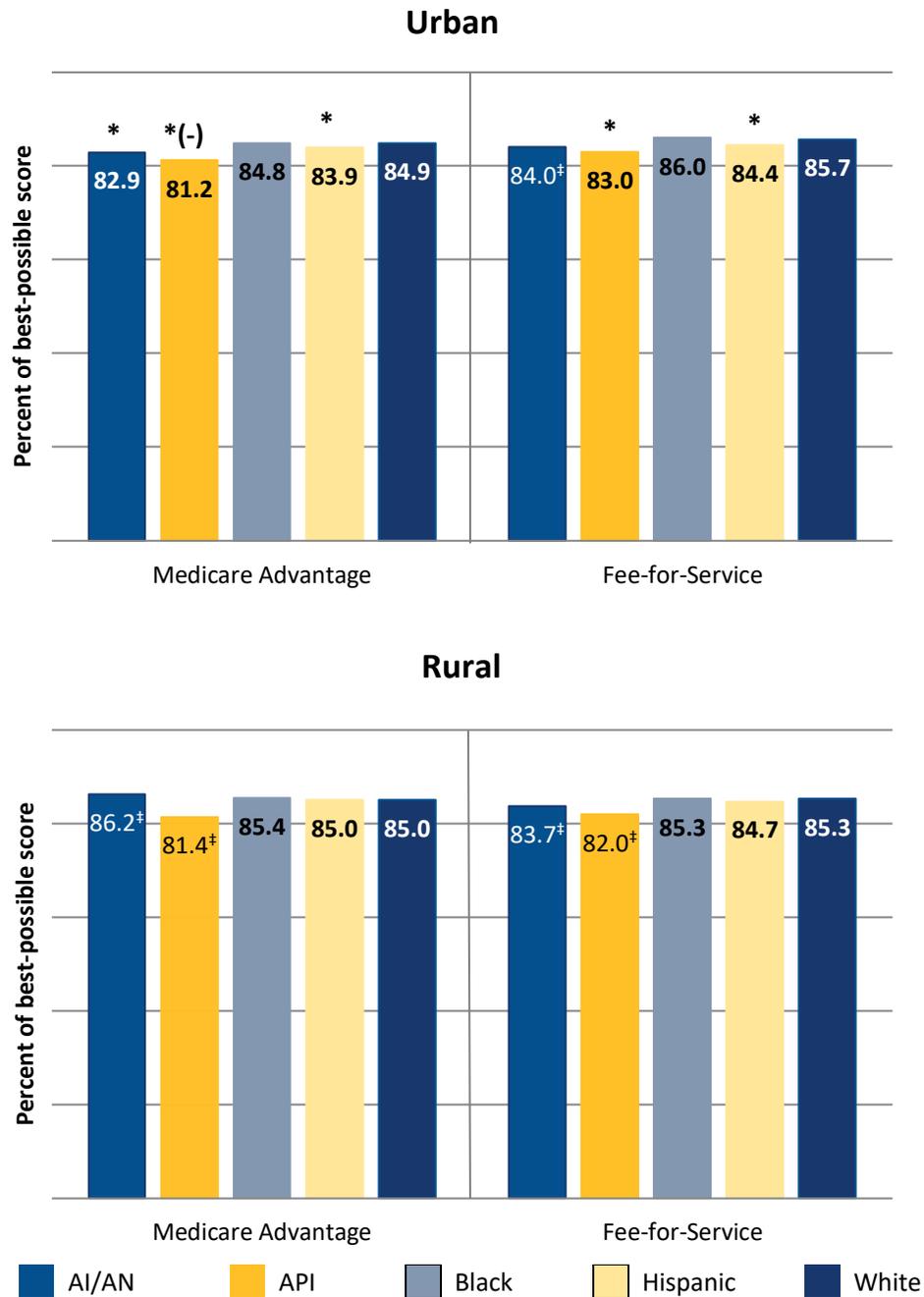
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

† This includes how often in the last six 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,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

## Disparities

- Urban AI/AN MA beneficiaries reported worse experiences with care coordination than urban White MA beneficiaries. The difference between urban AI/AN and urban White MA beneficiaries was less than 3 points on a 0–100 scale. Urban AI/AN FFS beneficiaries reported experiences with doctor communication that were similar to the experiences reported by urban White FFS beneficiaries.
- In both MA and FFS, rural AI/AN beneficiaries reported experiences with care coordination that were similar to the experiences reported by rural White beneficiaries.
- In both MA and FFS, urban API beneficiaries reported worse experiences with care coordination than urban White beneficiaries. The difference between urban API and urban White MA beneficiaries was greater than 3 points on a 0–100 scale. The difference between urban API and urban White FFS beneficiaries was less than 3 points on a 0–100 scale.
- In both MA and FFS, rural API beneficiaries reported experiences with care coordination that were similar to the experiences reported by rural White beneficiaries.
- In both MA and FFS, urban Black beneficiaries reported experiences with care coordination that were similar to the experiences reported by urban White beneficiaries.
- In both MA and FFS, rural Black beneficiaries reported experiences with care coordination that were similar to the experiences reported by rural White beneficiaries.
- In both MA and FFS, urban Hispanic beneficiaries reported worse experiences with care coordination than urban White beneficiaries. In each case, the difference between urban Hispanic and urban White beneficiaries was less than 3 points on a 0–100 scale.
- In both MA and FFS, rural Hispanic beneficiaries reported experiences with care coordination that were similar to the experiences reported by rural White beneficiaries.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

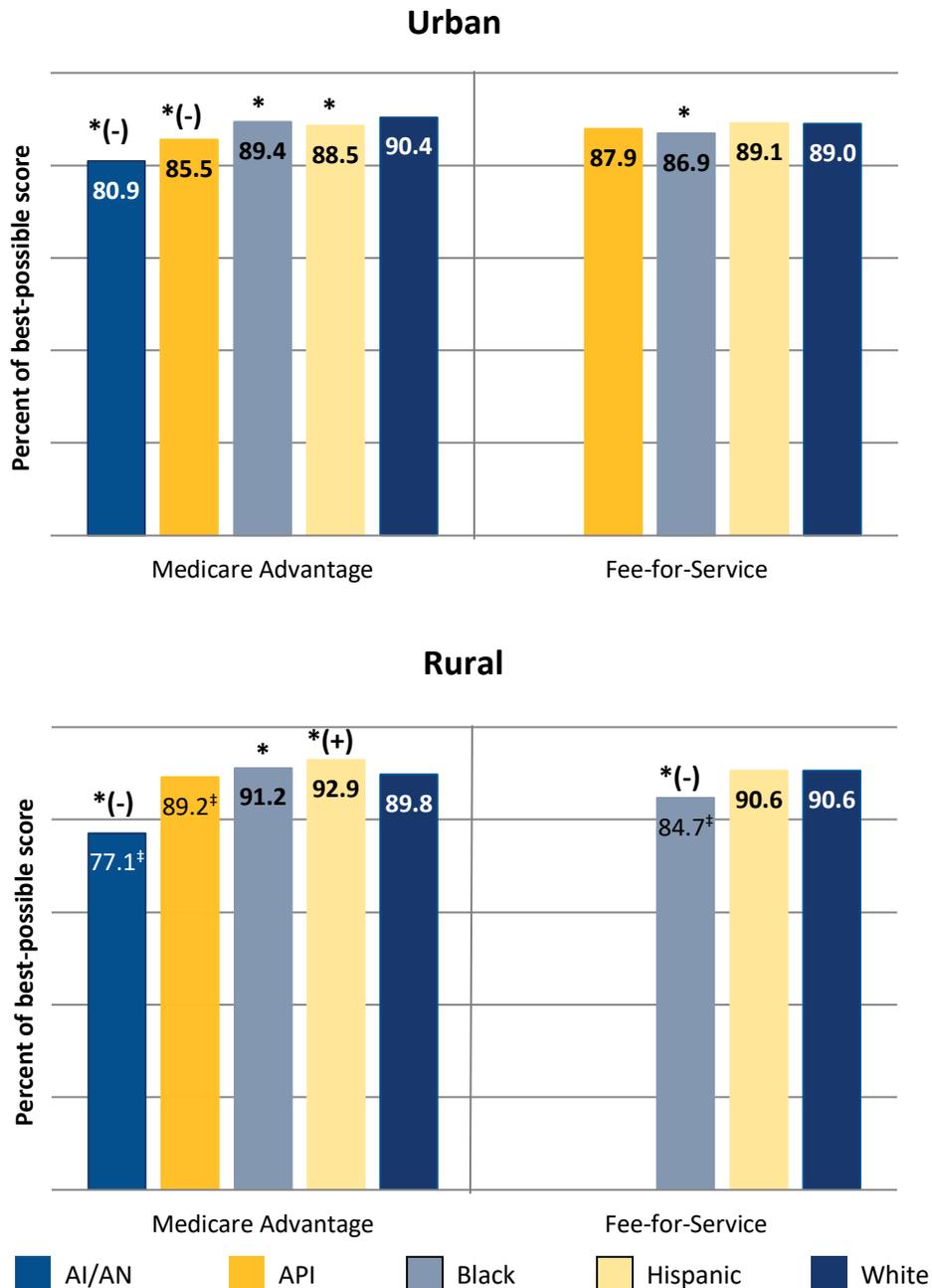
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

† This includes how often in the last six 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,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

<sup>#</sup> There were not enough data from urban AI/AN FFS beneficiaries, rural AI/AN FFS beneficiaries, or rural API FFS beneficiaries to compare these groups to Whites on this measure.

## Disparities

- Urban AI/AN MA beneficiaries reported worse experiences getting needed prescription drugs than urban White MA beneficiaries. The difference between urban AI/AN and urban White MA beneficiaries was greater than 3 points on a 0–100 scale. There were not enough data from urban AI/AN FFS beneficiaries to compare them to urban White FFS beneficiaries on this measure.
- Rural AI/AN MA beneficiaries reported worse experiences getting needed prescription drugs than rural White MA beneficiaries. The difference between rural AI/AN and rural White MA beneficiaries was greater than 3 points on a 0–100 scale. There were not enough data from rural AI/AN FFS beneficiaries to compare them to rural White FFS beneficiaries on this measure.
- Urban API MA beneficiaries reported worse experiences getting needed prescription drugs than urban White MA beneficiaries. The difference between urban API and urban White MA beneficiaries was greater than 3 points on a 0–100 scale. Urban API FFS beneficiaries reported experiences getting needed prescription drugs that were similar to the experiences reported by urban White FFS beneficiaries.
- Rural API MA beneficiaries reported experiences getting needed prescription drugs that were similar to the experiences reported by rural White MA beneficiaries. There were not enough data from rural API FFS beneficiaries to compare them to rural White FFS beneficiaries on this measure.
- In both MA and FFS, urban Black beneficiaries reported worse experiences getting needed prescription drugs than urban White beneficiaries. In each case, the difference between urban Black and urban White beneficiaries was less than 3 points on a 0–100 scale.
- Rural Black MA beneficiaries reported better experiences getting needed prescription drugs than rural White MA beneficiaries. The difference between rural Black and rural White MA beneficiaries was less than 3 points on a 0–100 scale. Rural Black FFS beneficiaries reported worse experiences getting needed prescription drugs than rural White FFS beneficiaries. The difference between rural Black and rural White FFS beneficiaries was greater than 3 points on a 0–100 scale.
- Urban Hispanic MA beneficiaries reported worse experiences getting needed prescription drugs than urban White MA beneficiaries. The difference between urban Hispanic and urban White MA beneficiaries was less than 3 points on a 0–100 scale. Urban Hispanic FFS beneficiaries reported experiences getting needed prescription drugs that were similar to the experiences reported by urban White FFS beneficiaries.
- Rural Hispanic MA beneficiaries reported better experiences getting needed prescription drugs than rural White MA beneficiaries. The difference between rural Hispanic and rural White MA beneficiaries was greater than 3 points on a 0–100 scale. Rural Hispanic FFS beneficiaries reported experiences getting needed prescription drugs that were similar to the experiences reported by rural White FFS beneficiaries.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

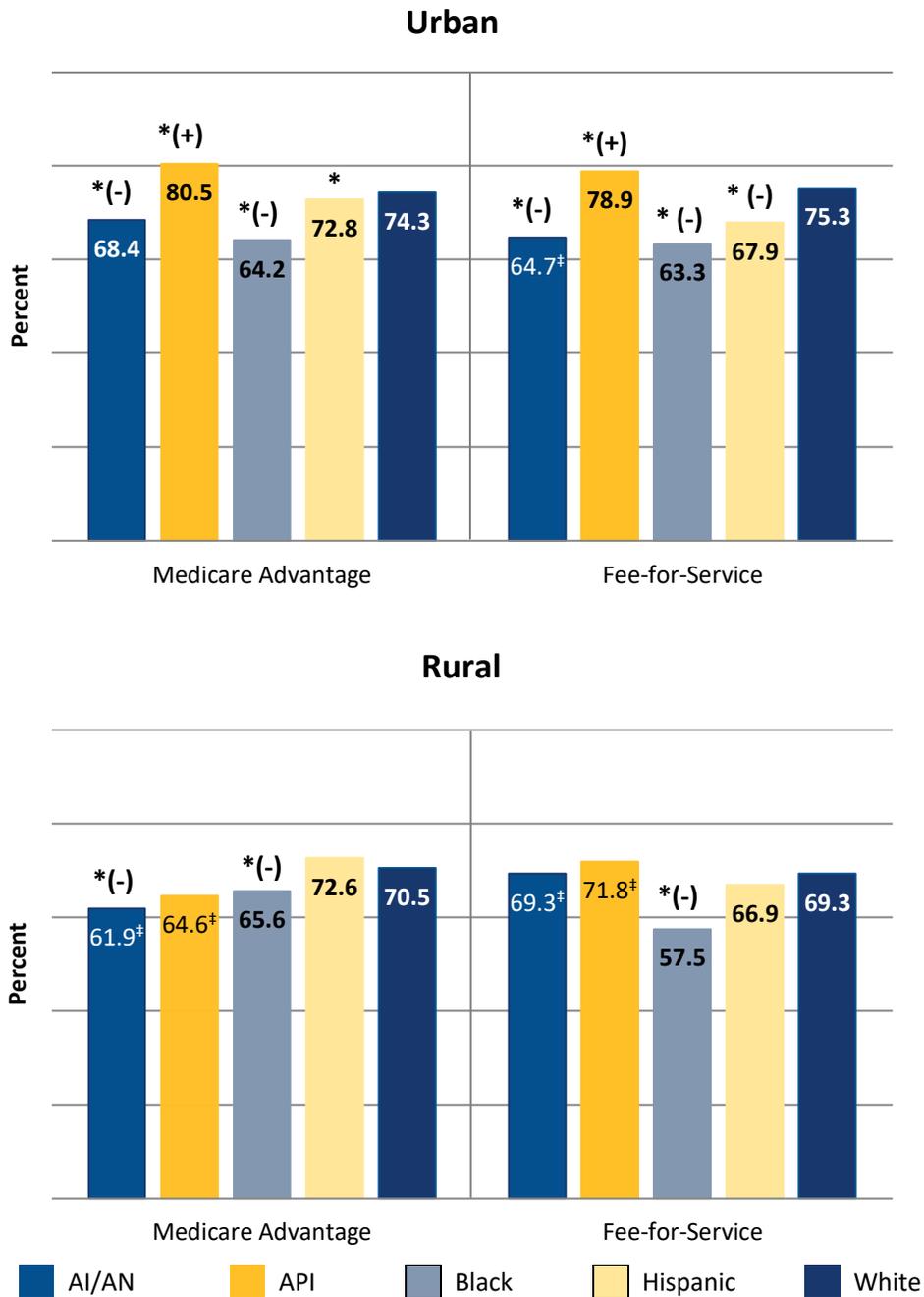
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> This includes how often in the last six 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 race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

## Disparities

- In both MA and FFS, urban AI/AN beneficiaries were less likely than urban White beneficiaries to have received the flu vaccine. In each case, the difference between urban AI/AN and urban White beneficiaries was greater than 3 percentage points.
- Rural AI/AN MA beneficiaries were less likely than rural White MA beneficiaries to have received the flu vaccine. The difference between rural AI/AN and rural White MA beneficiaries was greater than 3 points on a 0–100 scale. Rural AI/AN FFS beneficiaries were about as likely as rural White FFS beneficiaries to have received the flu vaccine.
- In both MA and FFS, urban API beneficiaries were more likely than urban White beneficiaries to have received the flu vaccine. In each case, the difference between urban API and urban White beneficiaries was greater than 3 percentage points.
- In both MA and FFS, rural API beneficiaries were about as likely as rural White beneficiaries to have received the flu vaccine.
- In both MA and FFS, urban Black beneficiaries were less likely than urban White beneficiaries to have received the flu vaccine. In each case, the difference between urban Black and urban White beneficiaries was greater than 3 percentage points.
- In both MA and FFS, rural Black beneficiaries were less likely than rural White beneficiaries to have received the flu vaccine. In each case, the difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- In both MA and FFS, urban Hispanic beneficiaries were less likely than urban White beneficiaries to have received the flu vaccine. The difference between urban Hispanic and urban White MA beneficiaries was less than 3 percentage points. The difference between urban Hispanic and urban White FFS beneficiaries was greater than 3 percentage points.
- In both MA and FFS, rural Hispanic beneficiaries were about as likely as rural White beneficiaries to have received the flu vaccine.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

