CHAPTER 12

The Medicare Advantage program: Status report

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Chapter summary

Each year, the Commission provides a status report on the Medicare Advantage (MA) program, which gives Medicare beneficiaries the option of receiving benefits from private plans rather than from traditional fee-for-service (FFS) Medicare. The MA program is quite robust, with growth in enrollment, considerable plan offerings, and a record-high level of supplemental benefits. In 2025, 55 percent of eligible Medicare beneficiaries enrolled in MA, up from 54 percent in 2024 and 37 percent in 2018. In 2025, the MA program included 5,492 plan options offered by 164 organizations, enrolled about 34.9 million beneficiaries, and paid MA plans an estimated $537 billion (not including payments for drug coverage offered by MA plans). In 2026, on average, a Medicare beneficiary can choose from 39 plans offered by an average of eight organizations.

The Commission is required by law to report in March of each year on the status of the MA program, including a review of payment policies, risk-adjustment methods, the impact of risk selection, mechanisms for promoting quality, access to care, and other issues. We examine MA enrollment trends, plan availability for the coming year, plan generosity (including enhanced financial protections and supplemental benefits), and

In this chapter

- Robust MA enrollment, plan availability, and rebates
- Higher payments to MA plans stem from favorable selection and coding intensity
- Industry concentration and integration
- Quality in MA
- Medicare payment and MA plan costs for enrollees with ESRD
- Technical Appendix 12–A: Base comparison
- Technical Appendix 12–B: Favorable selection
- Technical Appendix 12–C: Coding intensity

Medicare spending. We also provide information about Medicare payments and MA plan costs for enrollees with end-stage renal disease (ESRD).

The Commission strongly supports the inclusion of private plans in the Medicare program. We hold the goal of meaningful and transparent competition in MA to create incentives for plans to improve quality and reduce costs for beneficiaries and taxpayers. Beneficiaries should be able to choose among Medicare coverage options since some may prefer to avoid the constraints of provider networks and utilization management by enrolling in FFS Medicare, while others may prefer features of MA, like reduced premiums and cost-sharing liability. MA plans are required by statute to offer an out-of-pocket spending limit—which is not included in FFS Medicare—and plans can reduce cost-sharing liability, offer integrated Part D benefits, and provide supplemental benefits that generally are not available to beneficiaries in FFS unless they purchase additional health insurance coverage or pay for the services out of pocket. Medicare's capitated payments to MA plans (which are expected to average $16,242 per beneficiary per year in 2026, including rebate payments) provide plans with incentives to reduce unnecessary services and increase the use of preventive services.

In 2026, the Medicare program will pay MA plans, on average, $2,660 per beneficiary per year in rebate payments, which plans use to provide supplemental benefits for their enrollees. These rebates have more than doubled since 2018 and now account for a projected 15 percent of Medicare's total payments to MA plans. The benefits that rebates finance reduce out-of-pocket costs for MA enrollees and have the potential to address health challenges that many seniors face as they age (such as vision and hearing issues) and for which there is limited coverage under FFS Medicare. On average, plans project using about 26 percent of the rebate funds to reduce cost sharing for MA enrollees, 38 percent for non-Medicare services, 19 percent to enhance plans' Part D benefit through lower premiums or reduced cost sharing, 7 percent to reduce MA enrollees' Part B premiums, and 10 percent for administrative expenses and profit. New data from CMS show that in 2023, MA organizations spent roughly $24 billion on non-Medicare services; however, available data do not provide information about the extent to which beneficiaries use these benefits, making it difficult for policymakers to weigh the cost of rebate payments against the unknown value of the added benefits.

When risk-based payment for private plans was first added to Medicare in 1985, payments to private plans were set at 95 percent of FFS payments because it was expected that plans would share savings from their efficiencies (relative to FFS) with taxpayers. But in total, private plans have never been paid less than FFS Medicare because of policies that increase payments to MA above FFS payments and distort the nature of plan competition in MA. For example, MA benchmarks are set above FFS spending in many markets in part to encourage more uniform plan participation across the country. Payments under the quality-bonus program further increase MA payments above FFS without producing meaningful information on plan quality for Medicare beneficiaries or the Medicare program.

The two largest factors responsible for higher payments to plans in recent years are favorable selection and coding intensity. "Favorable selection" into MA occurs when beneficiaries with risk scores (which are used to set MA payments) that overpredict their spending tend to enroll in MA more often than beneficiaries whose risk scores underpredict their spending. Favorable selection is the extent to which, without any management or other intervention from MA plans, the risk-standardized spending of MA enrollees is lower than what Medicare would spend if they were in FFS. This selection may stem from a variety of factors, including beneficiaries' propensities to use care for reasons unrelated to their health, differences in health status that are not accounted for by risk scores, or plan benefit designs that are less attractive to beneficiaries whose spending is underpredicted by their risk scores, among other reasons. "Coding intensity" refers to the tendency for more diagnosis codes to be recorded for MA enrollees, which causes risk scores—and payments—for the same beneficiaries to be higher when they are enrolled in MA than they would be in FFS Medicare. MA coding intensity is driven by several factors, including MA plans' documenting diagnoses more comprehensively than providers in FFS Medicare (who may not report all possible diagnosis codes), submitting fraudulent diagnostic data, and other reasons. Separately identifying all of the factors causing favorable selection and coding intensity is challenging and in many cases not possible, given available data. However, regardless of the causes, favorable selection of enrollees into MA and higher MA coding intensity lead to pricing errors that cause CMS's risk-adjustment system to set payment rates too high for MA enrollees, thereby increasing Medicare's payments to plans.

We estimate that Medicare will spend 14 percent—a projected $76 billion—more for MA enrollees in 2026 than it would spend if those beneficiaries were enrolled in FFS Medicare, an amount equal to 12 percent of total MA payments. The higher payments that we estimate relative to FFS vary significantly across MA parent organizations and are not an estimate of plan profits and administrative expenses. These increased payments to MA plans contribute to funding for the supplemental benefits discussed above, which beneficiaries in our annual focus groups report are the primary reason that enrollees choose MA. But the relatively higher payments to MA plans are financed by the taxpayers and beneficiaries who fund the Medicare program. Higher MA spending increases Part B premiums for all beneficiaries, including those in FFS Medicare who do not enjoy subsidized supplemental benefits. The Commission estimates that Part B premium payments will be about $11 billion higher in 2026 because of higher Medicare payments to MA plans (equivalent to roughly $175 per beneficiary per year, or $14.61 per beneficiary per month).

The Commission contends that important reforms are needed to improve Medicare's policies of paying and overseeing MA plans. First, reforms are needed to reduce the overall level of Medicare payments to MA plans. As noted above, relatively higher levels of payment stem largely from favorable selection and coding intensity. Those effects vary across plans and distort the nature of competition in the program. Past experience with reductions in MA payments has demonstrated that plans can adjust their bidding behavior, which lessens the effects on plan participation, supplemental benefits offered to enrollees, and beneficiary enrollment. Second, reforms are needed to the quality-bonus program because it is administratively burdensome, adds significantly to program costs, and does not provide meaningful information about quality of care to beneficiaries choosing among MA plans. Third, reforms to the MA benchmark system would be valuable because current benchmarks generate a number of inequities, including "cliff" effects due to grouping counties into quartiles, caps on benchmarks, and benchmarks that are skewed by the inclusion of FFS-spending data for beneficiaries with only Part A coverage. Fourth, it is important for Medicare to carefully monitor and respond to the challenges, burdens, and care disruptions that beneficiaries experience when choosing among plans and navigating changes to provider networks. Finally, the Commission finds that plan-submitted data about beneficiaries' health care encounters are incomplete, and we lack information about the use of many MA supplemental benefits. Without these data, policymakers cannot fully understand enrollees' use of services, which

limits policymakers' ability to oversee the program and assess the value that enrollees get from supplemental benefits.

Over the past few years, the Commission has made several recommendations to improve the program. These recommendations call for the Congress and CMS to address coding intensity, replace the quality-bonus program, establish more equitable benchmarks, and improve the completeness of encounter data. In addition, because of Medicare's fiscal situation, the growth in subsidization of supplemental benefits should be considered with attention to their value.

Medicare payments to plans—In 2026, Medicare's payments to MA plans are projected to be $615 billion. We estimate that Medicare will spend 14 percent more for MA enrollees than it would spend if those beneficiaries were enrolled in FFS Medicare, which translates to a projected $76 billion. In this year's report, we incorporate the ESRD population in our estimates of payments to MA plans relative to FFS, favorable selection, and coding intensity. Our prior reports had not included the ESRD population because we had not yet developed the analytic framework for constructing an estimate for that group. The higher payments we estimate relative to FFS vary significantly across MA parent organizations and are not an estimate of plan profits and administrative expenses.

Last year, we projected that in 2025, Medicare would spend 20 percent more on MA enrollees than on similar enrollees in FFS Medicare. The lower projected payment difference for 2026 is primarily due to the completed phase-in of a new risk model (called Version 28, or V28) designed to reduce differences in coding and the availability of new risk-score data, which show slower growth in MA risk scores in recent years (described further below). The Commission has supported the change to the V28 risk model, and our lower estimated payment difference indicates that V28 is having the intended effect of reducing the impact of differences in MA and FFS diagnosis coding on payments. Altogether, our estimates suggest that plans were able to maintain their aggregate level of rebates ($222 per enrollee per month) in 2026 by adjusting their bids—and, in fact, rebates reached a record high—despite the complete phase-in of the V28 risk model.

Favorable selection—We project that in 2026, favorable selection will increase MA payments by roughly 11 percent above what the program would have paid under FFS Medicare, or $57 billion of the $76 billion in higher total payments

to MA plans. The Commission's estimates of favorable selection are reasonably robust and in line with a growing body of research.

Risk adjustment and coding intensity—We estimate that MA risk scores in 2024 were about 14 percent higher than scores for similar FFS beneficiaries due to higher coding intensity. For 2026, we project that MA risk scores will be about 10 percent higher than scores for similar FFS beneficiaries. Declining differences in MA and FFS coding intensity are driven by the completed phase-in of the V28 risk model, which we estimate to reduce coding intensity by 2.9 percentage points in each year of the model's phase-in (2024 through 2026). By law, CMS reduces MA risk scores by a minimum amount to make them more consistent with FFS coding; CMS has the authority to impose a larger reduction than the minimum required by law but has never done so. In 2026, the adjustment will reduce MA risk scores by the minimum amount, 5.9 percent. We project that, after the adjustment, MA risk scores will remain about 4 percent higher than they would have been if MA enrollees were in FFS Medicare. We estimate that those higher scores will result in $22 billion of the $76 billion in higher total payments to MA plans. (We estimate that MA spending would have been about $3 billion lower than FFS spending for similar beneficiaries before accounting for the effects of favorable selection and coding intensity.)

Although the V28 risk model reduces the variation in coding intensity across MA plans, we continue to estimate meaningful heterogeneity in coding intensity: 16 percent of MA enrollees were in plans that had coding intensity in 2024 that fell below CMS's coding adjustment, and other plans coded far above that amount, including eight MA organizations with average coding intensity that was more than 20 percent higher than FFS levels in 2024. Eight of the 10 largest MA organizations had coding intensity that was at least 5 percentage points higher than CMS's coding adjustment. Higher coding intensity allows some plans to offer more supplemental benefits—and attract more enrollees—than other plans, thereby distorting both the nature of plan competition in MA and plan incentives to improve quality and reduce costs.

Quality in MA—The MA quality-bonus program rewards contracts with a high star rating by increasing their benchmark. In 2026, about $16 billion in payments to MA plans will result from the program. In 2026, 64 percent of MA enrollees are projected to be in a plan that receives a quality-bonus increase to its benchmark. Enrollees generally report satisfaction with their coverage—a trend that has held over time. For example, scores for all measures on the MA Consumer Assessment of Healthcare Providers and Systems surveys, except

for the annual flu vaccine, were above 82 percent from 2018 to 2024. The Commission continues to be concerned that the MA quality-bonus program and star-rating system are not adequate to assess the quality of care that MA enrollees can expect to receive nor to evaluate alternatives for assessing beneficiary access to care, quality, and experience in MA.

Medicare payments and MA plan costs for enrollees with end-stage renal disease—In the March 2021 report to the Congress, the Commission compared MA plans' medical costs with their revenues for individuals with ESRD, described MA enrollment trends by coinsurance amounts, and estimated the prices that plans paid for dialysis services in 2018. In this report, we update those analyses using the most recent available data.

Medicare payments to MA plans grew faster, on average, than plans' reported medical costs for enrollees with ESRD, and were substantially higher relative to costs in 2023 than in 2018. In 2018, MA plans roughly broke even on medical costs for enrollees with ESRD, on average, implying that plans may have lost money on ESRD patients once administrative costs were accounted for. By 2023, Medicare payments to plans were much higher relative to plans' medical costs for enrollees with ESRD, by 12 percent. Most MA enrollees with ESRD in 2023 (93 percent) were enrolled in contracts with higher ESRD revenues than medical costs.

Most plans apply the maximum allowable amount of cost sharing—20 percent coinsurance—to dialysis services. In 2022, about 90 percent of enrollees with ESRD in conventional plans and special-needs plans for dually eligible beneficiaries were responsible for a 20 percent coinsurance for dialysis. MA enrollees with ESRD are likely to receive some financial protection from the maximum out-of-pocket limit ($9,250 in 2026) that MA plans are required to offer.

MA plans pay, on average, more than FFS rates for dialysis services. In 2022, the average MA plan price for dialysis was 22 percent higher than the FFS Medicare rate, down from 28 percent higher in 2020. The high level of consolidation in the dialysis industry—and the associated provider market power—could help explain, at least in part, the difference between average MA and FFS prices for dialysis. Since 2021, increasing MA enrollment by beneficiaries with ESRD, combined with the removal of network-adequacy rules for outpatient dialysis facilities, may have increased negotiating leverage for many MA plans, accounting for the drop in MA prices for dialysis in 2021 and 2022. ■

Each year, the Commission provides a status report on the Medicare Advantage (MA) program, as required by law. The MA program allows Medicare beneficiaries enrolled in both Part A and Part B to receive benefits from private plans rather than from the traditional fee-for-service (FFS) program. MA plans typically have flexibility to use alternative payment models, negotiate with individual providers, use care-management techniques that fill potential gaps in care delivery, and provide incentives for beneficiaries to seek care from more efficient providers. By contrast, traditional FFS Medicare has lower administrative costs but has fewer incentives to coordinate care and is limited in its ability to make care delivery more efficient.[1]

The Commission strongly supports including private plans in the Medicare program. Beneficiaries should be able to choose among Medicare coverage options since some may prefer to avoid the constraints of provider networks and utilization management by enrolling in FFS Medicare, while others may prefer features of MA, such as reduced premiums and cost-sharing liability. MA plans are required by statute to offer an out-of-pocket (OOP) spending limit that is not included in FFS Medicare. MA plans can also offer integrated Part D benefits, provide supplemental benefits not covered by Part A or Part B of Medicare, and reduce cost-sharing liability and premiums. These benefits are particularly appealing for those who are unable to afford a Medicare supplemental insurance (Medigap) policy that would help cover cost sharing in FFS Medicare.[2] In exchange for these benefits, MA plan enrollees accept provider networks and utilization-management tools such as prior authorization to ensure that a health care service is medically necessary before it will be covered by the plan. Because private plans and FFS Medicare have structural aspects that appeal to different segments of the Medicare population, the Commission supports payment policies that do not unduly favor MA or FFS.

We hold the goal of meaningful and transparent competition in MA to create incentives for plans to improve quality and reduce costs for beneficiaries and taxpayers. But the Commission is concerned that the MA program, as currently structured, does not serve beneficiaries or taxpayers as it should. Indeed, current MA payment policies distort the goal of plans competing to reduce health care costs and improve quality; instead, these policies increase program spending and Part B beneficiaries' premiums. The rapid growth of MA enrollment and spending elevates the urgent need for reform. Over the past decade, the Commission has developed four recommendations (some that incorporate and update prior recommendations) that would substantially improve the MA program for both beneficiaries and taxpayers (see text box, "Commission recommendations to improve MA payment policies," pp. 352–354).

In this chapter, we review types of MA plans and Medicare's mechanisms for paying them to provide Medicare benefits to enrollees. We then provide updated information on MA enrollment and plan availability. We also discuss MA rebates, used by plans to provide supplemental benefits to enrollees, which are projected to reach record levels in 2026. Next, we examine Medicare's payments to MA plans, including the impact of higher MA coding intensity and favorable selection into MA on spending. Overall, we estimate that Medicare's payments to plans substantially exceed what would have been spent on MA beneficiaries had they instead been enrolled in FFS Medicare. We then assess the structure of the MA market, including trends in the concentration of enrollment and the integration of MA organizations with other entities in the health care sector. We also review MA's flawed system for quality reporting and measurement. Finally, we update our 2021 analysis of Medicare payments and MA plan costs for individuals with end-stage renal disease (ESRD), who are increasingly enrolling in MA plans.

Background

Medicare Advantage (MA) plans include health maintenance organization (HMO), preferred provider organization (PPO), private fee-for-service (PFFS), and medical savings account (MSA) plans.[3] For payment purposes, there are two categories of MA plans: local plans and regional plans. Local plans may be any of the available plan types and may serve one or more counties. Medicare pays them based on their enrollees' counties of residence. Regional plans, however, must be PPOs and must serve an entire region as established by CMS; there are 26 regions and each region comprises

Commission recommendations to improve Medicare Advantage payment policies

For some enrollees, the supplemental benefits that Medicare Advantage (MA) plans offer fill gaps in the Medicare benefit by adding coverage for services that are not included in traditional Medicare.[4] These benefits are particularly appealing for those who are unable to afford a Medigap policy that would cover cost sharing in fee-for-service (FFS) Medicare. But the Commission is concerned that many of Medicare's payment policies and policies to incentivize high-quality care do not serve beneficiaries or taxpayers. Indeed, MA payment policies distort the goal of plans competing to reduce health care costs and improve quality; instead, these policies increase program spending and Part B beneficiaries' premiums.

- CMS's annual coding adjustment has for many years been inadequate to address the level of MA diagnostic coding that we have estimated. For 2026, we find that the V28 risk model has made important improvements in addressing the overall level of coding and in improving the fairness of risk adjustment across MA organizations. However, we estimate that after the coding adjustment, higher MA coding intensity continues to result in higher payments to MA plans and inequity across MA organizations.

- The quality-bonus program boosts payments to plans for 64 percent of MA enrollees but does not effectively promote high-quality care.

- Benchmarks are set at a high level, and we estimate that MA plan bids in 2026 are, on average, roughly equal to the costs of covering the Medicare benefit under FFS, when we account for the effects of higher coding intensity and favorable selection in MA.

- Plan-submitted data about beneficiaries' health care encounters are incomplete. If these data were complete and accurate, they could be used to identify MA plan efficiencies, improve quality measurement, and provide more robust oversight of the MA program.

Overall, we estimate in 2026 that Medicare is paying MA plans 14 percent, or $76 billion, more than it would spend if MA enrollees were covered under FFS Medicare, which increases the financial burden on taxpayers and beneficiaries who fund the MA program. Paying MA plans more than FFS spending for beneficiary care also creates inequities among beneficiaries since beneficiaries in FFS Medicare help finance the higher payments that MA plans use to provide supplemental benefits for their enrollees (benefits that FFS beneficiaries generally must pay for out of pocket or through supplemental insurance). We estimate that aggregate Part B premiums will be about $11 billion (8 percent) higher in 2026 because of payments above FFS spending (equivalent to about $175 per beneficiary per year, or $14.61 per beneficiary per month).[5] Further, incentives for efficient delivery of care are undermined by paying MA plans more than the program pays for FFS beneficiaries.

The Commission continues to support including private plans in the Medicare program so that beneficiaries can choose among Medicare coverage options. But the rapid growth of MA enrollment and spending elevates the urgent need for reform. As MA enrollment continues to grow, higher payments to plans relative to FFS will worsen Medicare's fiscal sustainability. To encourage efficiency and promote value for taxpayers and beneficiaries, an overhaul of MA payment policies should include reducing the level of Medicare payments to MA plans. Past experience with reductions in MA payments under the Affordable Care Act of 2010 (ACA) has demonstrated that plans can adjust their bidding behavior and lessen the effects on plan participation and beneficiary enrollment. If payments to MA plans were lowered, plans might reduce the supplemental benefits they offer, but research has found that plans have responded to past payment

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Commission recommendations to improve Medicare Advantage payment policies (cont.)

reductions by modifying other aspects of their bids in order to continue offering benefits to attract enrollees (Cabral et al. 2018, Chernew et al. 2023, Congressional Budget Office 2022, Song et al. 2013).

Over the past decade, the Commission has developed four recommendations (some that incorporate and update prior recommendations) that would improve the MA program for both beneficiaries and taxpayers. Table 12–1 summarizes the Commission's standing recommendations to (1) account for continued coding differences between MA and FFS and address those differences

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TABLE 12–1

Commission's recommendations to improve MA payment policies

Recommendation
Fully account for MA coding intensity—*March 2016* The Congress should direct the Secretary to develop a risk-adjustment model that uses two years of FFS and MA diagnostic data and does not include diagnoses from health risk assessments from either FFS or MA, and then apply a coding adjustment that fully accounts for the remaining differences in coding between FFS Medicare and MA plans.
Improve encounter-data accuracy and completeness—*June 2019* The Congress should direct the Secretary to establish thresholds for the completeness and accuracy of MA encounter data and rigorously evaluate MA organizations' submitted data and provide robust feedback; concurrently apply a payment withhold and provide refunds to MA organizations that meet thresholds; and institute a mechanism for direct submission of provider claims to Medicare administrative contractors as a voluntary option for all MA organizations that prefer this method starting in 2024, for MA organizations that fail to meet thresholds, or for all MA organizations if program-wide thresholds are not achieved.
Replace the quality-bonus program—*June 2020** The Congress should replace the current MA quality-bonus program with a new MA value-incentive program that scores a small set of population-based measures, evaluates quality at the local-market level, uses a peer-grouping mechanism to account for differences in enrollees' social risk factors, establishes a system for distributing rewards with no "cliff" effects, and distributes plan-financed rewards and penalties at a local market level.
Establish more equitable benchmarks—*June 2021*** The Congress should replace the current MA benchmark policy with a new MA benchmark policy that applies a relatively equal blend of per capita local-area FFS spending with price-standardized per capita national FFS spending; a rebate of at least 75 percent; a discount rate of at least 2 percent; and the Commission's prior MA benchmark recommendations—using geographic markets as payment areas, using the FFS population with both Part A and Part B in benchmarks, and eliminating the current pre–Affordable Care Act cap on benchmarks.

Note: MA (Medicare Advantage), FFS (fee-for-service).
* The June 2020 quality recommendation incorporates the Commission's prior recommendations to eliminate the doubling of the quality increases in specified counties (recommended in March 2016) and to establish a geographic basis for MA quality reporting that reflects health care market areas (June 2005, March 2010, and March 2018).
** The June 2021 benchmark recommendation incorporates the Commission's prior recommendations to eliminate the cap on benchmark amounts implemented by the Affordable Care Act of 2010 (ACA) (recommended in March 2016), base benchmarks on FFS spending data only for beneficiaries with both Part A and Part B (recommended in March 2017), and establish a geographic basis for MA payments that reflects health care market areas (recommended in June 2005, March 2010, and March 2018).

Source: Medicare Payment Advisory Commission (2021a), Medicare Payment Advisory Commission (2020a), Medicare Payment Advisory Commission (2019), Medicare Payment Advisory Commission (2016c).

Commission recommendations to improve Medicare Advantage payment policies (cont.)

in a complete and equitable way (Medicare Payment Advisory Commission 2016c); (2) ensure the completeness and accuracy of encounter data to improve the MA payment system, serve as a source of quality data, and facilitate comparisons with FFS Medicare (Medicare Payment Advisory Commission 2019); (3) replace the quality-bonus program with a market area–based, plan-financed reward program (Medicare Payment Advisory Commission 2020a); and (4) establish more equitable MA benchmarks for the Medicare program (Medicare Payment Advisory Commission 2021a). Through reforms to the MA payment system, the Commission aims to improve the program for the beneficiaries it serves and to harness plan efficiencies to strengthen Medicare's long-term financial sustainability.

The Commission has separately expressed concern about the FFS benefit design and has recommended changes to give beneficiaries better protection against high out-of-pocket (OOP) spending and to create incentives for them to make better decisions about their use of discretionary care. Protecting beneficiaries against high OOP spending would modernize the FFS benefit and mitigate the need for beneficiaries to purchase supplemental insurance (Medicare Payment Advisory Commission 2012a). That recommendation also would create clearer incentives for beneficiaries to make better decisions about their use of care through adjustments and refinements in cost sharing based on evidence of service value while holding the aggregate beneficiary cost-sharing liability about the same as under current law. Finally, our recommendation would add a charge on supplemental insurance (such as Medigap) to recoup at least some of the additional costs resulting from the higher service use that supplemental insurance imposes on the Medicare program while still providing beneficiaries the choice to buy supplemental coverage if they wish to do so. ■

one or more entire states. For each MA enrollee, Medicare pays plans a capitated rate that is adjusted to account for differences in expected medical costs.

Types of MA plans

Our analysis of the MA program uses the most recent data available, and we report our results by plan type as defined by CMS. CMS uses these plan types to distinguish between ways that Medicare pays MA plans, but there are important differences even within these types that we discuss below. The analysis (including the analysis of enrollment and payments to plans) does not include non-MA private-plan options (e.g., 1876 cost plans, Program of All-Inclusive Care for the Elderly plans) that may be available to some beneficiaries. The primary MA plan types (covering more than 99 percent of enrollees) are:

- ***HMOs and local PPOs***—These plans have provider networks and, if they choose, can use tools such as selective contracting and utilization management to coordinate and manage care and control service use. They can choose individual counties to serve and can vary their premiums and benefits across counties. There are meaningful differences between HMOs and PPOs. For example, HMOs generally do not pay for care furnished by out-of-network (OON) providers and often require that enrollees select a named primary care provider (PCP), who manages referrals to specialists. PPOs provide more flexibility for enrollees by not requiring a named PCP and by allowing enrollees to see both in- and out-of-network specialists without a referral. However, these plans generally have both higher premiums than HMOs and higher

cost sharing for OON providers compared with in-network providers. HMO point-of-service is a subset of the HMO plan type that allows members to seek OON care for certain types of services or in certain cases (such as travel). HMO point-of-service plans offer less flexibility to seek care out of network than PPOs but more than standard HMOs.

- ***Regional PPOs*—**These plans must offer a uniform benefit package and premium across CMS-designated regions made up of one or more states. Regional PPOs have more flexible provider-network requirements than local PPOs. For instance, regional PPOs may meet Medicare access requirements by arranging for enrollees to obtain plan-covered services through noncontracted providers at in-network cost-sharing levels for enrollees.

Two additional plan classifications cut across plan types: special-needs plans (SNPs) and employer group plans. SNPs offer benefit packages tailored to specific populations (that is, beneficiaries who are dually eligible for Medicare and Medicaid, are institutionalized, or have certain chronic conditions). Each SNP must be an HMO or PPO plan. Employer group plans are available only to Medicare beneficiaries who are members of employer or union groups that contract with those plans. SNPs are included in our plan data, with the exception of plan-availability figures because these plans are not available to all beneficiaries. Employer group plans do not submit bids and are not available to all Medicare beneficiaries, so they are not included in our analysis of bids or plan availability.

How Medicare pays MA plans

In contrast to FFS Medicare's fixed rates per service paid to providers, Medicare pays MA plans a fixed rate for each enrolled beneficiary, which is the product of a base rate and a risk score. Risk scores adjust a plan's base rate to account for differences in expected beneficiary medical costs by increasing a plan's payment rate for beneficiaries who are likely to have higher medical expenses and decreasing a plan's payment rate for beneficiaries who are likely to have lower medical expenses. The general purpose of risk adjustment is to accurately predict costs on average for large groups of beneficiaries and to reduce incentives for plans either to avoid beneficiaries with certain unprofitable attributes or to attract those with profitable attributes.

A plan's base rate is determined by the MA plan's bid and the benchmark for the county in which the beneficiary resides. The bid is intended to represent the dollar amount that the plan estimates will cover its costs of providing the Part A and Part B benefit package for a beneficiary of average spending. The benchmark is the maximum amount of Medicare payment set by law for an MA plan to provide Part A and Part B benefits.[6] (Medicare also pays many plans for providing the Part D drug benefit, but those payments are determined through the Part D bidding process and are not discussed here.) Plans with higher quality ratings are rewarded with a higher benchmark (although the increase to the benchmark can be limited by the Affordable Care Act of 2010 (ACA) benchmark caps).

For 2026, almost 100 percent of plans bid below their benchmarks. For these plans, the base rate is the plan's bid plus a "rebate" equal to a share of the difference between the plan's bid and the benchmark (as low as 50 percent but typically either 65 percent or 70 percent, depending on a plan's quality ratings).[7] The beneficiary pays no additional premium to the plan for Part A and Part B benefits (but continues to be responsible for paying the Medicare Part B premium).

The rebate that plans receive must be used to provide supplemental benefits to enrollees in the form of lower cost sharing, lower premiums, or coverage of non-Medicare services (benefits not covered by Part A or Part B). Plans also devote some of the rebate to their administrative costs and profit. Plans can choose to include additional supplemental benefits that are not financed by the rebate in their benefit packages and charge premiums to cover those additional benefits.[8] (A more detailed description of the MA program's payment system can be found in our *Payment Basics* series at https://www.medpac.gov/document-type/payment-basic/.)

How Medicare calculates MA benchmarks

Under the statute, each county's benchmark, excluding quality bonuses, equals a certain share (ranging from 95 percent to 115 percent, subject to caps) of the projected average per capita FFS Medicare spending for the

county's beneficiaries.[9] Each county's benchmark is determined by organizing the counties into quartiles based on their FFS spending.[10] Low-FFS-spending counties have benchmarks higher than their county's FFS spending level to help attract plans and enable enrollees to receive supplemental benefits, and high-FFS-spending counties have benchmarks lower than FFS spending with the goal of generating Medicare savings because MA plans have greater opportunity to produce spending efficiencies in these areas. Counties are assigned to quartiles based on average FFS spending; the highest-spending quartile of counties has benchmarks set at 95 percent of local FFS spending. The next-highest-spending quartile of counties has benchmarks set at 100 percent of FFS spending, followed by the third-highest quartile set at 107.5 percent of FFS spending. The lowest-spending quartile has benchmarks set at 115 percent of local FFS spending. U.S. territories are treated like counties in this lowest-spending quartile. Counties that move among quartiles from year to year receive a blended quartile factor. For example, a county that moved from the 100 percent quartile in 2025 to the 107.5 percent quartile in 2026 would have a blended rate of 103.75 percent in 2026.

By statute, plans that are awarded quality bonuses have benchmarks that are 5 percentage points higher than the standard county benchmarks (subject to benchmark growth caps); in certain counties, plans can receive a double bonus, and the benchmarks for plans awarded quality bonuses are 10 percentage points higher than the standard benchmarks.[11] Unlike nearly all of Medicare's FFS quality-incentive programs, these quality bonuses are not budget neutral but are instead financed by added program dollars and beneficiary premiums. The Commission has repeatedly recommended that the Congress revise the MA quality-incentive program to be budget neutral (that is, financed with a share of plan payments) and focused on measures tied to clinical outcomes and patient experience (Medicare Payment Advisory Commission 2020a, Medicare Payment Advisory Commission 2004).

How Medicare calculates risk scores

Risk scores are beneficiary-level index values that indicate the expected Medicare costs for an enrollee relative to the national average FFS beneficiary. How well Medicare's payments to MA plans match their enrollees' costliness depends in large part on how well the risk scores predict the expected costs for the plans' enrollees.

CMS calculates risk scores with the CMS hierarchical condition category (CMS–HCC) risk-adjustment model, which uses demographic information (e.g., age, sex, Medicaid eligibility, institutional status, and disability status) and certain diagnoses grouped into HCCs to calculate a risk score for each enrollee. HCCs are medical conditions or groups of related conditions with similar treatment costs. Some conditions have more than one HCC, which differ by severity of the condition and are arrayed in a hierarchy. For example, the CMS–HCC model has four HCCs for chronic kidney disease, listed here in order of highest severity: Stage 5, Stage 4, Stage 3B, and Stage 3 (except Stage 3B). The "hierarchical" aspect of HCCs means that if a beneficiary's diagnoses map to more than one HCC in a condition hierarchy, CMS applies only the HCC that has the largest effect on the beneficiary's risk score—the highest-severity HCC applicable to that beneficiary.

CMS tracks beneficiary demographic information, but MA plans submit diagnostic information to CMS through encounter records, which contain basic information about each Medicare-covered encounter an enrollee has with a health care provider and each Medicare-covered item provided to the enrollee.[12] Diagnostic data collected from encounters in one year are used to predict Medicare costs for the following year. For example, diagnostic data collected during 2025 was used to calculate risk scores used to adjust payments to plans in 2026.

CMS designed this risk-adjustment model to maximize its ability to predict annual medical expenditures for FFS Medicare beneficiaries while also ensuring that the model's diagnostic categories were clinically meaningful and "sufficiently clinically specific to minimize opportunities for gaming or discretionary coding" (Pope et al. 2004). CMS has two requirements aimed at ensuring the validity and reliability of the diagnostic data used in an enrollee's risk score: Diagnoses must (1) appear on a claim from a hospital inpatient stay, a hospital outpatient visit, or a face-to-face visit with a physician or other health care professional; and (2) be supported by evidence in the

patient's medical record.[13] Diagnoses resulting from telehealth services meet the face-to-face requirement when the services are provided using interactive audio and video telecommunication that enables real-time communication with the beneficiary. To verify that diagnoses are supported by evidence in the patient's medical record, CMS conducts risk-adjustment data-validation (RADV) audits. RADV audits have been limited so far, but the available results show significant issues with medical-record support for risk-adjustment diagnoses. For example, the Department of Health and Human Services Office of Inspector General (OIG) has conducted RADV-like audits of high-risk diagnoses for at least 30 MA contracts and found that 70 percent of all diagnosis codes audited were not supported by medical records and that some diagnoses were not supported over 90 percent of the time (Office of Inspector General 2023). For example, OIG audited diagnoses of acute stroke that were documented on one physician encounter record but were not documented on an inpatient or outpatient encounter record. Such acute stroke diagnoses were found to be in error 96 percent of the time, and OIG concluded generally that a "history of stroke" diagnosis (which does not map to an HCC) should have been used for such cases (Office of Inspector General 2023). (See text box, "Update on risk-adjustment data-validation audits," pp. 402–403.)