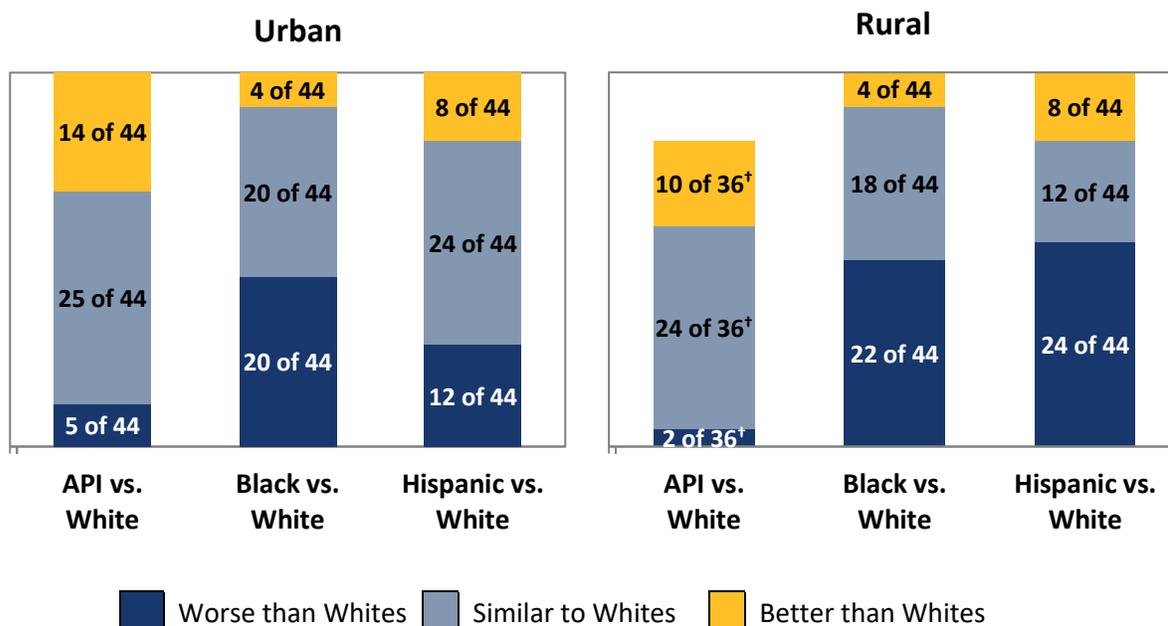
For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Racial and Ethnic Disparities in Care Within Urban and Rural Areas: All Clinical Care Measures

Number of clinical care measures for which urban and rural residents of selected racial and ethnic minority groups experienced care that was worse than, similar to, or better than the care experienced by White urban and rural residents in 2018



**SOURCE:** This chart summarizes clinical quality (HEDIS) data collected in 2018 from MA plans nationwide.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> There was only enough data from rural API beneficiaries to make rural-urban comparisons on 36 of the 44 clinical care measures.

### Urban Asians and Pacific Islanders received worse care than urban Whites

- Controlling high blood pressure
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Initiation of alcohol and other drug dependence treatment
- Transitions of care—medication reconciliation after inpatient discharge

### Urban Asians and Pacific Islanders received better care than urban Whites

- Breast cancer screening
- Colorectal cancer screening
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Diabetes care—eye exam
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Statin use in patients with diabetes
- Osteoporosis management in women who had a fracture
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- 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
- Avoiding use of high-risk medication in the elderly
- Avoiding use of opioids at high dosage

### Urban Blacks received worse care than urban Whites

- Controlling high blood pressure
- Continuous beta-blocker treatment after a heart attack
- Medication adherence for cardiovascular disease—statins
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Medication adherence for diabetes—statins
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for mental illness (within 30 days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within seven days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within 30 days of discharge)
- Medication reconciliation after hospital discharge
- Transitions of care—notification of inpatient admission
- Transitions of care—patient engagement after inpatient discharge
- Transitions of care—medication reconciliation after inpatient discharge
- Follow-up after emergency department visit for people with high-risk multiple chronic conditions
- Avoiding potentially harmful drug-disease interactions in elderly patients with chronic renal failure

### Urban Blacks received better care than urban Whites

- Breast cancer screening
- Initiation of alcohol and other drug dependence treatment
- 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

#### Urban Hispanics received worse care than urban Whites

- Controlling high blood pressure
- Medication adherence for cardiovascular disease—statins
- Medication adherence for diabetes—statins
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Initiation of alcohol and other drug dependence treatment
- Transitions of care—notification of inpatient admission
- Transitions of care—medication reconciliation after inpatient discharge
- 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 use of opioids from multiple pharmacies
- Avoiding use of opioids from multiple prescribers and pharmacies

#### Urban Hispanics received better care than urban Whites

- Breast cancer screening
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Diabetes care—eye exam
- Diabetes care—blood pressure controlled
- Statin use in patients with diabetes
- Osteoporosis management in women who had a fracture
- Transitions of care—patient engagement after inpatient discharge

#### Rural Asians and Pacific Islanders received worse care than rural Whites

- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment

#### Rural Asians and Pacific Islanders received better care than rural Whites

- Breast cancer screening
- Colorectal cancer screening
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Diabetes care—eye exam
- Statin use in patients with diabetes
- Transitions of care—patient engagement after inpatient discharge
- Transitions of care—medication reconciliation after inpatient discharge
- 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
- Avoiding use of high-risk medications in the elderly

### **Rural Blacks received worse care than rural Whites**

- Pharmacotherapy management of COPD exacerbation—systemic corticosteroid
- Controlling high blood pressure
- Continuous beta-blocker treatment after a heart attack
- Medication adherence for cardiovascular disease—statins
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Medication adherence for diabetes—statins
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for mental illness (within 30 days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within seven days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within 30 days of discharge)
- Initiation of alcohol and other drug dependence treatment
- Medication reconciliation after hospital discharge
- Transitions of care—notification of inpatient admission
- Transitions of care—receipt of discharge information
- Transitions of care—medication reconciliation after inpatient discharge
- Follow-up after emergency department visit for people with high-risk multiple chronic conditions
- Avoiding potentially harmful drug-disease interactions in elderly patients with chronic renal failure

### **Rural Blacks received better care than rural Whites**

- Breast cancer screening
- Colorectal cancer screening
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls
- Avoiding opioid use at high dosage

### **Rural Hispanics received worse care than rural Whites**

- Adult body mass index assessment
- Pharmacotherapy management of COPD exacerbation—systemic corticosteroid
- Pharmacotherapy management of COPD exacerbation—bronchodilator
- Controlling high blood pressure
- Continuous beta-blocker treatment after a heart attack
- Medication adherence for cardiovascular disease—statins
- Diabetes care—blood sugar controlled
- Medication adherence for diabetes—statins
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within seven days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within 30 days of discharge)
- Initiation of alcohol and other drug dependence treatment
- Medication reconciliation after hospital discharge
- Transitions of care—notification of inpatient admission
- Transitions of care—receipt of discharge information
- Transitions of care—patient engagement after inpatient discharge
- Transitions of care—medication reconciliation after inpatient discharge
- Follow-up after emergency department visit for people with high-risk multiple chronic conditions
- 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
- Avoiding use of opioids from multiple pharmacies

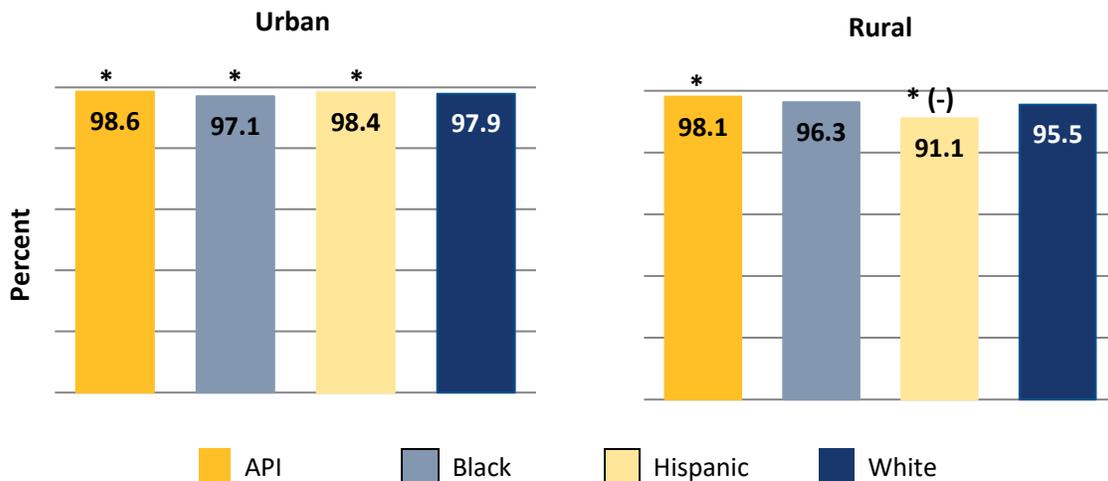
### **Rural Hispanics received better care than rural Whites**

- Breast cancer screening
- Diabetes care—kidney disease monitoring
- Diabetes care—blood pressure controlled
- Osteoporosis management in women who had a fracture
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- Avoiding use of opioids at high dosage
- Avoiding use of opioids from multiple prescribers

## Clinical Care: Prevention and Screening

### Adult BMI Assessment

Percentage of MA enrollees aged 18 to 74 years who had an outpatient visit whose body mass index (BMI) was documented in the past two years, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries were more likely than urban White beneficiaries to have had their BMIs documented. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries were more likely than rural White beneficiaries to have had their BMIs documented. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Urban Black beneficiaries were less likely than urban White beneficiaries to have had their BMIs documented. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries were about as likely as rural White beneficiaries to have had their BMIs documented.
- Urban Hispanic beneficiaries were more likely than urban White beneficiaries to have had their BMIs documented. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries were less likely than rural White beneficiaries to have had their BMIs documented. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

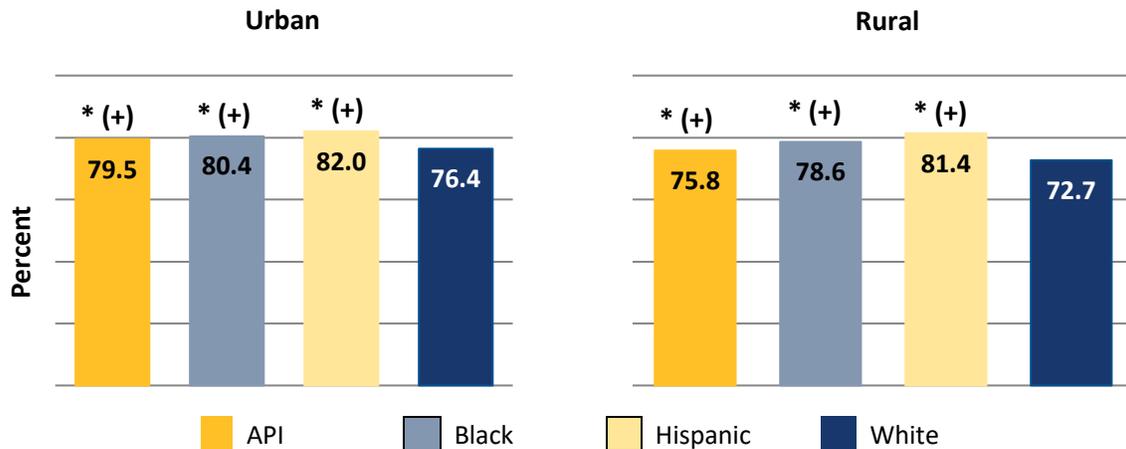
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Breast Cancer Screening

Percentage of MA enrollees (women) aged 50 to 74 years who had appropriate screening for breast cancer, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

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

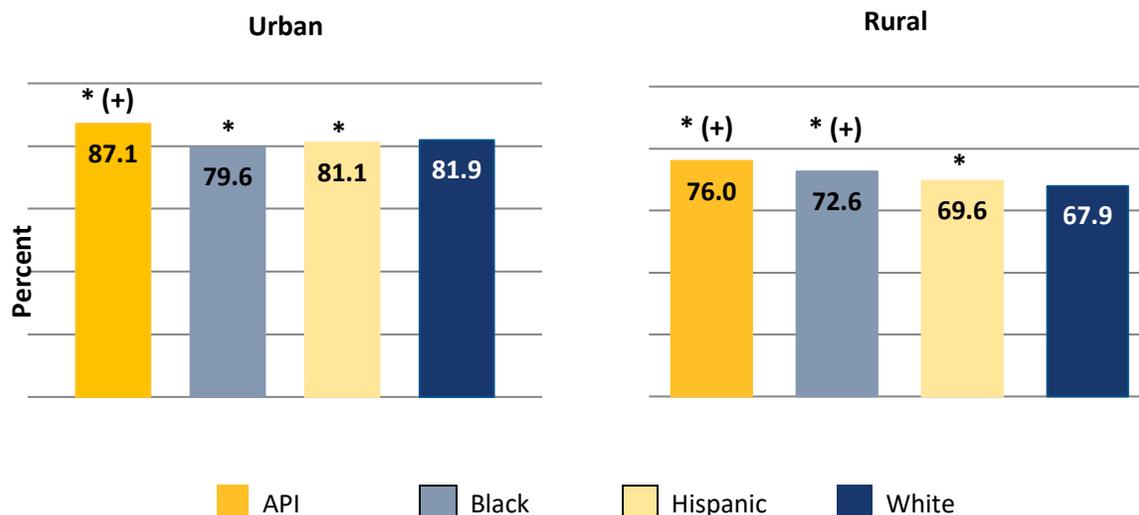
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Colorectal Cancer Screening

Percentage of MA enrollees aged 50 to 75 years who had appropriate screening for colorectal cancer, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries were more likely than urban White beneficiaries to have been appropriately screened for colorectal cancer. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries were more likely than rural White beneficiaries to have been appropriately screened for colorectal cancer. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries were less likely than urban White beneficiaries to have been appropriately screened for colorectal cancer. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries were more likely than rural White beneficiaries to have been appropriately screened for colorectal cancer. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries were less likely than urban White beneficiaries to have been appropriately screened for colorectal cancer. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries were more likely than rural White beneficiaries to have been appropriately screened for colorectal cancer. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

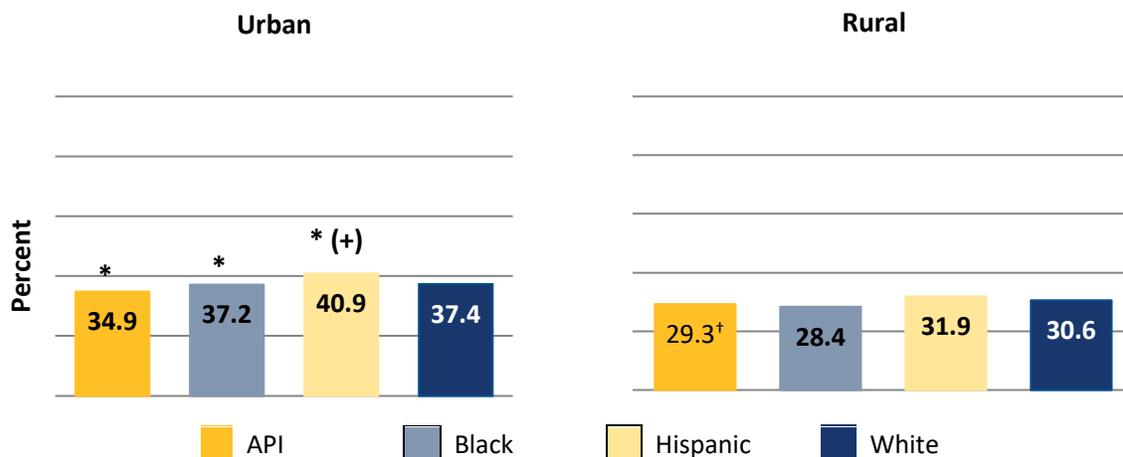
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Clinical Care: Respiratory Conditions

### 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 race and ethnicity within urban and rural areas, 2018**



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

#### Disparities

- Urban API beneficiaries with a new diagnosis of COPD or newly active COPD were less likely than urban White beneficiaries with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries with a new diagnosis of COPD or newly active COPD were about as likely as rural White beneficiaries with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis.
- Urban Black beneficiaries with a new diagnosis of COPD or newly active COPD were less likely than urban White beneficiaries with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries with a new diagnosis of COPD or newly active COPD were about as likely as rural White beneficiaries with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis.
- Urban Hispanic beneficiaries with a new diagnosis of COPD or newly active COPD were more likely than urban White beneficiaries with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with a new diagnosis of COPD or newly active COPD were about as likely as rural White beneficiaries with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

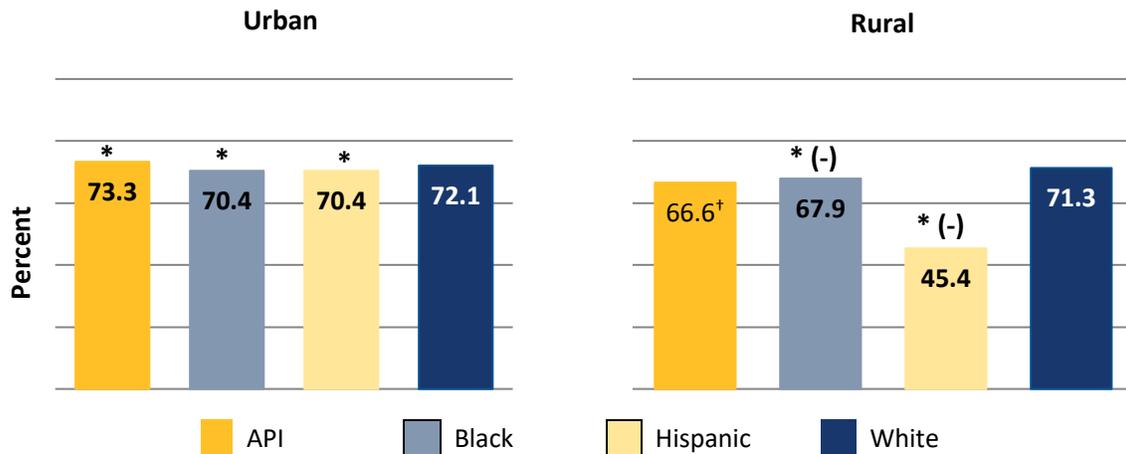
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Clinical Care: Pharmacotherapy Management of COPD Exacerbation—Systemic Corticosteroid

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 systemic corticosteroid within 14 days of the event, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- Urban API beneficiaries who experienced a COPD exacerbation were more likely than urban White beneficiaries who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries who experienced a COPD exacerbation were about as likely as rural White beneficiaries who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event.
- Urban Black beneficiaries who experienced a COPD exacerbation were less likely than urban White beneficiaries who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries who experienced a COPD exacerbation were less likely than rural White beneficiaries who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who experienced a COPD exacerbation were less likely than urban White beneficiaries who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries who experienced a COPD exacerbation were less likely than rural White

beneficiaries who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

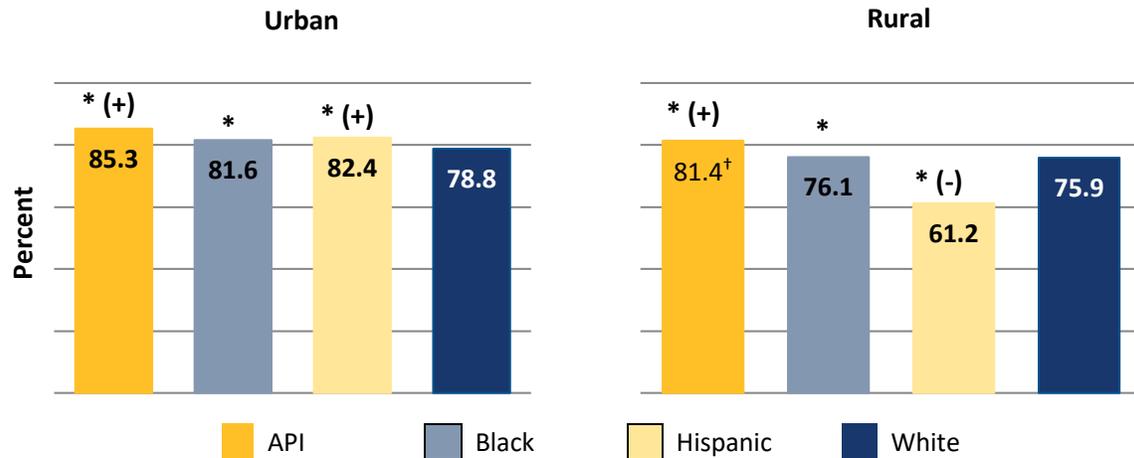
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## 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 race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

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

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

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

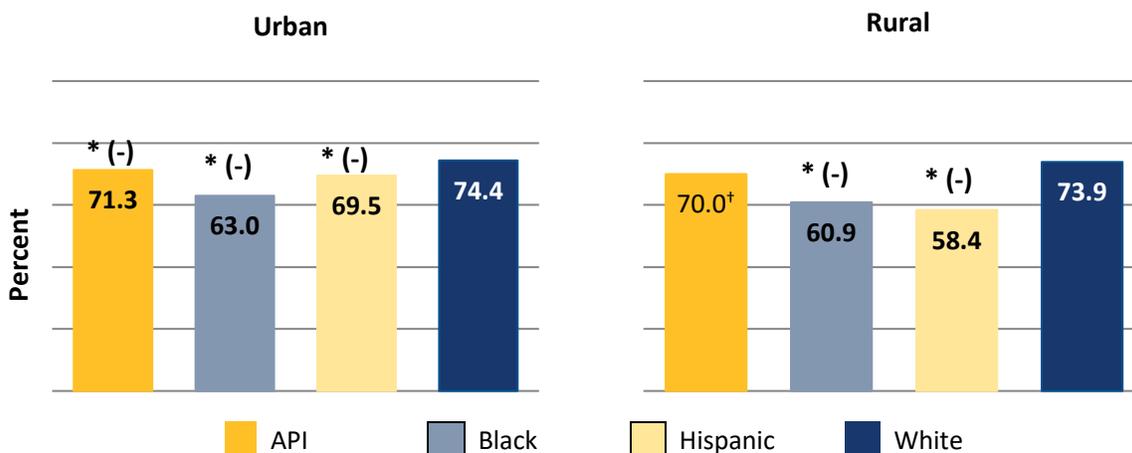
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Clinical Care: Cardiovascular Conditions

### Controlling High Blood Pressure

Percentage of MA enrollees aged 18 to 85 years who had a diagnosis of hypertension whose blood pressure was adequately controlled<sup>†</sup> during the past year, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

#### Disparities

- Urban API beneficiaries who had a diagnosis of hypertension were less likely than urban White beneficiaries who had a diagnosis of hypertension to have had their blood pressure adequately controlled. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries who had a diagnosis of hypertension were about as likely as rural White beneficiaries who had a diagnosis of hypertension to have had their blood pressure adequately controlled.
- Urban Black beneficiaries who had a diagnosis of hypertension were less likely than urban White beneficiaries who had a diagnosis of hypertension to have had their blood pressure adequately controlled. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who had a diagnosis of hypertension were less likely than rural White beneficiaries who had a diagnosis of hypertension to have had their blood pressure adequately controlled. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who had a diagnosis of hypertension were less likely than urban White beneficiaries who had a diagnosis of hypertension to have had their blood pressure adequately controlled. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries who had a diagnosis of hypertension were less likely than rural White beneficiaries who had a diagnosis of hypertension to have had their blood pressure adequately controlled. The

difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

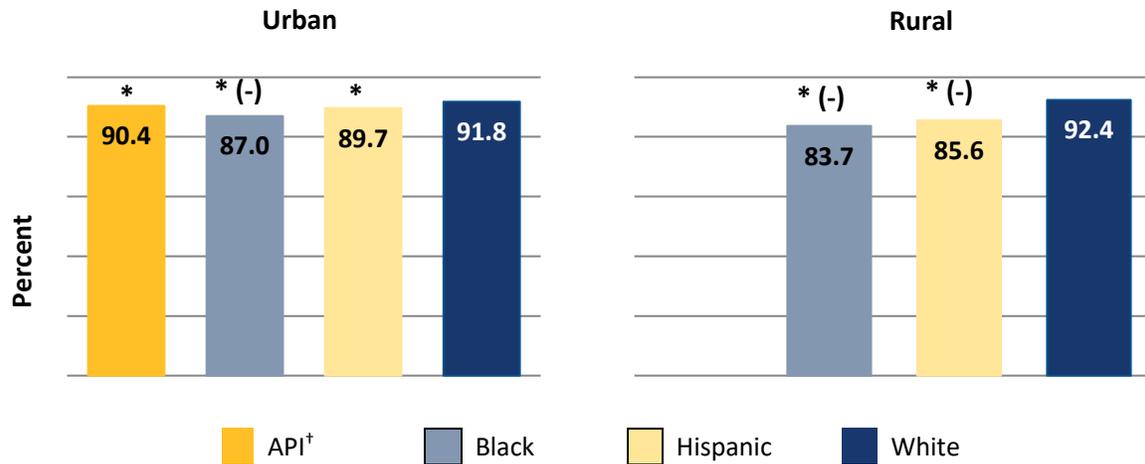
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

† 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.

## 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) who received persistent beta-blocker treatment for six months after discharge, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who were hospitalized for a heart attack were less likely than urban White beneficiaries who were hospitalized for a heart attack to have received persistent beta-blocker treatment. The difference between urban API and urban White beneficiaries was less than 3 percentage points. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who were hospitalized for a heart attack were less likely than urban White beneficiaries who were hospitalized for a heart attack to have received persistent beta-blocker treatment. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were hospitalized for a heart attack were less likely than rural White beneficiaries who were hospitalized for a heart attack to have received persistent beta-blocker treatment. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who were hospitalized for a heart attack were less likely than urban White beneficiaries who were hospitalized for a heart attack to have received persistent beta-blocker treatment. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries who were hospitalized for a heart attack were less likely than rural White beneficiaries who were hospitalized for a heart attack to have received persistent beta-blocker treatment. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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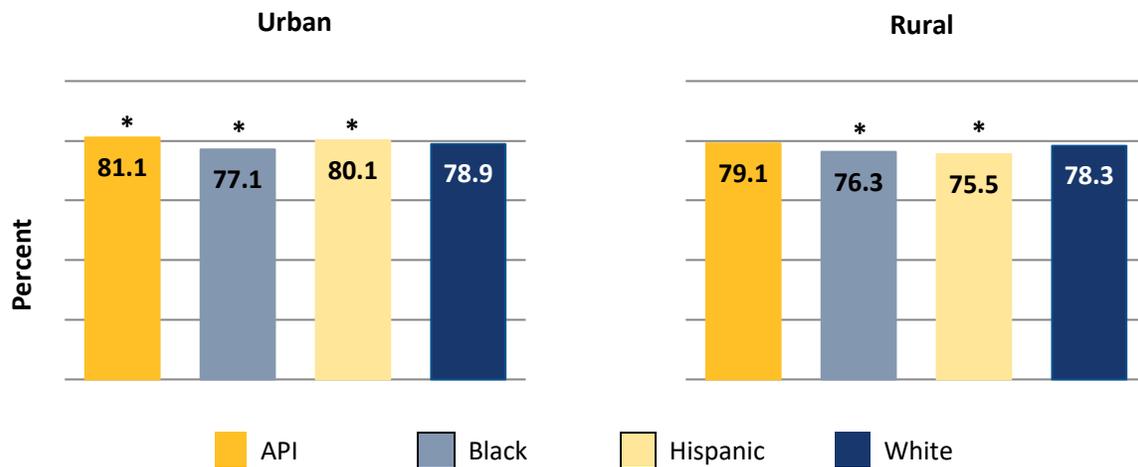
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## 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 with clinical atherosclerotic cardiovascular disease (ASCVD) who received statin therapy, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with ASCVD were more likely than urban White beneficiaries with ASCVD to have received statin therapy. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries with ASCVD were about as likely as rural White beneficiaries with ASCVD to have received statin therapy.
- Urban Black beneficiaries with ASCVD were less likely than urban White beneficiaries with ASCVD to have received statin therapy. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries with ASCVD were less likely than rural White beneficiaries with ASCVD to have received statin therapy. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Urban Hispanic beneficiaries with ASCVD were more likely than urban White beneficiaries with ASCVD to have received statin therapy. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries with ASCVD were less likely than rural White beneficiaries with ASCVD to have received statin therapy. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

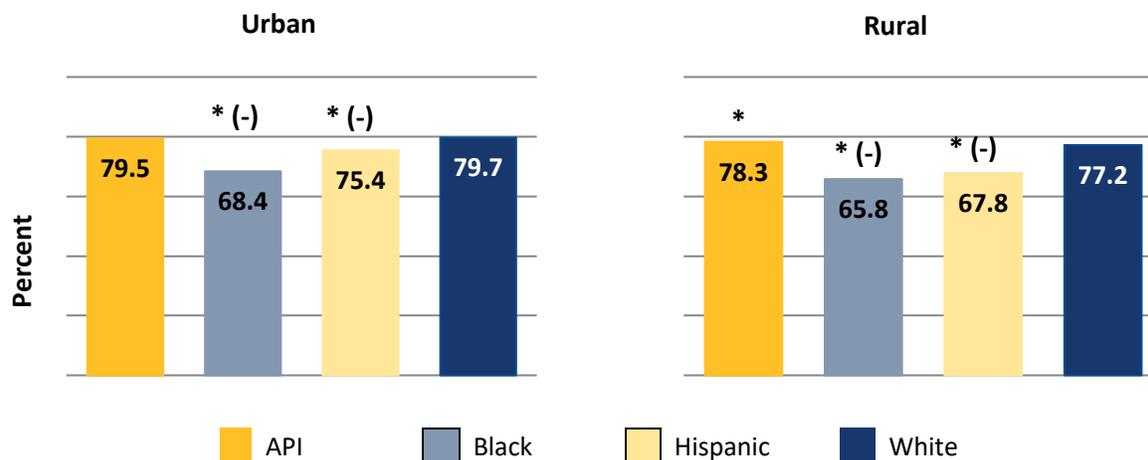
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## 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 with clinical atherosclerotic cardiovascular disease (ASCVD) 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 race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with ASCVD were about as likely as urban White beneficiaries with ASCVD to have had proper statin medication adherence. Rural API beneficiaries with ASCVD were more likely than rural White beneficiaries with ASCVD to have had proper statin medication adherence. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Urban Black beneficiaries with ASCVD were less likely than urban White beneficiaries with ASCVD to have had proper statin medication adherence. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries with ASCVD were less likely than rural White beneficiaries with ASCVD to have had proper statin medication adherence. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries with ASCVD were less likely than urban White beneficiaries with ASCVD to have had proper statin medication adherence. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with ASCVD were less likely than rural White beneficiaries with ASCVD to have had proper statin medication adherence. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

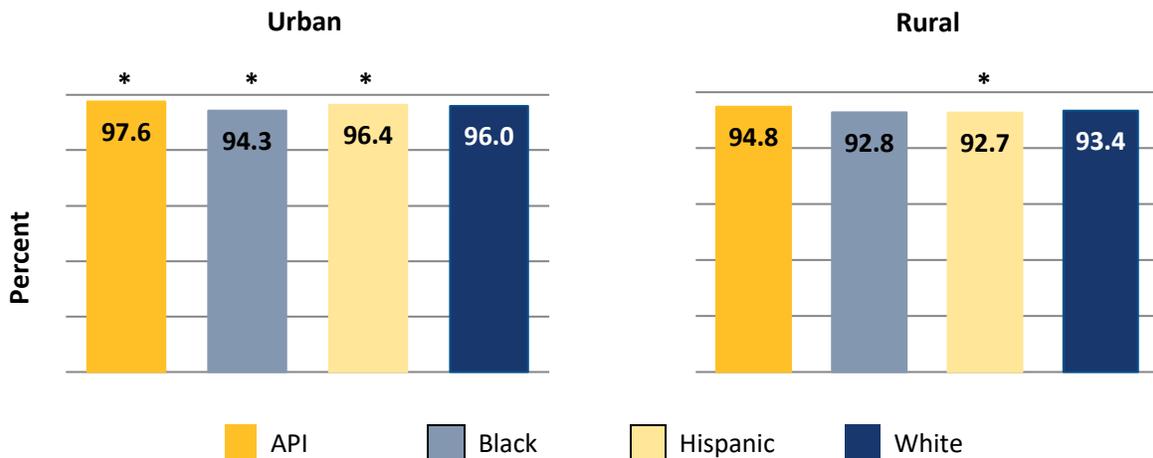
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Clinical Care: Diabetes

### 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 race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

#### Disparities

- Urban API beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have had their blood sugar tested at least once in the past year. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries with diabetes were about as likely as rural White beneficiaries with diabetes to have had their blood sugar tested at least once in the past year.
- Urban Black beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have had their blood sugar tested at least once in the past year. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries with diabetes were about as likely as rural White beneficiaries with diabetes to have had their blood sugar tested at least once in the past year.
- Urban Hispanic beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have had their blood sugar tested at least once in the past year. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have had their blood sugar tested at least once in the past year. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

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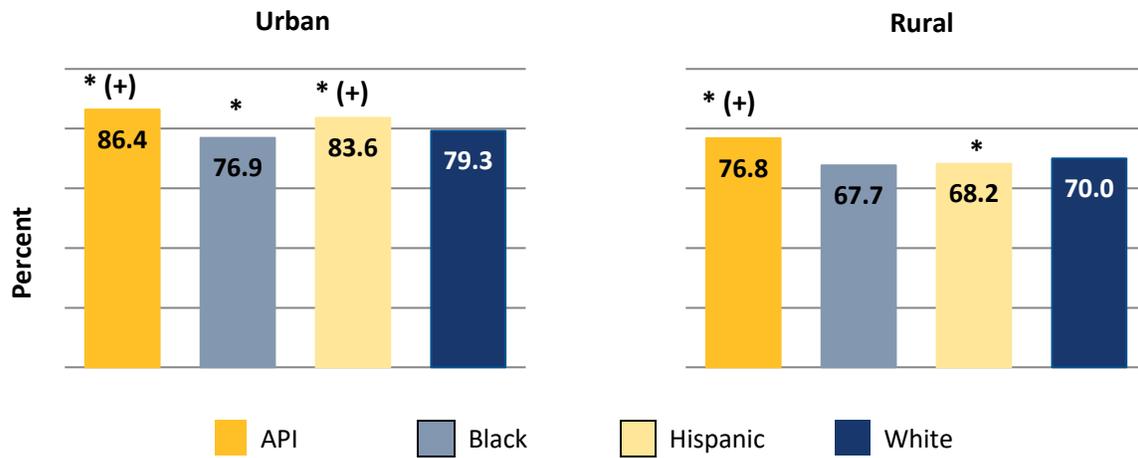
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Diabetes Care—Eye Exam