The CMS–HCC model is calibrated using FFS claims data so that each beneficiary's risk score reflects the expected spending that would occur for a beneficiary relative to the national average spending in FFS Medicare. Relying on FFS data for risk scores, and for other aspects of Medicare's payments to MA plans, generates two payment-accuracy issues. First, risk scores do not predict spending for MA enrollees as accurately as they do for FFS beneficiaries, on average. Risk scores systematically overpredict spending for MA enrollees, leading to higher average payments to MA plans relative to what FFS spending would have been for similar beneficiaries. This favorable selection of enrollees into MA results from relying on FFS data for risk scores and benchmarks. (See "Before coding differences, favorable selection causes risk-based payments to overpredict spending for MA enrollees," p. 383). Second, diagnoses are not coded with the same frequency in MA and FFS. Higher MA coding intensity leads to higher average payments to MA plans and advantages plans that code more intensively than other plans. (See "Coding differences increase payments to MA plans in 2026 by an estimated $22 billion and continue to generate inequity across plans," p. 386.)

Robust MA enrollment, plan availability, and rebates

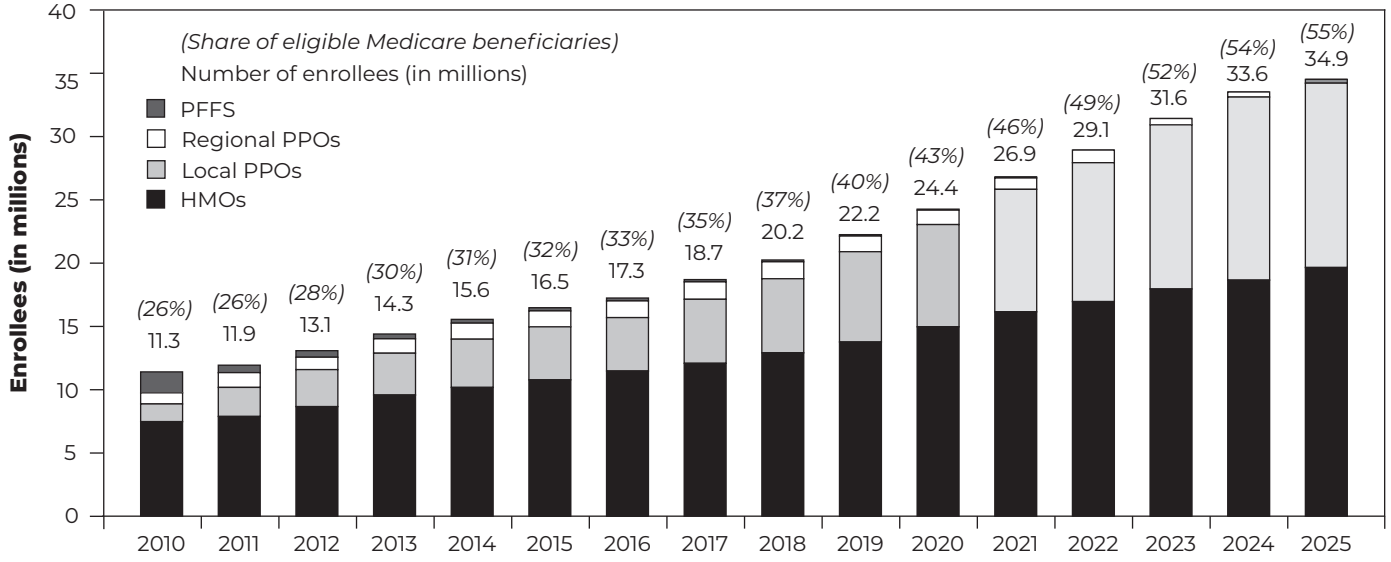
Continued growth in MA plan enrollment, considerable plan availability, and substantial rebates indicate a robust MA program. In each year since 2023, more than half of eligible Medicare beneficiaries have been enrolled in MA plans. For 2026, the average beneficiary has access to 39 plans sponsored by eight organizations. Rebates, which are used to fund supplemental benefits, are projected to reach record-high levels in 2026.

In 2025, enrollment in MA plans grew by 4 percent; 55 percent of eligible Medicare beneficiaries were enrolled in MA plans

Between July 2024 and July 2025, enrollment in MA plans grew by 4 percent—or 1.3 million enrollees—to 34.9 million enrollees, while the total MA-eligible population (beneficiaries with both Part A and Part B coverage) grew by only 2 percent. Between 2024 and 2025, MA enrollment rose from 54 percent to 55 percent of eligible Medicare beneficiaries (Figure 12-1, p. 358). The share of eligible Medicare beneficiaries enrolled in MA has more than doubled since 2010. MA has become increasingly attractive to beneficiaries because plans provide cost-sharing reductions, subsidized Part D coverage, non-Medicare benefits, and a cap on out-of-pocket (OOP) expenses at little or no additional premium. (The magnitude of these additional benefits stems in part from Medicare's higher payments to MA plans.) Most beneficiaries with care needs that are met within plan networks and coverage policies will likely have lower total financial liability (premiums and cost sharing) compared with beneficiaries who stay in FFS and purchase the most comprehensive supplemental coverage (Ippolito et al. 2024). Some MA enrollees with high care needs do experience greater cost liabilities compared with beneficiaries in FFS (e.g., greater cost sharing for in-network and out-of-network services compared with Medigap premiums) (Keohane et al. 2015).

FIGURE 12–1

Share of eligible Medicare beneficiaries enrolled in Medicare Advantage has more than doubled since 2010



Note: PFFS (private fee-for-service), PPO (preferred provider organization), HMO (health maintenance organization). Medicare Medical Savings Account plans are included but are not shown separately due to the small number of enrollees in such plans. Beneficiaries must have both Part A and Part B coverage to enroll in a Medicare Advantage plan; therefore, beneficiaries who have Part A only or Part B only are not included in this figure.

Source: MedPAC analysis of CMS enrollment files, July 2010 to July 2025.

Among plan types, HMOs continued to enroll the most beneficiaries (20 million) in 2025. Enrollment in HMOs grew by 5 percent between 2024 and 2025, outpacing growth of local PPOs (3 percent) (Table 12-2). Between 2024 and 2025, enrollment in HMOs grew by nearly 1 million, accounting for roughly two-thirds of the overall increase in MA enrollment; enrollment in local PPOs grew by just under half a million and accounted for roughly one third of overall MA growth. For the first time in several years, HMO enrollment growth has outpaced that of local PPOs; the shift could reflect a change in the types of plans offered by MA insurers in 2025.

Increased SNP enrollment accounted for more than half of all MA enrollment growth between 2024 and 2025. In 2025, SNP enrollment grew by 10 percent—a continuation of the rapid growth (above 10 percent per year) observed over the last six years. Some of the growth in SNP enrollment is likely due to the winding down of Medicare–Medicaid plans (MMPs), which are demonstration plans (operated outside of the MA program) that CMS and certain states have been testing as part of an effort to develop new models of care for dually eligible beneficiaries. In 2022, CMS announced that it would be ending the MMP demonstrations at the end of 2025.[14] Beginning in 2026, most remaining MMPs will convert to operating as MA dual-eligible SNPs (D–SNPs). At their peak, MMPs had between 400,000 and 450,000 enrollees; in July of 2025, roughly 240,000 enrollees remained in MMPs.

Of the three main types of SNPs (D–SNP, chronic or disabling condition (C–SNP), and institutional (I–SNP)), D–SNPs are the largest, enrolling roughly 80 percent of all SNP enrollees. Enrollment in C–SNPs,

TABLE 12–2

Enrollment growth in HMOs outpaced growth in other plan types in 2025

	MA enrollment (in millions)		Percent change in enrollment (2024–2025)
	July 2024	July 2025	
Total MA-eligible beneficiaries	**61.7**	**63.2**	**2%**
Total MA enrollment	**33.6**	**34.9**	**4**
Plan type			
HMO	18.7	19.7	5
Local PPO	14.5	15.0	3
Regional PPO	0.4	0.2	–39
PFFS	<0.05	<0.05	24
Restricted-availability plans included in totals above			
SNPs*	6.9	7.6	10
Employer group*	5.8	5.8	0

Note: HMO (health maintenance organization), MA (Medicare Advantage), PPO (preferred provider organization), PFFS (private fee-for-service), SNP (special-needs plan). The number of MA-eligible beneficiaries excludes beneficiaries who are not eligible to enroll in an MA plan because they do not have both Part A and Part B coverage (approximately 6 million beneficiaries in 2025). Totals and calculated values may be affected by rounding.
* SNPs and employer group plans have restricted availability. Their enrollment is included in the statistics by plan type. We present them separately to provide a more complete picture of the MA program.

Source: MedPAC analysis of CMS enrollment files.

however, has grown dramatically in recent years. C–SNP enrollment grew by 22 percent, 54 percent, and 69 percent in 2023, 2024, and 2025, respectively. This growth has been driven, in part, by a rise in the number of C–SNPs offered by MA insurers—nearly three times as many C–SNPs in 2025 as they offered in 2019 (Stein et al. 2025a). Several aspects of Medicare policy may make C–SNPs attractive to MA insurers and to Medicare beneficiaries (Polakowski et al. 2025). For example, eligible MA enrollees are permitted to enroll in a C–SNP at any point in the year (rather than just during the annual open enrollment period), and Medicare uses higher risk scores for new Medicare enrollees enrolling in C–SNPs than it would use if the same beneficiaries were to enroll in a conventional MA plan or other type of SNP. Additionally, since C–SNP enrollees must have a chronic condition to enroll, plans may have an easier time identifying risk-adjustment-eligible diagnoses for C–SNP members than for enrollees in other types of MA plans. The chronic-condition enrollment requirement might also enable C–SNPs to offer easier access to non–primarily health-related supplemental benefits (such as food and produce, pest-control services, or housing support). This feature could be particularly important in 2026, given the end of the MA value-based insurance design (VBID) demonstration at the end of 2025. The MA–VBID demonstration enabled plans to make non–primarily health-related benefits widely available to SNP enrollees because it allowed plans to target the benefits on the basis of socioeconomic status. Without the demonstration, plans will be able to offer these benefits only as special supplemental benefits for the chronically ill (SSBCI), meaning that they must be targeted to enrollees who meet CMS's definition of being chronically ill. Since C–SNP enrollees must have a chronic condition to enroll, giving members access to these benefits in C–SNPs

could be easier than in other plans (see the section on supplemental benefits for more information about non–primarily health-related benefits, p. 368).

Researchers, as well as CMS, have noted an uptick in the number of full-benefit dual-eligible beneficiaries enrolled in C–SNPs (Centers for Medicare & Medicaid Services 2025f, Stein et al. 2025a). For most C–SNPs, the share of enrollees who are fully dually eligible is generally low—averaging roughly 15 percent between 2011 and 2024. However, for a small but growing number of C–SNPs, the share is significantly higher (at or above 60 percent of plan enrollees) (Centers for Medicare & Medicaid Services 2025f, Stein et al. 2025a). Between 2021 and 2025, the number of C–SNPs for which dually eligible individuals comprised more than 60 percent of enrollment rose from 16 (of 207) to 66 (of 385) (Centers for Medicare & Medicaid Services 2025f). Because C–SNPs are not required to meet the same standards as D–SNPs with respect to how they coordinate Medicare and Medicaid benefits, both CMS and researchers have expressed concern that the rising number of C–SNPs with high shares of dually eligible enrollees may hamper efforts to integrate benefits for these enrollees (Centers for Medicare & Medicaid Services 2025f, Stein et al. 2025a, Stein et al. 2025b). Of all full-benefit dual-eligible individuals newly enrolled in C–SNPs in 2024, roughly 10 percent were previously enrolled (in 2023) in a highly integrated D–SNP (HIDE–SNP), fully integrated D–SNP (FIDE–SNP), or other integrated plan (such as a Program for All-Inclusive Care for the Elderly or MMP) (Stein et al. 2025b).

Looking across plan types, HMOs accounted for nearly all (90 percent) SNP enrollment growth. Enrollment in SNP HMOs grew by 12 percent, accounting for two-thirds of total HMO growth. Although local PPO SNPs have proliferated since 2018, rising from 4 percent of SNP enrollment to 19 percent in 2025, most SNP enrollees (81 percent) are enrolled in HMOs. Altogether, in 2025, Medicare beneficiaries who were eligible to enroll in SNPs were predominantly enrolled in HMOs, while enrollment of beneficiaries who did not qualify for a SNP was more evenly distributed between HMOs and PPOs.

Enrollment patterns differ in urban and rural areas. In urban areas, 57 percent of eligible beneficiaries were enrolled in MA in 2025; in rural areas, 49 percent of eligible beneficiaries were enrolled in MA.[15] The growth of MA enrollment in urban and rural areas was similar (4 percent) between 2024 and 2025. The predominant plan type often differs between urban and rural areas: In 2025, 41 percent of rural MA enrollees were in HMO plans, compared with 59 percent of urban enrollees. By contrast, 57 percent of rural enrollees were in local PPOs compared with 40 percent of urban enrollees.

Geographic variation in the growth of MA has resulted in some areas having a very high share of eligible Medicare beneficiaries enrolled in MA and other areas having a relatively low share. In some states (including Iowa, Kansas, Maryland, Massachusetts, and Nebraska), less than 40 percent of eligible Medicare beneficiaries are enrolled in MA; however, a relatively small share of the MA-eligible population (less than 10 percent) lives in such states. In contrast, in 30 states (including California, Florida, New York, Pennsylvania, and Texas) and Puerto Rico, home to more than three-quarters of eligible Medicare beneficiaries, more than half of the eligible population was enrolled in an MA plan in 2025. In 10 of these 30 states (including Alabama, Florida, Georgia, Louisiana, and Michigan), encompassing roughly 20 percent of eligible beneficiaries, the share enrolled in MA exceeded 60 percent. MA enrollment is particularly high in some metropolitan areas (e.g., El Paso, TX; Grand Rapids, MI; Miami, FL; Pittsburgh, PA; Rochester, NY) and in Puerto Rico, where more than 75 percent of eligible Medicare beneficiaries are enrolled in MA plans. MA benchmarks are computed at the county level and are based on the area's FFS spending; in an increasing number of counties, more than half of eligible Medicare beneficiaries are enrolled in MA plans.

Availability of MA plans remains high in 2026

Every year, we assess plan availability and projected enrollment for the coming year based on the bid data that plans submit to CMS. We find that access to MA plans remains high in 2026, with most Medicare beneficiaries having access to many plans and multiple insurers. Measures of availability slightly declined relative to 2025, though these measures remained high and stable. While almost all beneficiaries have had access to some type of MA plan since 2006, local HMOs and PPOs are widely available (Table 12-3). In

TABLE 12–3

Access to Medicare Advantage plans remains high

Type of plan	2022	2023	2024	2025	2026
Share of Medicare beneficiaries with access to at least one MA plan					
Any MA plan	99%	>99.5%	>99.5%	>99.5%	99%
Local CCP	99	99	>99.5	>99.5	99
Regional PPO	74	74	74	68	60
PFFS	35	29	30	29	26
Special-needs plans					
Dual eligible	94	94	95	95	98
Chronic condition	59	66	72	85	90
Institutional	74	77	78	80	79
Zero-premium plan with drug coverage	98	99	99	99	98
Average number of choices					
County weighted	22	26	28	28	26
Beneficiary weighted	36	41	43	42	39
Average number of insurers					
County weighted	5	5	6	6	5
Beneficiary weighted	8	8	8	8	8

Note: MA (Medicare Advantage), CCP (coordinated-care plan), PPO (preferred provider organization), PFFS (private fee-for-service). "Local CCP" includes HMO and local PPO plans. This table's figures exclude employer-only plans and Medicare Medical Savings Account plans. Special-needs plans are included in the three rows of special-needs plans but excluded from all other rows. The share of Medicare beneficiaries includes only beneficiaries with both Part A and Part B coverage (i.e., MA-eligible beneficiaries). A "zero-premium plan with drug coverage" includes Part D coverage with no Part D premium (but may include the Part B premium). "County weighted" means that each county is weighted the same and the measure is the average number of choices per county. "Beneficiary weighted" means that each county is weighted by the number of eligible beneficiaries in the county.

Source: MedPAC analysis of CMS bid and enrollment data.

2026, 99 percent of Medicare beneficiaries have an HMO or local PPO plan operating in their county of residence, down slightly from nearly 100 percent in 2025.[16]

The availability of SNPs continues to be high across the types of special-needs populations served (Table 12-3). In 2026, 98 percent of beneficiaries reside in areas where SNPs serve beneficiaries who are dually eligible for Medicare and Medicaid (up from 95 percent in 2025), 90 percent live where SNPs serve beneficiaries with chronic conditions (up from 85 percent in 2025), and 79 percent live where SNPs serve institutionalized beneficiaries (down from 80 percent in 2025). Overall, 99 percent of beneficiaries reside in counties served by at least one type of SNP (data not shown). Our measure of SNP availability reflects only the share of MA-eligible beneficiaries residing in a county served by a SNP. However, individuals must meet additional coverage criteria to be eligible to enroll in a SNP; for example, to enroll in an institutional SNP, a beneficiary would typically reside in a skilled nursing facility that has a relationship with the plan.

In 2026, 98 percent of eligible Medicare beneficiaries (down from 99 percent in 2025) have access to at least one "zero-premium" plan with drug coverage—that is, a conventional (open to all MA-eligible beneficiaries) MA plan that includes Part D drug coverage and charges no Part C or Part D premium (enrollees may pay the Medicare Part B premium) (Table 12-3, p. 361).[17] About 76 percent of conventional MA enrollment is projected to be in these zero-premium plans (data not shown). Also in 2026, 99 percent of beneficiaries (unchanged from 2025) have access to at least one plan that offers some reduction in the Part B premium (data not shown); about 29 percent of 2026 conventional MA enrollment is projected to be in these premium-reduction plans (a decline from 32 percent in 2025); and the median monthly premium reduction is $61 for enrollees in one of these plans (data not shown). As plans have increasingly offered Part B–premium reductions, MA enrollees may become increasingly attracted to the direct assistance these benefits provide.

In most counties, beneficiaries have access to many MA plans. While nearly all Medicare beneficiaries have had an MA plan available to them since 2006, the number of plans offered per insurer has increased substantially since 2019, coinciding with CMS's regulatory repeal of its "meaningful differences" requirement.[18] In 2018, the average number of plans available per county was 10 (equivalent to an average of 20 plans per beneficiary). In 2026, the average number of plans available in a county is 26 (down from 28 plans in 2025) (Table 12-3, p. 361). About 4 percent of counties in 2026 do not have an available conventional MA plan (up from 3 percent in 2025; data not shown).[19] Plan availability can also be evaluated by the number of plan choices available to the average beneficiary. According to that calculation, the average beneficiary in 2026 has 39 available plans, down from 42 plans in 2025. An additional measure of plan access is the number of insurers offering products to the average beneficiary. In 2026, the average beneficiary can choose from plans sponsored by eight organizations (unchanged from 2025); 96 percent of beneficiaries have access to MA plans sponsored by at least three organizations, 92 percent of beneficiaries can choose from plans sponsored by at least four organizations, and 86 percent of beneficiaries can choose from plans sponsored by at least five organizations (data not shown).[20]

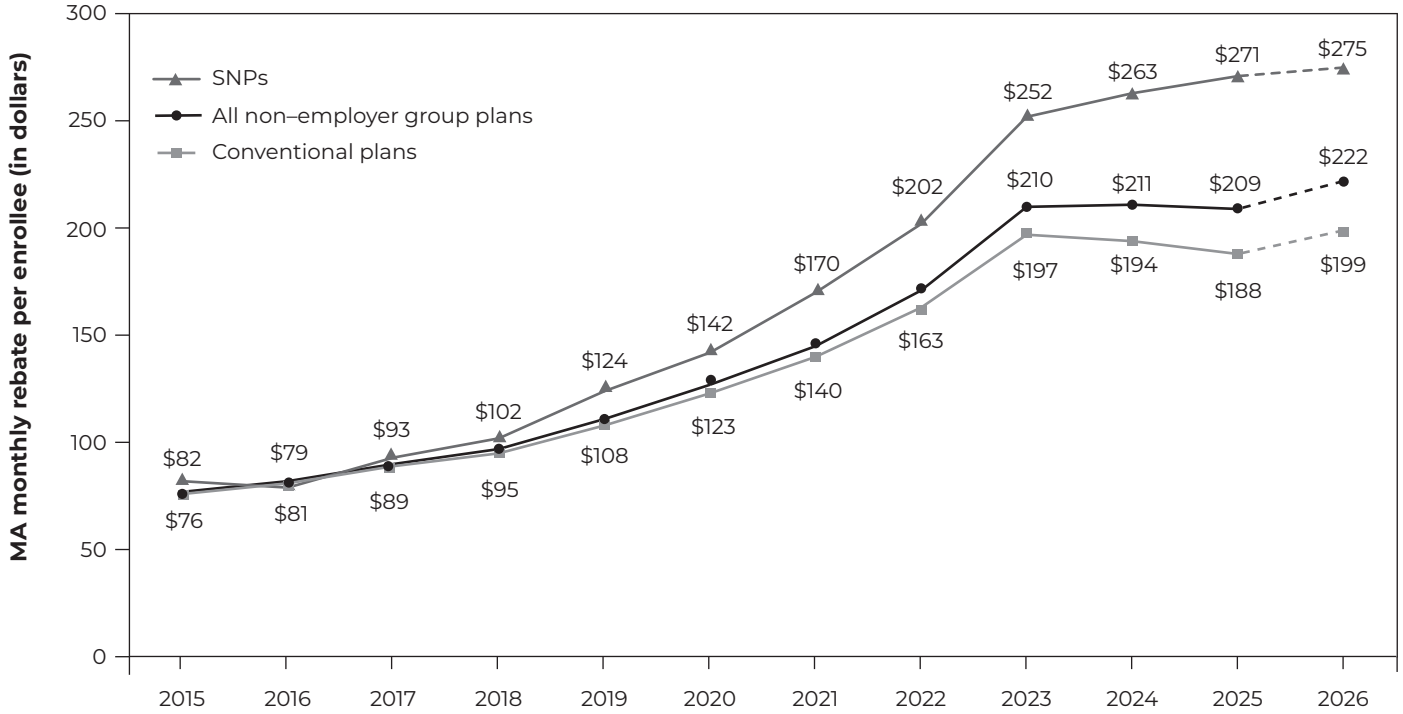
Beneficiaries in our focus groups consistently report being confused about their coverage options and overwhelmed regarding the number of choices they face (NORC at the University of Chicago 2025). Across sectors, studies of marketing and consumer behavior have consistently indicated that "choice overload" can both be distressing and lead to suboptimal decisions, and the potential negative consequences of "too much choice" are amplified in sectors with a high degree of complexity, such as health care (Dar and Gul 2025, Frank and Lamiraud 2009, Misuraca et al. 2024, Reutskaja et al. 2020, Schlesinger et al. 2014, Taylor et al. 2016). One published literature review found that as the number of health plan choices increases, individuals are less likely to correctly identify the lowest-cost plan, less likely to review all of their coverage options, and more likely to select a plan that is clearly inferior to another available plan (Taylor et al. 2016). Included studies also found that individuals had difficulties even when the increase in the number of choices was relatively small, for example, from around 5 choices to around 10, and that many people have difficulty understanding concepts such as coinsurance and deductibles, tend to put too much emphasis on premiums over cost sharing when picking plans, and are susceptible to how plan choices are presented. Another study compared growth in MA enrollment with growth in the number of MA plans and found that enrollment grew faster in areas where the increase in the number of plans was relatively small (fewer than 15 plans), suggesting that beneficiaries were more likely to enroll when they had a more manageable number of choices (McWilliams et al. 2011). The Commission has expressed concern that, given the large number of plan choices, beneficiaries may find it difficult to discern differences in plan benefit packages in order to make an optimal choice (Medicare Payment Advisory Commission 2023b).

MA rebates, which plans use to provide supplemental benefits to enrollees, are projected to reach record levels in 2026

MA plans that bid below their benchmark are paid a "rebate" equal to a share of the difference between the plan's bid and the benchmark (as low as 50 percent but typically either 65 percent or 70 percent, depending on a plan's quality ratings). Plans are required to use rebates to provide supplemental benefits. These benefits have the potential to address health challenges

FIGURE 12–2

Monthly MA rebates are projected to reach a record high in 2026



Note: MA (Medicare Advantage), SNP (special-needs plan). "Conventional plans" excludes employer group plans and special-needs plans. "Special-needs plans" excludes employer group plans and non-special-needs plans. The plan rebate is the per beneficiary per month amount that the plan offers as premium-free supplemental benefits. Rebate dollar amounts are based on the enrollment-weighted national average and reflect plan risk scores in plan bids but do not reflect payment adjustments for sequestration. We use plans' actual enrollment to calculate average rebates for 2015 through 2025. The average for 2026 is weighted using enrollment projections from plans' bids. Enrollment weights are based on months of enrollment for MA enrollees without end-stage renal disease (ESRD) since plans do not receive rebates for members with ESRD. Dollar amounts are nominal figures, not adjusted for inflation. After adjusting for inflation, rebates in 2025 for conventional plans were about 1.7 times their 2016 level, and those for SNPs were about 2.5 times their 2016 level.

Source: MedPAC analysis of MA plan bid data.

that many seniors face as they age (such as vision and hearing issues) and for which there is limited coverage under FFS Medicare. Surveys of MA enrollees, as well as MedPAC's beneficiary focus groups, generally show that enrollees appreciate having access to the supplemental benefits that plans use rebates to offer (Commonwealth Fund 2025, NORC at the University of Chicago 2025). For 2026, almost 100 percent of plans bid below their benchmarks and therefore receive rebates.[21] Average MA rebates are expected to reach an all-time high in 2026. Across all non–employer group plans, the average rebate is expected to be $222 per member per month (PMPM), up from $209 in 2025 (dollar values not adjusted for inflation).[22] The average rebate for conventional plans (i.e., non-employer group, non-special-needs plans) in 2026 will be about $199 PMPM, up from $188 in 2025; for special-needs plans, the average rebate will be about $275, up from $271 in 2025.[23]

MA rebates have grown dramatically over the last decade (Figure 12-2). The average rebate paid to conventional MA plans in 2026 will be nearly two and a half times the amount paid to MA plans in 2016 (not

accounting for inflation). (Accounting for inflation, rebates in 2025 for conventional plans were about 1.7 times their 2016 level, and those for SNPs were about 2.5 times their 2016 level.) The increase is due primarily to rapid growth in rebates between 2018 and 2023; average rebates for conventional plans rose from $95 PMPM in 2018 to $197 in 2023; they then declined slightly to $188 PMPM in 2025 before rising again to $199 in 2026 (Figure 12-2, p. 363). For SNPs, the average rebate is significantly higher—$275 PMPM in 2026—and has increased in every year since 2016.

MA plans are required to use the rebate to provide supplemental benefits for their enrollees. Supplemental benefits can be organized into four broad categories: reduced cost sharing for Part A and Part B services, reduced Part B premiums, enhanced Part D benefits (including reduced Part D premiums), and coverage of non-Medicare services (services not covered under FFS Medicare, such as dental, vision, and hearing services).[24] Plans have flexibility regarding which supplemental benefits they offer and the generosity of the coverage. Plans also use some of the rebate to cover their administrative costs and profit.[25] In the bids they submit to CMS, MA plans must report how much of their rebate they plan to allocate to each of the four broad categories of supplemental benefits. Plans' rebate allocations are a projection of how the plan anticipates rebate dollars will be used but might not reflect actual use. In 2026, the Medicare program will pay conventional plans approximately $2,391 per beneficiary per year for supplemental benefits; plans report that they expect to use $199 of those funds (about 8 percent) for plan administrative expenses and profit. Medicare will pay SNPs about $3,306 per beneficiary per year for supplemental benefits, and plans expect to use about $417 (about 13 percent) for plan administrative expenses and profit.

In 2026, as in most previous years, conventional MA plans project allocating the largest share of their rebate dollars ($81 PMPM) to reducing cost sharing for Part A and Part B services (Table 12-4). That allocation represents a similar share of the total rebate as in 2025 (40 percent in 2026 vs. 41 percent in 2025) (Table 12-4).[26] The lower cost sharing that plans use rebates to offer can provide MA enrollees with additional financial protection. For conventional plans, the projected rebates allocated to cost-sharing reductions include coverage for the beneficiary maximum out-of-pocket (MOOP) cap on plan-approved Part A and Part B expenses. In 2026, plans project that, on average, their liability for the MOOP will be $19 PMPM—equivalent to 8 percent of rebates (unchanged from 2025; data not shown) and 1 percent of projected plan payments (unchanged from 2025; data not shown).[27,28] Because cost-sharing reductions lower a beneficiary's OOP expenses, rebate dollars that are used to lower beneficiary cost sharing also lower a plan's MOOP liability. All cost-sharing reductions, including the MOOP, are subject to plan coverage policies. In certain circumstances, MA enrollees can be granted special enrollment periods that permit them to change plans midyear.[29] For beneficiaries who switch MA insurers midyear, their OOP spending contribution toward their MOOP limit is reset when they switch plans such that OOP expenses accumulated under their initial plan are not counted toward reaching the MOOP limit under the second plan. For beneficiaries who switch midyear between plan types offered by the same insurer, the insurer has discretion regarding whether beneficiary's OOP spending contribution toward the MOOP limit is reset. MOOP limits are not reset for beneficiaries who switch plans midyear but remain enrolled with the same insurer and in the same plan type.

Table 12-4 shows how plans expect to use rebate dollars, including any funds the plan expects to use for administrative costs and profit. In addition to the 40 percent they anticipate using to reduce cost sharing, conventional plans expect to use 25 percent for non-Medicare benefits like dental, vision, and hearing; 26 percent for Part D enhancements like lower premiums or cost sharing; and 9 percent to reduce the Part B premium for their enrollees. Accounting separately for plans' administrative costs and profits (data not shown), that amount equates to using about 35 percent to reduce cost sharing, 22 percent for non-Medicare services, 26 percent for Part D benefits, about 9 percent for Part B premiums, and about 8 percent for administrative expenses and profit.

Because most SNP enrollees are dually eligible for Medicare and Medicaid, many of their OOP costs are often covered by other programs: Medicaid generally covers Part A and Part B cost sharing and pays the Part B premium in most cases, and Medicare's Part D low-income subsidy typically covers the premium

TABLE 12–4

In 2026, conventional MA plans project using rebates primarily to reduce cost sharing and premiums; SNPs project using rebates to offer non-Medicare benefits

	Rebate (per member per month)			Share of total rebate	
	2025	2026	2026 percent change	2025	2026
All nonemployer plans					
Total	**$209**	**$222**	**6%**	**100%**	**100%**
Supplemental benefit type					
Cost sharing	64	66	4	31	30
Non-Medicare supplemental	95	98	3	45	44
Part D benefits	37	43	18	17	19
Part B premium	14	15	8	6	7
Conventional plans					
Total	**$188**	**$199**	**6%**	**100%**	**100%**
Supplemental benefit type					
Cost sharing	76	81	5	41	40
Non-Medicare supplemental	54	50	–7	29	25
Part D benefits	42	51	22	22	26
Part B premium	15	18	14	8	9
Special-needs plans					
Total	**$271**	**$275**	**2%**	**100%**	**100%**
Supplemental benefit type					
Cost sharing	29	32	12	11	12
Non-Medicare supplemental	213	212	0	79	77
Part D benefits	21	24	12	8	9
Part B premium	8	8	–6	3	3

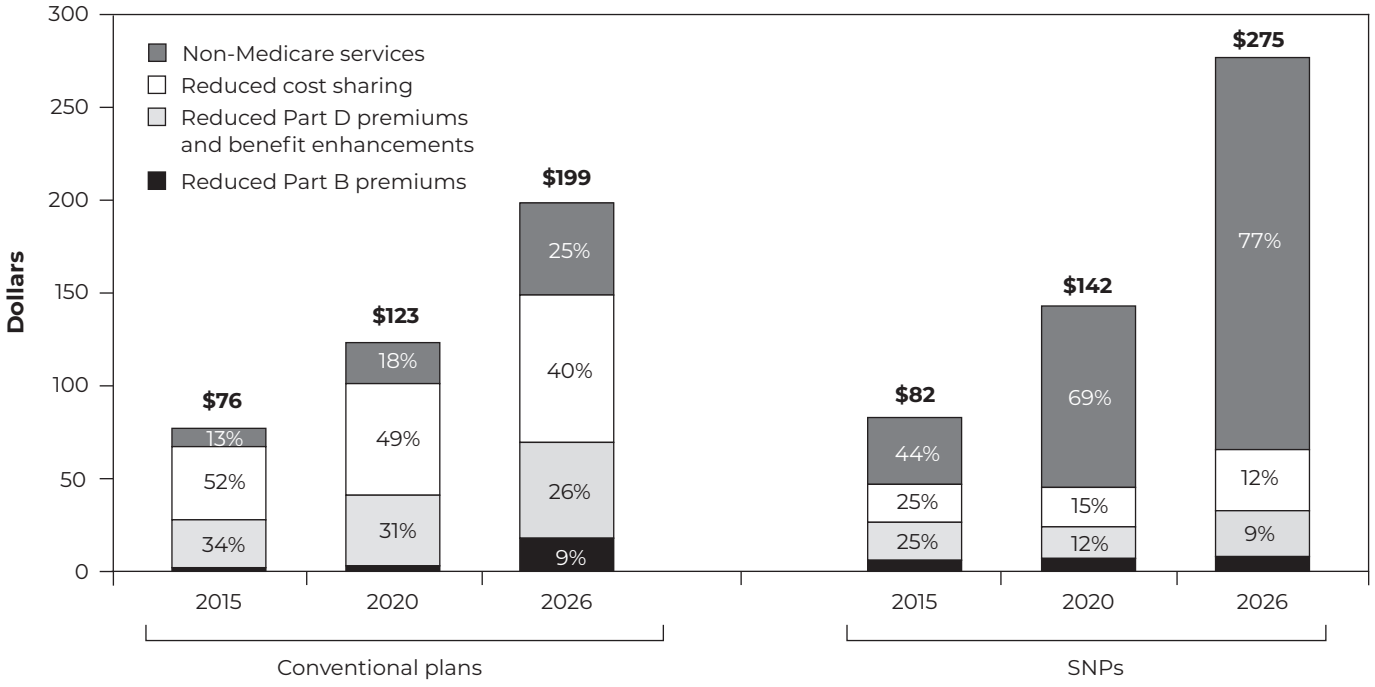
Note: MA (Medicare Advantage), SNP (special-needs plan). Employer group plans are not included. Amounts for cost sharing and non-Medicare supplemental benefits include plan costs for administration and profit. Cost-sharing amounts for conventional plans include plan projections of their liability for the cap on beneficiaries' out-of-pocket expenses. Rebate dollar amounts are based on the national average and reflect plan risk scores in plan bids but do not reflect payment adjustments for sequestration. We use plans' actual enrollment to calculate average rebates for 2015 through 2025. The average for 2026 is weighted using enrollment projections from plans' bids. Enrollment weights are based on months of enrollment for MA enrollees without end-stage renal disease (ESRD) since plans do not receive rebates for members with ESRD. We do not have reliable information about beneficiaries' use of these benefits. Components may not sum to totals due to rounding.