Percentage of Medicare Advantage enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had an eye exam (retinal) in the past year, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have had an eye exam in the past year. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries with diabetes were more likely than rural White beneficiaries with diabetes to have had an eye exam in the past year. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have had an eye exam in the past year. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries with diabetes were about as likely as rural White beneficiaries with diabetes to have had an eye exam in the past year.
- Urban Hispanic beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have had an eye exam in the past year. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have had an eye exam in the past year. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

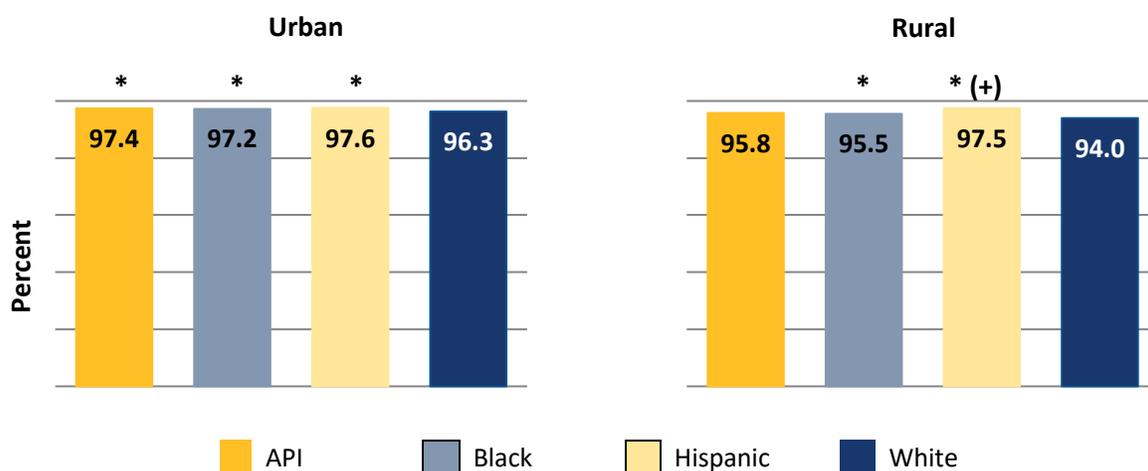
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Diabetes Care—Kidney Disease Monitoring

Percentage of Medicare Advantage enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had medical attention for nephropathy in the past year, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

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

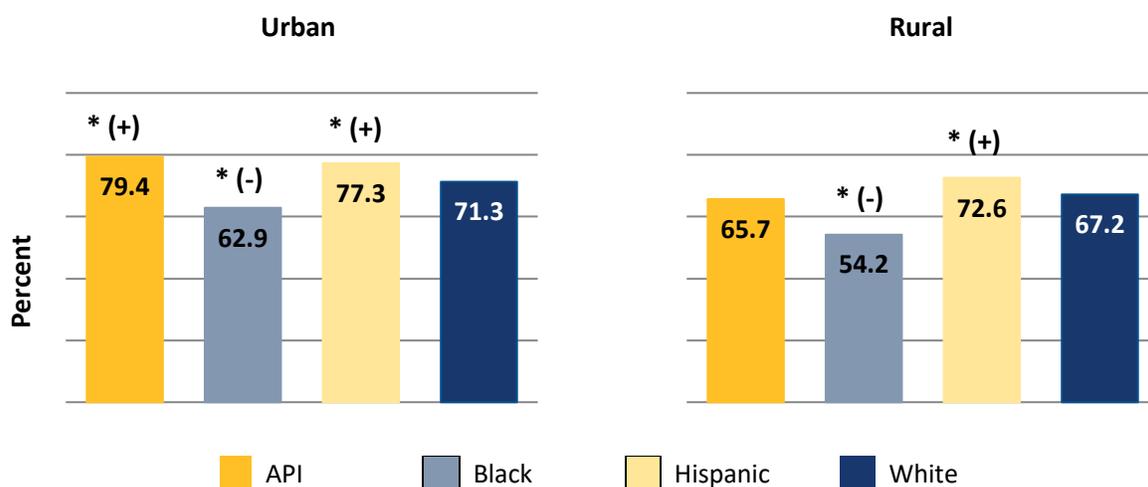
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## 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 race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have their blood pressure under control. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries with diabetes were about as likely as rural White beneficiaries with diabetes to have their blood pressure under control.
- Urban Black beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have their blood pressure under control. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have their blood pressure under control. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have their blood pressure under control. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with diabetes were more likely than rural White beneficiaries with diabetes to have their blood pressure under control. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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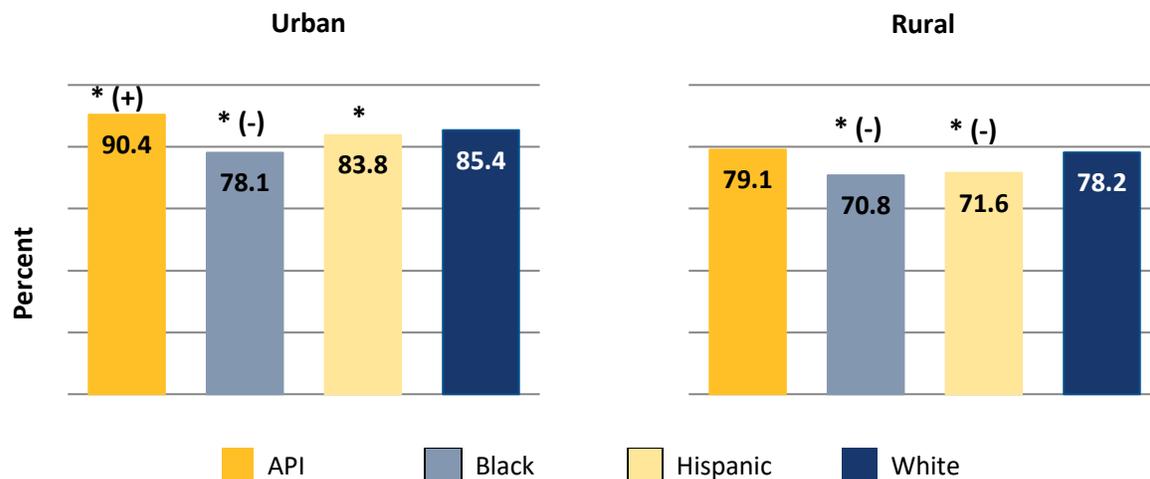
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## 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 race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have their blood sugar levels under control. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries with diabetes were about as likely as rural White beneficiaries with diabetes to have their blood sugar levels under control.
- Urban Black beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have their blood sugar levels under control. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have their blood sugar levels under control. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have their blood sugar levels under control. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have their blood sugar levels under control. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

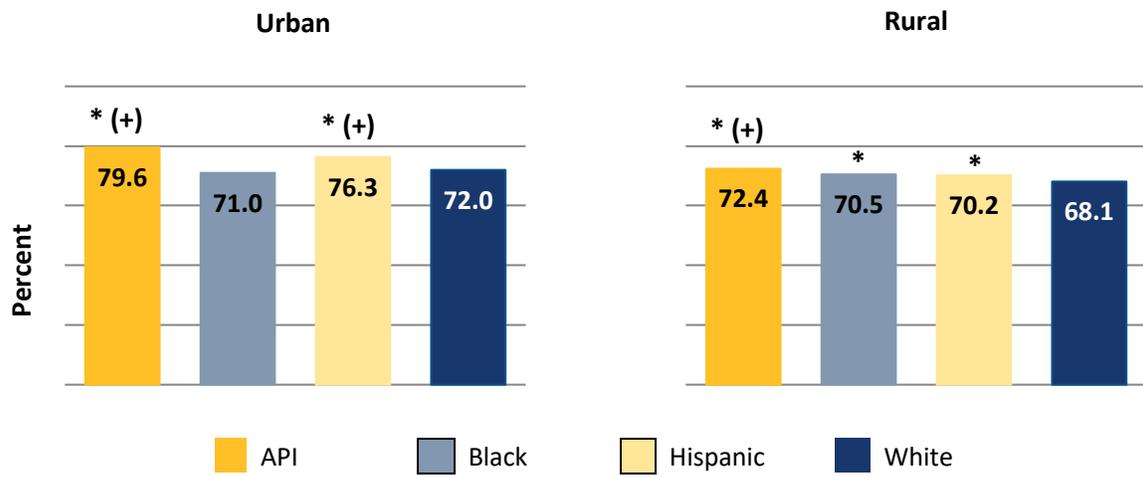
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Statin Use in Patients with Diabetes

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)<sup>†</sup> who received statin therapy, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have received statin therapy. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries with diabetes were more likely than rural White beneficiaries with diabetes to have received statin therapy. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries with diabetes were about as likely as urban White beneficiaries with diabetes to have received statin therapy. Rural Black beneficiaries with diabetes were more likely than rural White beneficiaries with diabetes to have received statin therapy. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Urban Hispanic beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have received statin therapy. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with diabetes were more likely than rural White beneficiaries with diabetes to have received statin therapy. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

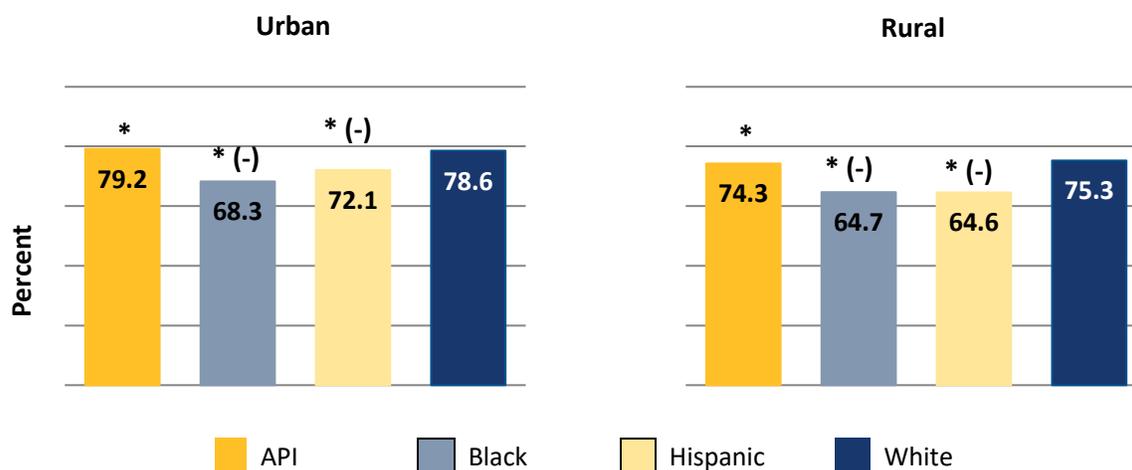
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Excludes those who also have clinical atherosclerotic cardiovascular disease.

## Medication Adherence for Diabetes—Statins

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)<sup>†</sup> 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 race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have had proper statin medication adherence. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have had proper statin medication adherence. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Urban Black beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have had proper statin medication adherence. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have had proper statin medication adherence. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have had proper statin medication adherence. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have had proper statin medication adherence. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

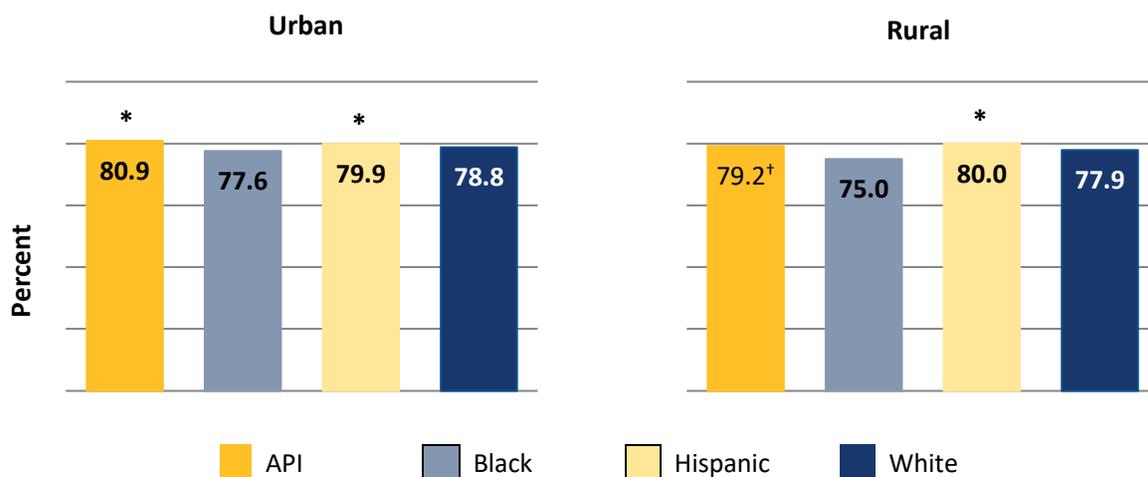
- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Excludes those who also have clinical atherosclerotic cardiovascular disease.

## Clinical Care: Musculoskeletal Conditions

### Rheumatoid Arthritis Management

Percentage of MA enrollees aged 18 years and older who were diagnosed with rheumatoid arthritis during the past year who were dispensed at least one ambulatory prescription for a disease-modifying antirheumatic drug (DMARD), by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

#### Disparities

- Urban API beneficiaries who were diagnosed with rheumatoid arthritis were more likely than urban White beneficiaries who were diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries who were diagnosed with rheumatoid arthritis were about as likely as rural White beneficiaries who were diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD.
- Urban Black beneficiaries who were diagnosed with rheumatoid arthritis were about as likely as urban White beneficiaries who were diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD. Rural Black beneficiaries who were diagnosed with rheumatoid arthritis were about as likely as rural White beneficiaries who were diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD.
- Urban Hispanic beneficiaries who were diagnosed with rheumatoid arthritis were more likely than urban White beneficiaries who were diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries who were diagnosed with rheumatoid arthritis were more likely than rural White beneficiaries who were diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

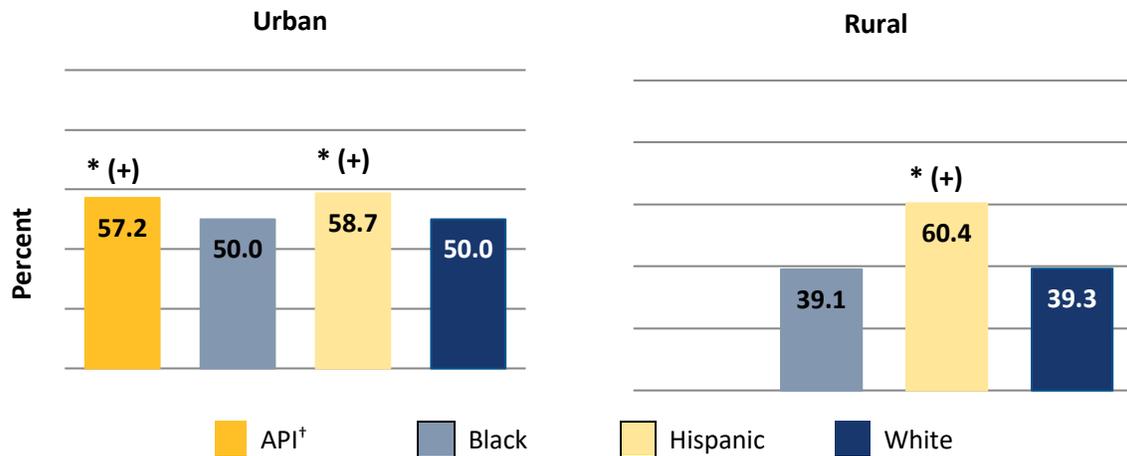
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Osteoporosis Management in Women Who Had a Fracture

Percentage of MA enrollees (women) aged 67 to 85 years who suffered a fracture 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 race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

† There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API women who suffered a fracture were more likely than urban White 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 urban API and urban White women was greater than 3 percentage points. There were not enough data from rural API women to compare them to rural White women on this measure.
- Urban Black women who suffered a fracture were about as likely as urban White women who suffered a fracture to have had either a bone mineral density test or a prescription for a drug to treat osteoporosis. Rural Black women who suffered a fracture were about as likely as rural White women who suffered a fracture to have had either a bone mineral density test or a prescription for a drug to treat osteoporosis.
- Urban Hispanic women who suffered a fracture were more likely than urban White 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 urban Hispanic and urban White women was greater than 3 percentage points. Rural Hispanic women who suffered a fracture were more likely than rural White 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 Hispanic and rural White women was greater than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

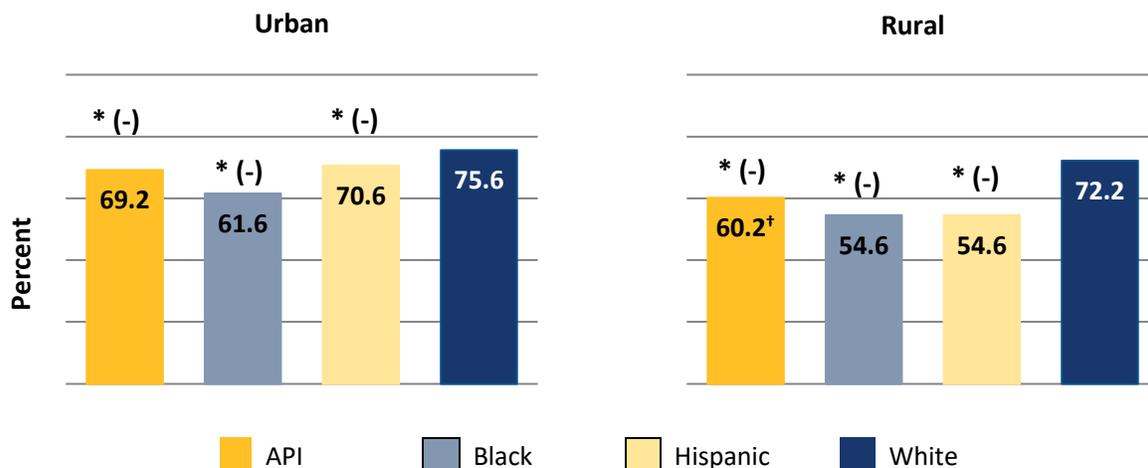
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Clinical Care: Behavioral Health

### 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 who remained on antidepressant medication for at least 84 days, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

#### Disparities

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

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

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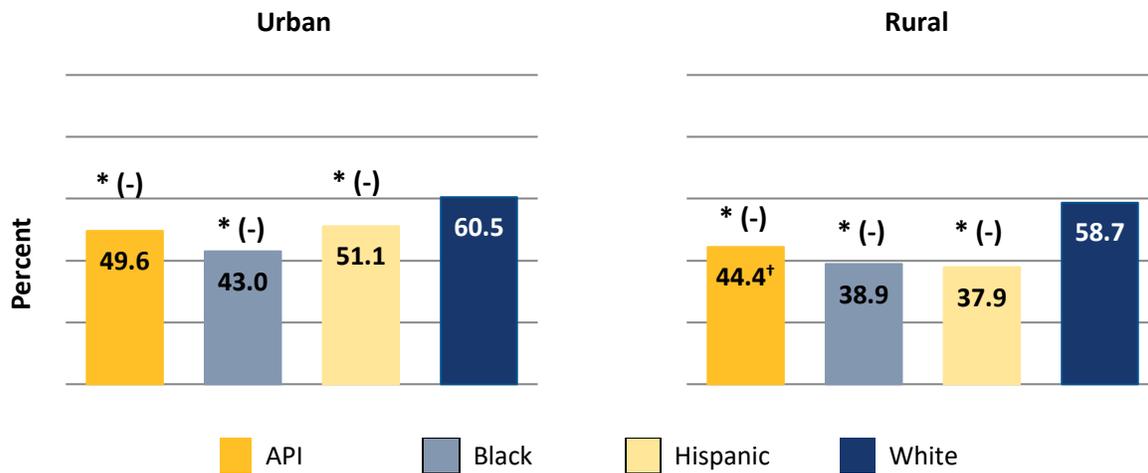
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## 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 who remained on antidepressant medication for at least 180 days, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- Urban API beneficiaries who were diagnosed with a new episode of major depression were less likely than urban White beneficiaries 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 urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries who were diagnosed with a new episode of major depression were less likely than rural White beneficiaries 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 API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries who were diagnosed with a new episode of major depression were less likely than urban White beneficiaries 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 urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were diagnosed with a new episode of major depression were less likely than rural White beneficiaries 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 Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who were diagnosed with a new episode of major depression were less likely than urban White beneficiaries 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 urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries who were diagnosed with a new episode of major depression were less likely than rural White beneficiaries 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 Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

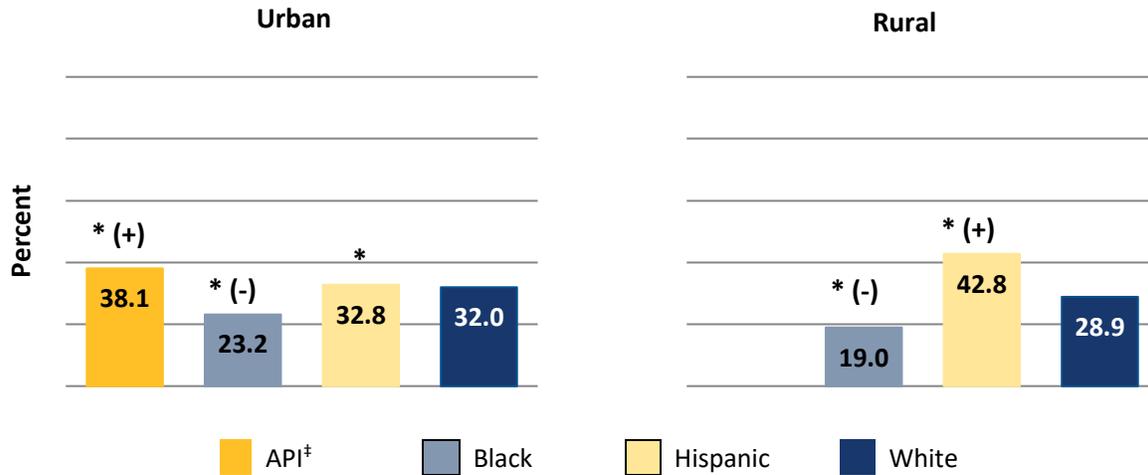
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Follow-up After Hospital Stay for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who were hospitalized for treatment of selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of discharge, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who were hospitalized for a mental health disorder were more likely than urban White beneficiaries 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 urban API and urban White beneficiaries was greater than 3 percentage points. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who were hospitalized for a mental health disorder were less likely than urban White beneficiaries 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 urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were hospitalized for a mental health disorder were less likely than rural White beneficiaries 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 Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who were hospitalized for a mental health disorder were more likely than urban White beneficiaries 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 urban Hispanic and urban White beneficiaries

was less than 3 percentage points. Rural Hispanic beneficiaries who were hospitalized for a mental health disorder were more likely than rural White beneficiaries 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 Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

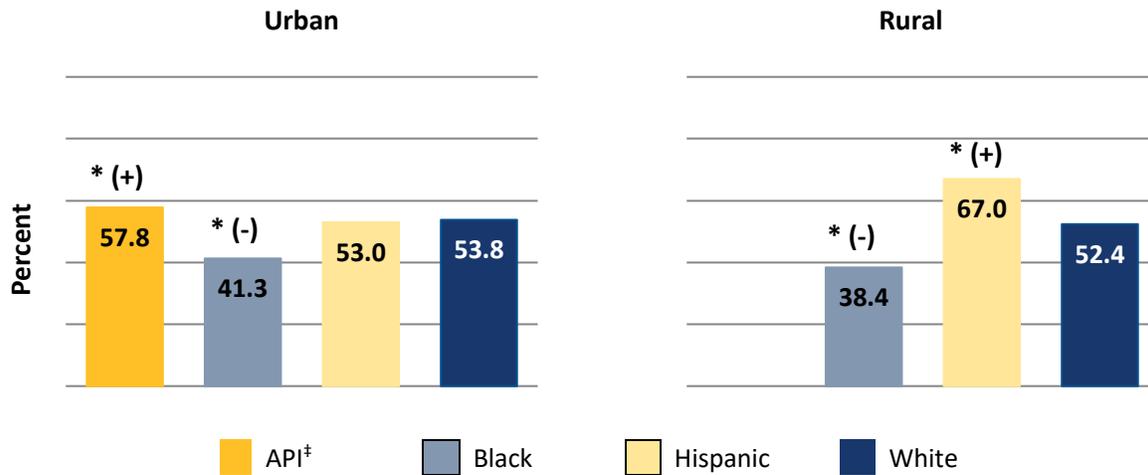
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

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

## Follow-up After Hospital Stay for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who were hospitalized for treatment of selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of discharge, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who were hospitalized for a mental health disorder were more likely than urban White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of being discharged. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who were hospitalized for a mental health disorder were less likely than urban White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of being discharged. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were hospitalized for a mental health disorder were less likely than rural White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of being discharged. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who were hospitalized for a mental health disorder were about as likely as urban White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of being discharged. Rural Hispanic beneficiaries who were hospitalized for a mental health

disorder were more likely than rural White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of being discharged. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

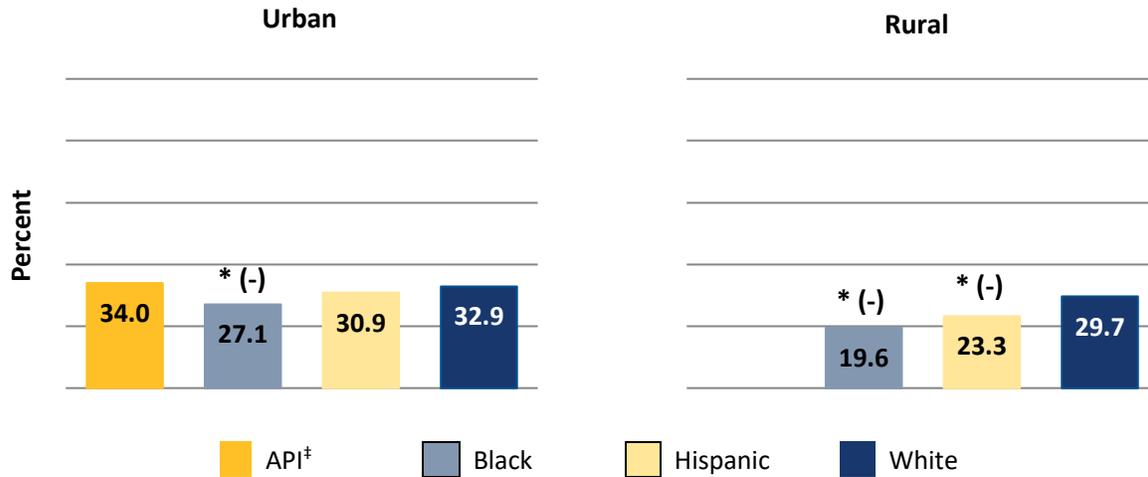
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

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

## Follow-up After Emergency Department (ED) Visit for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of the ED visit, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who had an ED visit for a mental health disorder were about as likely as urban White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of the ED visit. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who had an ED visit for a mental health disorder were less likely than urban White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of the ED visit. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who had an ED visit for a mental health disorder were less likely than rural White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of the ED visit. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who had an ED visit for a mental health disorder were about as likely as urban White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of the ED visit. Rural Hispanic beneficiaries who had an ED visit for a mental health disorder were less likely than rural White beneficiaries who had an ED visit for a mental health disorder to

have had a follow-up visit with a mental health practitioner within seven days of the ED visit. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

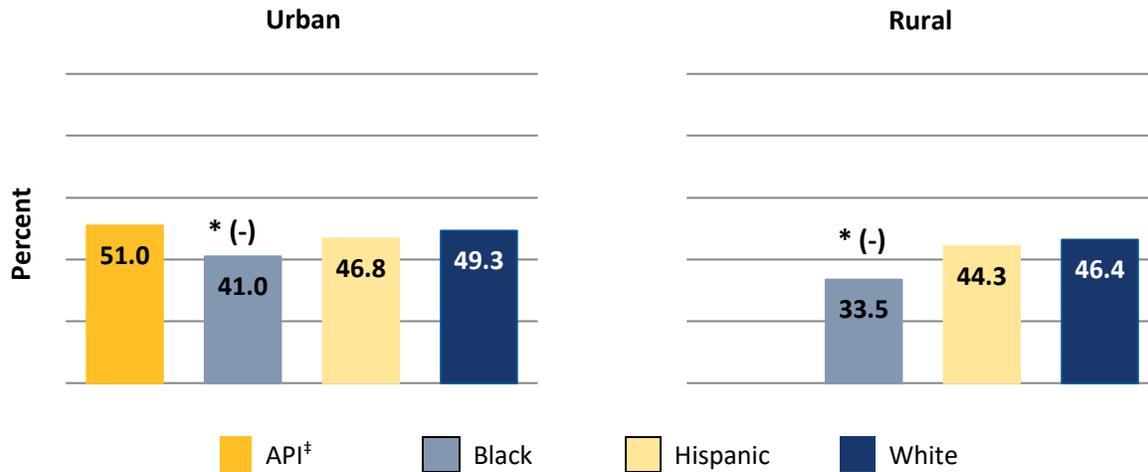
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† Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.

## Follow-up After Emergency Department (ED) Visit for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of the ED visit, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who had an ED visit for a mental health disorder were about as likely as urban White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who had an ED visit for a mental health disorder were less likely than urban White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who had an ED visit for a mental health disorder were less likely than rural White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who had an ED visit for a mental health disorder were about as likely as urban White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit. Rural Hispanic beneficiaries who had an ED visit for a mental health disorder were about as

likely as rural White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

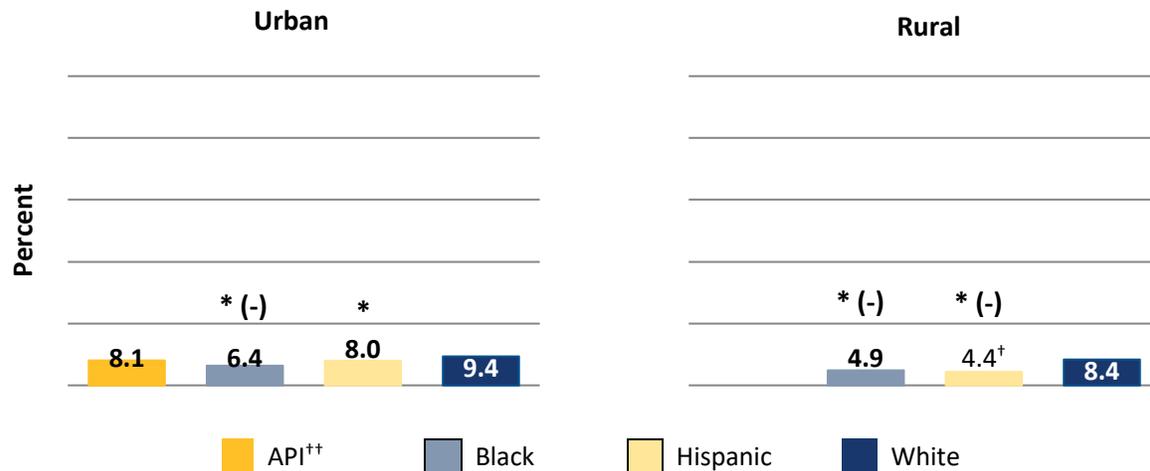
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

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

## Follow-up After Emergency Department (ED) Visit for Alcohol and Other Drug (AOD) Abuse or Dependence (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence within seven days of the ED visit, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

<sup>††</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who had an ED visit for AOD abuse or dependence were about as likely as urban White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who had an ED visit for AOD abuse or dependence were less likely than urban White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who had an ED visit for AOD abuse or dependence were less likely than rural White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who had an ED visit for AOD abuse or dependence were less likely than urban White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries who had an ED visit for AOD abuse or

dependence were less likely than rural White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

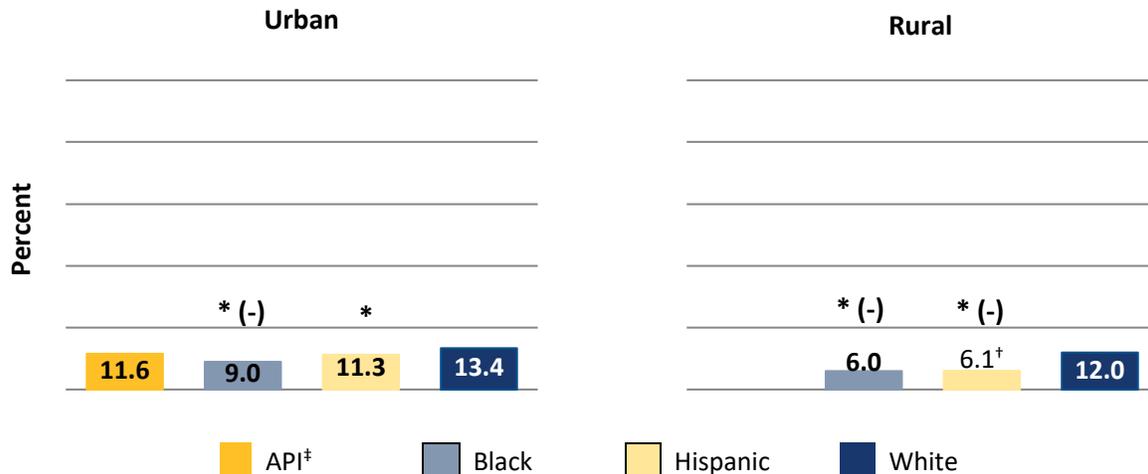
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

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

## Follow-up After Emergency Department (ED) Visit for Alcohol and Other Drug (AOD) Abuse or Dependence (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