Source: MedPAC analysis of data from CMS on plan bids.

and all or most cost sharing for prescription drug coverage. As a result, SNPs have less reason than conventional plans to use their rebates to cover these costs. Instead, SNPs project allocating most of their rebate dollars ($212 PMPM, or 77 percent in 2026) to cover non-Medicare supplemental benefits such as dental, vision, or hearing services (Table 12-4). Although this amount is a slightly smaller share of the total rebate than in 2025 (79 percent), SNPs' projected spending on non-Medicare supplemental benefits has increased dramatically since 2015 (when non-Medicare supplemental benefits accounted for 43 percent of

FIGURE 12–3

MA plans allocate a substantial share of rebates to non-Medicare services



Note: MA (Medicare Advantage), SNP (special-needs plan). "Conventional plans" excludes employer group plans and special-needs plans. "Special-needs plans" excludes employer group plans and non-special-needs plans. The plan rebate is the per beneficiary per month amount that the plan offers as premium-free supplemental benefits. Rebate dollar amounts are based on the national average and reflect plan risk scores in plan bids but do not reflect payment adjustments for sequestration. We use plans' actual enrollment to calculate average rebates for 2015 and 2020. The average for 2026 is weighted using enrollment projections from plans' bids. Enrollment weights are based on months of enrollment for MA enrollees without end-stage renal disease (ESRD) since plans do not receive rebates for members with ESRD. Dollar amounts are nominal figures, not adjusted for inflation.

Source: MedPAC analysis of MA bid data.

SNPs' projected rebate allocation) (Figure 12-3). For 2026, SNPs allocated 12 percent of their rebates to reducing cost sharing, 9 percent to Part D benefits, and 3 percent to Part B premiums. Accounting separately for plans' administrative costs and profits (data not shown), that equates to about 10 percent for cost-sharing reductions, 66 percent for non-Medicare services, about 9 percent for Part D benefits, about 3 percent for Part B premiums, and about 13 percent for administrative expenses and profit.

In total, the Medicare program will pay MA plans (including conventional plans and SNPs) $2,660 per beneficiary in 2026 for supplemental benefits (including $263 per beneficiary per year for plan administrative expenses and profit). Accounting separately for administrative costs and profit, plans project using about 26 percent of these rebate funds to reduce cost sharing for MA enrollees, 38 percent for non-Medicare covered services, about 19 percent to enhance plans' Part D benefit through lower premiums or reduced cost sharing, about 7 percent to reduce MA enrollees' Part B premiums, and about 10 percent for administrative expenses and profit.

The increase in the average rebate per member, combined with rapid MA enrollment growth, has resulted in a substantial increase in the amount Medicare spends on rebates. We estimate that in 2025, Medicare paid MA plans approximately $84 billion in

rebates (accounting for 17 percent of non-ESRD plan payments).[30] Conceptually, the rebates paid to MA plans were originally intended to be a form of shared savings in which plans would be rewarded for providing Medicare benefits at a lower cost than would have been the case under FFS.[31] However, the Commission has shown that a large portion of Medicare's spending on MA rebates is financed by additional program spending rather than by savings derived from plan efficiencies (see "Higher payments to MA plans stem from favorable selection and coding intensity"). Because MA rebates are paid from the Medicare trust funds, they are partially financed by Part B premiums collected from all beneficiaries (including those in FFS Medicare). The Commission estimates that Part B premiums will finance about $13 billion of MA rebates in 2025, with nearly $6 billion coming from FFS beneficiaries who do not have access to the supplemental benefits financed by the rebates.[32]

MA supplemental benefits

As shown in Figure 12-3, MA plans—particularly SNPs—allocate a large fraction of rebate dollars to providing non-Medicare services as supplemental benefits. Coverage for vision, hearing, and dental services are some of the most common of these benefits: In 2025, nearly all MA enrollees (in both non–SNPs and SNPs) were in plans that offered some coverage of dental, vision, or hearing services (Ochieng et al. 2025). MA plans may also offer nonmedical supplemental benefits such as nonemergency transportation services, assistance paying for over-the-counter items, meals, and gym memberships.[33] The share of plans offering these types of benefits—and the share of enrollees in such plans—has risen as MA rebates have increased. These benefits have the potential to address health challenges that many seniors face as they age and for which there is limited coverage under FFS Medicare.

Relatively little is known about the extent to which MA enrollees use the many supplemental benefits available to them. The Commission has previously examined the data that Medicare collected before 2024 about MA enrollees' use of services and, for most supplemental benefits, found that the data were insufficient for examining utilization (Medicare Payment Advisory Commission 2025a). Most available evidence about MA enrollees' use of supplemental benefits comes from broad surveys or from analyses conducted by MA plans. A 2024 survey by the Commonwealth Fund found that 69 percent of MA enrollees used at least one supplemental benefit, but the survey did not shed light on which enrollees used which benefits (Commonwealth Fund 2024). The Commission's review of surveys and other studies found that the available evidence provides little insight into MA enrollees' use of supplemental benefits and leaves basic questions unanswered (Medicare Payment Advisory Commission 2025a).

Starting in 2024, CMS began implementing a series of actions to improve and increase the amount of data that plans report regarding supplemental benefits. Among these is a requirement that plans report their spending for a number of commonly offered supplemental benefits as part of the data used to monitor and enforce medical-loss-ratio (MLR) requirements. The data provide new insights about how much plans spend on supplemental benefits and the distribution of spending across benefits (see text box on MA MLR data, pp. 368–372, for more detail). In addition to the new MLR requirements, CMS also began, in 2024, collecting additional information about MA enrollees' use of supplemental benefits, including encounter records for dental services and other supplemental benefits and plan-level use and spending data as part of the Part C reporting requirements (Centers for Medicare & Medicaid Services 2024b, Centers for Medicare & Medicaid Services 2024c). Those data were not available at the time of our analysis, but we anticipate the data for 2024 will be available for analysis in 2026.

Higher payments to MA plans stem from favorable selection and coding intensity

The Commission estimates that MA payments (which combine base payments to cover Medicare benefits and the rebates that finance supplemental benefits) substantially exceed what would have been spent on MA beneficiaries had they instead been enrolled in FFS Medicare. Before applying any adjustments for favorable selection or coding intensity, we estimate that Medicare payments to MA plans have generally been similar to historical spending for FFS beneficiaries with both Part A and Part B coverage. But in aggregate, the effects of favorable selection (before any coding

MA medical-loss-ratio data show MA organizations spent roughly $24 billion on non-Medicare services offered as supplemental benefits in 2023

Medicare Advantage (MA) plans that bid below their spending benchmark receive a "rebate" from Medicare that they must use to provide supplemental benefits for their enrollees. These benefits can include reduced cost sharing for Part A and Part B services, reduced Part B and Part D premiums, enhanced Part D benefits, and coverage of non-Medicare services (services not covered under fee-for-service (FFS) Medicare, such as dental, vision, and hearing). Historically, there has been little information about how plans use the rebates they receive from Medicare and how much they spend on various types of supplemental benefits. The new data show that, across the non-Medicare services offered as supplemental benefits, MA plans spent the most on dental benefits. Non–primarily health-related benefits accounted for the second-most spending; these benefits are more commonly offered by special-needs plans (SNPs) than by conventional plans, and the data suggest that a large share of the spending was associated with benefits offered under the MA value-based insurance design (MA–VBID) demonstration, which concluded at the end of 2025. Despite the new insights enabled by these data, there are limitations to the questions they can be used to answer. Data on MA enrollees' use of supplemental benefits is not yet available and will be important for assessing whether Medicare's spending for supplemental benefits produces good value for Medicare beneficiaries and the taxpayers who fund the program.

MA medical-loss-ratio data provide new, but limited, information about plans' spending on supplemental benefits

Starting in 2024, CMS began requiring MA plans to report their expenditures on supplemental benefits as part of the data used to monitor and enforce medical-loss-ratio (MLR) requirements.[34] Under the new requirements, MA organizations (MAOs) are required to report, for each contract, their expenditures for 16 non-Medicare services that are commonly offered as supplemental benefits, as well as their expenditures for special supplemental benefits for the chronically ill (SSBCI) and "all other primarily health-related supplemental benefits" (a total of 18 reporting categories). The MLR data are collected at the end of the calendar year following the year in which benefits are provided (e.g., data pertaining to plans' spending in 2023 were collected at the end of 2024). In contrast to bid data, which include plans' projections of expected spending, MLR data reflect MAOs' actual spending during a year. The new data represent the first time that information about plans' actual spending for supplemental benefits has been available.

However, the data have several limitations. One limitation is that the data are reported at the contract level. MA contracts can consist of multiple plans and can span wide geographic areas. Contract-level reporting means that we cannot assess how spending on supplemental benefits varies at the plan or enrollee level. Because MA contracts can comingle conventional plans, SNPs, and employer plans, it is difficult to answer certain questions such as how spending by SNPs compares with spending by conventional plans. Because employer plans do not submit bids, we do not have a basis for accurately estimating the share of the rebate that those plans expected to allocate to non-Medicare services, making it difficult to compare plans' rebate revenue with their expectations and expenditures.

One potential use of the MLR data could be to assess how spending by MAOs compares with the rebates they received from Medicare. However, several factors make it difficult to use the data for this purpose. One barrier is that the data do not disaggregate information about how much plans spent on reducing cost sharing for their members (plan bids show that conventional plans expected that a majority of rebate dollars would be used to reduce cost sharing). In its rulemaking, CMS chose not to collect this information because it assumed it

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MA medical-loss-ratio data show MA organizations spent roughly $24 billion on non-Medicare services offered as supplemental benefits in 2023 (cont.)

would be "exceedingly difficult for MA organizations to separately identify and track" such spending (Centers for Medicare & Medicaid Services 2022c). As a result, we cannot know the total amounts that insurers spent on all supplemental benefits; we can assess spending only for the subset of benefits that CMS requires insurers to report separately.

An additional barrier is that the spending reported in the MLR data includes benefits that are financed by rebates and benefits for which enrollees paid an additional premium.[35] Further, the data include only the amount the plan spent on the benefit, excluding any portion of the rebate the plan kept to cover its administrative costs or profit. In 2026, of the rebate dollars that plans project using to provide non-Medicare services as supplemental benefits, conventional plans project that 13 percent will be used for plan administrative costs and profit; SNPs project using 14 percent.

A further limitation of the data is that some of the reporting categories—including some with very high levels of spending—are somewhat broad, making it difficult to understand what types of services taxpayer dollars are being used for. (For example, non–primarily health-related benefits, which can encompass a range of items and services, are grouped into just two categories.) Last, because the data lack measures of utilization, the MLR data alone cannot tell us anything about how much MAOs are spending per user or per unit (MAOs report per member per month amounts, but these provide limited insight because benefit eligibility, access, and use can vary widely across MA plans). Altogether, although the new data provide several valuable new insights into insurers' overall spending on supplemental benefits, data limitations significantly restrict the types of analyses for which the data can be used; the limitations underscore the ongoing importance of the other data-collection efforts that CMS has begun implementing (e.g., in the encounter data and Part C and Part D reporting requirements).

A large share of supplemental-benefit spending is on non–primarily health-related benefits

We analyzed the 2023 MLR data for a subset of MA contracts to characterize MAOs' spending on non-Medicare services offered as supplemental benefits. We limited our analysis to contracts for HMOs, local and regional preferred provider organizations (PPOs), and private fee-for-service (PFFS) plans. We excluded contracts that included either Medicare Medical Savings Account (MSA) plans or end-stage renal disease special-needs plans (ESRD SNPs) because the rules for how these plans are paid and how they may use rebates differ from other types of MA plans (42 CFR 422.102(a)(1), 42 CFR 422.304(c)(1)). After these exclusions, our sample included 98 percent of total 2023 MA enrollment and 98 percent of reported supplemental-benefit spending. We estimate that, in 2023, Medicare paid approximately $74 billion in rebates to the contracts included in our analysis.

We then summed the total supplemental-benefit spending that MAOs reported for non-Medicare services (Table 12-5, p. 370). For 2023, MAOs reported spending roughly $24 billion on the non-Medicare services they offered as supplemental benefits (i.e., supplemental benefits other than cost-sharing and premium reductions). Dental benefits accounted for the most spending, encompassing more than a quarter (28 percent) of the total reported spending. This finding aligns with MedPAC's previous analyses of MA bids, which have shown that dental benefits account for a significant portion of conventional MA plans' projected spending on non-Medicare services (Medicare Payment Advisory Commission 2025a).

The next-largest category of spending reported by plans was for "non–primarily health-related" benefits. In 2023, plans spent nearly $6 billion on these types of benefits—accounting for roughly a quarter (24 percent) of all reported supplemental-

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MA medical-loss-ratio data show MA organizations spent roughly $24 billion on non-Medicare services offered as supplemental benefits in 2023

TABLE 12–5

MA organizations spent approximately $24 billion on non-Medicare services as supplemental benefits in 2023

Benefit category	Total spending (billions)	Percent
Dental	$6.6	28%
Non–primarily health related	5.8	24
SSBCI	*0.7*	*3*
Other non–primarily health related	*5.1*	*21*
Over-the-counter items	4.4	18
"Other" primarily health related	2.0	8
Vision	1.8	7
Transportation	0.9	4
Fitness	0.7	3
Hearing	0.7	3
Meals	0.6	3
Routine foot care	0.1	<1
Worldwide coverage	0.1	<1
Personal Emergency Response Systems	0.1	<1
Acupuncture	0.1	<1
Remote-access technologies	0.1	<1
Chiropractic care	0.1	<1
Health education	<0.01	<1
Smoking and tobacco cessation counseling	<0.01	<1
Total	**23.9**	**100**

Note: MA (Medicare Advantage), SSBCI (special supplemental benefits for the chronically ill). Includes spending reported by contracts for health maintenance organizations, local and regional preferred provider organizations, and private fee-for-service plans. Excludes spending reported by contracts that included either Medicare Medical Savings Account plans or end-stage renal disease special-needs plans. Components may not sum to totals due to rounding.

Source: MedPAC analysis of MA medical-loss-ratio data from CMS.

benefit spending. Non–primarily health-related benefits are relatively new in MA. For many years, supplemental benefits were required to be "primarily health related," meaning that their main purpose had to be "to prevent, cure, or diminish an illness or injury" (Centers for Medicare & Medicaid Services 2016). This definition included dental, vision, and hearing services but also included enhanced or expanded coverage of Medicare-covered services (e.g., additional days of inpatient care), health-related transportation services, fitness benefits, acupuncture, enhanced disease-management services, bathroom safety devices, posthospitalization meals, over-the-counter items, and other benefits. Beginning in plan year 2019, CMS broadened its definition of "primarily health related" to permit additional services that address physical impairments, lessen the functional or psychological

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MA medical-loss-ratio data show MA organizations spent roughly $24 billion on non-Medicare services offered as supplemental benefits in 2023 (cont.)

impact of injuries, or reduce avoidable health care utilization (Centers for Medicare & Medicaid Services 2018b). Under this new definition, plans can provide services such as adult day-care services, home-based palliative care, in-home support services, and support for caregivers of enrollees.

Beginning in 2020, as required by the Bipartisan Budget Act of 2018, MA plans were given the ability to offer non–primarily health-related items or services to chronically ill enrollees, so long as there is a "reasonable expectation of improving or maintaining the health or overall function of the chronically ill enrollee" (Centers for Medicare & Medicaid Services 2019). These benefits are referred to as special supplemental benefits for the chronically ill (SSBCI) and must be targeted to MA enrollees who (1) have one or more comorbid and medically complex chronic conditions that are life threatening or that significantly limit the overall health or function of the enrollee, (2) have a high risk of hospitalization or other adverse health outcome, and (3) require intensive care coordination. Examples of SSBCI include things like meals, food and produce, pest-control services, structural home modifications, or subsidies for rent or utilities (Centers for Medicare & Medicaid Services 2019). For 2023, MA plans reported spending just under $700 million on SSBCI—roughly 12 percent of total spending for non–primarily health-related benefits and just 3 percent of spending reported across all benefit categories.

The remainder of the roughly $6 billion spent on non–primarily health-related supplemental benefits was reported under a catch-all "other" (non-SSBCI) non–primarily health-related supplemental benefits category. In the MLR data for 2023, plans reported more than $5 billion in this category (88 percent of spending on non–primarily health-related benefits and 21 percent of all reported spending on supplemental benefits). This category likely consists primarily of spending for supplemental benefits offered under the MA–VBID demonstration, which could include many of the same benefits offered as SSBCI (such as food and produce, meals, pest-control services) but offered with additional regulatory flexibilities.[36] MA plans participating in the MA–VBID demonstration, which ran from 2017 through the end of 2025, were permitted to offer non–primarily health-related benefits and were given additional flexibility to target the benefits to enrollees on the basis of socioeconomic status (Centers for Medicare & Medicaid Services 2020b). A substantial share of MA plans that offered non–primarily health-related benefits in 2023 (especially D–SNPs) did so through the MA–VBID demonstration (ATI Advisory 2023). In 2023, 86 percent of D–SNP enrollees were in plans participating in the MA–VBID demonstration, and the model was the predominant pathway by which D–SNPs offered non–primarily health-related supplemental benefits (ATI Advisory 2023, Friedman et al. 2024, Laktas et al. 2024). Because the MA–VBID demonstration ended at the end of 2025, the share of spending reported in this category could change in future years. Consulting groups, researchers, and some MAOs have suggested that many benefits offered under the VBID will transition to being offered as SSBCI in 2026 (Friedman et al. 2024, Health Management Associates 2025, Schmidt and Graham 2025, UnitedHealth Group 2025).

The third-highest category of reported supplemental benefit spending in 2023 was for over-the-counter (OTC) items ($4.4 billion), which accounted for 18 percent of total reported spending. In recent years, it has been very common for OTC benefits to be offered in the form of a prepaid debit card, or "flex card," provided to enrollees by MA plans. Often, enrollees can use the cards for expenses related to a set of plan-defined supplemental benefits; it is particularly common for plans to combine OTC benefits with other benefits through these types of arrangements (ATI Advisory 2025, Yeh and Yen 2024). (Plans define which

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MA medical-loss-ratio data show MA organizations spent roughly $24 billion on non-Medicare services offered as supplemental benefits in 2023 (cont.)

benefits the cards can be used for, and the benefits can be primarily or non–primarily health related). Altogether, spending on non–primarily health-related benefits and OTC items accounted for more than 40 percent of reported supplemental benefit spending for 2023. MAOs' reported spending for most other categories of benefits was considerably lower: spending for vision, transportation, fitness, and hearing benefits—some of the most widely available benefits across MA plans—together accounted for less than $5 billion of total reported supplemental-benefit spending (about 17 percent).

For a sample of MA contracts, insurer-reported spending on supplemental benefits is in line with projections in plans' bids

One important question about MAOs' spending for supplemental benefits is how it compares with the rebates MA insurers receive from Medicare. As with medical spending, MAOs accept financial risk for their enrollees' use of supplemental benefits. If enrollees use their supplemental benefits more intensively than the plan expected, such that the cost of that use exceeds the rebate the plan received from Medicare, the plan bears the cost of the difference. If enrollees use their supplemental benefits less than expected and the cost to the plan is less than what the plan received in rebates, the insurer benefits. (Insurers may mitigate risk by, for example, entering into risk-sharing agreements with third-party vendors or providers of supplemental benefits). There could be cause for concern if plans' spending is consistently below the amount the plans received in rebates.

To assess this possibility, we identified a subsample of MA contracts and compared their reported spending with the rebates they received—which were estimated using information from their bids. Because employer plans do not submit bids, we limited our subsample to bids of plans in MA contracts that did not have any members enrolled in employer plans. Roughly one-third of MA enrollees from our full sample were included in our subsample.

Medicare paid the contracts in our subsample approximately $25 billion in rebates. On average, those contracts projected spending roughly 45 percent of their rebates—roughly $11 billion of the $25 billion—on non-Medicare services (plans projected allocating 53 percent of their rebates to non-Medicare services when administrative costs and profit were included). Looking at the MLR data for these contracts, we found that these contracts reported spending about $11 billion on non-Medicare services. In other words, we found that—in the aggregate—for a limited subset of contracts, plans' reported spending was roughly in line with the amount we would expect based on their bids. However, the results varied by contract and by insurer, with some insurers and contracts reporting spending that was higher or lower than the expected level (based on their bids). ■

differences) cause the risk scores of MA enrollees to overpredict what their spending would have been in FFS—increasing MA payments by an estimated 11 percent ($57 billion) above FFS spending in 2026. In addition, even after CMS applies the coding-intensity adjustment, diagnostic coding by MA plans overstates the differences in health conditions between MA and FFS enrollees that are used for risk scores—further increasing MA payments by an estimated 4 percent ($22 billion) above FFS spending in 2026.

MA payments in 2026 are projected to be 14 percent higher than what FFS spending would have been for MA enrollees

In 2026, Medicare's payments to MA plans will total a projected $615 billion.[37] That total includes payments

TABLE 12–6

MA payments estimated to be substantially above what FFS spending would have been due to the effects of coding intensity and favorable selection, 2026

	Share of FFS spending in 2026		
	Benchmarks	**Bids**	**Payments**
Overall estimate	124%*	95%*	114%
Estimated before coding and selection	107*	83*	99
Estimated coding effect	+4	+3	+4
Estimated favorable-selection effect	+12	+9	+11

Note: MA (Medicare Advantage), FFS (fee-for-service). The "overall estimate" of benchmarks, bids, and payments as a share of FFS spending incorporates all three components of the Commission's methodology for comparing payments: a base comparison of MA payments with FFS spending that standardizes for differences in risk scores and geography but does not account for the effects of coding intensity and favorable selection; an adjustment to that base comparison for coding intensity; and an adjustment for favorable selection. The values in the "estimated before coding and selection" row reflect estimates using only the base comparison, without adjusting for the effects of coding intensity and favorable selection. The values in the third and fourth rows are the additive adjustments to the base comparison for the effects of coding and selection. Estimates of payments include beneficiaries with end-stage renal disease (ESRD). More details on our methodology can be found later in this chapter and in the technical appendixes to this chapter. Components may not sum to totals due to rounding.
* Estimates of benchmarks and bids relative to FFS spending do not include employer plans or enrollees with ESRD because MA plans do not submit bids for those enrollees.

Source: MedPAC analysis of data from CMS on plan bids, enrollment, benchmarks, FFS expenditures, and risk scores.

for all enrollees, including those with ESRD. We estimate that, because of differences between MA and FFS stemming from favorable selection and coding intensity, Medicare spends 14 percent more for MA enrollees than it would spend if those beneficiaries were enrolled in FFS Medicare, a difference that translates to a projected $76 billion—or 12 percent of total payments to MA plans—in 2026.[38] The payments above FFS spending comprise a large share of the funding for plan rebates in 2026, which we estimate to be 17 percent of FFS spending and 15 percent of total payments to plans. These higher payments relative to FFS Medicare vary significantly across MA organizations (as shown by the variation in the effects of coding intensity across MA organizations, among other factors).

Importantly, these payments above what would have occurred in FFS Medicare are not an estimate of plan profits and administrative expenses. Instead, these additional payments are the primary reason that plans are able to provide generous supplemental benefits and better financial protection for many MA enrollees, which help attract enrollees and increase plans' total revenues.

We reach this estimate by first projecting total payments ($615 billion) to MA plans in 2026. We obtain this number by using the Trustees' projections of MA enrollment and MA payments per capita (Boards of Trustees 2025).[39] We project that those payments, on average, will be equal to about 99 percent of FFS spending in 2026 (Table 12-6), after standardizing for differences in risk scores and the counties of residence between MA and FFS beneficiaries. Benchmarks and bids will be 107 percent and 83 percent of FFS spending, respectively. Those estimates are calculated before accounting for any inaccuracies in the risk-adjustment model used for payment.

However, to accurately compare MA and FFS spending, we must ensure that the two populations are comparable by accounting for differences in coding intensity and favorable selection. "Coding intensity" refers to the tendency for more diagnosis codes to be recorded for MA enrollees, which causes risk scores for the same beneficiaries to be higher when they are enrolled in MA than they would be in FFS. "Favorable selection" into MA occurs when beneficiaries whose risk scores overpredict their spending tend to enroll

in MA; it is the extent to which, if MA enrollees were in FFS, their risk-standardized spending would be lower than the FFS average; that is, it captures MA enrollees' preexisting tendency for lower spending before any intervention from MA plans (including coding intensity or plan management). As in prior years, we have made technical refinements to our methods for estimating coding intensity and favorable selection, and these updates are reflected in both projected and historical comparisons of MA payments and FFS spending.[40]

Accounting for greater coding intensity and favorable selection in MA increases our projections of benchmarks, bids, and plan payments as a share of what FFS spending would have been for MA enrollees. Indeed, we project that benchmarks in 2026 are 124 percent of what FFS spending would have been, indicating that MA plans bid against an amount that is 24 percent more, in aggregate, than what their enrollees would have cost if they were in FFS Medicare (Table 12-6, p. 373). Actual MA payments in 2026 are an estimated 114 percent of FFS spending because nearly all plans bid below those benchmarks. Plan bids are typically far below their benchmarks but can vary (Medicare Payment Advisory Commission 2022).[41]

Our projection of the payment difference between MA and FFS for 2026 (14 percent) is lower than the projection we reported last year for 2025 (20 percent). That difference stems largely from a lower estimate of the effect of coding intensity on payments in 2026. That change is primarily due to the completed phase-in of the V28 risk model and the availability of new risk-score data that show slower growth in MA risk scores under the prior risk model in recent years. The Commission has supported the change to the V28 risk model, and our lower estimated payment difference indicates that V28 is having the intended effect of reducing the impact of differences in MA and FFS diagnosis coding on payments. (Medicare Payment Advisory Commission 2025b). This effect is discussed in greater detail in our estimate of coding intensity (p. 390).

MA bids and rebate levels are consistent with both plan efficiencies and higher payments from coding and selection

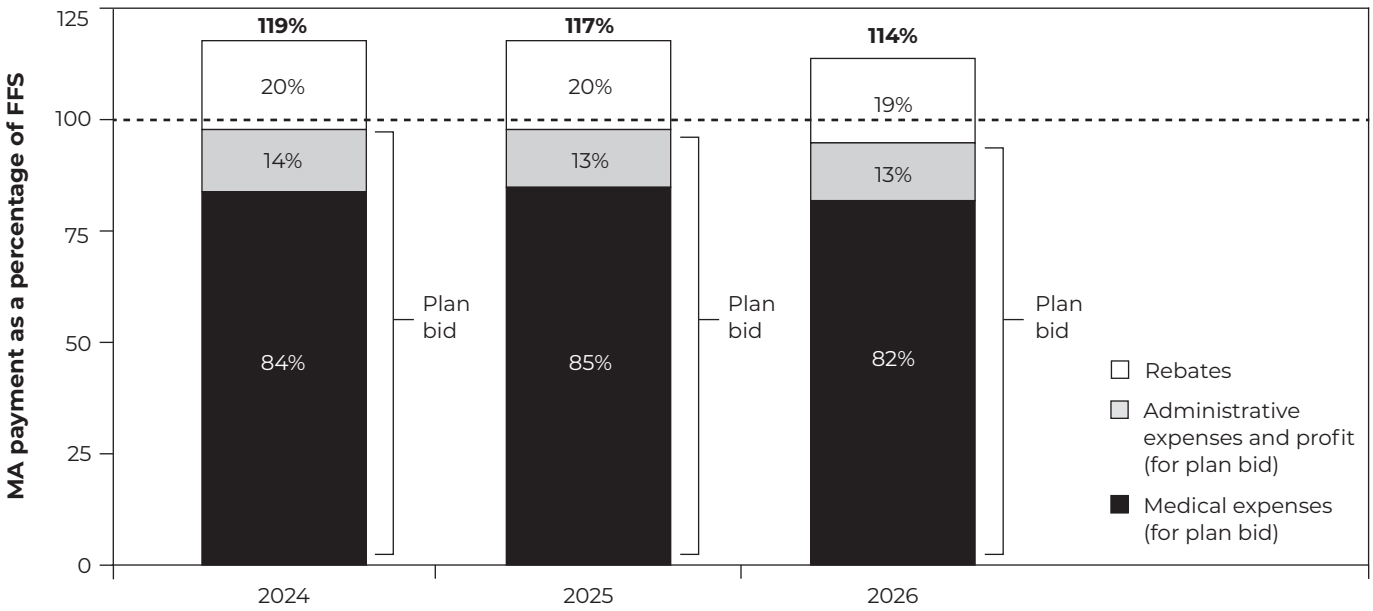
We project that—after accounting for coding intensity and favorable selection—plan bids ($1,132 per enrollee per month) in 2026 are 95 percent of what FFS spending would have been for MA enrollees (Table 12-6, p. 373). In other words, plans are offering to provide the standard Medicare benefit for an estimated 5 percent less than it would cost the Medicare program to cover their enrollees in the FFS program. Bids in 2026 were the lowest relative to FFS that we have estimated in recent years. For example, we estimate that bids were about 98 percent of FFS spending in 2024 and 97 percent of FFS spending in 2025 (data not shown). This decrease in relative bids coincides with the phase-in of the V28 risk model, which decreased plan risk scores. On a risk-adjusted basis, lower risk scores caused plan benchmarks to be lower than they otherwise would have been, and it appears that plans responded to their lower risk-adjusted benchmarks with lower bids.[42] Plan bids in 2026 are projected to be 23 percent lower than risk-adjusted benchmarks, on average, unchanged from 2025 despite the downward pressure on risk-adjusted benchmarks in 2026 (data not shown).

Altogether, our estimates suggest that plans were able to maintain their aggregate level of rebates ($222 per enrollee per month) in 2026 by adjusting their bids (and, in fact, rebates reached a new record high) despite the complete phase-in of the V28 risk model. At the same time, the program's overall payment difference between MA and FFS fell during the years of V28 implementation. We estimate that the Medicare program paid MA plans 21 percent more than what FFS spending would have been in 2023 (the year before the transition to V28 began), which is projected to fall to 14 percent more than FFS spending in 2026 (when the model was fully implemented). Our estimates suggest that, overall, plans have largely absorbed or adapted to those lower payments in order to achieve similar levels of rebates that fund supplemental benefits to their enrollees. Those estimates reflect the average experience in 2026. Experiences may vary by market, and the Commission will continue to monitor the effects of changes in MA payments.

Further insight into plans' efficiency in providing the standard Medicare benefit relative to the FFS program can be obtained using the information that plans report in their bids. Bids represent each plan's estimate of their projected cost of providing the standard Medicare benefit to their enrolleest, including the amounts they expect to spend on their enrollees' medical expenses, administrative costs, and profit. Figure 12-4 reports plans' overall projected medical expenses and

FIGURE 12–4

Higher MA payments relative to FFS are used to finance supplemental benefits, 2024 to 2026



Note: MA (Medicare Advantage), FFS (fee-for-service). Estimates of MA payments relative to what spending would have been in FFS incorporate all three components of the Commission's methodology for comparing MA payments with FFS spending: a base comparison of MA payments with FFS spending that standardizes for differences in risk scores and geography; an adjustment to that base comparison for favorable selection; and an adjustment for coding intensity. MA payments have two components: the bid and the rebate. Estimates of medical expenses and administrative expenses and profit relative to FFS spending break out the bid portion of plans' payments into those two components using the itemization that plans report when submitting their bids. Those separate components, along with the rebate portion of plans' payments, are then compared with the same estimate of what FFS spending would have been for MA enrollees, which is used as the denominator for the comparison of total MA payments to FFS spending. Because plans do not submit bids for beneficiaries with end-stage renal disease and do not receive rebates for these beneficiaries, the figure excludes these beneficiaries. The rebate component contains administrative expenses and profit (10 percent of the total rebate in 2024, 2025, and 2026), which is not reflected in the administrative expenses and profit component for the plan bid. Components may not sum to totals due to rounding.