<sup>††</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who had an ED visit for AOD abuse or dependence were about as likely as urban White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who had an ED visit for AOD abuse or dependence were less likely than urban White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who had an ED visit for AOD abuse or dependence were less likely than rural White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who had an ED visit for AOD abuse or dependence were less likely than urban White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries who had an ED visit for AOD abuse or

dependence were less likely than rural White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

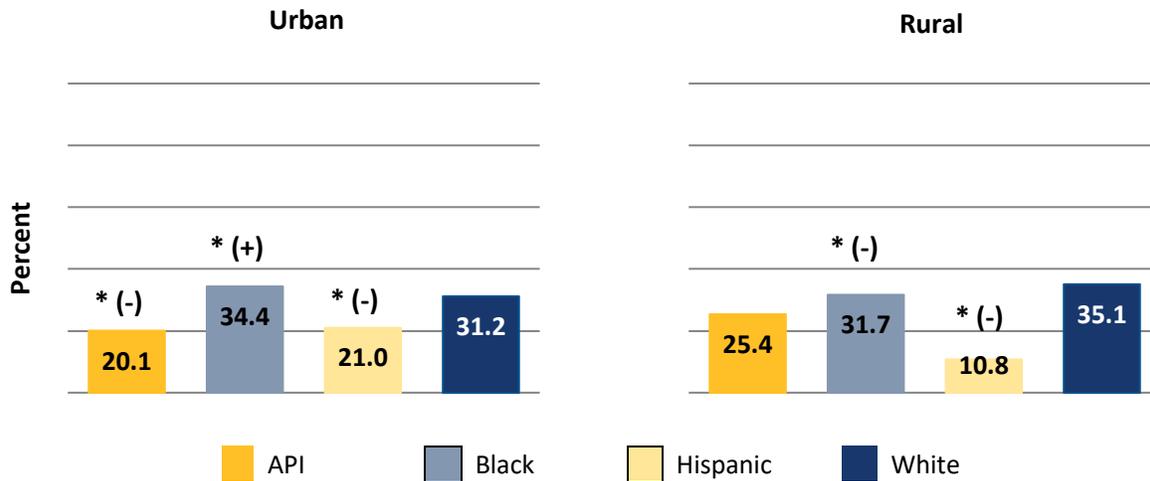
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

† 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 of Alcohol and Other Drug Dependence Treatment

Percentage of MA enrollees aged 18 years and older<sup>†</sup> with a new episode of alcohol or other drug (AOD) dependence who initiate<sup>‡</sup> treatment within 14 days of the diagnosis, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with a new episode of AOD dependence were less likely than urban White beneficiaries with a new episode of AOD dependence to have initiated treatment within 14 days of the diagnosis. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries with a new episode of AOD dependence were about as likely as rural White beneficiaries with a new episode of AOD dependence to have initiated treatment within 14 days of the diagnosis.
- Urban Black beneficiaries with a new episode of AOD dependence were more likely than urban White beneficiaries with a new episode of AOD dependence to have initiated treatment within 14 days of the diagnosis. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries with a new episode of AOD dependence were less likely than rural White beneficiaries with a new episode of AOD dependence to have initiated treatment within 14 days of the diagnosis. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries with a new episode of AOD dependence were less likely than urban White beneficiaries with a new episode of AOD dependence to have initiated treatment within 14 days of the diagnosis. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with a new episode of AOD dependence were less likely than rural White beneficiaries with a new episode of AOD dependence to have initiated treatment within 14

days of the diagnosis. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

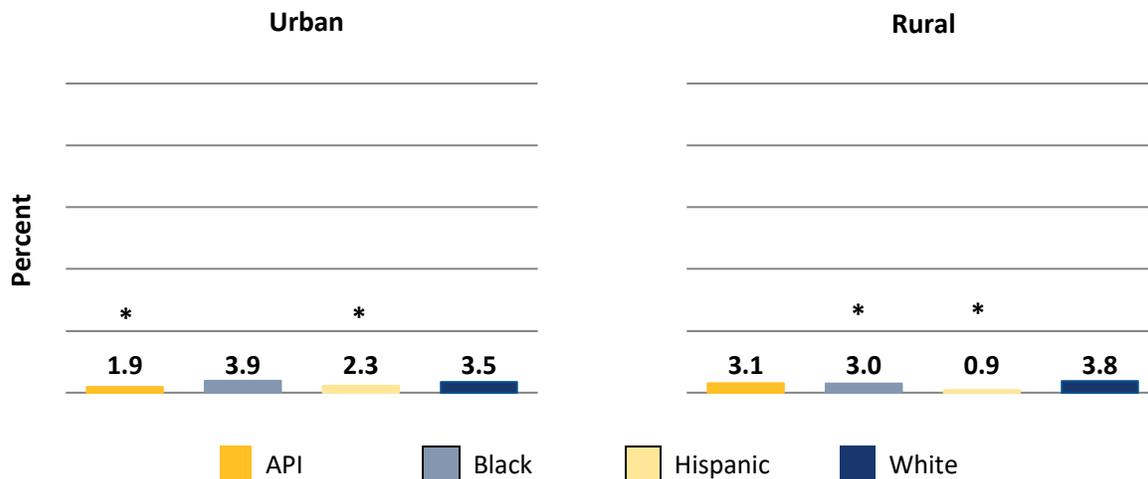
(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

† 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.

## Engagement of Alcohol and Other Drug Dependence Treatment

Percentage of MA enrollees aged 18 years and older<sup>†</sup> with a new episode of alcohol or other drug (AOD) dependence who initiated treatment and who had two or more additional services within 30 days of the initiation visit, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with a new episode of AOD dependence who initiated treatment were less likely than urban White beneficiaries 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 urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries with a new episode of AOD dependence who initiated treatment were about as likely as rural White beneficiaries 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.
- Urban Black beneficiaries with a new episode of AOD dependence who initiated treatment were about as likely as urban White beneficiaries 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. Rural Black beneficiaries with a new episode of AOD dependence who initiated treatment were less likely than rural White beneficiaries 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 Black and rural White beneficiaries was less than 3 percentage points.
- Urban Hispanic beneficiaries with a new episode of AOD dependence who initiated treatment were less likely than urban White beneficiaries 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 urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries with a

new episode of AOD dependence who initiated treatment were less likely than rural White beneficiaries 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 Hispanic and rural White beneficiaries was less than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

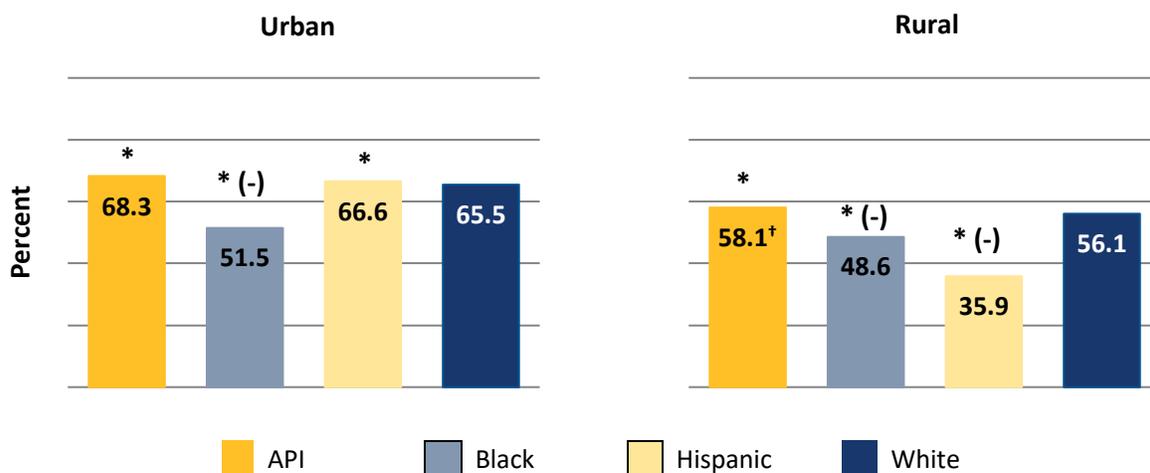
(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

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

## Clinical Care: Medication Management and Care Coordination

### 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 race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

#### Disparities

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

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

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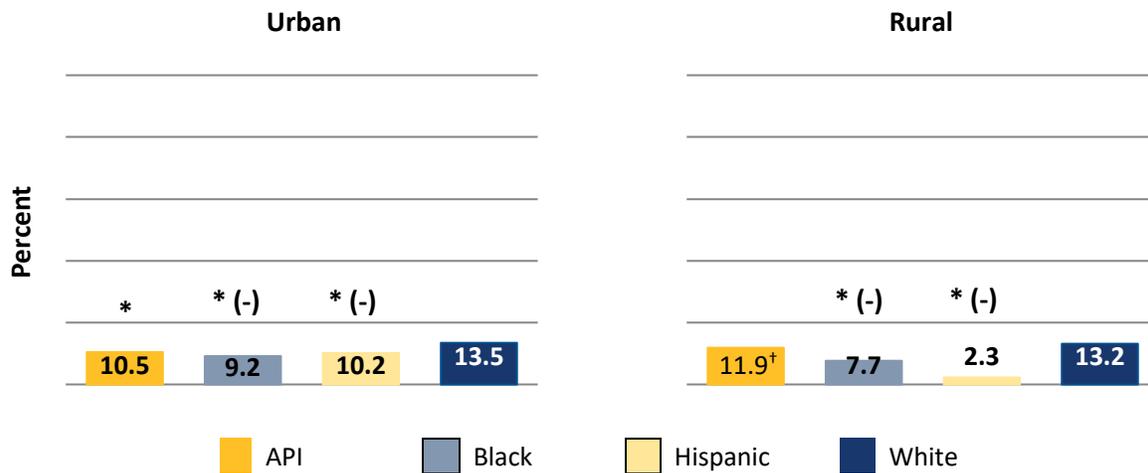
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Transitions of Care—Notification of Inpatient Admission

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility whose primary or ongoing care providers were notified of the inpatient admission on the day of or the day following admission, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- The primary or ongoing care providers of urban API beneficiaries who were discharged from an inpatient facility were less likely than the primary or ongoing care providers of urban White beneficiaries who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was less than 3 percentage points. The primary or ongoing care providers of rural API beneficiaries who were discharged from an inpatient facility were about as likely as the primary or ongoing care providers of rural White beneficiaries who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission.
- The primary or ongoing care providers of urban Black beneficiaries who were discharged from an inpatient facility were less likely than the primary or ongoing care providers of urban White beneficiaries who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was greater than 3 percentage points. The primary or ongoing care providers of rural Black beneficiaries who were discharged from an inpatient facility were less likely than the primary or ongoing care providers of rural White beneficiaries who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was greater than 3 percentage points.
- The primary or ongoing care providers of urban Hispanic beneficiaries who were discharged from an inpatient facility were less likely than the primary or ongoing care

providers of urban White beneficiaries who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was greater than 3 percentage points. The primary or ongoing care providers of rural Hispanic beneficiaries who were discharged from an inpatient facility were less likely than the primary or ongoing care providers of rural White beneficiaries who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was greater than 3 percentage points.

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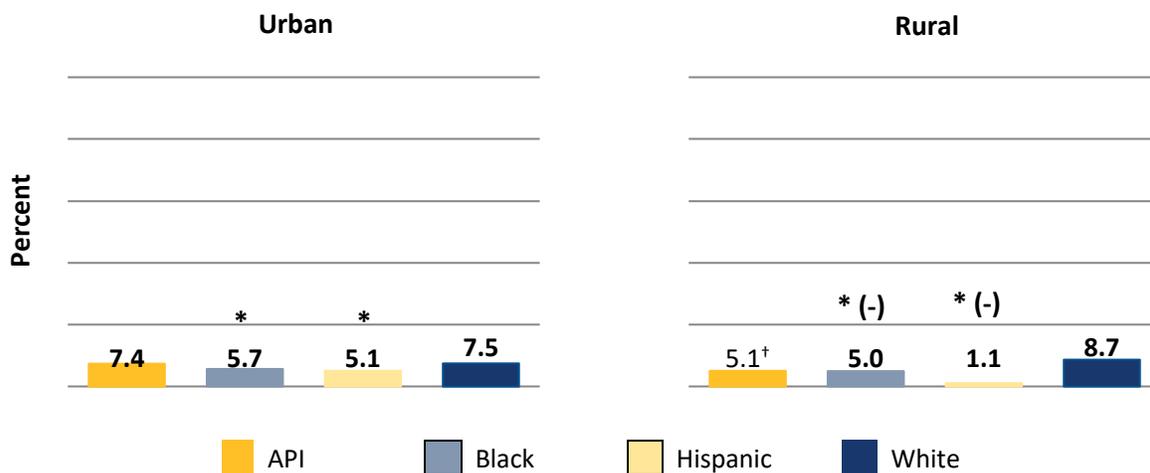
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Transitions of Care—Receipt of Discharge Information

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility who received discharge information on the day of or the day following discharge, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- Urban API beneficiaries who were discharged from an inpatient facility were about as likely as urban White beneficiaries who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge. Rural API beneficiaries who were discharged from an inpatient facility were about as likely as rural White beneficiaries who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge.
- Urban Black beneficiaries who were discharged from an inpatient facility were less likely than urban White beneficiaries who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries who were discharged from an inpatient facility were less likely than rural White beneficiaries who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who were discharged from an inpatient facility were less likely than urban White beneficiaries who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries who were discharged from an inpatient facility were less likely than rural White beneficiaries who were discharged from an inpatient facility to have

received discharge information on the day of or the day following discharge. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

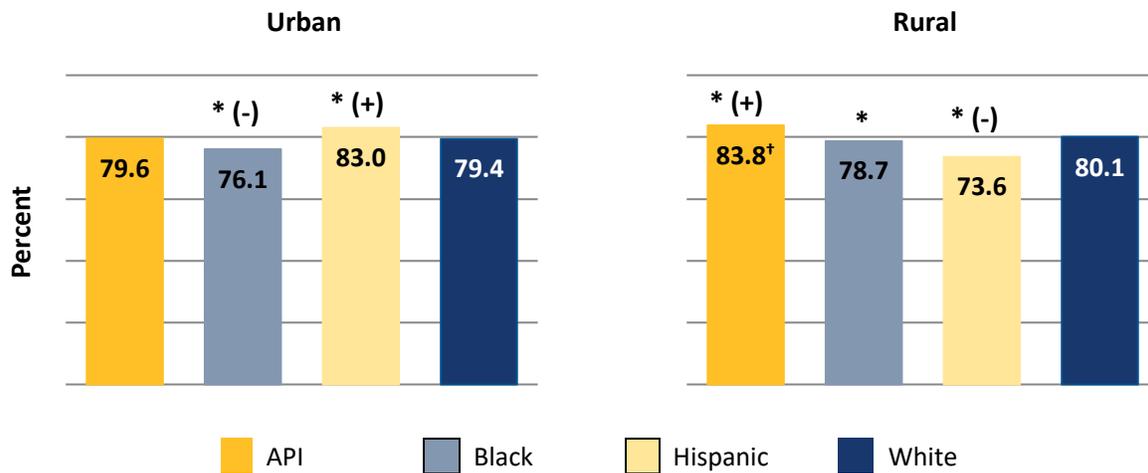
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Transitions of Care—Patient Engagement After Inpatient Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility for whom patient engagement (office visit, home visit, telehealth) was provided within 30 days of discharge, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- Urban API beneficiaries who were discharged from an inpatient facility were about as likely as urban White beneficiaries who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. Rural API beneficiaries who were discharged from an inpatient facility were more likely than rural White beneficiaries who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries who were discharged from an inpatient facility were less likely than urban White beneficiaries who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were discharged from an inpatient facility were less likely than rural White beneficiaries who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Urban Hispanic beneficiaries who were discharged from an inpatient facility were more likely than urban White beneficiaries who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between urban Hispanic and urban White beneficiaries was

greater than 3 percentage points. Rural Hispanic beneficiaries who were discharged from an inpatient facility were less likely than rural White beneficiaries who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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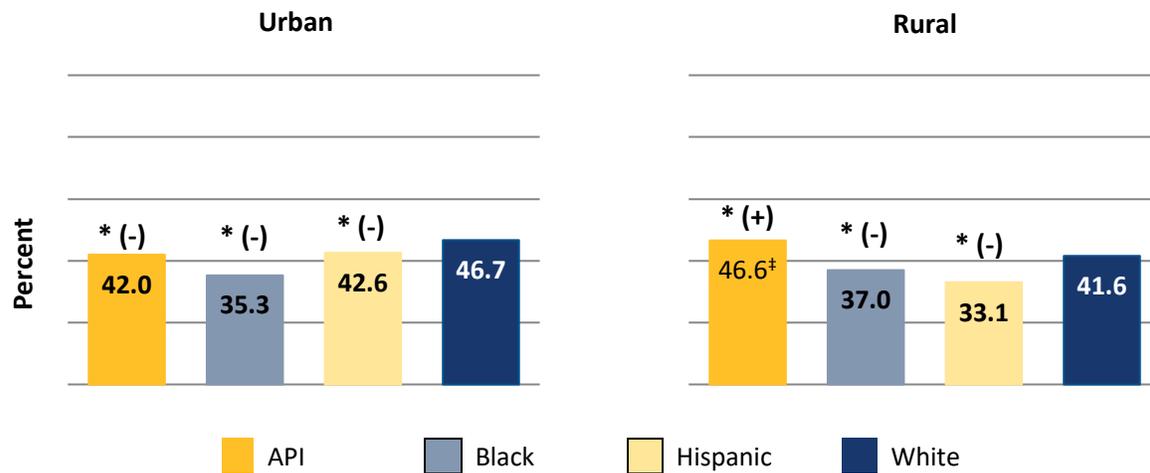
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Transitions of Care—Medication Reconciliation After Inpatient Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility for whom medications were reconciled within 30 days of discharge,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