Source: MedPAC analysis of Medicare enrollment, Medicare claims spending, MA bid data, and risk-adjustment files.

costs from administration and profits for 2026, and it compares those expenses with the Commission's estimate of what FFS spending would have been for MA enrollees. Our 2026 projections of MA payments and FFS spending, together with plans' projections of their costs included in their bids, are consistent with plans reducing their enrollees' medical expenses by 18 percent below what they would have been if enrollees were in FFS Medicare (Figure 12-4). Efficiencies in plans' total costs of providing the standard Medicare benefit, including medical expenses, profit, and administrative costs, are smaller. Plans' total cost of providing medical benefits are projected to be 5 percent below what FFS spending would have been for MA enrollees in 2026 (Table 12-6, p. 373). The difference of 13 percentage points is accounted for by plans' administrative costs and profit. Plans reported that 13 percent of their bids were for administrative costs and profit in 2026, unchanged from 2025. Plans may have an incentive to understate the administrative expenses and profits reported in their bids, for example, by reclassifying some profits retained through vertical integration arrangements (i.e., payments to plan-owned providers)

(Frank and Milhaupt 2023, Frank and Milhaupt 2022). Therefore, the administrative expenses and profits reported in plan bids may be a lower bound on the portion of bids that are accounted for by those items.

One way to assess the validity of the Commission's estimate of MA payments relative to FFS spending is to verify that the overall estimate is consistent with aggregate data from several sources, including plan bids, overall rebate levels, and studies of MA plans' efficiencies in reducing the medical spending of their members relative to FFS. As just described, comparing plans' bids with our estimates of what FFS spending would have been for MA enrollees implies that medical efficiencies were between 15 percent and 18 percent on average between 2024 and 2026. In other words, our estimates are consistent with (1) plans achieving material efficiencies in their medical expenses relative to FFS and (2) higher payments from selection and coding. Without accounting for the effects of favorable selection and coding, plans' bids would have indicated that plan medical spending projections would be 28 percent below FFS spending in 2026—far more than the 18 percent medical spending reductions that our analysis finds for 2026. We reviewed recent studies to assess whether the Commission's estimates of MA plans' medical spending reductions relative to FFS were supported by the literature. The studies we reviewed generally did not indicate that MA plans reduce their enrollees' medical expenses by nearly 30 percent on average, indicating the implausibility of estimates that do not account for selection and coding.

We found that the weight of the recent evidence on MA plans' medical spending reductions is in line with the Commission's estimates. Three recent studies we identified found estimates of MA plans reducing their enrollees' medical expenses, estimates that ranged from 12 percent to 16 percent, similar to the 15 percent to 18 percent we estimated by comparing the components of plan bids to the Commission's estimate of what FFS spending would have been for MA enrollees.[43] Overall, the studies indicate that substantial effects of coding and selection are needed to explain the bid and rebate payments observed in the MA market.

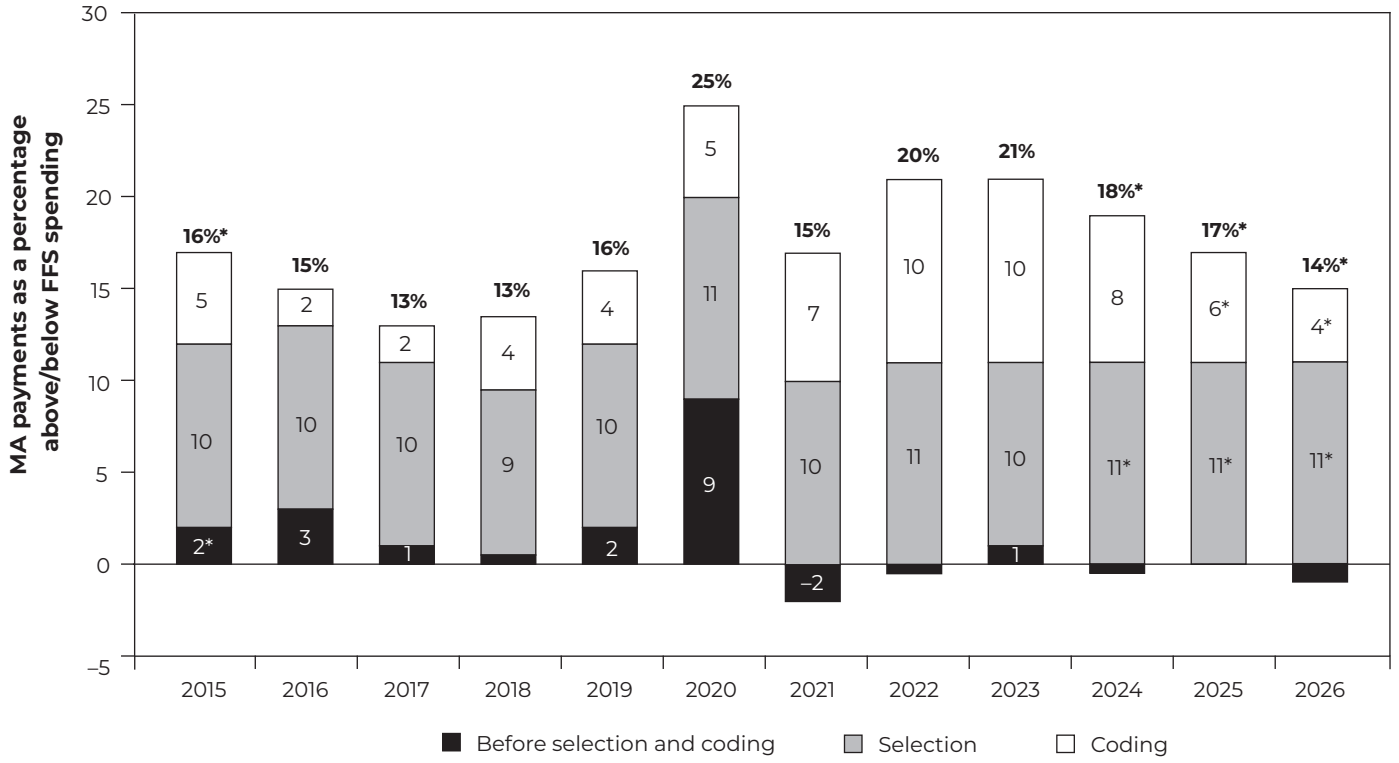
Our review included two recent white papers (Inovalon 2025, Teigland et al. 2025a) and one recent peer-reviewed study that estimated the effect of MA enrollment on medical spending (Jung et al. 2025). Both white papers examined the combined effect of MA enrollment on medical and prescription drug spending, and both papers used a study design that controlled for preexisting differences between a sample of MA enrollees and a FFS comparison group. One white paper focused on the non-dual-eligible population and found that MA plans reduced spending by 12 percent relative to FFS (Teigland et al. 2025a). The second white paper included non–dually eligible and the dual-eligible population in their sample and found that MA plans reduced spending by 10 percent relative to FFS, including a 16 percent reduction in spending for nonprescription medical costs (Inovalon 2025).[44,45] Neither white paper found spending reductions for prescription drugs. The peer-reviewed study by Jung and colleagues used MA encounter data to examine differences in spending between MA and FFS beneficiaries using a sample of MA and FFS beneficiaries from every state. That study found 13 percent lower spending in MA relative to FFS when controlling for some differences in beneficiary characteristics.[46] While these studies were the best available recent evidence at the time of publication, they are subject to limitations. The two white papers used small, nonrepresentative samples for their study populations, and the study by Jung and colleagues did not include all types of medical spending and only partially accounted for differences between the MA population and FFS comparison group. The Commission will continue to monitor this literature.

Since 2015, MA payments have substantially exceeded what FFS spending would have been

Figure 12-5 shows that since 2015, payments to MA plans have been substantially above the amount FFS Medicare would have spent for the same beneficiaries, primarily due to the effects of favorable selection and coding intensity. Throughout the 11-year period from 2015 through 2026, we estimate that MA payments were more than 10 percent above FFS spending for comparable beneficiaries in each year. In 2022 and 2023, relative MA payments reached 20 percent and 21 percent above FFS spending, respectively. This change is largely explained by an increase in the effect of coding intensity. However, the phase-in of the V28 risk model reduced the effect of coding intensity starting in 2024. For 2025, the lower effect of coding intensity resulted in MA payments that are a projected 17 percent

FIGURE 12–5

Higher MA payments relative to what estimated spending would have been in FFS, since 2015



Note: MA (Medicare Advantage), FFS (fee-for-service). Estimates of MA payments relative to what spending would have been in FFS before selection and coding are less than 0.5 percent for 2018, 2022, 2024, 2025, and 2026. We include the effects of selection and coding for beneficiaries with end-stage renal disease in all years, but we do not include their "before selection and coding" effects between 2015 and 2022. Components may not sum to totals due to rounding.
* Specified values were derived from projected data (for 2023 to 2025) or earlier versions of the methodologies for estimating each component (for 2015). Values without an asterisk were estimated using historical data and the current and most comprehensive version of the methodology for estimating each component. See text for details.

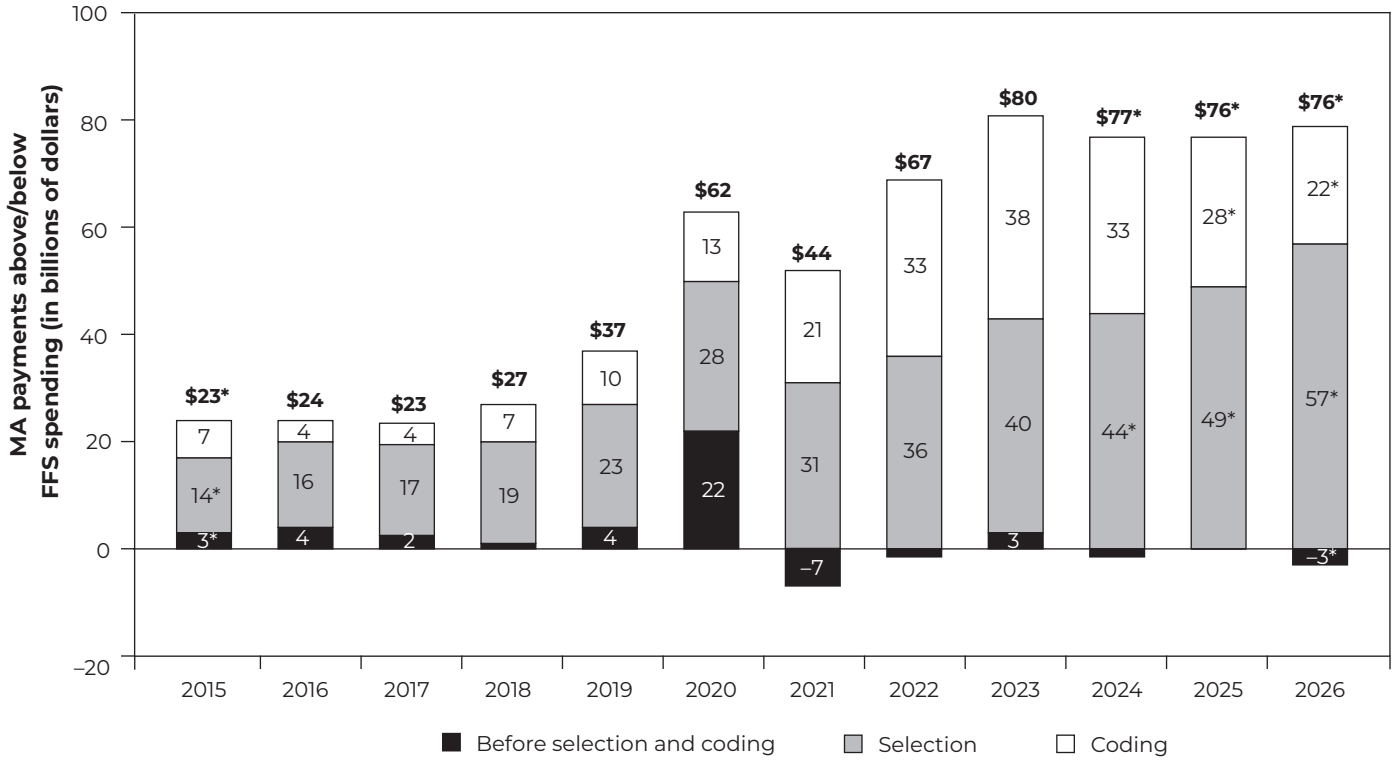
Source: MedPAC analysis of Medicare enrollment, Medicare claims spending, and risk-adjustment files.

above what would have occurred in FFS Medicare, a decrease from our projection of 20 percent above FFS spending in our March 2025 report to the Congress (Medicare Payment Advisory Commission 2025b). This year's lower estimate for 2025 is almost entirely due to a lower estimated effect of coding intensity in that year, which is explained in the text box "Updates to coding-intensity estimates reflect newly available data and other factors" (pp. 392–393). The V28 risk model will be fully phased in by 2026, further reducing the effect of coding intensity and resulting in MA payments that we project will be 14 percent above the amount that FFS Medicare would have spent for the same beneficiaries—the lowest relative payment since 2018.

Figure 12-6 (p. 378) shows the higher payments to MA plans in dollar terms relative to what spending would have been if enrollees were in FFS. (In estimating the payment amount above FFS spending, we included MA payments for beneficiaries with ESRD, which we estimate will account for about 6 percent of MA payments in 2026.[47]) We project that Medicare will pay

FIGURE 12–6

Estimated coding and selection have increased MA payments above what spending would have been in FFS



Note: MA (Medicare Advantage), FFS (fee-for-service). Estimates of MA payments relative to what spending would have been in FFS before selection and coding are less than $2 billion for 2018, 2022, 2024, and 2025. We include the effects of selection and coding for beneficiaries with end-stage renal disease in all years, but we do not include their "before selection and coding" effects between 2015 and 2022. Components may not sum to totals due to rounding.
* Specified values were derived from projected data (for 2024 to 2026) or earlier versions of the methodologies for estimating each component (for 2015). Values without an asterisk were estimated using historical data and the current and most comprehensive version of the methodology for estimating each component. See text for details.

Source: MedPAC analysis of Medicare enrollment, Medicare claims spending, and risk-adjustment files.

MA plans a total of $76 billion more in 2026 than the program would have spent if those enrollees had been in FFS Medicare.

Our current methodology for estimating MA payments relative to FFS spending has three components. These three components are estimated separately and are then combined in a single calculation of MA spending relative to FFS. First, we estimate a base comparison of MA payments relative to an estimate of FFS spending that is standardized for differences in average risk scores and geography but does not account for the effects of coding intensity and favorable selection. Second, we estimate the effect of favorable selection and use that estimate to adjust the base comparison of MA payments with FFS spending. Third, independently of the effects of favorable selection, we estimate the effect of coding intensity and use that estimate to make an additional adjustment to the base comparison. We use historical data to estimate the effect of each of the three components on MA payments for the most recent year for which data are available (2023 for the base-comparison and favorable-selection components, 2024 for coding intensity) and earlier years. We then project

Incorporating MA enrollees with ESRD into MedPAC's comparison of payments to MA plans relative to FFS spending

Our comparison of payments to Medicare Advantage (MA) plans relative to fee-for-service (FFS) spending has three components: a base comparison, an estimate of the effect of favorable selection, and an estimate of the effect of coding intensity. In prior years, all of these analyses excluded Medicare beneficiaries with end-stage renal disease (ESRD) because Medicare uses a separate payment system based on state rates rather than bids and benchmarks and uses a separate set of risk models to pay MA plans for enrollees with ESRD. We had not yet analyzed the effects of coding intensity and favorable selection under that risk model (see section "Medicare payment and MA plan costs for enrollees with ESRD" (p. 412) for more details about those payments). In this year's report, we are now incorporating estimates for MA enrollees with ESRD into each of the three components of our comparison of Medicare spending on MA and FFS.

While only 1 percent of the MA-eligible population are beneficiaries with ESRD, their average Medicare spending is high relative to the non-ESRD population. The share of MA enrollment among beneficiaries with ESRD has grown rapidly in recent years since the implementation of the 21st Century Cures Act, which allowed beneficiaries in dialysis status to enroll in an MA plan after starting dialysis treatment. (See section on "Medicare payment and MA plan costs for enrollees with ESRD" for more information about MA enrollees with ESRD, p. 412). CMS categorizes beneficiaries with ESRD into three groups based on their treatment status: dialysis, transplant (i.e., within the first 3 months of a kidney transplant), and functioning graft (i.e., 4 to 36 months after a kidney transplant). Unlike enrollees without ESRD, payments to MA plans for their ESRD population are not based on a plan bid. Instead, CMS pays MA plans for enrollees with ESRD based on a local risk-standardized average (e.g., rates for beneficiaries in dialysis and transplant status reflect the state-based spending average for a dialysis or transplant beneficiary with a risk score of 1.0). For enrollees in dialysis or transplant status, CMS pays plans using their projections of statewide average FFS Medicare spending for beneficiaries with ESRD who are in dialysis status. For enrollees in functioning-graft status, plans receive their non-ESRD MA county benchmark rate. CMS adjusts the base payment rate for each enrollee with ESRD using the beneficiary's risk score. CMS calibrates three separate ESRD risk models, one for each

(continued next page)

what we expect each component to be through 2026 in years for which data are not yet available, to provide the Congress with our best estimate for the current year. Those projections are subject to uncertainty. In future reports, we will provide updated payment comparisons for those years using historical data. More details on the methods used for estimating each of the components can be found later in this chapter and in the technical appendixes to this chapter.

Before accounting for the effects of coding intensity and favorable selection, MA payments are generally similar to what FFS spending would have been

The first component of the Commission's payment comparison involves constructing a base comparison of MA payments with FFS spending for beneficiaries with similar risk scores and counties of residence. We begin with that base comparison because it aligns with

Incorporating MA enrollees with ESRD into MedPAC's comparison of payments to MA plans relative to FFS spending (cont.)

of the dialysis, transplant, and functioning-graft populations (these models are different from the V24 and V28 risk models used for the population without ESRD). Beneficiary risk scores are calculated using the risk model that corresponds with their ESRD treatment designation during the month.

For the base comparison, we generally followed the same method of comparison we previously used for non-ESRD beneficiaries (Medicare Payment Advisory Commission 2023c), but we made some necessary modifications to account for differences in the payment system for MA enrollees with ESRD (for which plans do not bid against benchmarks). We aggregate the amount of spending for the FFS comparison group for each applicable MA enrollee with ESRD (based on having the same area of residence and risk score) and compare this amount with the aggregated MA payment amounts for those enrollees.

- For the dialysis and transplant populations, we estimated MA payments using CMS's state-based payment rates (which are risk standardized for a beneficiary with average risk, exclude indirect medical education payments, and apply CMS's user-fee deduction), the number of MA enrollee months in dialysis and transplant status within those states, and their risk scores.[48] For the FFS comparison group, we calculated the monthly average of risk-standardized spending per dialysis/transplant beneficiary at the state level.[49] State-level spending for the comparison group included nonclaims spending for provider incentive payments (e.g., shared-savings payments),[50] dialysis bad-debt payments, provider-settlement payments,[51] and an administrative add-on factor that reflects CMS's estimate of administrative costs when setting rates for non-ESRD MA enrollees.[52] We excluded medical education payments, organ-acquisition costs, and spending during hospice enrollment.[53] We used our calculation of the state-based risk-standardized spending average for the FFS comparison group and multiplied this average by the risk-adjusted (using MA enrollee risk scores) MA (dialysis and transplant status) enrollment months in each state. Thus, our total estimate compares the aggregate MA payments for dialysis and transplant enrollees with their corresponding aggregate FFS spending amounts (using the same risk score and state of residence).

- For the functioning-graft population, we estimated MA payments using CMS's county-level payment rates (which use county-level benchmarks for the non-ESRD population that are risk standardized for a beneficiary with average risk), the number of MA enrollee months in functioning-graft status within those counties, and their risk scores.[54] For the FFS comparison group, we calculated the monthly average of risk-standardized spending per functioning-graft beneficiary at the county and state level.[55] Because MA payment rates for the functioning-graft population are not based on a historical baseline of the population's FFS spending, CMS does not publish historical data on nonclaims spending for this population. Thus, our FFS comparison group included our imputations of nonclaims spending for provider incentive payments (e.g., shared-savings payments),[56] provider-settlement payments,[57] and administrative costs. In addition, we applied exclusions for estimates of spending in which MA plans are not liable (medical education payments, organ-acquisition costs, and spending during hospice enrollment).[58] Because the functioning-graft population divided into counties is relatively small and could produce unreliable results, we blended our county-based estimate of risk-standardized spending with our state-based estimate (similar to CMS's framework for non-ESRD credibility adjustment).[59] We used our blended calculation of local-area risk-standardized spending averages for the FFS

(continued next page)

Incorporating MA enrollees with ESRD into MedPAC's comparison of payments to MA plans relative to FFS spending (cont.)

comparison group and multiplied these averages by the risk-adjusted (using MA enrollee risk scores) MA functioning-graft enrollment months in each county. Our total estimate compares the aggregate MA payments for functioning-graft enrollees with their corresponding aggregate FFS spending amounts (using the same risk score and county of residence).

Using 2023 data, we found that MA ESRD payments were 103 percent of what they would have been in FFS—before the effects of selection and coding. For the dialysis and transplant populations (representing an estimated 91 percent of ESRD spending for MA enrollees in 2023), we found that MA payments were 101 percent of what they would been in FFS. The 1 percent estimate above FFS spending likely reflects a small degree of projection error in payment rates. We observed a sharp decline (44 percent) in total dialysis bad-debt payments in 2023, which may have been unexpected in CMS's projections and contributed to expected spending that was higher than actual spending. For the functioning-graft population (representing an estimated 9 percent of ESRD spending for MA enrollees in 2023), we found that MA payments were 123 percent of what they would have been in FFS. Developing an accurate local-area payment rate for the relatively small number of functioning-graft enrollees is challenging, and the non-ESRD county benchmark served as a poor proxy of risk-standardized spending for this population in 2023. The combined dollar-weighted estimates for all enrollees with ESRD resulted in an overall estimate of MA ESRD payments that were 103 percent of what they would have been in FFS in 2023 (before the effects of favorable selection and coding intensity). We use that 103 percent as the projected value of the base component for enrollees with ESRD for 2024 through 2026.

We conducted an analysis of favorable selection into MA for beneficiaries with ESRD using our simple method for switchers into MA from 2021 and 2023. (See Technical Appendix 12-B, p. 425, for more details about our simple method for estimating selection.) In each year, we estimated a selection percentage of either 99 percent or 100 percent, which suggests that there is not a meaningful selection effect (either favorable or adverse) among the ESRD population into MA. Therefore, for our MA payments relative to FFS spending comparison, we estimate a selection effect of roughly 0 percent for beneficiaries with ESRD in all years.

We also conducted analyses of coding intensity for MA enrollees with ESRD, separately for the three different risk-adjustment models for ESRD beneficiaries. The transplant risk model does not rely on diagnosis codes, so differences in MA and FFS coding intensity are not possible. For enrollees in dialysis and functioning-graft status, we applied the demographic estimate of coding intensity method as outlined in Technical Appendix 12-C, pp. 440, to generate a coding-intensity estimate for beneficiaries on dialysis and for beneficiaries with a functioning graft. Then we combined the three estimates of coding intensity (including an estimate of zero for the transplant population), weighting each by its respective share of payments to MA plans for ESRD enrollees in dialysis, transplant, or functioning-graft status to generate a single ESRD coding-intensity estimate. (See Technical Appendix 12-C, p. 440, for more details about our coding-intensity estimates.) For example, we estimated 2026 coding intensity to be 9 percent for the dialysis population, 9 percent for the functioning-graft population (after coding-intensity adjustment, which applies to functioning-graft risk scores but does not apply to dialysis or transplant risk scores), and we assumed coding intensity to be 0 percent for the transplant population. To combine these estimates, we weighted these estimates by 89 percent, 9 percent, and 2 percent, respectively, for a coding-intensity estimate of 9 percent for the whole ESRD population in 2026 after coding adjustment.

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Incorporating MA enrollees with ESRD into MedPAC's comparison of payments to MA plans relative to FFS spending (cont.)

Taking our combined estimates for the MA ESRD population in 2026, we estimate that MA payments for the ESRD population were 112 percent relative to what they would have been if these enrollees were in FFS. This estimate combines our base comparison (before the effects of favorable selection and coding) of 103 percent, the 0 percentage point estimated effect of favorable selection, and the 9 percentage point effect of coding intensity. The 12 percent higher MA payments for enrollees with ESRD, relative to what spending for the same enrollees would have been if they were in FFS, translates to an estimated $4 billion in 2026.

Last, we incorporate our estimates for the ESRD population into our overall estimates of MA payments by weighting the ESRD and non-ESRD populations by their respective share of projected spending in 2026 (a little over 6 percent for the ESRD population and a little less than 94 percent for the population without ESRD). For 2026, we project that the overall estimate before selection and coding is 99 percent (99 percent for the non-ESRD population and 103 percent for the ESRD population). We project that the overall effect of favorable selection is 11 percent (11 percent for the non-ESRD population and 0 percent for the ESRD population). For coding intensity, we project that the overall effect is 4 percent (4 percent for the non-ESRD population and 9 percent for the ESRD population). Shown in Figure 12-5 (p. 377), we find that total payments to MA plans are 14 percent higher than they would have been had those beneficiaries instead been enrolled in FFS Medicare. We now apply the 14 percent to what total spending (including enrollees with ESRD) would have been in FFS Medicare, which we estimate—using CMS's projections of MA enrollment and payments per capita—to be $540 billion in 2026 (i.e., $615 billion in MA payments divided by 114 percent). Therefore, we estimate that Medicare payments to MA plans are about $76 billion higher than they would have been under FFS Medicare. In prior years, we estimated payments to MA plans relative to FFS for the population without ESRD and applied that estimate to payments to MA plans excluding payments for enrollees with ESRD. ■

how CMS constructs its estimates of risk-standardized FFS spending that it uses to set county benchmarks. However, that base comparison does not account for how coding intensity and favorable selection cause CMS's estimates of risk-standardized FFS spending to overpredict costs for the average MA enrollee. Those effects are incorporated as separate components in the Commission's payment comparisons.

In our base comparison of MA payments to FFS spending, we account for risk score and geographic differences (at the county level) between MA and FFS beneficiaries. For MA enrollees, we use actual MA plan payments. For our FFS comparison spending, we calculate the monthly risk-standardized spending average (i.e., adjusted for a beneficiary with average risk) in counties where MA enrollees reside and apply the risk-adjusted (using MA risk scores) MA enrollment months to the FFS spending average. The Commission uses historical data on the actual FFS spending of beneficiaries with both Part A and Part B coverage (that is, people who would be eligible to enroll in MA) to estimate the base payment comparison for the most recent year for which data are available (2023).[60] Our estimates of the base payment comparison for years in which we do not have historical data (2024 to 2026) rely instead on CMS's projections of FFS spending. Those projections differ from the actual FFS spending of MA-eligible beneficiaries for several reasons, including

that the projections include Part A–only enrollees and that CMS's projection of the FFS-spending trend is subject to uncertainty. The method that CMS uses to produce its FFS projections has been criticized because it includes beneficiaries who have Part A but not Part B coverage, although MA enrollees are required to have both Part A and Part B coverage.[61] The Commission has recognized this shortcoming and previously recommended that CMS calculate MA benchmarks using FFS-spending data only for beneficiaries with both Part A and Part B coverage (Medicare Payment Advisory Commission 2021a, Medicare Payment Advisory Commission 2017).

The Commission's estimate that Medicare payments to MA plans in 2026 average 99 percent of projected FFS spending—without any adjustments for coding intensity or favorable selection—reflects several aspects of MA payment policy (Table 12-6, p. 373). First, benchmarks are set above projected FFS spending in some counties and below FFS spending in other counties. Second, benchmarks are increased based on plan quality scores—resulting in quality-bonus payments that are financed with additional program dollars. We estimate that quality bonuses will account for about 3 percent (an estimated $16 billion) of MA payments in 2026. Combining both of those factors, we project benchmarks to be 107 percent of FFS spending in 2026 before accounting for coding and selection. Third, payments to MA plans are below benchmarks because bids are nearly always lower than benchmarks, and plans receive a percentage (based on quality score) of the difference between bids and benchmarks in additional rebate payments.

We estimated the base comparison of MA payments with FFS spending using both CMS's projections and the observed risk-standardized FFS spending of MA-eligible beneficiaries enrolled in both Part A and Part B in each year from 2016 to 2023 (Figure 12-7, p. 384). Our analysis of historical data has shown that using CMS's spending projections has not systematically impacted our base comparison of MA spending with FFS payments.[62] Both methods produced results that were within 1 percentage point of each other for every year except 2020 and 2021, years that were affected by the coronavirus pandemic. The similarity of the estimates for the two methods indicates that relying on CMS's projections of FFS spending (including adjustments for Medicare as a secondary payer) for estimating differences in MA and FFS spending has not introduced meaningful error in our analysis, and increases our confidence in relying on CMS's projections for our payment comparisons for 2024 to 2026.[63] We will continue to compare how our estimates differ between using CMS's projections and using historical data. Should a systematic difference between the two emerge, we will consider incorporating an adjustment to our base payment comparison for the years that rely on projected data.

We note that the comparison of our historical estimates with CMS's projections are not equivalent to examining the unadjusted differences in national raw FFS spending per capita with and without the Part A-only population. In 2023, on an unadjusted basis, national spending per capita was about 6 percent higher when excluding the Part A-only population. This finding suggests that other adjustments (e.g., Medicare as a secondary payer, risk score normalization of Part A-only enrollees, county-level standardization, county-level distribution of MA enrollment) have caused our historical estimates to be similar to CMS's projections.

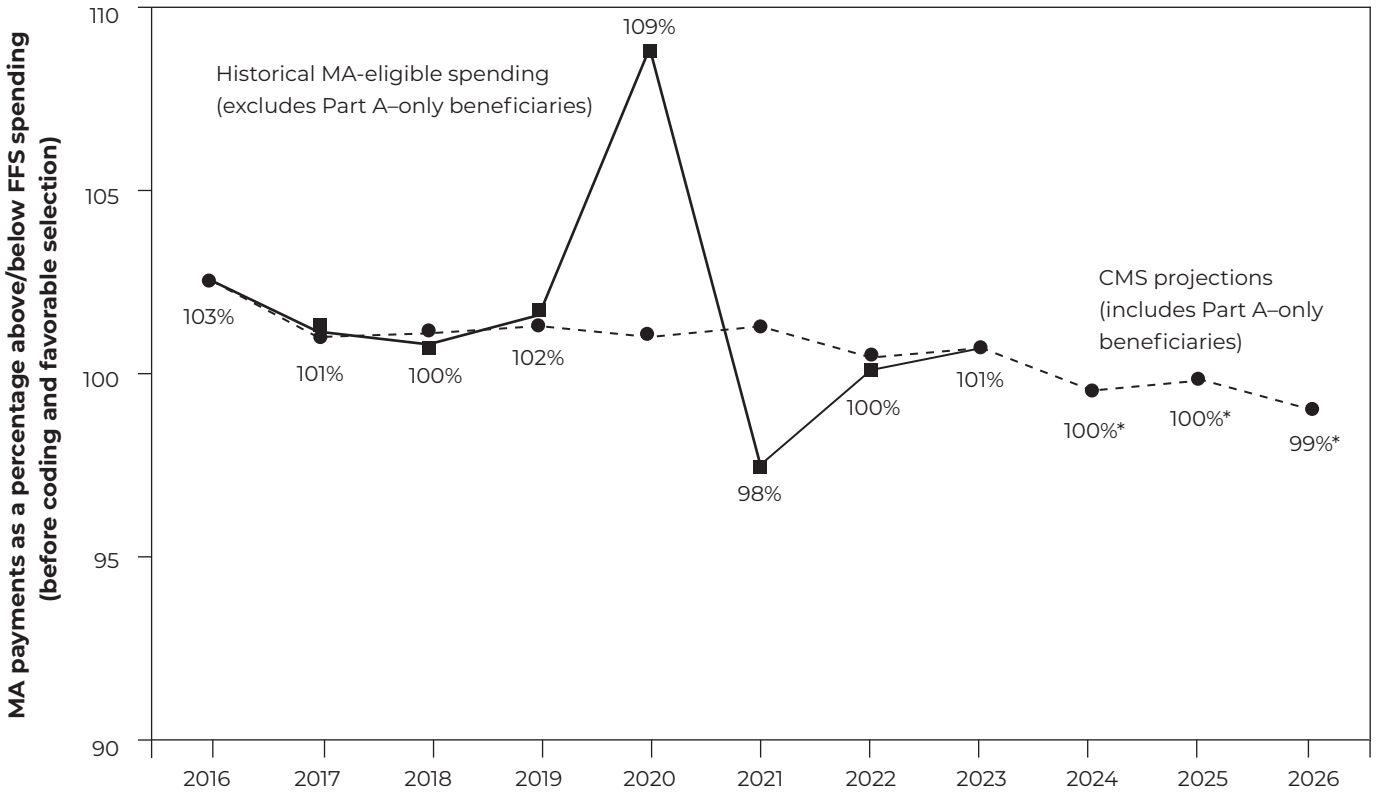
Before coding differences, favorable selection causes risk-based payments to overpredict spending for MA enrollees

The second component of the Commission's payment comparison adjusts the base comparison of MA payments relative to FFS spending for favorable selection. When setting MA benchmarks and paying plans for each enrollee, CMS implicitly assumes that if MA enrollees were in FFS Medicare, their average Medicare spending would be equal to that of current FFS enrollees in the same county after adjusting for differences in risk scores. However, applying MA risk scores to FFS-spending averages may overpredict the actual spending that MA enrollees would have had in FFS for two reasons: coding intensity and favorable selection. (The Commission's estimates of coding intensity are discussed below.)