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

### Disparities

- Urban API beneficiaries who were discharged from an inpatient facility were less likely than urban White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries who were discharged from an inpatient facility were more likely than rural White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries who were discharged from an inpatient facility were less likely than urban White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were discharged from an inpatient facility were less likely than rural White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who were discharged from an inpatient facility were less likely than urban White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries who were discharged from an inpatient facility were less likely than

rural White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

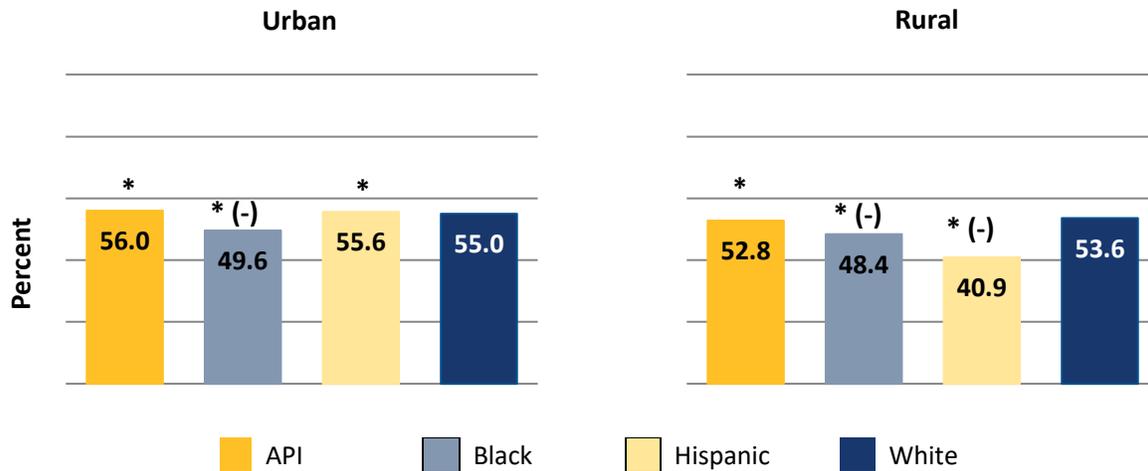
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

† Scores on this measure may differ from scores on the medication reconciliation measure presented on page 201 because of different rules governing the collection of the data.

## Follow-Up After Emergency Department (ED) Visit for People with High-Risk Multiple Chronic Conditions

Percentage of MA enrollees aged 18 years and older with multiple high-risk chronic conditions<sup>†</sup> who received follow-up care within seven days of an ED visit, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with multiple high-risk chronic conditions<sup>†</sup> were more likely than urban White beneficiaries with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries with multiple high-risk chronic conditions were less likely than rural White beneficiaries who were discharged from an inpatient facility to have received follow-up care within seven days of an ED visit. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Urban Black beneficiaries with multiple high-risk chronic conditions were less likely than urban White beneficiaries with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries with multiple high-risk chronic conditions were less likely than rural White beneficiaries with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries with multiple high-risk chronic conditions were more likely than urban White beneficiaries with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries with multiple high-risk chronic conditions were less likely than rural White beneficiaries

with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

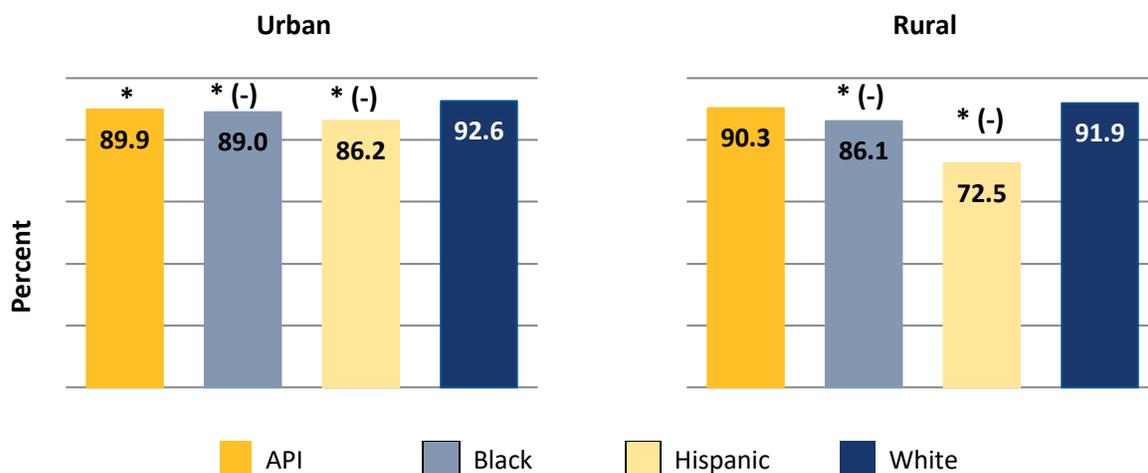
(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

† Conditions include COPD and asthma, Alzheimer's disease and related disorders, chronic kidney disease, depression, heart failure, acute myocardial infarction, atrial fibrillation, and stroke and transient ischemic attack.

## Clinical Care: Overuse/Appropriateness

### 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,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

#### Disparities

- Use of potentially harmful medication<sup>†</sup> was avoided less often for elderly urban API beneficiaries with chronic renal failure than for elderly urban White beneficiaries with chronic renal failure. The difference between elderly urban API and elderly urban White beneficiaries was less than 3 percentage points. Use of potentially harmful medication was avoided about as often for elderly rural API beneficiaries with chronic renal failure as for elderly rural White beneficiaries with chronic renal failure.
- Use of potentially harmful medication was avoided less often for elderly urban Black beneficiaries with chronic renal failure than for elderly urban White beneficiaries with chronic renal failure. The difference between elderly urban Black and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful medication was avoided less often for elderly rural Black beneficiaries with chronic renal failure than for elderly rural White beneficiaries with chronic renal failure. The difference between elderly rural Black and elderly rural White beneficiaries was greater than 3 percentage points.
- Use of potentially harmful medication was avoided less often for elderly urban Hispanic beneficiaries with chronic renal failure than for elderly urban White beneficiaries with chronic renal failure. The difference between elderly urban Hispanic and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful

medication was avoided less often for elderly rural Hispanic beneficiaries with chronic renal failure than for elderly rural White beneficiaries with chronic renal failure. The difference between elderly rural Hispanic and elderly rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

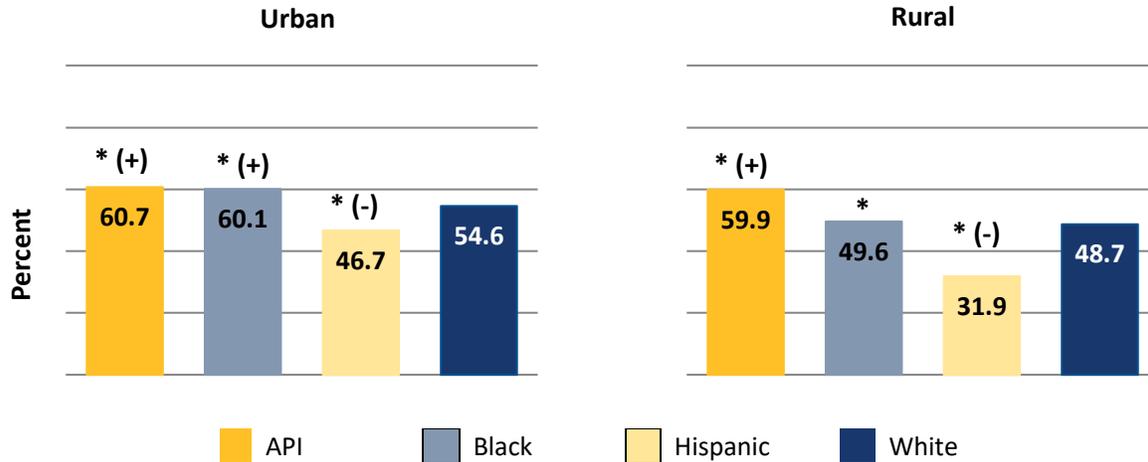
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

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

## 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,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of potentially harmful medication<sup>†</sup> was avoided more often for elderly urban API beneficiaries with dementia than for elderly urban White beneficiaries with dementia. The difference between elderly urban API and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful medication was avoided more often for elderly rural API beneficiaries with dementia than for elderly rural White beneficiaries with dementia. The difference between elderly rural API and elderly rural White beneficiaries was greater than 3 percentage points.
- Use of potentially harmful medication was avoided more often for elderly urban Black beneficiaries with dementia than for elderly urban White beneficiaries with dementia. The difference between elderly urban Black and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful medication was avoided more often for elderly rural Black beneficiaries with dementia than for elderly rural White beneficiaries with dementia. The difference between elderly rural Black and elderly rural White beneficiaries was less than 3 percentage points.
- Use of potentially harmful medication was avoided less often for elderly urban Hispanic beneficiaries with dementia than for elderly urban White beneficiaries with dementia. The difference between elderly urban Hispanic and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful medication was avoided less often for elderly rural Hispanic beneficiaries with dementia than for elderly rural White beneficiaries with dementia. The difference between elderly rural Hispanic and elderly rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

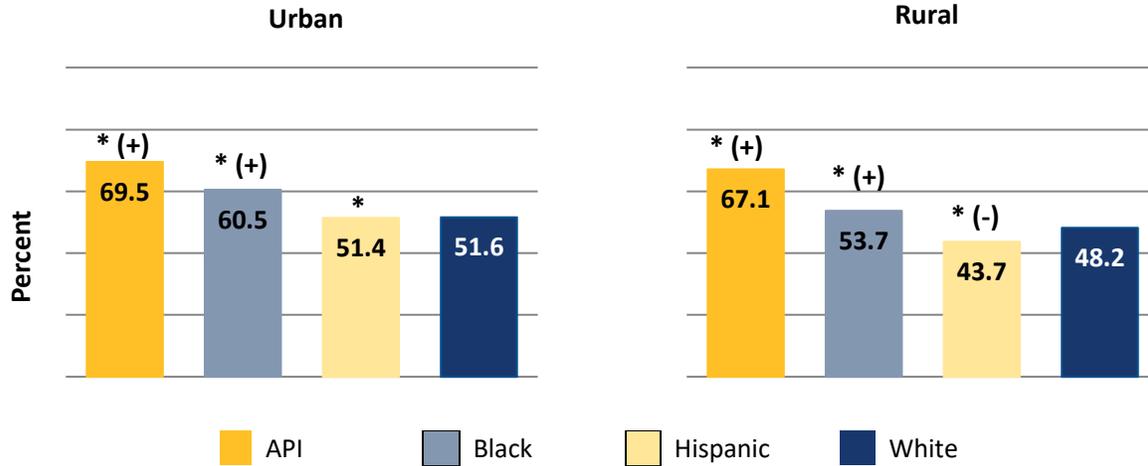
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> This includes antiemetics, antipsychotics, benzodiazepines, tricyclic antidepressants, H<sub>2</sub> receptor antagonists, nonbenzodiazepine hypnotics, and anticholinergic agents.

## Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with a History of Falls

Percentage of MA enrollees aged 65 years and older with dementia who were not dispensed a prescription for a potentially harmful medication,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of potentially harmful medication<sup>†</sup> was avoided more often for elderly urban API beneficiaries with a history of falls than for elderly urban White beneficiaries with a history of falls. The difference between elderly urban API and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful medication was avoided more often for elderly rural API beneficiaries with a history of falls than for elderly rural White beneficiaries with a history of falls. The difference between elderly rural API and elderly rural White beneficiaries was greater than 3 percentage points.
- Use of potentially harmful medication was avoided more often for elderly urban Black beneficiaries with a history of falls than for elderly urban White beneficiaries with a history of falls. The difference between elderly urban Black and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful medication was avoided more often for elderly rural Black beneficiaries with a history of falls than for elderly rural White beneficiaries with a history of falls. The difference between elderly rural Black and elderly rural White beneficiaries was greater than 3 percentage points.
- Use of potentially harmful medication was avoided less often for elderly urban Hispanic beneficiaries with a history of falls than for elderly urban White beneficiaries with a history of falls. The difference between elderly urban Hispanic and elderly urban White beneficiaries was less than 3 percentage points. Use of potentially harmful medication was avoided less often for elderly rural Hispanic beneficiaries with a history of falls than for elderly rural White beneficiaries with a history of falls. The difference between elderly rural Hispanic and elderly rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

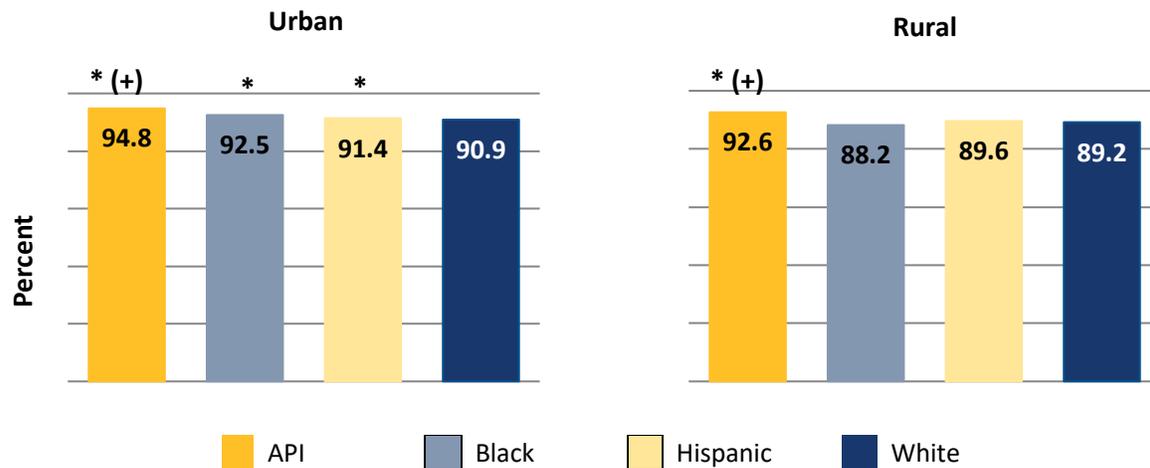
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> This includes anticonvulsants, nonbenzodiazepine hypnotics, selective serotonin reuptake inhibitors (SSRIs), antiemetics, antipsychotics, benzodiazepines, and tricyclic antidepressants.