"Favorable selection" refers to the tendency for Medicare's risk-adjustment model to—on average—overpredict the spending that the MA-enrolled population would have had if they were enrolled in the FFS program, even for beneficiaries with similar coding intensity. Favorable selection can occur due to unmeasured differences in health status but can also

FIGURE 12–7

Part A–only beneficiaries included in CMS's projections had no systematic effect on the Commission's base comparison of MA payments with FFS spending



Note: MA (Medicare Advantage), FFS (fee-for-service). Estimates have not been adjusted for MA coding intensity and favorable selection of beneficiaries who choose to enroll in MA plans (i.e., underlying differences in risk-adjusted spending between the MA and FFS populations that are not captured by risk scores and would increase MA payments relative to FFS spending). Estimates include both claims and nonclaims FFS spending. Estimates do not include MA payments for beneficiaries with end-stage renal disease. Estimates of actual MA payments in 2020 include remittances related to plans' medical loss ratios. Relative to estimates originally published from 2016 through 2019, prospective estimates are revised to reflect payments to employer plans and adjustments for MA enrollees with Medicare as a secondary payer. Prospective estimates use the figures for FFS per beneficiary spending that CMS's Office of the Actuary generates to determine the MA benchmarks that plans use when submitting bids. Those FFS-spending figures are calculated by summing (1) risk-adjusted Part A FFS monthly spending for all Part A enrollees and (2) risk-adjusted Part B FFS monthly spending for all Part B enrollees. Percentages shown in the figure have been rounded.
* Specified values used projected data.

Source: MedPAC analysis of bid data, Medicare enrollment, Medicare claims spending, and risk-adjustment files.

result from factors such as differences in beneficiaries' propensities to seek care for reasons that are unrelated to their health (Medicare Payment Advisory Commission 2024c).

Risk models are imperfect, and beneficiaries with the same risk score typically have a wide distribution of actual spending relative to the spending predicted by their risk score (Lieberman et al. 2023). Each year, a mix of beneficiaries enroll in MA who either have lower spending than predicted by their risk score or higher spending than predicted by their risk score. The MA program as a whole will experience favorable selection if the average MA enrollee has less spending than predicted by their risk score (before any effects from plans' utilization-management and coding efforts). Because favorable selection occurs when beneficiaries systematically spend less than is predicted by their

risk score, higher-risk beneficiaries (including dually eligible beneficiaries) are not necessarily unfavorable to MA plans. Indeed, our estimates have shown evidence of favorable selection for beneficiaries with both low risk scores and high risk scores (Medicare Payment Advisory Commission 2025b).

The effect of favorable selection may vary over time. Those differences over time reflect a combination of factors, including changes to Medicare's risk-adjustment model and changes in the composition of beneficiaries who choose MA and FFS. If the share of beneficiaries in MA continues to increase, it is not clear how favorable selection will change. It is possible that as MA grows, the favorability of the MA program will converge with the population remaining in FFS, and favorable selection will decrease. Alternatively, it is possible that as fewer beneficiaries remain in FFS, benchmarks will be set on an increasingly small group that is not representative of the overall Medicare population. For example, beneficiaries remaining in FFS may have a much higher rate of comprehensive supplemental coverage, which would tend to increase their use of care and may increase favorable selection in MA. We have found that favorable selection persists as the share of MA enrollees in a market increases (Medicare Payment Advisory Commission 2025b), which is consistent with the findings of other studies that have also found relatively small changes in favorable selection as MA penetration increases (Crow and Fiedler 2025, Lieberman et al. 2023). Thus, the increase in MA penetration has likely coincided with similar growth of average risk-standardized spending in both FFS and MA.

The Commission has developed and refined its methodology for estimating the effect of favorable selection over several years (Medicare Payment Advisory Commission 2025b, Medicare Payment Advisory Commission 2024c, Medicare Payment Advisory Commission 2023b, Medicare Payment Advisory Commission 2012a). We use our current methodology to estimate an aggregate selection percentage for the entire population of MA enrollees in each year beginning in 2015. That methodology produces a comprehensive estimate that calculates a base selection percentage in the year before enrolling in MA and then estimates how the selection percentage would have changed over time through the estimated target year (incorporating the effects of both attrition out of MA and mean reversion).[64,65] We assessed the selection of enrollees with ESRD using a modified approach, and we apply a selection effect of 0 percent to enrollees with ESRD based on that analysis. (See text box on incorporating MA enrollees with ESRD into our payment comparison, pp. 379–382.)

Our current methodology for estimating favorable selection followed a similar approach to the one used last year, with several refinements that had small effects on the overall estimate. We improved our method for generalizing estimates from our study population (of switchers) to other MA enrollees (i.e., those outside our study population, including beneficiaries who joined MA when they were newly eligible for Medicare). We now account for differences in dual-eligibility status when applying estimates outside our study population, along with continuing to account for differences in mortality status and year of initial enrollment. That refinement, along with the studies discussed below that find substantial selection in the newly eligible population, gives us greater confidence in our approach to modeling selection for the nonswitcher population. We also refined our methodology to more fully account for MA beneficiaries' dual-eligibility status when modeling the selection of switchers within our study population and implemented several other technical updates. More detail on our methodology for estimating favorable selection can be found in Technical Appendix 12-B, p. 425.

A substantial and growing body of research has found evidence of favorable selection in MA and provides support for the Commission's estimates and methodology (Brown et al. 2014, Crow and Fiedler 2025, Curto et al. 2021, Curto et al. 2019, Fuglesten Biniek et al. 2024, Goldberg et al. 2017, Government Accountability Office 2021, Jacobs and Kronick 2018, Jacobson et al. 2019, Lieberman et al. 2023, Medicare Payment Advisory Commission 2023b, Medicare Payment Advisory Commission 2012a, Meyers et al. 2019, Newhouse et al. 2015, Pelech et al. 2025, Rahman et al. 2015, Riley 2012, Ryan et al. 2023, Teigland et al. 2025a). The Commission's method uses data from the portion of the MA population who previously switched (i.e., "switchers") to MA from the FFS program to estimate selection for the entire population of MA enrollees, including those who enrolled upon their initial eligibility for Medicare. The Commission's

approach adjusts for many of the differences between the study and nonstudy populations by assigning selection percentages to the nonstudy population using the estimated selection of enrollees in our study population with the same year of entry, dual-eligibility status, and mortality status in the following two years.

Cumulatively, the Commission's work and that of other research provide support for our approach that generalizes estimates based on switchers in our study population to the other two segments of the MA population: beneficiaries who switched from FFS but had insufficient data to be included in our study population and beneficiaries who enrolled in MA upon becoming newly eligible for Medicare.[66]

- ***Beneficiaries who switch from FFS to MA—***Analyses of switchers from FFS have been used in other studies and have found substantial selection effects (Crow and Fiedler 2025, Jacobson et al. 2019, Lieberman et al. 2023, Medicare Payment Advisory Commission 2012a, Newhouse et al. 2015). In addition, the Commission found substantial selection effects among beneficiaries with only one prior year of FFS enrollment (Medicare Payment Advisory Commission 2024c).
- ***Newly eligible beneficiaries directly enrolling in MA—***Two recent studies also estimated favorable selection among MA beneficiaries who enrolled upon their initial eligibility for Medicare and found estimates that were even larger than our estimates for switchers in similar years (Pelech et al. 2025, Teigland et al. 2025a).[67] These studies covered a sample of beneficiaries who had commercial insurance before enrolling in MA and beneficiaries who had Medicaid coverage before enrolling in MA.

Some FFS beneficiaries who are outside our study population may contribute to additional favorable selection. Our analyses require our FFS comparison group to have at least one full year of FFS, which means we are not able to capture the effects of switchers from MA to FFS during their first year in FFS (because risk scores include the effects of MA coding intensity). However, other studies have found that MA plans experience favorable selection when these beneficiaries switch out of MA and into FFS (Fuglesten Biniek et al. 2024, Goldberg et al. 2017, Government Accountability Office 2021, Rahman et al. 2015, Riley 2012).

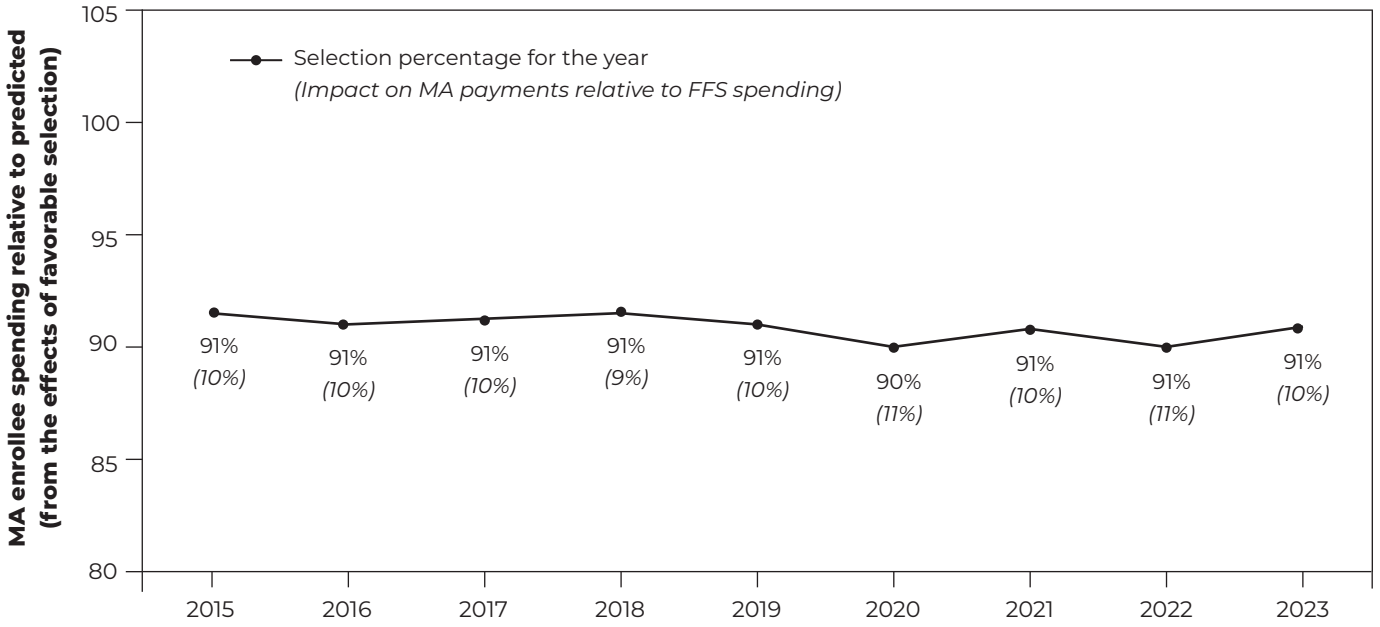
Our analysis using our comprehensive method finds persistent favorable selection over several years. We estimate that favorable selection of the overall MA population resulted in MA payments that were 10 percent above FFS spending in 2023, a slight decrease from 11 percent above FFS spending in 2022 (Figure 12-8).[68] Those estimates express favorable selection as the amount by which MA payments are above what FFS costs would have been for MA enrollees due to the payment system's overprediction of costs. Favorable selection can also be expressed as a selection percentage, which is the estimate of what FFS costs would have been for MA enrollees relative to their predicted costs. The selection percentage was below 100 percent in every year during the 2015 to 2023 period, indicating that the spending that the FFS program would incur for the MA population would be below what would be predicted by their risk score. For example, the estimated selection percentage of 91 percent in 2023 indicates that MA enrollees would have spent 9 percent less than predicted if they were enrolled in FFS. Favorable selection persisted throughout the study period even as a larger share of Medicare beneficiaries enrolled in MA, including enrollees who had higher risk scores. The estimates presented in Figure 12-8 use the Commission's comprehensive method for the non-ESRD population and apply our estimate of a 0 percent selection effect for the ESRD population, which we estimated using the Commission's simple method. We discuss these methods in greater detail in Technical Appendix 12-B, p. 425.

Coding differences increase payments to MA plans in 2026 by a projected $22 billion and continue to generate inequity across plans

The third component of the Commission's payment comparison adjusts the base comparison of MA payments relative to FFS spending for coding intensity. Payments to MA plans are risk adjusted to account for differences in health spending risk. Higher risk scores increase payments to plans for enrollees with higher expected Medicare spending. MA enrollees' risk scores are based on demographic information and diagnoses that plans submit to CMS. Our estimates of coding intensity are independent of our estimates of the effects of favorable selection because we estimate selection before MA enrollment and subsequent changes in selection using FFS data (which are unaffected by plans' practices of coding diagnoses).

FIGURE 12–8

Evidence of substantial favorable selection annually from 2015 to 2023



Note: MA (Medicare Advantage), FFS (fee-for-service). Estimates include MA enrollees with and without end-stage renal disease (ESRD). Estimates for beneficiaries without ESRD were constructed using the Commission's comprehensive method for estimating favorable selection. Beneficiaries with ESRD were estimated to have no favorable-selection effect using the Commission's simple method for estimating favorable selection. Selection percentages are computed as the ratio of the estimated spending that the FFS program would have incurred for MA enrollees relative to the spending predicted by their county benchmark and Medicare's risk-adjustment model. Selection-percentage values farther below 100 percent indicate greater favorable selection. Estimates are rounded to the nearest percent. Estimates of the impact of selection on MA payments relative to FFS spending are computed using the inverse of the selection percentage (e.g., the impact of selection in 2023 was 100 percent divided by 91 percent minus 1). Thus, the impact of selection represents predicted spending for MA enrollees (for which MA payments are based) as a percentage of what spending would have been for MA enrollees in FFS.

Source: MedPAC analysis of Medicare enrollment (2006–2023), Medicare claims spending (2007–2023), and risk-adjustment files (2007–2023).

Documenting additional diagnosis codes raises plan enrollees' risk scores, which increases the monthly payments that MA plans receive from Medicare and the rebates that plans receive to provide supplemental benefits to enrollees. Plans that document relatively more diagnosis codes for enrollees with similar levels of health risk have a competitive advantage over other plans.

Documenting an additional HCC for an enrollee can significantly increase Medicare's payment to a plan for that enrollee. Because of the increased financial incentives for MA plans to code more diagnoses and the additional tools, such as health risk assessments and chart reviews, that MA plans use to capture diagnoses—tools that are not available or are not used as frequently in FFS Medicare—coding intensity is higher in MA than in FFS, and payments to MA plans are higher than intended.

For 2026, we project that MA risk scores will be about 10 percent above risk scores for comparable FFS beneficiaries. CMS's adjustment reduces MA risk scores by 5.9 percent. Thus, overall coding intensity is only partially offset by CMS's coding-intensity adjustment. The net effect is a 4 percent increase in MA risk scores due to coding intensity, leading to $22 billion in higher projected payments to MA plans in 2026.

To align with our overall comparison of spending on MA relative to FFS, we estimate MA coding intensity relative to FFS risk scores (i.e., MA risk scores are 10 percent higher than FFS risk scores due to coding intensity). The denominator for CMS's coding adjustment, however, is the average MA risk score. Because the average MA risk score is larger than the average FFS risk score, the two percentages are not equivalent. Based on our MA coding-intensity estimate of 10 percent above FFS, we estimate that CMS's coding adjustment would have had to reduce MA risk scores by 9.3 percent to fully account for the effects of coding intensity in 2026.[69] However, coding intensity varies significantly across MA organizations. As a result, CMS's across-the-board adjustment for coding intensity, which reduces all MA risk scores by the same amount, generates inequity across organizations by reducing net revenue for plans with lower coding intensity and allowing other plans to retain a significant amount of revenue from higher coding intensity (see Figure 12-12, p. 397). Increasing CMS's across-the-board coding adjustment to 9.3 percent would increase the penalty for plans with lower coding intensity while still not fully addressing the effects of coding intensity for the organizations with higher coding levels. A policy addressing coding intensity more fairly would reduce risk scores more for plans with the highest coding intensity.

The Commission's approach to estimating coding intensity compares risk scores for the MA and FFS populations under the assumption that demographically similar populations of beneficiaries have a similar average prevalence of health conditions. We use the combination of age, sex, Medicaid eligibility, and institutional status to define demographic similarity. Any population-level differences in risk scores that are greater than what would be predicted using those demographic factors are attributed to coding intensity. More details on the methodology can be found in Technical Appendix 12-C, p. 440, including a discussion of sensitivity analyses we conducted to assess the effect of including additional characteristics when defining demographic similarity.

In our March 2016 report to the Congress, the Commission recommended a multipronged approach that would fully account for the impact of coding differences between MA and FFS, improve the equity of the adjustment across MA contracts, and improve incentives to reduce costs and improve quality. The Commission's approach to reducing MA coding intensity has been to address the mechanisms that generate coding differences first (e.g., remove health risk assessments and reduce year-to-year coding variations by using two years of diagnostic data) and then address remaining differences with either an across-the-board or tiered adjustment. The Commission's 2016 recommendation did not address the use of chart reviews because data were not available at that time, but eliminating chart reviews as a source of diagnoses for risk adjustment would be consistent with the Commission's approach.

Documenting more diagnosis codes increases payments to plans

Among the 20 most common HCCs in MA—which have payment amounts ranging from roughly $1,000 to $5,500—the average additional payment per HCC is about $3,400 per year. Documenting each additional HCC for an enrollee can thus significantly increase Medicare's payment to a plan. We can illustrate how coding additional HCCs increases payment to a plan for Medicare-covered services using average FFS Medicare spending.[70] For example, in 2022, the annual Medicare payment to an MA organization for a non-Medicaid-eligible 80-year-old male (where the demographic component of the risk score is valued at $6,726) with diabetes without complication (HCC 19, valued at $1,284) would have been $8,010. If the same 80-year-old male with diabetes were also found to have vascular disease (HCC 108, valued at $3,620), the Medicare annual payment to the MA organization would increase to $11,630.

Because the CMS–HCC model uses FFS Medicare claims data to estimate the size of the model coefficients, the model calculates an expected spending amount based on FFS Medicare costs and diagnostic-coding patterns. Most diagnoses are reported on physician and outpatient claims, which in FFS Medicare tend to be paid based on procedure codes, thus providing little financial incentive to document diagnoses for FFS beneficiaries. This distinction can lead to relative underreporting of diagnoses in FFS. If certain diagnoses are not reported on FFS claims, the cost of treating those conditions is attributed to other components in the model, causing the coefficients overall to be inflated above the value they would have been if the diagnoses had been more completely reported. Because Medicare's risk model is

based on diagnostic-coding patterns in FFS, when MA plans submit more diagnoses for a beneficiary than would have been documented in FFS Medicare, the program spends more for that beneficiary in MA than it would have if the beneficiary were in FFS.

Because of the increased financial incentives for MA plans to code more diagnoses and the additional tools that MA plans use to capture diagnoses, coding intensity is higher in MA than in FFS and payments to MA plans are higher than intended. Although Medicare's accountable care organization (ACO) programs and some other alternative payment models (APMs) offer incentives to increase diagnostic-coding intensity in FFS Medicare, we continue to see higher coding intensity in MA. The tools that ACOs and APMs have available result in less coding intensity than those available to MA plans; notably, chart reviews, plan-initiated health risk assessments, and subcapitation to medical groups are used only in MA. Furthermore, CMS limits annual risk-score growth for ACO enrollees when calculating shared savings or losses. Thus, we expect that FFS coding will continue to identify fewer diagnosis codes than MA coding does.

Higher MA payments due to coding differences have been under scrutiny for more than a decade. Research has consistently found that the impact of coding differences on MA risk scores produces higher payments for MA plans (Congressional Budget Office 2017, Geruso and Layton 2020, Government Accountability Office 2013, Hayford and Burns 2018, Jacobs and Kronick 2018, Kronick and Chua 2021, Kronick and Welch 2014). One study found that when controlling for differences in health status using Part D prescription drug data, from 2008 to 2015, MA risk scores grew by about 1 percent more per year than FFS risk scores (Jacobs and Kronick 2018). A second study used a difference-in-difference approach on risk-adjustment data for 2008 to 2013 to estimate that risk scores for enrollees remaining in MA grew about 1.2 percent faster per year than for beneficiaries in FFS Medicare (Hayford and Burns 2018). A third study, using county-level data, found that in the first year after MA enrollment, risk scores increased about 6 percent faster than FFS and about 2 percent faster in the second year (Geruso and Layton 2020). The Government Accountability Office used a risk-score prediction model to estimate coding intensity for 2010 through 2012, and those estimates align very closely with the Commission's estimates over that same time period (Government Accountability Office 2013). A study focusing on diagnoses submitted on hospital claims has found higher levels of MA coding intensity for beneficiaries who subsequently had a health assessment in a skilled nursing facility (Kosar et al. 2024).

Several studies published in the past year have shown evidence of coding intensity using new approaches and data sources. The overall estimates of coding intensity produced by these studies are all slightly larger than MedPAC's estimates of coding intensity. One study controlled for mortality differences and the differences in MA and FFS coding for specific HCCs and found overall coding intensity of about 8.4 percent in 2014 (Curto et al. 2025). Another study using risk scores derived from encounter data and applying the demographic estimate of coding intensity found coding intensity of about 10.1 percent in 2016 rising to about 17.4 percent in 2021 (Kronick et al. 2025a). This study also estimated that coding intensity under the V28 model would have been about 7.3 percentage points lower than actual coding intensity under the risk model used to pay MA plans in 2021 and that removing the HCCs with the largest MA and FFS coding differences could have a significant effect on eliminating differences in overall coding intensity. (There is more discussion of the V28 risk model and its effect on coding intensity later in this section.) Another study analyzed switchers from FFS to MA and found rapidly rising risk scores across cohorts of MA entrants and an overall coding-intensity estimate of 18.6 percent for 2021 (Jacobs and Layton 2025).

Finally, one new study assessed the prevalence of certain conditions using lab data and controlling for age and sex differences and found that the prevalence of obesity, hypertension, hyperlipidemia, and chronic kidney disease was not higher among MA compared with FFS beneficiaries; however, diabetes was more prevalent in MA (Oseran et al. 2025). By reviewing medical records and using lab data to validate the true prevalence of these conditions, this study highlights the concern over the diagnosis codes that MA plans submit for risk-adjusting payments to plans. Plan-reported codes should be supported by medical records (see text box "Update on risk adjustment data validation audits," pp. 402–403); however, these conditions appear to be far more prevalent in MA relative to FFS in risk-adjustment data than they appear to be in the medical record findings

from the Oseran et al. study. One study looking at plan-reported conditions found obesity and Stage 3 chronic kidney disease to be reported, respectively, 96 percent and 56 percent more often in MA risk-adjustment data than in FFS Medicare (Kronick et al. 2025a). We previously found that angina pectoris (a symptom that is often related to hypertension) was coded far more often in MA (controlling for age, sex, and Medicaid eligibility) and was coded 2.5 times more frequently than in FFS among the MA contracts in the highest 20 percent of contracts ranked by overall coding intensity (Medicare Payment Advisory Commission 2023a). CMS removed angina pectoris from the CMS–HCC risk model due to large differences in MA and FFS coding in the risk-score data (Centers for Medicare & Medicaid Services 2022a). Although the Oseran et al. study using medical record review and lab data found a higher prevalence of diabetes in MA, we previously found higher coding intensity by level of diabetes severity reported in MA risk-adjustment data. MA plans coded diabetes without complications less frequently than FFS but coded diabetes with chronic or acute complications far more often, including MA contracts with the highest overall coding intensity reporting diabetes with acute complications two times more frequently than demographically similar beneficiaries in FFS Medicare (Medicare Payment Advisory Commission 2023a). Because of these differences in coding the severity of diabetes between MA and FFS, CMS constrained the risk-score coefficients for all three diabetes conditions (without complications, with acute complication, or with chronic complication) to be the same (Centers for Medicare & Medicaid Services 2022a).

Starting in 2010, statute requires CMS to reduce MA risk scores to address the impact of MA and FFS coding differences on payments to MA plans.[71] In response, CMS reduced MA risk scores by 3.41 percent in each year from 2010 through 2013. Starting in 2014, legislation specified a minimum reduction of about 4.9 percent, which rose gradually to about 5.9 percent in 2018, where it will remain until the Secretary of Health and Human Services implements risk adjustment using MA diagnostic, cost, and use data (which is generally thought to mean a risk model that has coefficients estimated using MA encounter data rather than FFS claims data). Although larger reductions are allowed under the legislation, CMS reduced MA risk scores by only the minimum amount required by law for 2014 through 2026.

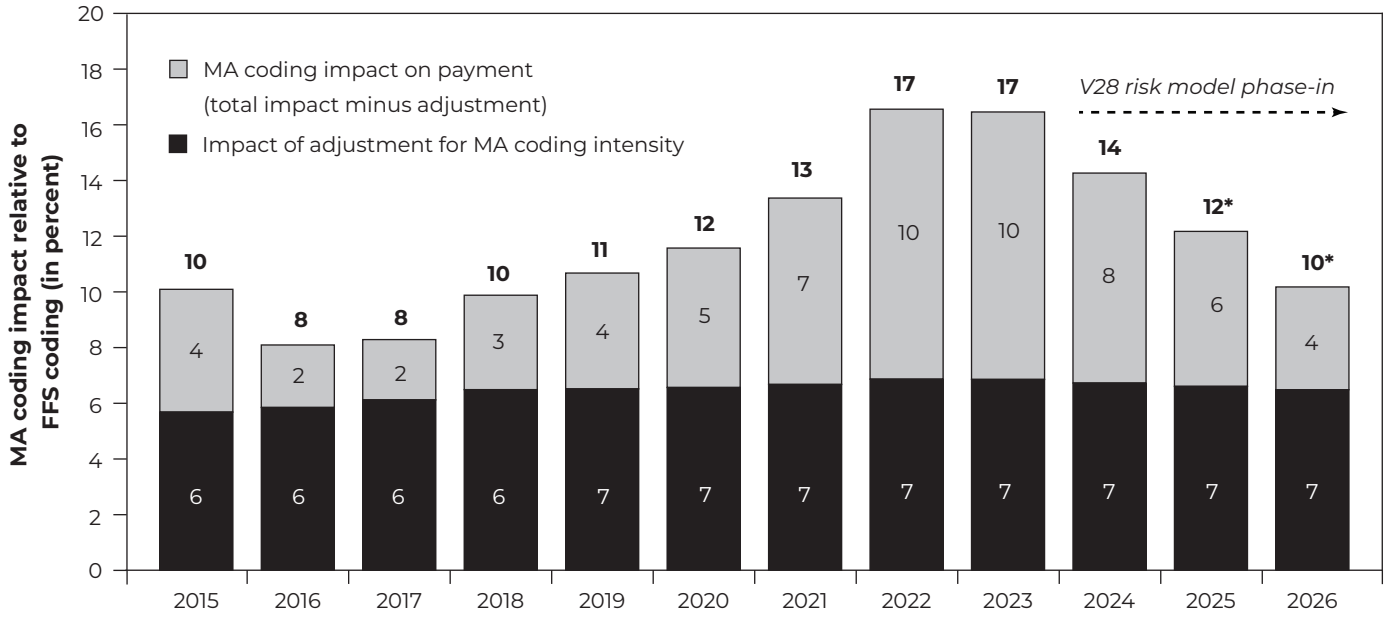
CMS has made other changes to the risk-adjustment model to better align FFS and MA risk scores. Between 2014 and 2016, CMS phased in a new risk-adjustment model that removed some diagnoses found to be coded more frequently in MA. We estimated that the new risk model reduced overall coding intensity by about 2.5 percentage points compared with the previous model. In 2017, CMS began accounting for Medicaid-benefit eligibility more accurately (full-, partial-, or no-benefit status by month), which reduced the gap in MA and FFS risk scores by about 1 percentage point, which was the amount by which MA risk scores were unduly higher than FFS due to differing shares of beneficiaries by Medicaid eligibility status. The largest reduction to MA and FFS coding differences began in 2024 when CMS initiated the phase-in of a new risk model (V28) that reduces the gap in coding intensity relative to FFS by removing or constraining the coefficients of diagnoses that were found to be coded more aggressively in MA. The V28 model will be fully phased in for payments to MA plans in 2026; the effect on coding intensity is discussed more below.

MedPAC's estimates of coding intensity

The Commission's method for estimating coding intensity compares risk scores for MA and FFS populations under the assumption that demographically similar populations of beneficiaries have a similar average prevalence of health conditions. We use the combination of age, sex, Medicaid eligibility, and institutional status to define demographic similarity. We introduced this method in 2023. The previous method used cohorts of MA and FFS enrollees matched by length of enrollment, age, and sex to estimate coding intensity. Over time, the cohort method became increasingly complex to implement. After revising the cohort method of estimating coding intensity to account for additional beneficiary characteristics, the Commission found that the new method produced substantially similar estimates of plan coding intensity over the period 2007 through 2021. A detailed description of those methods can be found in Chapter 13 of our March 2024 report to the Congress, along with the research leading to the revisions. For our 2025 report, we made additional revisions to exclude beneficiaries residing in Puerto Rico from our coding-intensity estimate because Puerto Rico's Medicaid program does not use the full-, partial-, or no-benefit structure, which is necessary for our coding-intensity estimation method. This revision

FIGURE 12–9

Estimated impact of coding intensity on MA risk scores was larger than the coding adjustment, 2015–2026



Note: MA (Medicare Advantage), FFS (fee-for-service). All estimates account for any differences in age, sex, Medicaid eligibility, and institutional status between MA and FFS populations. New enrollees are constrained to have no coding intensity because their risk scores are not based on diagnostic coding. Beneficiaries residing in Puerto Rico are excluded. The impact of the coding adjustment is calculated as the MA coding-intensity estimate relative to FFS, multiplied by the coding adjustment. For 2026, we calculate 1.10 × 5.9 percent = 0.065 or about 7 percent. Coding-intensity estimates reflect the risk model(s) used to pay MA plans in each year. The V28 risk model was phased in one-third in 2024, two-thirds in 2025, and completely in 2026. Components may not sum to totals due to rounding.
* For 2025 and 2026, we project coding intensity based on the annual trend from 2023 through 2024 for the V24 risk model, an increase of 0.7 percentage points per year, and account for an estimated –2.9 percentage point annual effect due to the phase-in of the V28 risk model. See Technical Appendix 12-C, p. 440, for more details.

Source: MedPAC analysis of CMS enrollment and risk-score files.

reduced our coding-intensity estimates by about 1 percentage point from what we previously reported. We also modified how we weight new enrollees so that the estimate more accurately reflects the share of payments associated with new and continuing (those with risk scores based on diagnosis codes) enrollees.

This year, we also estimate coding intensity for MA enrollees with ESRD, and we incorporate that estimate into our overall estimate of MA coding intensity. The share of payments to MA plans for enrollees with ESRD has grown rapidly since the enactment of the 21st Century Cures Act and is projected to account for more than 6 percent of MA spending in 2026. Given this trend, we expanded our estimate to include beneficiaries with ESRD; however, the change had little effect on our overall estimate of coding intensity.

Finally, based on comments from Commissioners and others, we conducted a number of sensitivity tests to assess adding variables to our demographic risk model. Those sensitivity analyses had little effect on our overall estimates of coding intensity. More details on our method for estimating MA coding intensity, how we estimate coding intensity for the ESRD population including separate estimates for the ESRD and non-ESRD populations, and sensitivity analyses can be found in Technical Appendix 12-C, p. 440.

For 2024, the most recent year of risk-score data available, we estimate that MA coding intensity fell from 17 percent in 2023 to 14 percent due to the initial phase-in of the V28 risk model (Figure 12-9). In addition to removing HCCs or constraining the coefficients on HCCs that had large differences in MA and FFS coding

Updates to coding-intensity estimates reflect newly available data and other factors

We updated the coding-intensity estimates published in last year's March 2025 report to incorporate newly available data from 2024. MedPAC updates its estimates each year to reflect the most recent data available at the time of publication. This year, the newly available data for 2024 were particularly consequential for updating our earlier projections of coding intensity because those data reflected the first year of experience with the V28 risk-adjustment model. The newly available data both allowed us to update the 2024 projection using historical data and informed updates to the methods used to project that 2024 estimate forward to 2025 and 2026.

Compared with the 16 percent estimate of coding intensity for 2025 that we published last year, we now project coding intensity to be 12 percent in 2025 and 10 percent in 2026. The difference in the estimates for 2025 is driven by three main factors, explained in Figure 12-10.

First, we observed lower overall coding intensity under V28 in 2024 relative to last year's estimate. Last year, we did not have access to V28 risk scores, so we calculated V24 and V28 risk scores using MA encounter and FFS claims data and risk-model software and then estimated coding intensity under the two models for 2021, 2022, and 2023. The average difference across the three years was 7.7 percentage points, which we assumed to represent the baseline difference in coding intensity for 2023 before the introduction of V28. We then trended that difference forward to 2024, assuming that coding intensity would grow faster under V28 compared with V24 as MA organizations and providers adapted to the new set of diagnoses included in the V28 risk model. (We previously observed a faster rate of coding-intensity growth between 2014 and 2015 during the phase-in of the V22 risk model, which, similar to the phase-in of V28, also removed diagnoses with differing rates of coding in MA and FFS.) As a result, we projected a 6.9 percentage point difference in coding intensity between the two models in 2024. We now have V24 and V28 risk scores for 2024 and calculate that coding intensity under V28 was 8.8 percentage points lower than under V24 in that year. Therefore, the effect of incorporating actual V28 risk scores accounts for 1.8 percentage points (estimate is affected by rounding) of the difference in coding-intensity estimates for 2025.

Second, we previously projected that coding intensity would continue to grow based on the V24 trend from 2019 to 2023, or about 1.6 percentage points per year. We now find that coding intensity grew by 0.7 percentage points from 2023 to 2024 under the V24 model. Because we observed atypical coding-intensity estimates during the coronavirus pandemic, for 2022 and 2023, we now apply a trend based on only postpandemic estimates, allowing for the possibility that the coding-intensity trend has fundamentally changed. In last year's projection, we applied the 1.6 percentage point annual trend for two years, from 2023 to 2025. Therefore, the difference in trend (0.9 percentage points annually) accounts for 1.8 percentage points of the difference between coding-intensity estimates for 2025 from our March 2025 report and this report.

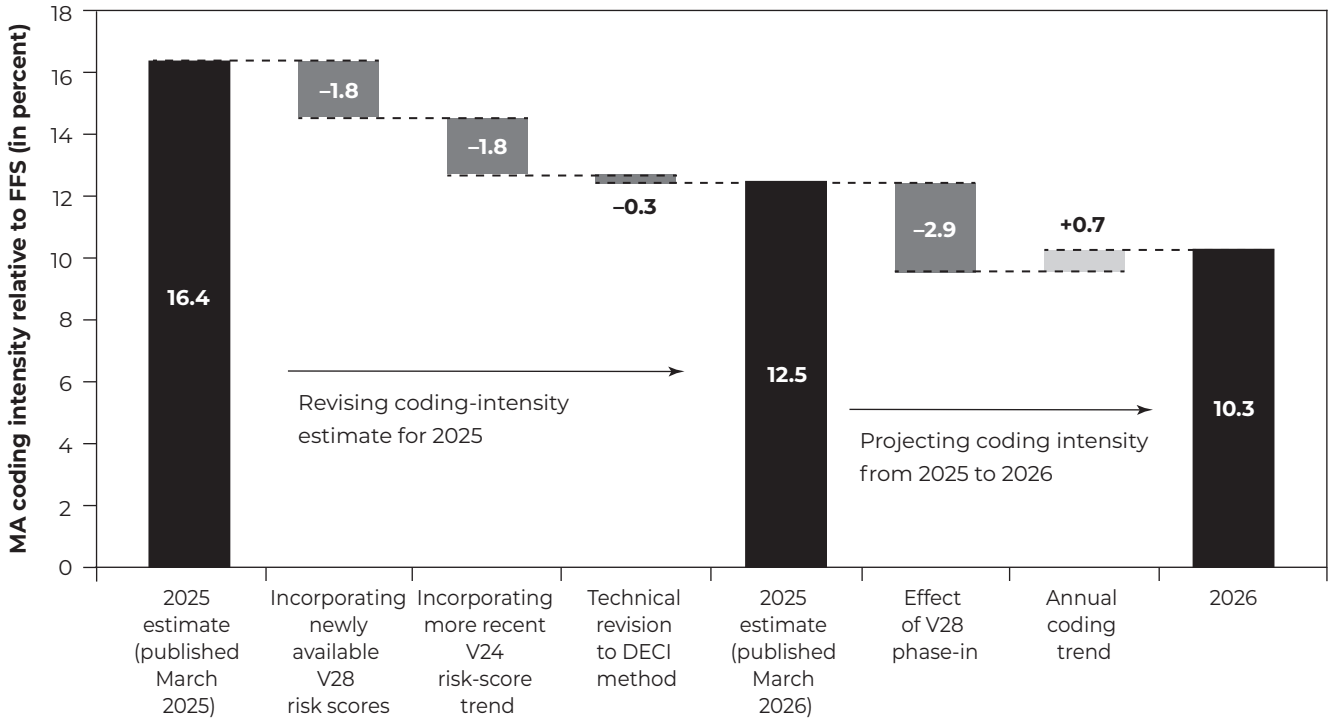
(continued next page)

rates, the V28 model also revised the diagnosis codes used to calibrate the model, which resulted in the removal of several codes from the model.[72] We estimate that in 2024, coding intensity would have been 8.8 percentage points lower under the V28 risk model, if that model had been fully phased in, than under the prior (V24) risk model, with coding-intensity estimates of about 9 percent and 18 percent, respectively. In 2024,

Updates to coding-intensity estimates reflect newly available data and other factors (cont.)

FIGURE 12–10

Updating the coding-intensity estimate for 2025 with new data, adjusting for other factors, and projecting coding intensity for 2026



Note: MA (Medicare Advantage), FFS (fee-for-service), DECI (demographic estimate of coding intensity). In our March 2025 report, we projected coding intensity from the most recent year of available data, 2023, to 2025. For this report, new data are available, and we have updated our method of projecting coding intensity. This figure reconciles the difference in coding-intensity estimates for 2025 due to updated data and other factors and explains the projection assumptions for 2026. These estimates are for MA enrollees without end-stage renal disease.

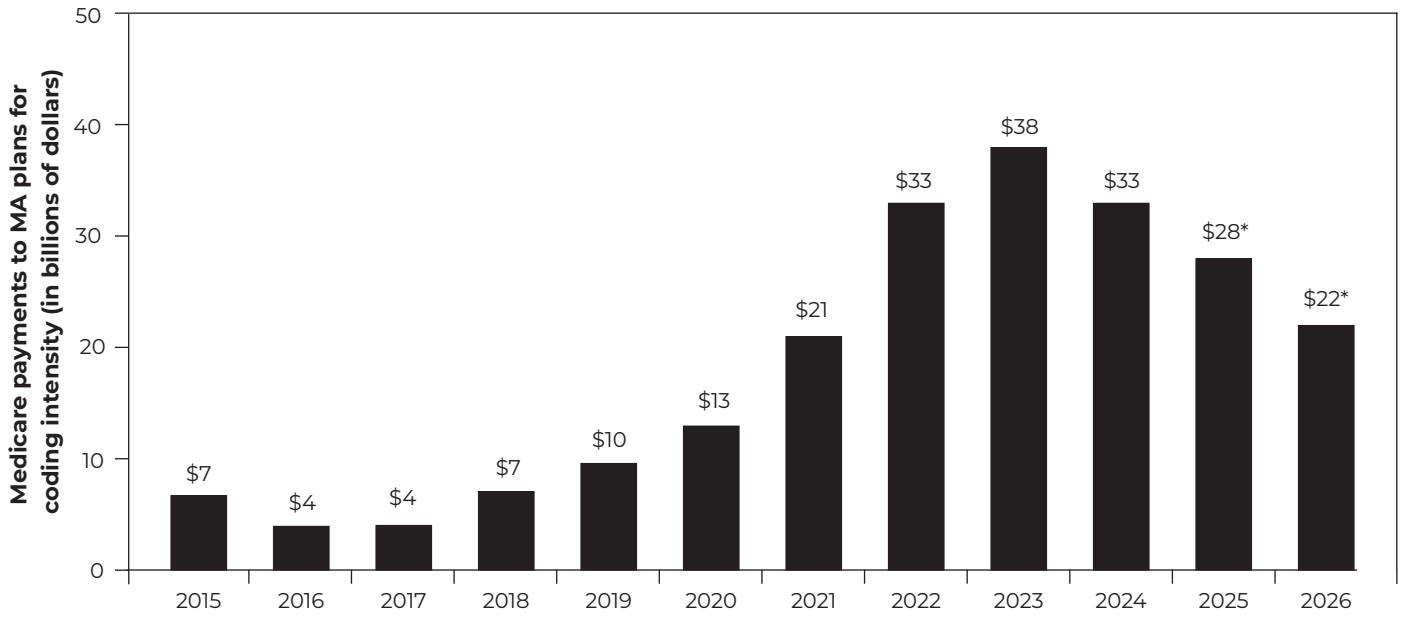
Source: MedPAC analysis of CMS enrollment and risk-score files.

Finally, we modified our method of calibrating the demographic risk model used in the demographic estimate of coding-intensity method to better align with how the CMS–HCC model is calibrated. The demographic model now uses a single denominator to calculate coefficients for differing groups of beneficiaries based on their Medicaid eligibility and institutional status. The change from using separate denominators for these groups to using a single denominator reduced our estimate of overall coding intensity for 2024 by 0.3 percentage points. We expect this effect will be similar in 2025.

For 2026, we project that coding intensity will be about 10 percent. Projecting from a 12 percent coding-intensity estimate in 2025 to 10 percent in 2026 reflects the combined effect of completing the phase-in of the V28 risk model from two-thirds for 2025 to fully phased in for 2026 (–2.9 percentage points) and an additional year of coding-intensity growth (+0.7 percentage points) based on the postpandemic trend for the V24 risk model. Next year, we will have access to a second year of V28 risk scores and can estimate a new trend based on that model. ■

FIGURE 12–11

MA coding intensity is projected to increase payments to plans by about $22 billion in 2026



Note: MA (Medicare Advantage). All estimates are based on the Commission's estimate of coding intensity after accounting for CMS's coding adjustment. Medicare spending for MA plans is based on the Medicare Trustees' reports.
* For 2025 and 2026, we project coding intensity based on the annual trend from 2023 through 2024 for the V24 risk model, an increase of 0.7 percentage points per year, and account for an estimated –2.9 percentage point annual effect due to the phase-in of the V28 risk model. See Technical Appendix 12-C, p. 440, for more details.

Source: MedPAC analysis of CMS enrollment and risk-score files and the Medicare Trustees' reports.

one-third of payments were adjusted with the V28 risk model, and the remaining two-thirds were adjusted with the V24 risk model.

Because the data required to estimate coding intensity are not yet available for 2025 and 2026, we project coding intensity for those years by incorporating the annual trend from 2023 to 2024 for the V24 risk model, an increase of 0.7 percentage points per year, and accounting for the effect of the continued phase-in of the V28 risk model (one-third in 2024, two-thirds in 2025, and fully phased in for 2026). (See text box "Updates to coding-intensity estimates reflect newly available data and other factors," pp. 392–393.) Based on the phase-in schedule, we project that V28 alone reduced coding intensity by an additional 2.9 percentage points in each of these years. Combining the effect of the annual coding-intensity trend with the V28 model phase-in, we project that coding intensity will continue to decline to about 12 percent in 2025 and to about 10 percent in 2026. Given that we have V28 risk-score data only for 2024, there is uncertainty about the impact of the continued phase-in of the V28 model for MA coding intensity. In particular, the V28 projection factor does not explicitly account for plans responding to the new coding incentives under the V28 model and actual trends under the V28 model may be higher or lower than we estimate. We will continue to monitor those effects and will update our analysis as we receive additional data.

For 2026, the projection of MA coding intensity of 10 percent is partially offset by CMS's coding-intensity adjustment, which reduced MA risk scores by

5.9 percent. The net effect is a 4 percent increase in MA risk scores due to coding intensity, leading to $22 billion in higher projected payments to MA plans.

Between 2007 and 2024, MA coding intensity resulted in $184 billion in increased payments to MA plans (Figure 12-11). Using our projection, we estimate that MA coding intensity in 2025 and 2026 will increase program spending by another $28 billion and $22 billion, respectively (data not shown). In total, we estimate that between 2007 and 2026, MA coding intensity will have generated $233 billion in higher aggregate payments to MA plans.

Documenting additional diagnosis codes increases plan rebates and can distort competition among plans

Documenting additional diagnostic codes increases the size of MA plans' rebates, which in turn allows plans to offer their enrollees more supplemental benefits than plans that document fewer additional diagnoses. For a plan submitting a bid below its benchmark (nearly all plans in 2026), the plan's rebate is based on the difference between the plan's bid for its expected enrollee population and the plan's risk-adjusted benchmark, which is the standard benchmark (for a beneficiary of average risk, with a 1.0 risk score) multiplied by the plan's expected average risk score. Raising a plan's average risk score raises the plan's risk-adjusted benchmark and widens the difference between the plan's bid and the risk-adjusted benchmark, thereby increasing the plan's rebate amount and ability to offer more supplemental benefits. Plans may also adjust their bids in response to higher benchmarks. In sum, plans can translate greater coding intensity into the ability to offer more supplemental benefits, giving them an advantage over their competitors in attracting enrollees.

MA payment policies aim to give plans an incentive to lower spending and improve quality by allowing them to offer more supplemental benefits. By reducing health care costs, plans can reduce their bids, increasing their rebate and supplemental benefit value. By improving quality scores, plans can be rewarded with a 5 percent or 10 percent increase in their benchmark or with an increase in the rebate percentage (the percentage of the bid and benchmark difference that determines the rebate amount).[73] These policies are intended to benefit enrollees through improved quality, more supplemental benefits, and reduced premiums, as well as lower taxpayer funding for the Medicare program. Greater MA coding intensity, however, distorts these incentives by allowing plans to offer more supplemental benefits regardless of whether they reduce costs or improve quality.

Table 12-7 (p. 396) illustrates the relationship between coding intensity and rebate amounts using a hypothetical example of three plans covering the same set of enrollees for whom the expected cost of care is the same, at $900 per member per month. Plan A and Plan Z have an expected risk score of 0.97, while Plan B has an expected risk score of 1.03 due to coding more diagnoses. All three plans have bids below the risk-adjusted benchmark and provide supplemental benefits funded by rebates. However, because Plan B has a higher risk score, its rebate is larger than Plan A's rebate ($52 per month vs. $15 per month), so it can offer enrollees more supplemental benefits. Plan B's coding efforts have therefore given it an unfair competitive advantage over Plan A.

In addition, increased coding intensity can influence the size of the rebate more than MA quality bonuses can. The higher risk score of Plan B, which has only 3.5 stars, gives it an advantage over bonus-level Plan Z, which has 5 stars: Plan B's rebate amount is higher than Plan Z's ($52 per month vs. $49 per month). Thus, by inflating its risk score from 0.97 to 1.03, Plan B can offer more supplemental benefits than are provided through quality bonuses.

The plans illustrated in Table 12-7 (p. 396) have a risk-score difference of 6 percentage points, reflecting different coding practices. We estimated coding intensity for MA organizations and found much greater variation in coding for 2024.[74] Figure 12-12 (p. 397) shows MA coding intensity relative to FFS coding, broken out by MA parent organization, excluding beneficiaries who reside in Puerto Rico, are enrolled in chronic-condition special-needs plans, or have ESRD, and organizations with fewer than 25,000 enrollees in the analysis.

Consistent with prior years, we find that about half of organizations (covering 16 percent of MA enrollees) have coding intensity below CMS's 2024 coding adjustment and are thereby penalized by the adjustment, while the other half of organizations (covering 84 percent of MA enrollees) have coding intensity that increases their payment even after

TABLE 12–7

Illustrative example: A plan that codes more diagnoses can offer its enrollees more supplemental benefits

Plan	Bid: Monthly cost of care for expected population	Risk score of expected population	Monthly MA benchmark for the county for an average-risk population (+5% for bonus plan)	Risk-adjusted monthly benchmark (benchmark multiplied by risk score)	Difference in risk-adjusted benchmark and plan bid	Monthly value of supplemental benefits (rebate amount)*
Nonbonus plans						
Plan A (3.5 stars)	$900	0.97	$952	$923	$23	$15
Plan B (3.5 stars)	900	1.03	952	981	81	52
Bonus plan						
Plan Z (5 stars)	900	0.97	1,000	970	70	49

Note: MA (Medicare Advantage). An average-risk population has a risk score of 1.0. This example assumes that the actual cost of care for the expected population is $900 monthly for each of the three plans and that the plans serve the same beneficiaries. Plan B's risk score of 1.03 is inflated due to greater diagnostic-coding effort.
* Plan A and Plan B at 3.5 stars have a rebate percentage of 65 percent. Plan Z at 5 stars has a rebate percentage of 70 percent.

accounting for the 2024 coding adjustment. These differences demonstrate that CMS's across-the-board adjustment for coding intensity, which reduces all MA risk scores by the same amount, perpetuates inequity across contracts by reducing net revenue for plans with lower coding intensity and allowing other plans to retain a significant amount of revenue from higher coding intensity.

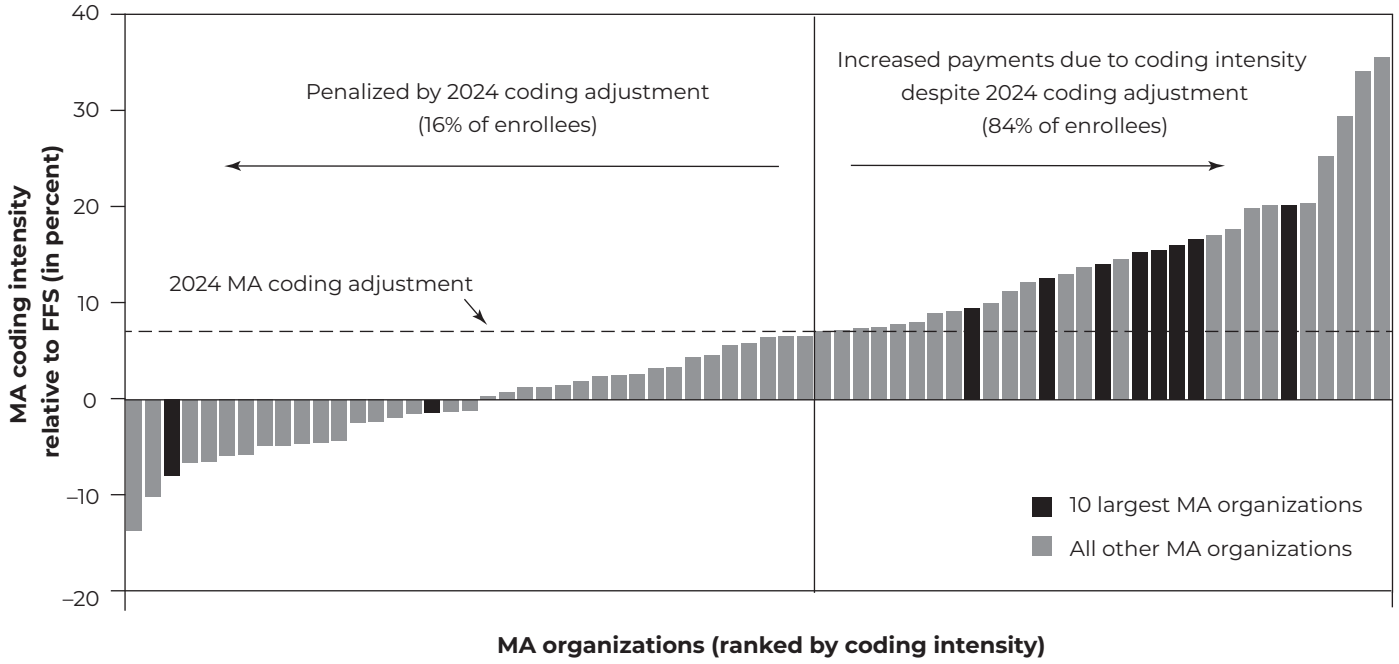
We also find significant variation in coding intensity across the 10 largest MA organizations (covering 81 percent of MA enrollees), from about 8 percent below to about 20 percent above FFS levels. Eight of the 10 largest MA organizations had greater coding intensity than the 2024 coding adjustment and therefore received a net increase in payment due to their coding practices. These differences are large enough to give MA organizations with higher coding intensity a significant competitive advantage by increasing the size of plan rebates and helping them to attract more enrollees. Our finding that coding intensity varies across MA organizations is consistent with other research (Curto et al. 2025, Geruso and Layton 2020, Kronick and Chua 2021, Kronick et al. 2025b, Kronick and Welch 2014).

As noted earlier, we found that in 2024, coding intensity under the V28 model was 8.8 percentage points lower than under the V24 model, on average. We also estimated the difference between coding intensity under the two models across MA organizations. Given the difference in coding intensity across organizations, for the V28 model to be an effective and fair approach to reducing coding intensity, it should reduce coding intensity consistent with an organization's overall coding level. Table 12-8 (p. 398) shows that in 2024, the V28 risk model reduced coding intensity more for organizations with larger V24 coding intensity. The effects are smaller for organizations with lower levels of coding intensity, particularly those with coding levels below that of FFS, suggesting that the effects of V28 on coding intensity were well-targeted to the organizations with the highest levels of coding intensity.

Organizations with coding intensity below FFS levels ("<–10 percent" and "–10 to 0 percent" rows) had no or a very small reduction in average coding intensity due to the V28 model, 0.3 percent and –1.6 percent, respectively. With the exception of the "0 to 5 percent" group at –7.9 percent difference, the

FIGURE 12–12

Coding intensity relative to FFS varied widely across MA organizations, 2024



Note: FFS (fee-for-service), MA (Medicare Advantage). Coding-intensity estimates reflect the one-third V28 model and two-thirds V24 model blend used for payment in 2024. All estimates account for any differences in age, sex, Medicaid eligibility, and institutional status between MA and FFS populations. New enrollees are constrained to have no coding intensity because their risk scores are not based on diagnostic coding. Beneficiaries residing in Puerto Rico, enrolled in a chronic-condition special-needs plan, or with end-stage renal disease are excluded from the analysis, as well as organizations with fewer than 25,000 enrollees. MA organizations with 25,000 or more enrollees cover about 97 percent of eligible MA enrollment.

Source: MedPAC analysis of CMS enrollment and risk-score files.

magnitude of the V28 effect increases along with the level of V24 coding intensity.[75]

Although there is a correlation between the V24 coding-intensity level and reduction in coding intensity due to V28, there also is variation in the V28 effect among organizations with similar V24 coding-intensity levels. Figure 12-13 (p. 399) shows coding-intensity estimates under the V24 and V28 risk models for each MA organization, ranked by V24 coding intensity in 2024. The gray shaded area represents the coding-intensity estimate under the V24 risk model, and the black bars represent the coding-intensity estimate under the V28 risk model for the same MA organization.

As shown in Table 12-8 (p. 398), the V28 risk model reduces overall coding intensity by the largest amount for organizations with the highest V24 coding intensity. However, as an example of the varying effect of V28, three organizations that had V24 coding intensity between 14.5 percent and 14.9 percent had V28 coding intensity of 8.6 percent, 0.5 percent, and 11.8 percent. Overall, we find that V28 has generally reduced overall coding intensity and improved the fairness of the MA risk-adjustment system.

MA plans have several tools to code more diagnoses

MA plans use several mechanisms, most of which do not exist in FFS Medicare, to document diagnoses for their enrollees. They can identify enrollees likely

TABLE 12–8

The V28 risk model reduced coding intensity more for MA organizations with higher V24 coding intensity, 2024

Level of V24 coding intensity	Share of enrollee years among MA organizations	Average difference in coding intensity (V28 estimate – V24 estimate)
<–10%	0.2%	0.3%
–10 to 0%	4.8	–1.6
0 to 5%	9.1	–7.9
5 to 10%	4.2	–5.0
10 to 15%	19.3	–5.5
15 to 20%	30.8	–8.5
20 to 25%	20.0	–11.5
>25%	1.5	–23.3

Note: MA (Medicare Advantage). All estimates account for any differences in age, sex, Medicaid eligibility, and institutional status between MA and fee-for-service populations. New enrollees are constrained to have no coding intensity because their risk scores are not based on diagnostic coding. Beneficiaries residing in Puerto Rico or enrolled in a chronic-condition special-needs plan are excluded from the analysis, as well as organizations with fewer than 25,000 enrollees. MA organizations with 25,000 or more enrollees cover about 97 percent of eligible MA enrollment.

Source: MedPAC analysis of CMS enrollment and risk-score files.

to have an HCC that has not yet been documented using data the plan already has: an enrollee's historical claims, risk-score data, and prescription drug data (e.g., a prescription for insulin likely indicates a diabetes diagnosis). Of all the mechanisms to document more diagnosis codes, evidence continues to highlight MA plans' use of health risk assessments and chart reviews as major sources of plan revenue from coding intensity.

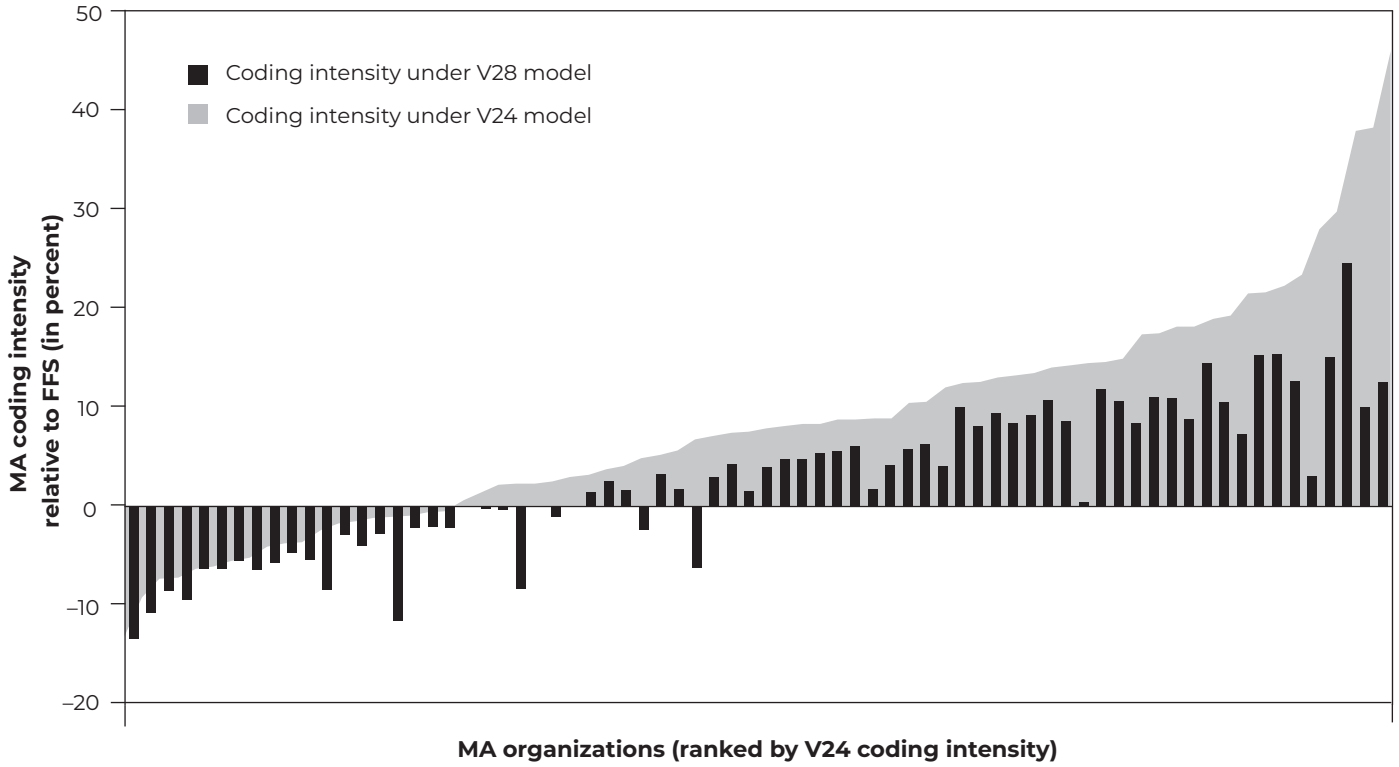
Coordination of coding incentives through pay-for-coding programs, capitated arrangements, and corporate ownership Some plans try to ensure that providers submit all possible diagnoses for their enrollees through pay-for-coding programs, in which plans send physicians a patient-assessment form that includes diagnosis codes that the plan has identified for a beneficiary. Plans ask physicians to confirm the existence of plan-identified diagnoses on the form and document those diagnoses on subsequent claims. Plans pay physicians based on completing the form or as a dollar amount per diagnosis code submitted. The corporate ownership of physician groups by MA organizations seems to intensify such programs. One organization is reported to have a dashboard comparing chronic conditions identified for MA enrollees across physician groups owned by that company and to offer bonuses as an incentive.[76]

Corporate ownership of physician practices by MA organizations or other companies focusing on risk-based payment arrangements with MA organizations can be an effective way to align an MA plan's coding incentives with the providers who have access to patient medical records and are responsible for coding diagnoses. Under many capitated arrangements, a portion of the increase in a plan's revenue from more diagnoses being documented is passed on through the capitated payments to providers (often determined as a percentage of the plan's revenue).

Our prior analysis has found that a disproportionate share of the organizations with the highest levels of diagnostic coding are located in California and Florida (Medicare Payment Advisory Commission 2025b). We also found a higher use of capitated payments to providers among these organizations and suggested that capitated arrangements may have contributed to higher coding-intensity estimates. A new working paper assessed the effect of corporate primary care practices (CPCPs) by tracking risk scores before and

FIGURE 12–13

Coding intensity under the V28 risk model was lower than under the V24 risk model, with larger differences among MA organizations with the highest V24 coding intensity, 2024



Note: MA (Medicare Advantage), FFS (fee-for-service). All estimates account for any differences in age, sex, Medicaid eligibility, and institutional status between MA and FFS populations. New enrollees are constrained to have no coding intensity because their risk scores are not based on diagnostic coding. Beneficiaries residing in Puerto Rico, enrolled in a chronic-condition special-needs plan, or with end-stage renal disease are excluded from the analysis, as well as organizations with fewer than 25,000 enrollees. MA organizations with 25,000 or more enrollees cover about 97 percent of eligible MA enrollment. This analysis compares coding intensity for V24 and V28 risk scores and does not reflect the blending of the two risk models used for paying MA plans in 2024.

Source: MedPAC analysis of CMS enrollment and risk-score files.

after a physician joins a CPCP, practices that are primarily located in Florida, Texas, and California. The analysis found that the risk scores of MA enrollees increased by 25 percent two years after their PCP joined a CPCP and by 35 percent after five years, with no corresponding increase in utilization nor an increase in risk scores derived from pharmaceutical data (Meyers et al. 2025). We note that the alignment of clinical and financial accountability under the capitated arrangements may provide a number of beneficial incentives to constrain costs, avoid low-value care, and coordinate care.

MA plans' use of health risk assessments to increase diagnostic coding Health risk assessments are provided to all Medicare beneficiaries as part of an annual wellness visit, and, for MA enrollees, health risk assessments are often provided during a plan-initiated home visit.[77] Health risk assessments may be part of a plan's care-management approach and should continue to be used for that purpose when they are used to improve patient care. However, when health risk assessments identify diagnosis codes that are not documented on subsequent encounters with providers, which would demonstrate that the

condition was not under active management, those codes should not be used for risk adjustment when calculating payments to plans. Health risk assessments sometimes rely on patient self-reporting of medical conditions, which may result in HCCs based on inaccurate diagnoses, diagnoses that are no longer active (and therefore not eligible for risk adjustment), or diagnoses without sufficient evidence to conform to International Classification of Diseases coding guidelines (Department of Justice 2022). (More detailed information can be found in our March 2023 report chapter on Medicare Advantage.)

We analyzed 2022 encounter records to identify HCCs that were supported only by a health risk assessment, meaning that there was no physician or hospital service provided to treat a beneficiary for a specific health condition during the same calendar year.[78] In 2022, about 7.7 million MA enrollees had a health risk assessment that identified at least one HCC and a total of 17.1 million unique HCCs were identified through health risk assessments. Of those, 3.5 million beneficiaries had a health risk assessment that was the only source for at least one of the HCCs identified, and a total of 5.7 million HCCs (one-third of all HCCs identified on health risk assessments) were identified only on a health risk assessment. Six HCCs each generated more than $900 million in payments from these assessments, accounting for about half of all payments generated by codes found only on health risk assessments.[79] We found that diagnostic coding that was associated with only health risk assessments accounted for $15 billion in payments to MA plans in 2023, or a little more than 3 percent of all payments to MA plans. About 80 percent of these payments were from health risk assessments conducted as part of an annual wellness visit or initial preventive physical examination, while the rest of these payments were from in-home health risk assessments. Other researchers found similar estimates of the impact of health risk assessments, contributing about $12 billion in payments to MA plans in 2020 (James et al. 2024). That research also found differences in the use of health risk assessments across parent organizations.

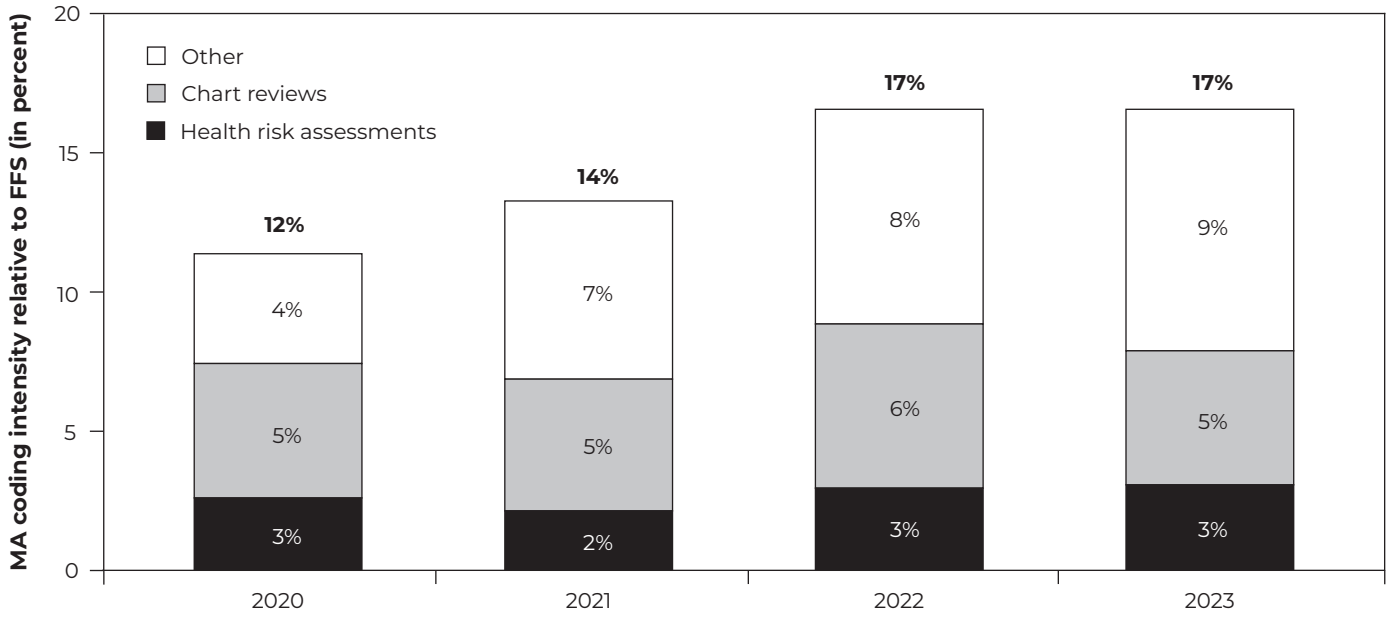
MA plans' use of chart reviews to increase diagnosis coding Some MA plans devote significant effort to conducting chart reviews to increase MA payments. Because chart reviews are not used in FFS Medicare, all diagnoses newly documented through chart reviews contribute to differences in FFS and MA diagnostic coding and contribute to increased payments to MA plans. Chart reviews that are allowable for risk adjustment document the diagnoses made during hospital and physician encounters in which medical services were provided. MA plans use chart reviews to identify diagnoses not captured through the usual means of reporting diagnoses (e.g., claims data and encounter data): diagnoses that are not reported on the provider's claim sent to the MA plan, diagnoses made during an encounter in which the MA plan does not submit a record of the encounter to CMS, or diagnoses made during an encounter in which the total number of diagnoses from that encounter exceeds the number of diagnosis fields on the encounter record. Because Medicare requires each HCC to be supported by diagnostic evidence in a patient's medical record (chart), chart reviews are one way for plans to identify diagnoses not captured through provider claims or in plan encounter data.