## 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 race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of high-risk medication was avoided more often for urban API beneficiaries than for urban White beneficiaries. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Use of high-risk medication was avoided more often for rural API beneficiaries than for rural White beneficiaries. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Use of high-risk medication was avoided more often for urban Black beneficiaries than for urban White beneficiaries. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Use of high-risk medication was avoided about as often for rural Black beneficiaries as for rural White beneficiaries.
- Use of high-risk medication was avoided more often for urban Hispanic beneficiaries than for urban White beneficiaries. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Use of high-risk medication was avoided about as often for rural Hispanic beneficiaries as for rural White beneficiaries.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

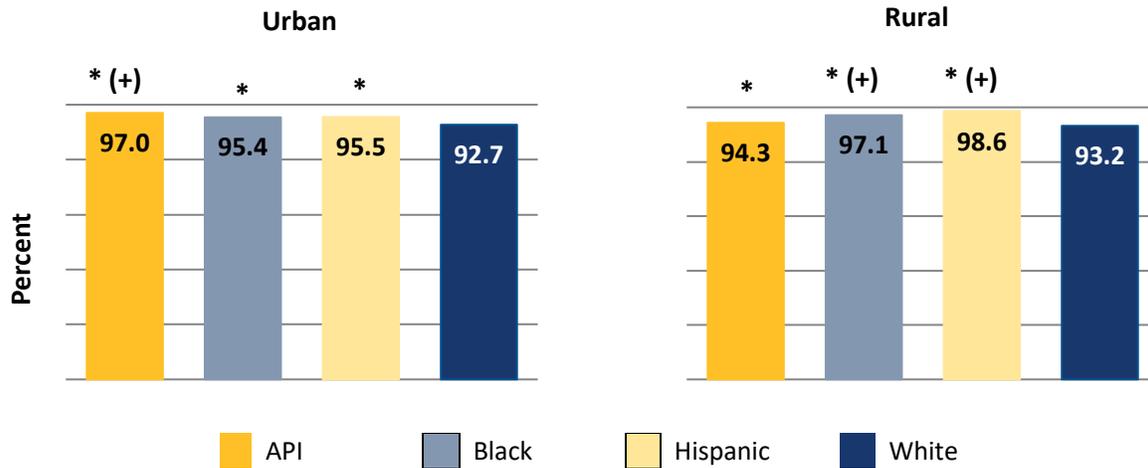
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Avoiding Use of Opioids at High Dosage

Percentage of MA enrollees aged 18 years and older who were not prescribed opioids at a high dosage<sup>†</sup> for more than 14 days, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of opioids at a high dosage<sup>†</sup> for more than 14 days was avoided more often for urban API beneficiaries than for urban White beneficiaries. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Use of opioids at a high dosage for more than 14 days was avoided more often for rural API beneficiaries than for rural White beneficiaries. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Use of opioids at a high dosage for more than 14 days was avoided more often for urban Black beneficiaries than for urban White beneficiaries. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Use of opioids at a high dosage for more than 14 days was avoided more often for rural Black beneficiaries than for rural White beneficiaries. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Use of opioids at a high dosage for more than 14 days was avoided more often for urban Hispanic beneficiaries than for urban White beneficiaries. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Use of opioids at a high dosage for more than 14 days was avoided more often for rural Hispanic beneficiaries than for rural White beneficiaries. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

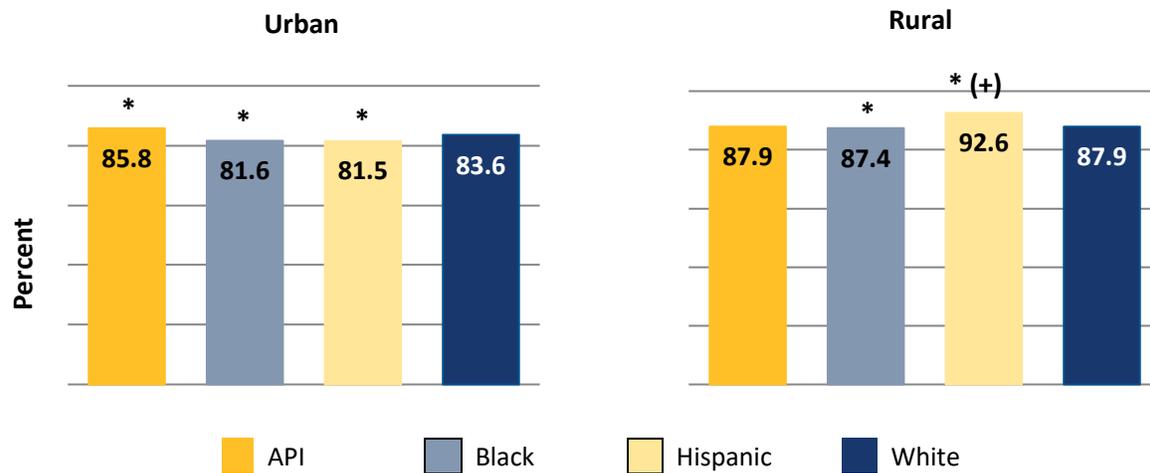
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Average morphine equivalent dose  $> 120$  mg

## Avoiding Use of Opioids from Multiple Prescribers

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more prescribers in the past year, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of opioids from multiple prescribers was avoided more often for urban API beneficiaries than for urban White beneficiaries. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Use of opioids from multiple prescribers was avoided about as often for rural API beneficiaries as for rural White beneficiaries.
- Use of opioids from multiple prescribers was avoided less often for urban Black beneficiaries than for urban White beneficiaries. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Use of opioids from multiple prescribers was avoided less often for rural Black beneficiaries than for rural White beneficiaries. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Use of opioids from multiple prescribers was avoided less often for urban Hispanic beneficiaries than for urban White beneficiaries. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Use of opioids from multiple prescribers was avoided more often for rural Hispanic beneficiaries than for rural White beneficiaries. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

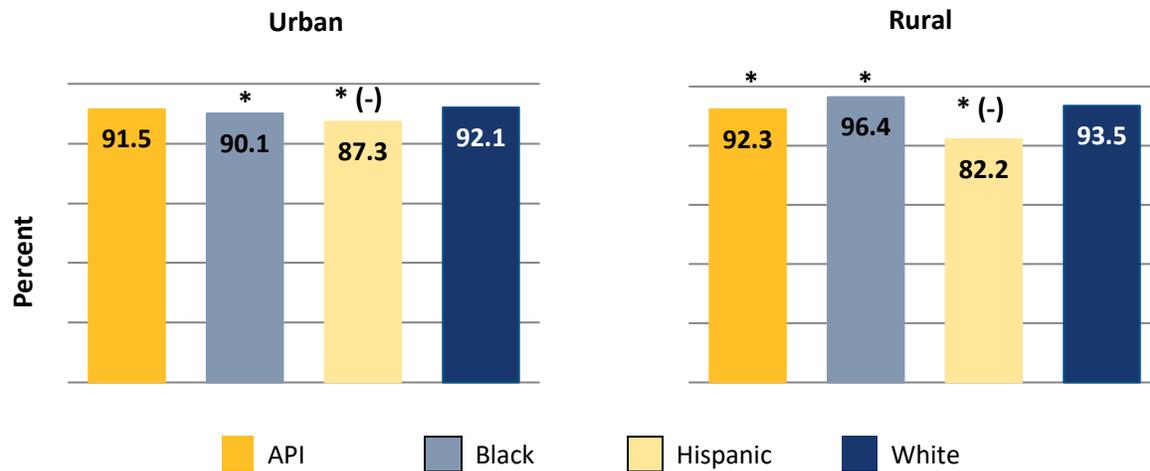
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Avoiding Use of Opioids from Multiple Pharmacies

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more pharmacies in the past year, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of opioids from multiple pharmacies was avoided about as often for urban API beneficiaries as for urban White beneficiaries. Use of opioids from multiple pharmacies was avoided less often for rural API beneficiaries than for rural White beneficiaries. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Use of opioids from multiple pharmacies was avoided less often for urban Black beneficiaries than for urban White beneficiaries. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Use of opioids from multiple pharmacies was avoided more often for rural Black beneficiaries than for rural White beneficiaries. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Use of opioids from multiple pharmacies was avoided less often for urban Hispanic beneficiaries than for urban White beneficiaries. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Use of opioids from multiple pharmacies was avoided less often for rural Hispanic beneficiaries than for rural White beneficiaries. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

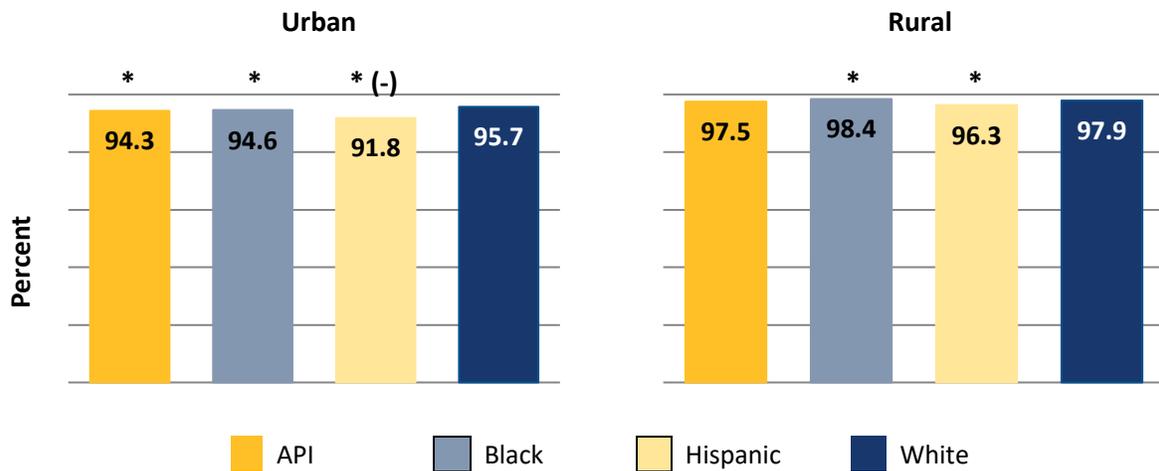
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Avoiding Use of Opioids from Multiple Prescribers and Pharmacies

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more prescribers and four or more pharmacies in the past year, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of opioids from multiple prescribers and pharmacies was avoided less often for urban API beneficiaries than for urban White beneficiaries. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Use of opioids from multiple prescribers and pharmacies was avoided about as often for rural API beneficiaries as for rural White beneficiaries.
- Use of opioids from multiple prescribers and pharmacies was avoided less often for urban Black beneficiaries than for urban White beneficiaries. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Use of opioids from multiple prescribers and pharmacies was avoided more often for rural Black beneficiaries than for rural White beneficiaries. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Use of opioids from multiple prescribers and pharmacies was avoided less often for urban Hispanic beneficiaries than for urban White beneficiaries. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Use of opioids from multiple prescribers and pharmacies was avoided less often for rural Hispanic beneficiaries than for rural White beneficiaries. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

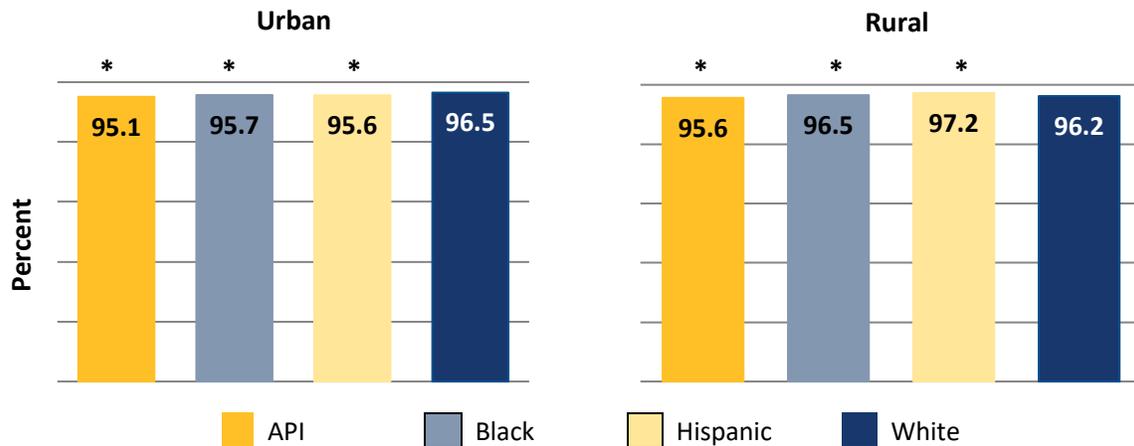
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Clinical Care: Access/Availability of 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 race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

#### Disparities

- Urban API beneficiaries were less likely than urban White beneficiaries to have had an ambulatory or preventive care visit. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries were less likely than rural White beneficiaries to have had an ambulatory or preventive care visit. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Urban Black beneficiaries were less likely than urban White beneficiaries to have had an ambulatory or preventive care visit. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries were more likely than rural White beneficiaries to have had an ambulatory or preventive care visit. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Urban Hispanic beneficiaries were less likely than urban White beneficiaries to have had an ambulatory or preventive care visit. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries were more likely than rural White beneficiaries to have had an ambulatory or preventive care visit. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Appendix: Data Sources and Methods

### *The Medicare Consumer Assessment of Healthcare Providers and Systems Surveys*

The Medicare Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey consists of a set of mail surveys with telephone follow-ups based on a stratified random sample of Medicare beneficiaries, with contracts serving as strata for Medicare Advantage (MA) beneficiaries and for fee-for-service (FFS) beneficiaries enrolled in prescription drug plans (PDPs) and states serving as strata for FFS beneficiaries not enrolled in a PDP. The 2018 survey attempted to contact 875,189 Medicare beneficiaries and received responses from 339,316, a 39 percent response rate. The 2018 survey represents all FFS beneficiaries, MA beneficiaries from 434 MA contracts that either were required to report (minimum of 600 eligible enrollees) or reported voluntarily (450–599 enrollees), and PDP beneficiaries from 54 PDP contracts with at least 1,500 eligible enrollees.

### *The Healthcare Effectiveness Data and Information Set*

The Healthcare Effectiveness Data and Information Set (HEDIS) consists of more than 90 measures across six domains of care (National Committee for Quality Assurance [NCQA], 2019). These domains include effectiveness of care, access/availability of care, experience of care, utilization and risk-adjusted utilization, relative resource use, and health plan descriptive information. HEDIS measures are developed, tested, and validated under the direction of NCQA. Although CAHPS data are collected only via surveys, HEDIS data are gathered both via surveys and via medical charts and insurance claims for hospitalizations, medical office visits, and procedures. In selecting HEDIS measures to include in this report, we excluded measures that underwent a recent change in specification, were similar to reported measures preferred by the Centers for Medicare & Medicaid Services (CMS), or were deemed unsuitable for this application by CMS experts. HEDIS data are available only for MA beneficiaries.

### *Information on Geography*

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 urban area 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. Metropolitan statistical areas contain a core urban area of 50,000 or more population. Micropolitan statistical areas contain a core urban area of at least 10,000 but less than 50,000 population. For this report, any beneficiary residing within a metropolitan statistical area was classified as an urban resident; any beneficiary living in a micropolitan statistical area or outside of a CBSA was classified as a rural resident.

### *Information on Race/Ethnicity*

The 2018 CAHPS survey asked beneficiaries, “Are you of Hispanic or Latino origin or descent?” The response options were: “Yes, Hispanic or Latino” and “No, not Hispanic or Latino.” The survey then asked, “What is your race? Please mark one or more,” with response options of “White,” “Black or African American,” “Asian,” “Native Hawaiian or other Pacific Islander,” and “American Indian or Alaska Native.” Following a U.S. Census approach, answers to these two questions were used to classify respondents into 1 of 7 mutually exclusive categories: Hispanic, multiracial, American Indian/Alaska Native (AI/AN), Asian/Pacific Islander (API), Black, White, or unknown.

- Respondents who endorsed Hispanic ethnicity were classified as Hispanic regardless of races endorsed.

- Non-Hispanic respondents who endorsed two or more races were classified as multiracial, with a single exception: Those who selected both “Asian” and “Native Hawaiian or other Pacific Islander” but no other race were classified as API.
- Non-Hispanic respondents who selected exactly one race were classified as AI/AN, API, Black, or White, according to their responses.
- Respondents without data regarding race/ethnicity were classified as unknown.
- Unknown cases were dropped from the analysis. The multiracial group was included in the analysis, but estimates for this group are not presented in this report.

HEDIS data, unlike CAHPS data, do not contain the patient’s self-reported race/ethnicity. Therefore, we imputed race/ethnicity for the HEDIS data using a methodology that combines information from administrative data, surname, and residential location (Haas et al., 2019). This methodology is recommended for estimating racial/ethnic disparities for Black, Hispanic, API, and White beneficiaries, but not for AI/AN or multiracial beneficiaries. In 2018, there were 505 MA contracts that supplied the 16,182,932 HEDIS measure records used.

Comparisons of rural-urban differences in patient experience by racial and ethnic group and racial and ethnic differences in patient experience by geography focus on AI/AN, API, Black, Hispanic, and White beneficiaries. Comparisons of rural-urban differences in clinical care by racial and ethnic group and racial and ethnic differences in clinical care by geography focus on API, Black, Hispanic, and White beneficiaries. Estimates of clinical care delivered to AI/AN beneficiaries were excluded for the reason noted above.

#### *Analytic Approach*

The CAHPS measures presented in this report are composite measures that summarize, through averaging, the answers to two or more related CAHPS survey questions, or items. The annual flu vaccine measure is included in the CAHPS survey and is thus grouped with other CAHPS measures in this report. It is, however, considered to be a HEDIS measure. This is a single-item measure rather than a composite.

CAHPS estimates for rural and urban residents are from case-mix adjusted linear regression models that contained health contract intercepts, an indicator of rural residence (urban was the reference group), and the following case-mix adjustors: age, education, self-rated health and mental health, dual eligibility/low-income subsidy, and proxy status. No adjustment was made for survey language. CAHPS estimates for rural and urban residents of different racial/ethnic backgrounds are from case-mix adjusted linear regression models stratified by racial/ethnic group. These models contained health contract intercepts, an indicator of rural residence, and the same set of case-mix adjustors used in the overall rural-urban models.

Predicted probabilities of race/ethnicity were used as weights to develop HEDIS-measure estimates for racial/ethnic subgroups (Elliott et al., 2009). None of the HEDIS measures reported (including the annual flu vaccine measure) is case-mix adjusted.

Cases with missing data on outcome measures were excluded from the analysis. There were no missing data on predictors (race/ethnicity and rural/urban residence) included in the analyses of HEDIS measures. For analyses of CAHPS measures, cases with missing information on race/ethnicity (about 4 percent) were excluded from the analysis, and missing data on case-mix adjustors were imputed using the health contract mean. There were no missing data on rural/urban residence.

Statistical significance tests were used to compare the model-estimated scores for rural residents with the score for urban residents and to compare model-estimated scores for racial/ethnic minority groups with scores for Whites. A difference in scores is denoted as statistically significant if there is less than a 5-percent chance that the difference could have resulted due to sampling error alone. Differences that are statistically significant and larger than 3 points on a 0–100 scale (CAHPS) or 3 percentage points

(HEDIS) are further denoted as practically significant. That is, in the charts that present national data on rural-urban differences in patient experience (CAHPS) and clinical care (HEDIS), differences that are not statistically significant or are statistically significant but less than 3 points in magnitude are distinguished (using symbols and labeling) from differences that are both statistically significant and 3 points in magnitude or larger. The 3-point criterion was selected because a difference of this size is considered to be of moderate magnitude (Paddison et al., 2013).

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## Disclaimer

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