Like health risk assessments, some MA plans treat chart-review programs as an independent revenue stream that yields a positive return on investment because the additional Medicare payments from newly documented diagnoses far exceed the costs of paying nurses and medical assistants to review medical charts.[80] Several lawsuits allege that MA plans use chart reviews to identify new diagnosis codes but not to verify the accuracy of already submitted codes. Some lawsuits allege that an MA organization is aware that diagnoses submitted to CMS are not supported by the medical chart and therefore violate Medicare's rules governing the reporting of diagnoses (United States of America ex rel. Benjamin Poehling v. UnitedHealth Group Inc. et al. 2016, United States of America ex rel. James M. Swoben v. Secure Horizons 2017, United States of America v. Anthem Inc. 2020). Some plans and vendors appear to selectively review charts with a higher likelihood of increasing revenue and use artificial intelligence to more accurately identify likely revenue-producing charts (Blue Health Intelligence 2020, Optum 2020). When chart reviews identify diagnoses that are not documented on subsequent encounters with providers, they increase risk scores of MA enrollees and the financial burden of the program for taxpayers and beneficiaries.

We analyzed 2022 encounter records to identify HCCs that were supported by a chart review but not through

FIGURE 12–14

Chart reviews and health risk assessments accounted for about half of overall MA coding intensity, 2020–2023



Note: MA (Medicare Advantage), FFS (fee-for-service). Figure shows the impact of coding intensity on payments to MA plans for the years 2020 through 2023. The underlying diagnoses were reported during health care encounters in the previous year, 2019 through 2022, respectively. "Other" sources of coding intensity can result from pay-for-coding programs, patient-assessment forms, transferring coding incentives from plans to providers via subcapitation, and other mechanisms. Components may not sum to totals due to rounding.

Source: MedPAC analysis of CMS enrollment and risk-score files and the Medicare Trustees' reports.

any other record of a physician or hospital encounter during the same calendar year. In 2022, about 12.0 million MA enrollees had a chart review that identified at least one HCC, and a total of 33.2 million unique HCCs were identified on chart reviews. Of enrollees with a chart review, 5.8 million beneficiaries had a chart review that was the only source of an HCC, and a total of 9.0 million HCCs (about 27 percent of all HCCs identified on chart reviews) were identified only through a chart review. Eight HCCs each generated more than $1 billion in Medicare payments from chart reviews, accounting for more than half of all payments generated by codes only found on chart reviews.[81] We found that in 2023, chart reviews alone accounted for about $24 billion in payments to MA plans, or about 6 percent of all payments to MA plans.

We estimate that chart reviews and health risk assessments together accounted for about $34 billion in payments to MA plans, or about 8 percent of all payments to MA plans in 2023.[82] Combined with our finding that all sources of coding intensity resulted in MA risk scores that were about 17 percent higher than risk scores for comparable FFS beneficiaries in 2023, we conclude that health risk assessments and chart reviews together accounted for about half of all MA coding intensity (Figure 12-14). Our estimates are similar to the results of another published analysis in terms of the overall magnitude of the impact and of the trend in the growing impact of health risk assessments and chart reviews on payments to MA plans from 2016 to 2021 (Jacobs 2024).

Update on risk-adjustment data-validation audits

Medicare payments to Medicare Advantage (MA) plans are based, in part, on diagnostic data that plans submit to CMS. Program rules state that, to be used for payment, diagnoses submitted for risk adjustment must result from a hospital inpatient stay, hospital outpatient visit, or face-to-face visit with a physician or other health care professional; diagnoses also must be supported by evidence in the patient's medical record. MA organization leadership signs an attestation stating that the submitted diagnostic data are accurate.

CMS conducts risk-adjustment data-validation (RADV) audits after payments have been made to the plan to check whether plan-submitted diagnoses are supported by the medical record as required by Medicare. If diagnoses do not meet requirements, plans are required to return payments to Medicare. These overpayments for diagnoses that do not meet program requirements are different in concept from payments for higher MA coding intensity. Diagnoses that are documented for MA enrollees that would have not been documented FFS beneficiaries contribute to differences in coding intensity, but those diagnoses may or may not have been documented appropriately in the medical record and therefore may or may not be considered "overpayments" in the RADV audit context. Similarly, diagnoses that are not appropriately supported by the medical record contribute to RADV overpayments, but such diagnoses may have been documented for risk adjustment equally in FFS and MA and therefore do not contribute to differences in coding intensity. However, there is an unknown amount of overlap between overpayments for RADV audits and payments to plans for higher MA coding intensity.

For RADV audits of payment years through 2017, CMS has been using a protocol that audits roughly 5 percent of MA contracts per year; uses a sample of 201 enrollees in each contract across three strata of beneficiaries with low, medium, and high risk scores; calculates an error rate for the sample population; and then calculates the overpayment amount for the sample of audited beneficiaries. The majority of MA enrollees would be eligible for audit since nearly 70 percent of MA enrollees had at least one hierarchical condition category (HCC) in 2022, and only a small fraction of these enrollees would be excluded from the audit sample for other reasons.[83] RADV audits of MA contracts during this period have been limited, and their results are largely unreported. Audits of 2007 risk-adjustment data identified diagnoses that did not meet risk-adjustment criteria and determined that average overpayment rates were well over 10 percent for most contracts under audit (Schulte 2016). CMS recovered $13.7 million in overpayments from audits of 37 contracts, based on overpayments for only the 7,437 beneficiaries included in the audit sample (Centers for Medicare & Medicaid Services 2017a). No audits were conducted for payment years 2008, 2009, or 2010. Kaiser Health News obtained, through a Freedom of Information Act request, summaries of the preliminary results for 90 audits completed during 2011, 2012, and 2013 and found that 71 audits uncovered net overpayments, with 23 audits finding overpayments of $1,000 or more per beneficiary (Schulte and Hacker 2022).

For audits of 2018 and subsequent years, the scope of RADV audits has changed in significant ways and is under review in the legal system.

- First, in the final rule published February 1, 2023, CMS outlined an audit method that would allow CMS to recover overpayments by extrapolating the error rate of the sampled enrollees to a larger population of audit-eligible enrollees in the contract (Centers for Medicare & Medicaid Services 2023c). The final rule also eliminated the use of extrapolation for RADV audits of 2017 and earlier, thereby limiting overpayment recovery to the audit sample only.

(continued next page)

Update on risk-adjustment data-validation audits

- In 2024 and 2025, CMS released audit methods (and updates to those methods) for payment years 2018 and 2019 that restrict the audit-eligible population to a much narrower set of enrollees in a given contract compared with audit-eligible populations for audits of 2017 and earlier. Audits of 2018 data will focus on only two sets of beneficiaries, or two "sampling frames": beneficiaries in the top decile of a contract's enrollees based on the greatest expected reduction in their risk score as a result of a RADV audit (the expected reduction in risk score due to an audit is based on a CMS improper-payment prediction model) or contract enrollees who had all of their HCCs supported only by chart reviews (Centers for Medicare & Medicaid Services 2024d). The first sampling frame includes roughly one-tenth of the beneficiaries who would have been audit eligible under the pre-2018 methods. For the second sampling frame, we estimate that between 2 percent and 3 percent of all MA enrollees (or between 3 percent and 4 percent of MA enrollees with at least one HCC) had all of their HCCs supported by only chart reviews, and those enrollees had an average of 1.5 HCCs. Audits for 2019 will focus only on the first sampling frame, beneficiaries in the top decile of a contract's enrollees based on the greatest expected reduction in the risk score as a result of a RADV audit (Centers for Medicare & Medicaid Services 2025j).

- In May 2025, CMS issued a press release stating that the agency will conduct RADV audits of all contracts and will expand the size of the audit sample for each contract (Centers for Medicare & Medicaid Services 2025b). At the time of the press release, the agency had already identified 58 contracts under audit for 2018 (Centers for Medicare & Medicaid Services 2025h). For 2019, the agency identified 355 contracts for RADV audits, which appears to align with the May 2025 press release of auditing all contracts with a sufficient audit sample (Centers for Medicare & Medicaid Services 2025i). In the press release, the agency also announced additional resources to facilitate the expansion in audit scope, including additional medical coding staff and the use of enhanced technology.

- In the final rule establishing regulations for RADV audits, CMS took the position that the agency would not use a "FFS adjuster" when calculating overpayment amounts in the audits (Centers for Medicare & Medicaid Services 2023c, Centers for Medicare & Medicaid Services 2018a). A FFS adjuster was announced in a 2012 RADV audit methods document as an offset to account for the difference in documentation standards for FFS claims used to develop the risk model (Centers for Medicare & Medicaid Services 2012).

- After publication of the final rule, Humana sued, claiming that CMS violated the Administrative Procedure Act because of the changing justification between the proposed and final rules regarding the FFS adjuster. In September 2025, the court vacated the final rule on the grounds that CMS violated the Administrative Procedure Act generally because the proposed rule justification that FFS adjusters introduce inequities does not appear in the final rule and could not have been a contributing factor for the new justification and that there was no meaningful dialogue in the final rule regarding the costs and benefits of the policy changes after MA organizations had relied on a previous rule's guidance from 2018 to 2023 (U.S. District Court for the Northern District of Texas 2025). CMS has not yet issued a new proposed rule to correct any Administrative Procedure Act deficits for this policy and has filed a notice of appeal of the judgment. Under the current circumstances, the scope of overpayment recovery from RADV audits under the final rule remains uncertain. ■

The Commission's 2016 recommendation on coding intensity

In our March 2016 report to the Congress, the Commission recommended a multipronged approach that would fully account for the impact of coding differences, improve the equity of the adjustment across MA contracts, and increase incentives to reduce costs and improve quality (Medicare Payment Advisory Commission 2016c). The Commission's approach to reduce MA coding intensity has been to address the mechanisms that generate coding differences first (e.g., remove health risk assessments and reduce year-to-year coding variations by using two years of diagnostic data) and then address remaining differences with either an across-the-board or tiered adjustment. The Commission's 2016 recommendation did not address the use of chart reviews because data were not available at that time, but eliminating chart reviews as a source of diagnoses for risk adjustment is consistent with the Commission's approach.[84]

The recommendation, which would replace the existing mandatory minimum coding-intensity adjustment (which has reduced MA risk scores by 5.9 percent since 2018), has three parts:

- develop a risk-adjustment model that uses two years of FFS and MA diagnostic data,
- exclude diagnoses that are documented only on health risk assessments from either FFS or MA, and then
- apply a coding adjustment that fully accounts for the remaining differences in coding between FFS Medicare and MA plans.

Implementing the first two policies—using two years of diagnostic data and excluding diagnoses documented through health risk assessments alone—and excluding chart-review data from risk adjustment (consistent with the Commission's approach) would result in a more equitable, targeted adjustment to MA contracts than the current across-the-board adjustment. As noted earlier, health risk assessments and chart reviews alone account for roughly half of estimated MA coding intensity. The Commission carefully considered options for addressing coding intensity and supports this approach because it balances implementation feasibility, administrative burden, and effectiveness.

Part of the cause of coding intensity is that providers do not report all possible diagnosis codes for their FFS beneficiaries. We note that using two years of diagnostic data would help address the underreporting of FFS beneficiaries' chronic conditions by helping to capture conditions that are not reported consistently year to year.

Adjusting for any remaining coding-intensity differences could also improve equity across MA contracts. Under one illustrative approach, contracts would be grouped into tiers of high, medium, and low coding intensity, and a coding-intensity adjustment would be applied based on each tier's average level of coding intensity (Medicare Payment Advisory Commission 2016a). CMS has used a similar approach to select MA contracts for RADV audits.[85] This policy would improve the overall equity of the coding-intensity adjustment relative to the single, across-the-board adjustment used today.

Industry concentration and integration

Each year, we assess the structure of the MA market, including trends in the concentration of enrollment and the integration of MA organizations with other entities in the health care sector.[86] In 2025, the MA program included 5,492 plan options offered by 164 organizations. As noted above, on average in 2026, beneficiaries have 39 plan options to choose from, offered by eight organizations. However, enrollment is highly concentrated at the local level: The largest organization in a county typically enrolls between 40 percent and 50 percent of the market. Enrollment is also increasingly concentrated at the national level; just three organizations enrolled more than half of all MA enrollees nationally in 2025. Additionally, MA organizations are increasingly integrating vertically, with provider and insurer lines of business having common ownership (or other financially aligned arrangements). Vertical integration is greatest among provider-owned MA plans—typically offered by large health systems—though insurer ownership of providers has increased significantly in recent years.

MA market was heavily concentrated locally and nationally in 2025

Enrollment in MA is highly concentrated at the local level and increasingly concentrated at the national

level. High enrollment concentration—particularly at the local level—can be a cause for concern if it dampens the competitive pressures that might otherwise drive insurers to maintain or improve quality, make care delivery more efficient, lower premiums, or provide supplemental benefits. Researchers have shown that markets with less concentration are associated with increased MA benefit generosity and lower MA premiums (Cabral et al. 2018, Pelech 2018, Pizer and Frakt 2002, Song et al. 2013). In extreme cases, dominance by a single firm (or small set of firms) may make it difficult for competitors to enter or remain active in a market (Frakt et al. 2012, Pelech 2017).[87]

Over the last decade, enrollment in MA has become increasingly concentrated at the national level in plans owned by a small set of large insurers that serve a majority of markets in the country. Between 2008 and 2025, the share of total MA enrollment in the three largest firms (UnitedHealth Group, Humana, and CVS Health) rose from 32 percent to 58 percent. Much of the growth of these firms—particularly UnitedHealth Group and Humana—has been driven by enrollment increases in counties in which the insurers have offered plans for many years (Hnath et al. 2024). However, all three have also significantly expanded the number of counties in which they offer plans. For example, UnitedHealth Group expanded from offering coordinated-care plans (i.e., HMO or PPO plans) in 41 percent of counties (a service area covering 68 percent of MA-eligible beneficiaries) in 2013, to 54 percent of counties (covering 81 percent of eligible enrollees) in 2020, to 88 percent of counties (covering 96 percent of eligible enrollees) in 2025 (Table 12-9, p. 406).[88] Humana and CVS Health have also expanded their service areas, and all three organizations now offer plans in counties that are home to more than 85 percent of MA-eligible beneficiaries. A recent study found that some of the service-area expansions for these three insurers were due to the companies acquiring existing MA contracts from another insurer (Hnath et al. 2024).[89] For example, acquisitions accounted for 30 percent of new county participation for UnitedHealth Group between 2012 and 2023 (acquisitions accounted for 16 percent and 5 percent of new county participation for CVS Health and Humana, respectively) (Hnath et al. 2024). However, the study found that nationally, for all MA insurers, only 15 percent of total market-entry events were attributable to acquisitions. These findings suggest that the service-area expansions of large national insurers have (at the time of market entry) generally served to introduce new competitors into local markets and are not simply an artifact of changes in ownership of existing competitors.

Between 2024 and 2025, the share of enrollees covered by these top three organizations fell by 1 percentage point to 58 percent (but remained 2 percentage points higher than in 2021) (Table 12-9, p. 406).[90] Among conventional plans (i.e., plans available to all Medicare beneficiaries, excluding SNPs and employer group plans), the top three organizations nationwide had 54 percent of enrollment in 2025—a decrease from 57 percent in 2024.[91]

Given the relevance of local competition for MA enrollees, we place greater importance on examining competition at the county level (Table 12-9, p. 406). Measures of local-market concentration suggest that concentration remained near 2024 levels in 2025. Excluding employer plans and SNPs, in 2025, enrollment in the largest organization in each county (regardless of the insurers' national enrollment) accounted for 43 percent, on average, of all MA enrollment in the county. Enrollment in the top-three organizations in each county accounted for 82 percent, on average, of all MA enrollment (unchanged from 2021 but slightly higher than the 81 percent observed in 2024). The share of MA enrollees living in counties with highly concentrated markets (as measured using the Herfindahl–Hirschman Index (HHI), a common measure of market concentration) remained stable at 95 percent (data not shown).[92] The geographic expansion of large national insurers has contributed to the changing concentration in local markets.

Overall, local MA markets tend to be highly concentrated, although the level of concentration has trended downward in recent years. When measured using the HHI, average county-level enrollment concentration has fallen over the last decade, despite the rising share of enrollees covered by the three largest firms nationally. This trend coincides with insurers entering new markets and steadily gaining market share in areas that have historically been very concentrated. Estimates for 2026 indicate that the average beneficiary will have access to many MA plans offered by a substantial number of organizations, as illustrated earlier in this chapter. However, large national insurers, and some regional

TABLE 12–9

Medicare Advantage enrollment is highly concentrated at the local and national levels, July 2021–July 2025

Plan type	Share of MA-eligible beneficiaries living in counties in which insurer offers an MA plan*			Percentage point change in share	
	2021	2024	2025	2021–2025	2024–2025
Conventional plans					
Top 3 nationwide					
UnitedHealth Group Inc.	86%	95%	96%	+10	+1
Humana Inc.	88	93	93	+5	0
CVS Health Corporation	81	88	87	+6	–1

	Share of enrollment			Percentage point change in share	
	2021	2024	2025	2021–2025	2024–2025
All MA plans					
Top 3 nationwide	**56%**	**59%**	**58%**	**+2**	**–1**
UnitedHealth Group Inc.	27	28	29	+2	+1
Humana Inc.	18	18	17	–1	–1
CVS Health Corporation	11	13	12	+1	–1
Conventional plans					
Top 3 nationwide	**55**	**57**	**54**	**–1**	**–3**
UnitedHealth Group Inc.	24	25	24	0	–1
Humana Inc.	21	22	20	–1	–2
CVS Health Corporation	9	9	11	+2	+2
County level (weighted average)**					
Top organization	44	42	43	–1	+1
Top 2 organizations	68	66	67	–1	+1
Top 3 organizations	82	81	82	0	+1

Note: MA (Medicare Advantage). Includes only MA plans (coordinated-care plans, private-fee-for-service plans, and Medicare Medical Savings Account plans). Excluded are cost-reimbursed plans and Medicare–Medicaid demonstration plans. "Conventional plans" excludes special-needs plans and employer group plans, which have restricted availability. Components may not sum to totals, differences, and market shares due to rounding.
* Counties in Connecticut are excluded due to changes over time in how the state's counties are tabulated.
** County-level shares of MA enrollment reflect the beneficiary-weighted average of the top organizations in each county.

Source: MedPAC analysis of July 2021–2025 enrollment data and CMS landscape files.

or local insurers, frequently enroll a large fraction of MA enrollees in an area. Such concentration may dampen competition, a topic the Commission will continue to explore and monitor.

Vertical integration of MA plans and providers

MA organizations are increasingly integrating vertically, with provider and insurer lines of business having common ownership (or other financially

aligned arrangements). Some have hypothesized that MA organizations may view vertical integration as a means of more directly promoting care that is more efficient, higher quality, and more clinically integrated. Although several features of MA payment may reward firms that vertically integrate insurer and provider businesses, incentives for integration are not confined to Medicare and are influenced by trends in other sectors of the health care system, as well as by the actions of regulatory agencies—particularly the Department of Justice and Federal Trade Commission. In this section, we assess integration as it pertains to MA and discuss elements of MA payment policy that may incentivize integration.

The Commission has previously found that vertical integration is highest in organizations in which a provider-based organization owns and operates a health plan, although the share of enrollees in such vertically integrated plans has decreased over time (Chartis Group 2024, Johnson et al. 2017, Medicare Payment Advisory Commission 2024c). However, insurer-led integration has accelerated in recent years, and several of the largest MA organizations (MAOs) have invested significantly in the acquisition of provider businesses, suggesting that insurers see advantages to owning a greater share of the health care delivery system (CVS Health 2023, Humana 2022, Humana 2021, Humana 2020, Signify Health 2023, UnitedHealth Group 2023, UnitedHealth Group 2022).

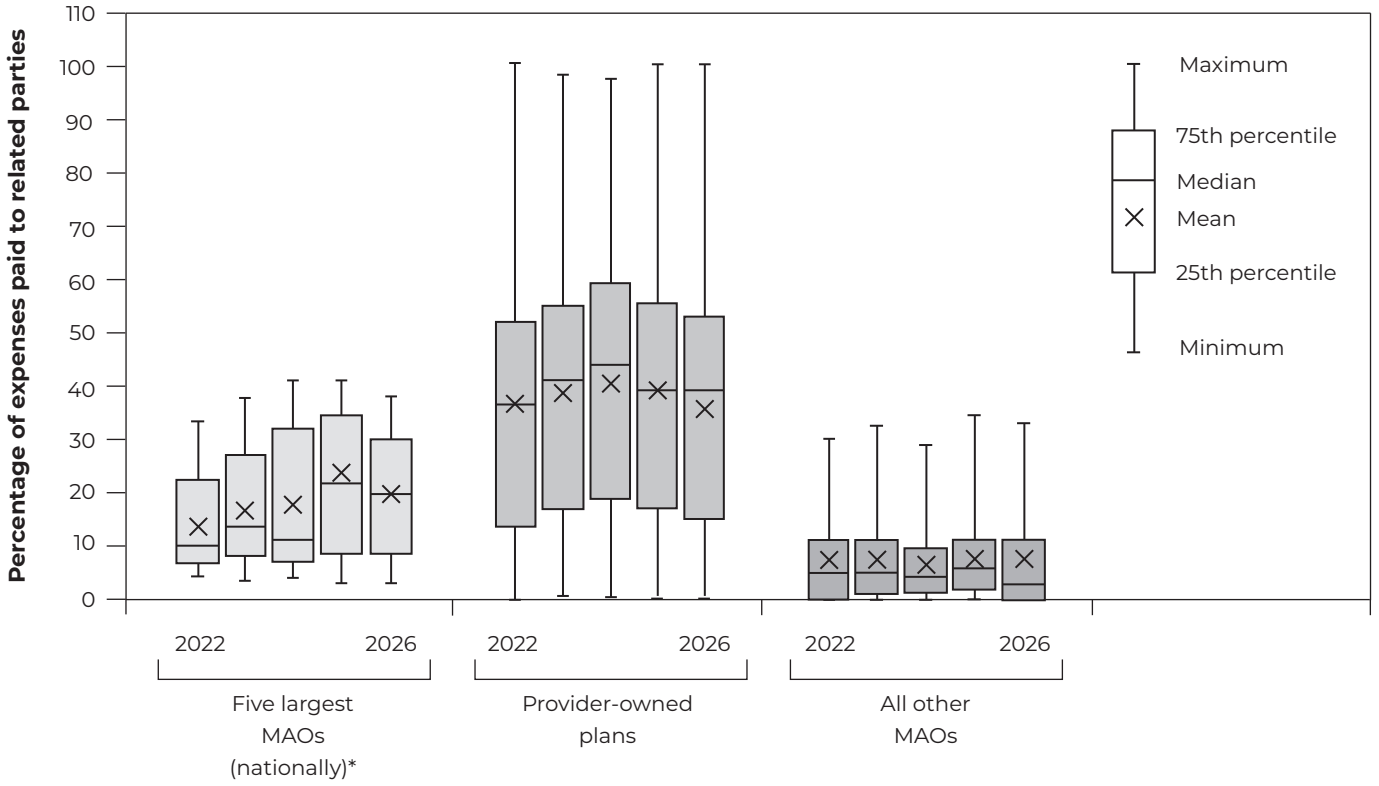
MA payment policy, though not the only factor influencing firms' decisions to integrate, may promote such arrangements by incentivizing efficient care delivery, rewarding plans that record diagnoses more thoroughly, and providing bonuses to plans that perform well on quality measures (Medicare Payment Advisory Commission 2024c). Although the evidence regarding the relationship between plan–provider integration and efficiency, coding intensity, and quality is limited, MAOs may view integration as a way to influence providers' activities more directly to achieve the outcomes incentivized under MA's capitated payment structure. For example, as described in the section on coding intensity (p. 398), a recent working paper that assessed the effect of corporate ownership of primary care practices on MA risk scores found that—for some insurer–provider combinations—the risk scores of MA enrollees increased substantially in the years after their PCP joined or was acquired by the vertically integrated corporate entity (Meyers et al. 2025). Researchers have also suggested that payments to plan-owned providers may offer an opportunity for MAOs to retain a higher share of profits within the parent organization while meeting MLR requirements (Frank and Milhaupt 2023, Frank and Milhaupt 2022). Empirical evidence on this effect is limited; one recent analysis of a small nonrepresentative sample of practices found that UnitedHealthcare's payments to providers owned by Optum (which is owned by the same parent company, UnitedHealth Group) were higher than prices paid to non-Optum providers (Arnold and Fulton 2025). A different analysis, using data on prices paid in the commercial sector, also found that corporate-owned primary-care practices were paid higher rates than independent practices (Wang et al. 2025). While these findings provide some information, additional research is needed to better understand if or how vertical integration of insurers and providers affects the prices insurers pay for services.

No public data provide a systematic accounting of ownership relationships between MA plans and health care providers, which poses a significant barrier to studying the effects of vertical integration. Some researchers have endeavored to create their own datasets, focusing on particular types of providers. For example, a recent paper used information from corporate financial filings, merger and acquisition databases, and insurer directories to identify medical groups operated by large MA insurers; the study estimated that the insurer-owned share of the primary care market (measured by volume) grew from less than 1 percent in 2016 to over 4 percent in 2023 (Adler et al. 2025). The study found that Optum, owned by UnitedHealth Group, was the largest of the entities—accounting for more than 2 percent of the market nationally but more than 35 percent in some counties.

CMS requires MAOs to submit limited information about the extent of their financial relationships with providers and other entities as part of the bidding process. Specifically, plans submitting bids are required to report the amount (including medical costs and nonbenefit expenses) per member per month that they expect their members to receive from a related party.[93] While the submitted data are projections and not a report of actual utilization in a completed year, they provide insight as to the MAO's own assessment of its integration with providers (or other entities)

FIGURE 12–15

Vertical integration is increasing and is highest in plans owned by provider organizations



Note: MAO (Medicare Advantage organization). Excluded are cost-reimbursed plans, Medicare–Medicaid demonstration plans, and employer group plans.
* The five largest non-provider-owned plans are UnitedHealth Group, Humana, CVS Health, Elevance Health, and Centene. Kaiser Foundation Health Plan enrolls more beneficiaries than Centene but is categorized as a provider-owned plan in the figure. "Maximum" and "minimum" are the values for the category when outliers are excluded.

Source: MedPAC analysis of data from CMS on plan bids, MMIT Directory of Health Plans, and the Agency for Healthcare Research and Quality Compendium of U.S. Health Systems.

that deliver services covered by the plan. Such entities include providers of medical benefits (e.g., doctors and hospitals) as well as entities that provide or administer supplemental benefits. The Commission has previously found that MAOs often administer supplemental benefits through vertically integrated arrangements (Medicare Payment Advisory Commission 2025a). For example, the parent organizations of some MAOs own or operate businesses that administer OTC cards and flex cards that are often used to provide MA supplemental benefits (OTC Health Solutions 2025, Solutran 2025).

Figure 12-15 illustrates that the degree of vertical integration in MA varies widely across parent organizations and is highest in provider-owned plans. Among these plans, the share is highest in plans owned by health systems (data not shown). The data show that large national insurers, on average, remain significantly less vertically integrated than their provider-owned competitors. However, at least one large national insurer is now significantly more vertically integrated than many provider-owned plans. This finding is particularly noteworthy given that large national organizations insure a significant share of MA

enrollees nationwide, so trends in the organization of the businesses can affect millions of beneficiaries. While the information presented here is reported at the parent-organization level, health care markets operate primarily at a local level, and national statistics do not necessarily describe the markets in which most beneficiaries live.

Altogether, we find that the MA industry has become more vertically integrated over the last five years. The Commission plans to continue monitoring trends in integration in MA and evaluating its effects on enrollees and the function of the program.

Quality in MA

The Commission has long held that MA presents opportunities for innovation to achieve higher-quality care at lower cost. But the current system for MA quality reporting and measurement is flawed and does not provide a reliable basis for evaluating quality across MA plans (Medicare Payment Advisory Commission 2020a, Medicare Payment Advisory Commission 2019). It is important for the Medicare program to monitor MA plan performance and promote higher quality (1) to ensure that beneficiaries have access to high-quality health care and (2) to provide good information for beneficiaries about the quality of and access to care provided by MA plans in their local market. While the Commission has determined that current metrics do not adequately reflect the quality of care that MA enrollees receive, they are the basis for the MA quality-bonus program (QBP), which is expected to increase MA payments by about $16 billion in 2026.

Quality-bonus program and star-rating system provide limited insight into MA quality

Quality measurement and rewards can promote better plan quality and support beneficiary choice of plans. The MA star-rating system, implemented in 2006, is composed of measures tied to clinical quality, administrative capability, and patient experience.[94] These ratings are made available through the Medicare Plan Finder website to enable beneficiaries to compare plans. As required by the ACA, since 2012 the MA star-rating system has been the basis of the QBP, which increases benchmarks for MA contracts that are rated 4 stars or higher.[95] The star rating also contributes to the level of rebate payments. Plans with higher star ratings retain a higher share of the difference between a plan bid and the benchmark when bids are below the benchmark. Beneficiaries enrolled in an MA plan with less than 5 stars can use a once-a-year special enrollment period to switch to a 5-star plan outside of the open enrollment period.

The share of MA contracts receiving quality bonuses has been declining in recent years but remains consistently high. Forty percent of rated MA contracts are in bonus status for 2026, a decrease from 41 percent in 2025 and 44 percent in 2024 (Centers for Medicare & Medicaid Services 2024a). Sixty-four percent of MA enrollees are projected to be enrolled in bonus-status contracts in 2026, compared with 64 percent in 2025 and 76 percent in 2024. The average star rating was 3.98 in 2026, a slight increase from 3.95 in 2025.

The Commission has discussed several flaws of the current approach to quality assessment in previous reports (Medicare Payment Advisory Commission 2024b, Medicare Payment Advisory Commission 2023b, Medicare Payment Advisory Commission 2020a, Medicare Payment Advisory Commission 2020b, Medicare Payment Advisory Commission 2016b). In brief, the Commission has identified issues with:

- *The measure set used to assess quality*. An excessive number of measures are assessed, and many administrative and process measures are not reflective of the quality of care and/or experience that plan enrollees can expect to receive. Medicare currently collects close to 100 MA quality measures, over 40 of which are used to determine a star rating from 1 to 5 for each MA contract.[96,97]
- *Reliance on MA contract-level reporting*. Measures are currently reported at the contract, rather than plan, level. Many contracts cover plans operating in wide geographic areas, some of which are not contiguous, resulting in scores that do not necessarily reflect performance in a local area. The ability of MAOs to consolidate plans into a single contract also presents an opportunity to increase the odds of achieving bonus status without meaningfully improving quality.
- *Methods for comparing performance across plans/contracts*. The way that performance is compared for purposes of the QBP can mask some true

differences in quality and amplify minor differences in other areas. For instance, contracts can aggregate plans that differ on features that are associated with quality. They may include plans across wide and noncontiguous geographic areas or bundle SNPs with conventional HMOs. On the other hand, the thresholds for scoring introduce discontinuities or "cliff effects" that may result in different rewards for contracts with relatively similar performance and may also reduce the incentive to improve for contracts that are far away from a "cliff."

- *Funding with additional program dollars*. Unlike quality incentive programs in FFS Medicare, which are either budget neutral (balancing penalties and rewards) or penalty only, the QBP is a reward-only incentive program that is projected to increase program spending by $16 billion in 2026. The absence of penalties for poor performance may also dilute incentives for MA organizations to focus efforts on quality improvement, contradicting the program's aims.

The inability of the MA–QBP to meaningfully characterize the quality of care that MA enrollees receive makes it difficult for beneficiaries to make informed choices and for policymakers to assess the value that private plans bring to the Medicare program. In our June 2020 report to the Congress, the Commission recommended replacing the QBP with a value-incentive program that addresses the flaws of the QBP. First, focusing on a small set of population-based outcome and patient/enrollee–experience measures would facilitate comparisons across MA plans, enabling beneficiaries to choose based on factors that are most meaningful to their experience. A continuous scale of performance, rather than one with cliff effects, would provide MA plans with the incentive to improve quality at every level. Performance evaluation at the local-market level, rather than the contract level as is currently done, would similarly improve the information that beneficiaries can use for decision-making and the incentives for MA plans to improve quality in every geographic area.

The Commission also recommended that the value-incentive program address the variation in the demographics of MA enrollees across plans. By accounting for differences in enrollees' social risk factors by stratifying plan enrollment into groups of beneficiaries with similar social risk profiles, plans with higher shares of these enrollees would not be disadvantaged in their ability to receive quality-based payments, while actual differences in the quality of care would not be masked. Finally, the Commission contends that MA quality-bonus payments should not be financed with additional program dollars, especially given that, in aggregate, Medicare pays MA plans more than would have been spent on FFS for the same beneficiaries. Application of budget-neutral financing would ensure that the MA quality system is more consistent with Medicare's FFS quality-payment programs, which are either budget neutral or produce program savings (Medicare Payment Advisory Commission 2020a).

MA patient experience

Good information on the quality and experience of care that MA enrollees receive—and how they compare with FFS Medicare—is necessary for beneficiaries and policymakers to properly evaluate program and plan options. However, several data and methodological challenges affect the ability to compare performance across MA plans and between MA plans and FFS Medicare. The Commission has discussed its concerns with these limitations in previous reports (Medicare Payment Advisory Commission 2024c, Medicare Payment Advisory Commission 2023c, Medicare Payment Advisory Commission 2020a, Medicare Payment Advisory Commission 2020b, Medicare Payment Advisory Commission 2016b). Despite these challenges, the Commission has expressed a strong interest in assessing the quality of care that all Medicare beneficiaries receive. To that end, we include a summary of MA Consumer Assessment of Health Providers and Systems (CAHPS) survey scores, a standardized and validated measure of patient experience collected by the Agency for Healthcare Research and Quality.[98] The CAHPS survey represents only one indicator of the quality of care that MA enrollees receive, but it is subject to fewer methodological limitations than other metrics that are currently used in the star-rating system. On the other hand, contract-level reporting means that responses may not reflect the experience of enrollees in a particular geographic area.

Patient-experience measures are an important indicator of quality of care because they assess,

TABLE 12–10

Medicare Advantage CAHPS performance scores, 2018–2024

CAHPS composite measure	2018	2020	2021	2022	2023	2024	Score change, 2023–2024
Getting needed care and seeing specialists	84	83	82	81	81	82	1
Getting appointments and care quickly	78	79	78	77	83	84	1*
Care coordination (e.g., personal doctor always or usually discusses medication, has relevant medical record, helps with managing care)	86	86	86	85	86	87	1
Customer service	90	91	90	90	90	90	0
Rating of health plan	87	88	88	88	88	87	–1
Rating of health care quality	87	87	87	86	87	87	0
Annual flu vaccine	75	76	75	74	71	69	–2

Note: CAHPS (Consumer Assessment of Healthcare Providers and Systems), CAHPS responses are case-mix adjusted for the predictable effects of the response tendencies of the people who complete them (e.g., age, sex, health status). The first four measures are composite measures of multiple survey questions that have responses of "never," "sometimes," "usually," and "always." CMS converts these to a linear mean score on a 0 to 100 scale. The fifth and sixth measures are global rating measures in which survey questions have responses of 1 to 10, which CMS also converts to a linear mean score on a 0 to 100 scale. The annual flu vaccine measure has a yes/no response. Years represent the experience of care during the last six months from the survey. For example, 2024 scores are based on beneficiaries' self-reported experience in the last six months from surveys collected in the spring of 2025. The 2019 CAHPS surveys were halted due to the coronavirus pandemic. We report values for 2018 to include a prepandemic comparison year.
* CMS revised which CAHPS survey items are scored in the "getting appointments and care quickly" composite measure in 2023. We caution against comparing 2023 and 2024 scores with prior years.

Source: MA–CAHPS national mean scores published by CMS, 2024.

from the patient's perspective, whether something that should have happened (such as getting needed care quickly) did and how often it occurred, across a population. When patients have a better experience, they are more likely to adhere to treatments, return for follow-up appointments, and engage with the health care system by seeking appropriate care (Doyle et al. 2013, Navarro et al. 2021). MAOs are required to contract with a third-party survey vendor to collect CAHPS survey responses from a random sample of each MA contract's enrollees.[99] To calculate national scores, MA–CAHPS measures are case-mix adjusted for beneficiary characteristics and weighted at the contract level.[100] Table 12-10 presents CAHPS measure scores for the five most recent years available, 2020 to 2024, along with 2018 as a prepandemic comparison.[101]

MA enrollees generally rated their coverage and experience favorably in 2024, and results have been relatively stable over time.[102] Scores for "getting appointments and care quickly" have increased in 2023 and 2024 compared with previous years, but this finding is in part attributable to changes in how CMS defined the measure in 2023 (Centers for Medicare & Medicaid Services 2025e). The share of respondents receiving an annual flu vaccine has declined each year from a high of 76 percent in 2020 to 69 percent in 2024; a similar decline is observed in FFS Medicare (see Chapter 4 for a discussion of FFS–CAHPS results). On the other hand, ratings of customer service, plan quality, and care quality in MA remain consistently high.

These relatively high and consistent scores align with our focus-group findings that beneficiaries are generally satisfied with their plans and do not report widespread challenges with access to care. However, we recognize that this aggregate picture is not inconsistent with individual beneficiaries experiencing issues with access or quality of care in particular

circumstances. CAHPS surveys target a random sample of all enrollees, not just those who have sought care during the survey period. Also, certain subsets of enrollees, such as those residing in institutional settings, are excluded from participation. Further, CAHPS survey items focus on breadth of access to care, not the specifics of cases in which problems have been experienced. While the Commission has expressed concern that the small share of beneficiaries with the greatest health needs may disproportionately experience access problems, the CAHPS survey is not designed to capture the depth of those problems. For this reason, the Commission aims to contextualize the results of these broad, population-level surveys with other potential indicators of access and quality in MA.

Medicare payment and MA plan costs for enrollees with ESRD

Although individuals with ESRD have been entitled to Medicare Part A and Part B benefits since 1972, they were mostly prohibited from joining MA plans until 2021, when the 21st Century Cures Act of 2016 allowed all beneficiaries with ESRD to sign up for MA plans.[103] Within four years of the statutory change, MA enrollment among beneficiaries with ESRD increased from 27 percent in December 2020 to 55 percent by December 2024. The increase in MA enrollment by beneficiaries on dialysis is likely linked to the same factors that have increased MA's popularity among beneficiaries without ESRD, including cost-sharing reductions, non-Medicare benefits, and a cap on OOP expenses at little or no additional premium. The cap on OOP expenses, in particular, is likely to be a valuable benefit for enrollees with ESRD who, compared with other Medicare beneficiaries without ESRD, have higher health care utilization and spending (Powers et al. 2019). Average FFS Medicare expenditures for beneficiaries with ESRD were $84,479 in 2022, compared with $14,044 per person per year for beneficiaries without ESRD (Medicare Payment Advisory Commission and the Medicaid and CHIP Payment and Access Commission 2025). Cost-sharing burdens are consequently higher for beneficiaries with ESRD, particularly those without supplemental cost-sharing coverage through Medicaid, an employer-sponsored plan, or a Medigap plan.[104]

In our March 2021 report to the Congress, we assessed MA plan costs and revenues for individuals with ESRD, MA enrollment trends by coinsurance amounts, and plan prices for dialysis. For this report, we have updated these analyses using the most recent available data. Our analysis finds that, since the 2021 statutory change, overall finances appear to have improved for both MA plans and dialysis facilities with increasing MA enrollment. Between 2018 and 2023, Medicare payments to MA plans for ESRD enrollees rose faster than costs. In 2023, Medicare payments to plans were about 7 percent higher than average medical costs plus an estimate of inflation-adjusted administrative expenses for enrollees with ESRD (total cost-to-revenue ratio of 0.930). (MA plans also incur additional costs for providing supplemental benefits to their enrollees with ESRD.) We also find that a growing share of plans apply the maximum allowable amount of cost sharing to dialysis services. In 2022, about 90 percent of enrollees with ESRD in conventional plans and D–SNPs are responsible for a 20 percent coinsurance for dialysis. Last, most MA plans continue to pay more than FFS rates for dialysis services, but those prices have decreased over time. In 2022, the average MA plan price for dialysis was 22 percent higher than the FFS Medicare rate, down from 28 percent higher in 2020. The relative decline in prices paid by MA plans may reflect a change in the balance of negotiating leverage between MA plans and dialysis providers over time, as a result of the increasing MA enrollment by beneficiaries with ESRD and removal of network-adequacy requirements for outpatient dialysis facilities.

Medicare's payments to MA plans for enrollees with ESRD on dialysis grew faster than plans' reported costs

For enrollees with ESRD on dialysis, a base rate is established for each state—called the "ESRD state rate"—and is equal to the average FFS spending for beneficiaries with ESRD in that state, standardized to the national average spending for FFS beneficiaries with ESRD. Medicare payments to MA plans for an enrollee with ESRD on dialysis are based on the ESRD state rate where the enrollee resides, adjusted by the enrollee's ESRD risk score.[105] The ESRD risk model is based on FFS beneficiaries with ESRD.

Because plans submit bids only for enrollees without ESRD (ESRD state rates are calculated entirely by CMS),

a plan's total rebate amount is based only on enrollees without ESRD. However, all MA plan enrollees are entitled to receive the same benefit package, including receipt of supplemental benefits or requirement to pay a plan premium. CMS offers plans the option to reconcile financing for enrollees with ESRD with the plan's rebate using the "ESRD subsidy" (Centers for Medicare & Medicaid Services 2025c). For plans with ESRD payments that do not cover their projected medical, administrative, and supplemental benefits costs for enrollees with ESRD, the ESRD subsidy allows plans to allocate a portion of their rebate funding to cover the gap between ESRD payments and costs (including plan costs for providing supplemental benefits to enrollees with ESRD), thereby reducing the level of rebates available to fund supplemental benefits for all enrollees. Conversely, for plans with ESRD payments that are greater than plan ESRD costs, the ESRD subsidy allows plans to add net ESRD revenues to their rebate funding and increase the level of supplemental benefits for all enrollees.

Using the same methodology as in our March 2021 report to the Congress, we analyzed bid pricing tool (BPT) data for plan years 2020 through 2025 to assess whether Medicare payments to MA plans for enrollees with ESRD covered plans' reported medical costs for those enrollees.[106,107] BPT data include information on total revenue, net medical expenses, and the share of member months applicable, separately, to enrollees with and without ESRD. Medical expenses include costs for Medicare-covered services and Part A and Part B mandatory supplemental benefits, but they do not include expenses for optional supplemental benefits. Plans do not report administrative and profit costs separately for enrollees with ESRD in the BPT data, and therefore we are unable to include those costs in our estimate of average medical costs for enrollees with ESRD, unless noted otherwise.

In 2018, MA plans' revenues were, on average, about equal to their medical costs for enrollees with ESRD. Average medical costs for enrollees with ESRD were $6,752 PMPM, slightly below the average plan revenue of $6,769 PMPM—a medical cost-to-revenue ratio of 0.997. That suggests that plans, after accounting for costs of administration, likely lost money on ESRD enrollees. However, by 2023, Medicare payments were much higher relative to plans' costs for enrollees with ESRD: Average medical costs rose 8.0 percent while plan revenues climbed 22.4 percent ($7,291 PMPM and $8,287 PMPM, respectively—a medical cost-to-revenue ratio of 0.880) (Figure 12-16, p. 414).

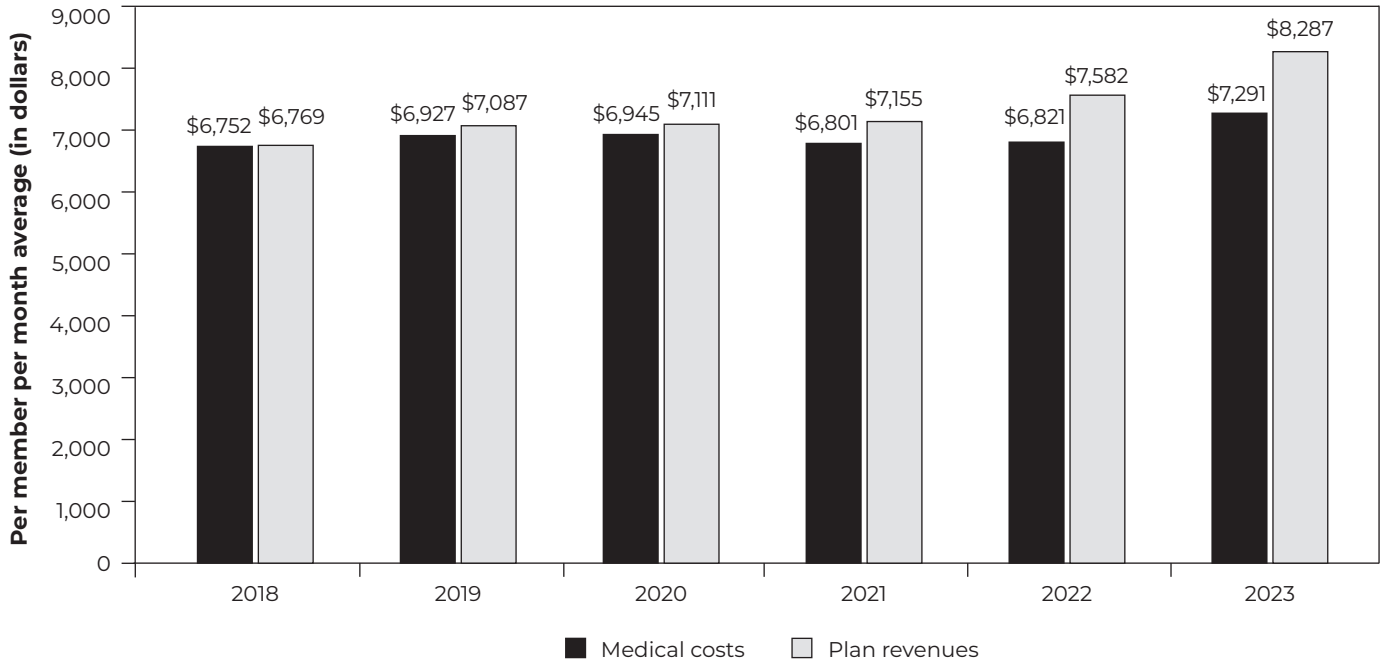
Among contracts, there was variation in ESRD enrollment-weighted medical cost-to-revenue ratios, though the amount of variation decreased between 2018 and 2023. MA contracts with lower ESRD medical costs than revenues have a cost-to-revenue ratio below 1.0. The median MA contract medical cost-to-revenue ratio in 2018, weighted by months of ESRD enrollment, was 0.971 (0.861 at the 10th percentile vs. 1.197 at the 90th percentile) versus 0.885 (0.814 at the 10th percentile vs. 0.963 at the 90th percentile) in 2023 (Figure 12-17, p. 415). Contracts with a cost-to-revenue ratio below 1.0 included about 56 percent of MA enrollees with ESRD in 2018 and 93 percent of MA enrollees with ESRD in 2023 (data not shown).

In addition to medical costs, plans incur administrative expenses for their enrollees with ESRD. Based on data from the 2019 base period, CMS estimated that plans would have nonbenefit expenses of about $350 PMPM for plan administration of benefits for enrollees with ESRD in 2021 (Centers for Medicare & Medicaid Services 2020a). Adding inflation-adjusted administrative expenses to average medical costs for enrollees with ESRD, costs were about 7 percent lower than Medicare payments to plans (total cost-to-revenue ratio of 0.930 in 2023) (not shown in Figure 12-17, p. 415).[108] Depending on whether an MA contract had administrative expenses for beneficiaries above or below the average amount estimated by CMS, the actual cost-to-revenue ratio may also be higher or lower than 0.930. MA plans also incur additional costs for providing supplemental benefits to their enrollees with ESRD, but these costs are not included in our analysis.

There are several potential reasons why Medicare's payments to MA plans for enrollees with ESRD are rising faster than plan costs, though at this time we do not have evidence that affirms why. MA plans may have reduced their costs by becoming more efficient in caring for enrollees with ESRD. The literature is still sparse on how care is managed and delivered to beneficiaries with ESRD in MA. An earlier study by Powers et al. (2020) found that enrollees in an ESRD C–SNP had fewer inpatient and skilled nursing facility admissions and days than a control group of beneficiaries with ESRD in FFS from 2010 to 2013;

FIGURE 12–16

MA plan revenues for enrollees with ESRD grew faster, on average, than plans' reported medical costs, 2018–2023



Note: MA (Medicare Advantage), ESRD (end-stage renal disease). The black bars represent average per member per month (PMPM) medical costs, and the gray bars represent average PMPM plan revenues for enrollees with ESRD..

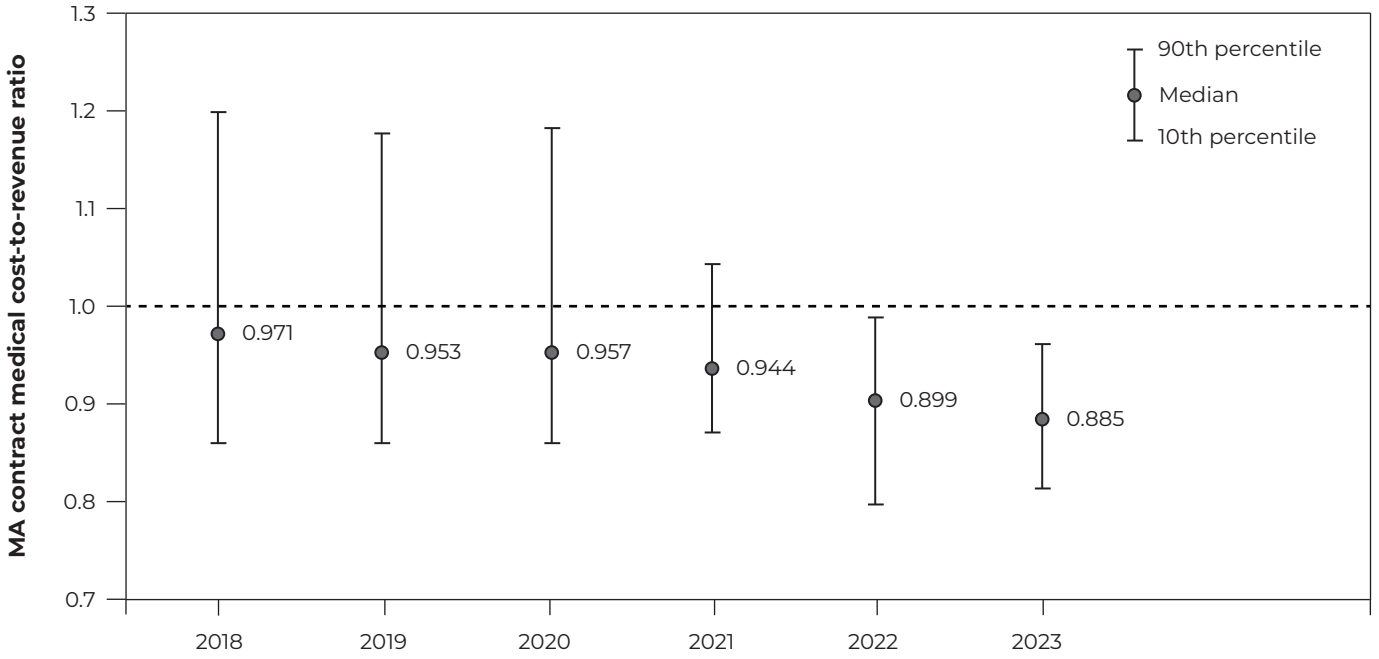
Source: MA 2020–2025 bid pricing tool data, including 2018–2023 cost and revenue information.

while not statistically significant, the authors found that relative to the FFS controls, those enrolled in the C–SNP had higher dialysis adherence and fewer inpatient admissions for ESRD complications (Powers et al. 2020). A more recent qualitative study by Tyler et al. (2025) reports that in preparation for, and response to, the ESRD enrollment growth following the 2021 statutory change, many MA plans began partnering, via risk-based contracts, with dialysis facilities and specialized care-management companies to provide tailored care coordination and case management to members with ESRD. These partners tended to focus on reducing hospitalizations and increasing the uptake of home dialysis (Tyler et al. 2025). In addition to any efficiency gains in care delivery, reductions in negotiated payment rates for dialysis services over the study period may have contributed to reductions in costs (see Figure 12-19, p. 418).

Faster growth in average plan revenues relative to costs could be driven by concentration of MA enrollment growth in states with above-average ESRD payment rates, as could more intensive coding of risk scores by MA plans for enrollees with ESRD. Additionally, if beneficiaries with ESRD who have higher spending remain in FFS Medicare, that would increase the ESRD state rate for payments to MA plans. The national average monthly FFS spending for beneficiaries on dialysis, as captured by ESRD U.S. per capita costs, has, in fact, grown from $7,133 in 2018 to $9,333 in 2023 (Centers for Medicare & Medicaid Services 2022b, Centers for Medicare & Medicaid Services 2017b). Beneficiaries who are eligible for Medicare solely due to ESRD (rather than age or disability) were completely barred from joining MA (except for an ESRD C-SNP) prior to 2021. Further research is needed to assess whether MA enrollment among those enrollees contributed to the differing cost and revenue trends.

FIGURE 12–17

MA plan revenues for enrollees with ESRD continue to cover medical costs on average, 2018–2023



Note: MA (Medicare Advantage), ESRD (end-stage renal disease). The dots represent the ESRD member month enrollment-weighted median of the MA contract medical cost-to-revenue ratio, and the bars represent the 10th percentile and 90th percentile values. The lower the ratio, the higher the contract's revenues relative to medical costs; these contracts appear below the dotted line, which represents a cost-to-revenue ratio of 1.0.

Source: MA 2020–2025 bid pricing tool data including 2018–2023 cost and revenue information.

Cost sharing for dialysis services increased, 2018 to 2022

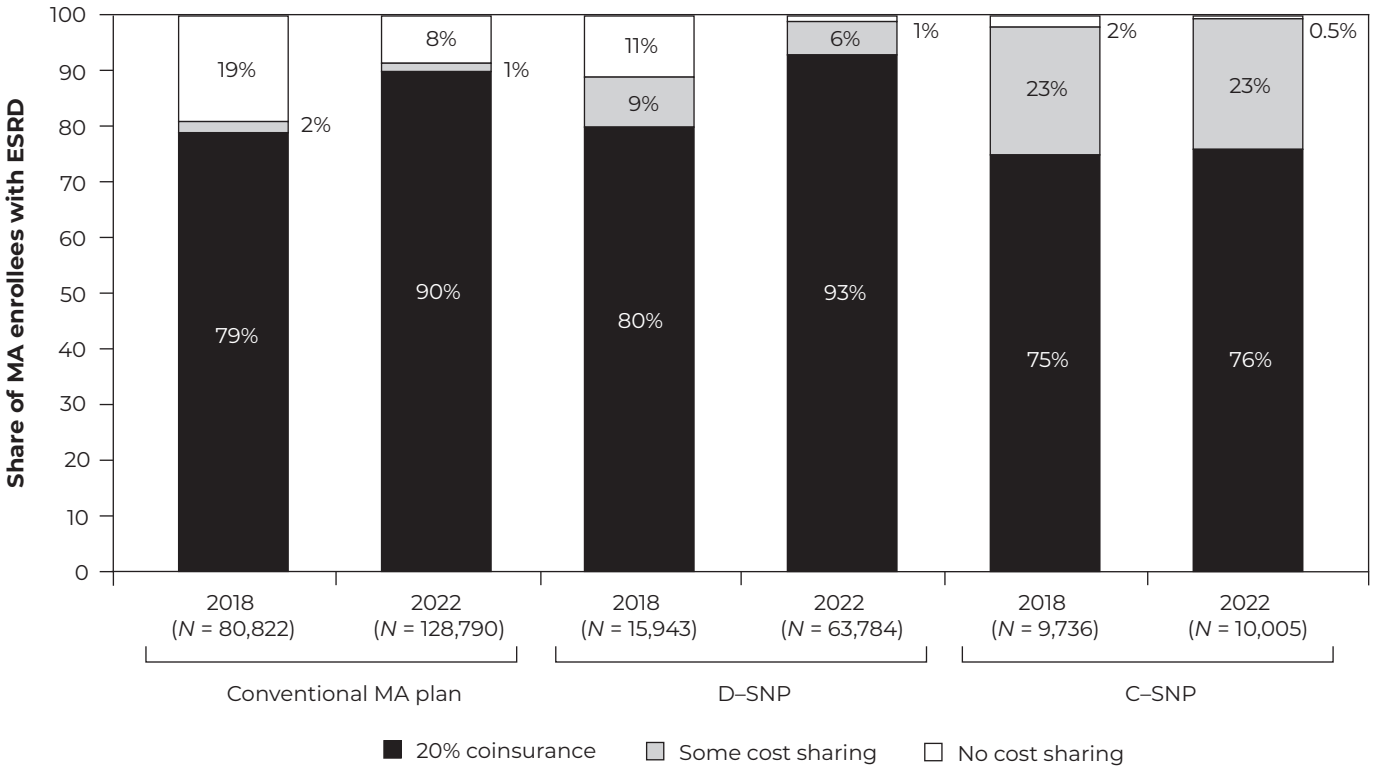
For dialysis services, the maximum allowable cost sharing is 20 percent coinsurance. Although beneficiaries with ESRD who enroll in MA may be seeking lower OOP costs, those who enroll in plans that charge 20 percent dialysis coinsurance may pay a higher dollar value for dialysis cost sharing than is allowable in FFS Medicare if their plan pays dialysis prices above FFS Medicare rates.

Using the same methodology as in our March 2021 report to the Congress, we analyzed MA encounter data, the plan benefits package (PBP) renal dialysis benefits file, and SNP data for 2018 to 2022 to measure the share of MA plans, and the share of ESRD enrollment in MA plans, with the maximum coinsurance amount (20 percent) for dialysis, by MA plan type (conventional MA, D–SNP, or C–SNP).

We found that between 2018 and 2022, 80 percent to 90 percent of MA enrollees with ESRD were in plans with coinsurance for dialysis, compared with about 5 percent of enrollees in plans with a copayment for dialysis. Across all plan types—conventional MA, D–SNPs, and C–SNPs—the share of plans with a 20 percent coinsurance for dialysis increased between 2018 and 2022. Over the period, the share rose from 82 percent to 91 percent among conventional MA plans; from 72 percent to 83 percent among D–SNPs; and from 74 percent to 82 percent among C–SNPs. There was a corresponding decrease in the share of plans with no cost sharing for dialysis from 2018 to 2022: a 7 percentage point decrease among conventional MA

FIGURE 12–18

A greater share of MA enrollees with ESRD in 2022 were in plans with 20 percent coinsurance for dialysis services than in 2018



Note: MA (Medicare Advantage), ESRD (end-stage renal disease), SNP (special-needs plan), D–SNP (dual-eligible SNP), C–SNP (chronic-condition SNP). The bars represent MA enrollment by beneficiaries with ESRD, by plan coinsurance amounts. For example, the left-most bar indicates that 79.0 percent of 80,822 MA enrollees with ESRD in conventional MA plans were in plans with 20 percent coinsurance versus 1.9 percent in plans with some cost sharing (<20 percent coinsurance and/or a copay) versus 19.1 percent in plans with no cost sharing. Approximately 57 percent and 50 percent of enrollees in C–SNPs in 2018 and 2022, respectively, were in ESRD C–SNPs.

Source: Data compiled by MedPAC from MA encounter data, MA plan benefits data, and CMS SNP data, 2018–2022.

plans (15 percent to 8 percent), a 3 percentage point decrease among D–SNPs (10 percent to 7 percent), and a 5 percentage point decrease among C–SNPs (8 percent to 3 percent).

Consistent with these changes in plan offerings, the share of MA enrollees with ESRD in plans with the maximum allowable 20 percent coinsurance for dialysis services also grew among those enrolled in conventional MA plans and D–SNPs (Figure 12-18). Between 2018 and 2022, the share of enrollees with ESRD with a 20 percent coinsurance for dialysis increased from 79 percent to 90 percent among those in conventional MA plans and from 80 percent to 93 percent among those in D–SNPs. However, the share among those in C–SNPs remained relatively stable (75 percent in 2018 vs. 76 percent in 2022). The share of enrollees with ESRD with no cost sharing for dialysis decreased during this time from 19 percent to 8 percent among enrollees in conventional MA plans and 11 percent to 1 percent among enrollees in D–SNPs. Among those in D–SNPs, the share of enrollees with some cost sharing (either less than 20 percent coinsurance or a copay) also decreased between 2018 (9 percent) and 2022 (6 percent).

Plans are prohibited by law from charging more than FFS for dialysis. As a result, when CMS first put limits on dialysis cost sharing in 2011, it specified that plans could not charge more than 20 percent coinsurance (the same as in FFS) or a $30 copayment. At the time, the two amounts were actuarially equivalent. However, CMS did not update the copayment limit to reflect newer data until 2022, when it calculated that the actuarially equivalent copayment had increased to $64. The updated figure implies that the $30 limit had become roughly equal to 10 percent coinsurance and that any effort to use copayments meant, in effect, charging much lower cost sharing than FFS. This discrepancy between the coinsurance and copayment limits may be one reason why almost all plans use coinsurance for dialysis. The updated copayment limit (rounded to $65) began to be phased in between 2023 and 2026; at that point, some plans might begin using copayments (Medicare Payment Advisory Commission 2023b).

Setting cost sharing for dialysis services at the maximum allowable amount allows plans to distribute rebate funding to other supplemental benefits for all enrollees in the plan, which can be beneficial for enrollees whose dialysis cost sharing is covered through Medicaid.[109] Although the MOOP constrains total OOP spending for MA enrollees, charging the maximum allowable cost sharing for dialysis services may discourage nondually eligible beneficiaries from enrolling in a plan or from staying enrolled in a plan throughout the year. However, while cost-sharing amounts for dialysis services are likely salient to beneficiaries with ESRD who typically receive dialysis three times per week, other factors—such as supplemental benefits, provider networks, and cost-sharing structures for other services—also influence beneficiaries' decisions to enroll in MA (Brazier et al. 2025).

Most MA plans paid more than FFS rates for dialysis services, 2018 to 2022

For beneficiaries with ESRD in FFS Medicare, dialysis facilities are paid a single case-mix-adjusted payment under the ESRD prospective payment system (PPS) that includes composite-rate services and ESRD-related drugs, laboratory services, and medical equipment and supplies.[110,111] For 2026, the base FFS payment rate is $281.71 for both freestanding facilities and hospital-based facilities (Centers for Medicare & Medicaid Services 2025g). Payments are adjusted by facility-level factors (wage index, low-volume adjustment, and rural adjustment) and patient-level factors (age, body size, onset (first four months of dialysis treatment), and comorbidities).[112]

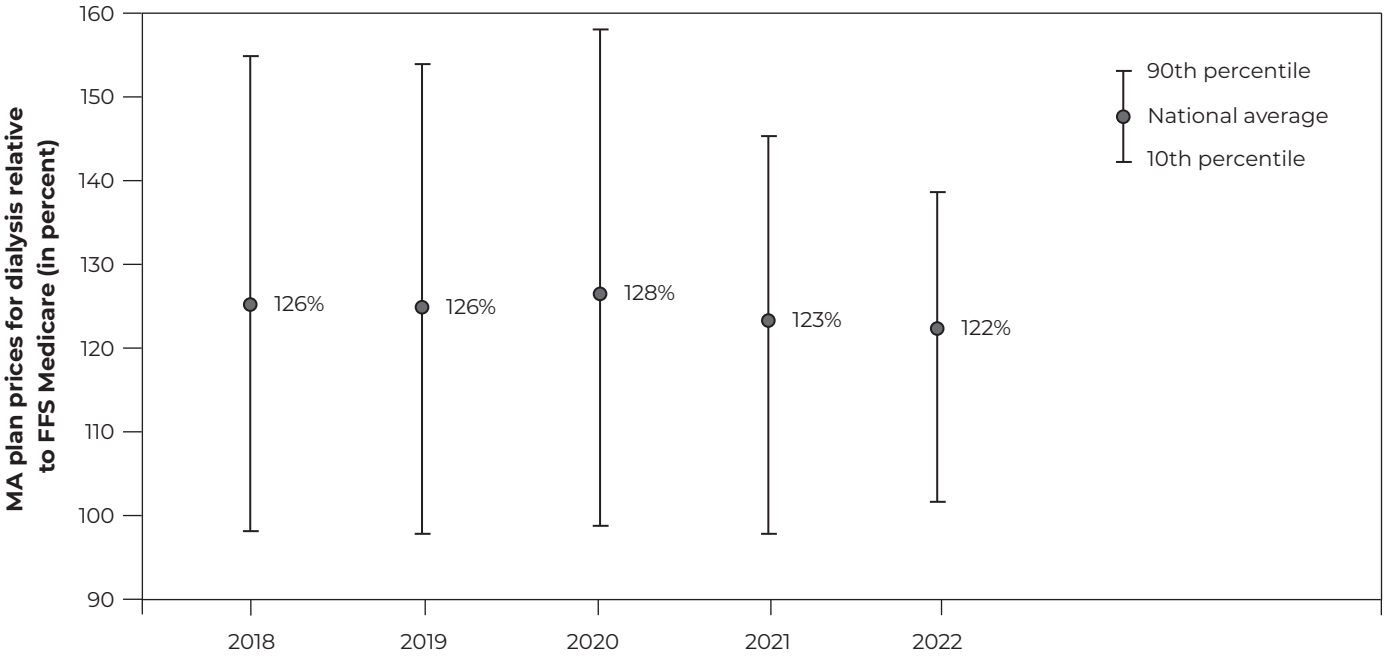
For beneficiaries with ESRD in MA, dialysis facilities are paid according to a negotiated rate that varies across MA contracts.[113] If MA plans are unable to negotiate dialysis prices similar to (or lower than) FFS Medicare payment rates for dialysis, plans have to offset higher dialysis spending from higher prices for dialysis services by reducing costs for other services for all plan enrollees (e.g., care coordination to reduce inpatient hospital and emergency room visits) or they risk losses on enrollees with ESRD.

We analyzed FFS claims and MA encounter data from 2018 to 2022 for the 50 states and the District of Columbia to estimate the prices MA plans paid for dialysis. The MA encounter data did not include sufficient information to replicate the complete FFS payment calculation, but we were able to adjust MA plan payments to facilities by the two factors we consider to have the greatest importance: enrollee age and facility wage index. We do not expect differences in the other factors to significantly affect the comparison of dialysis prices. (See text box "Estimating MA prices for dialysis services relative to FFS Medicare rates," p. 419, for details on our methodology and how it changed between the 2021 report to the Congress and this chapter.)

From 2018 through 2020, the national average MA plan prices for dialysis increased slightly from 26 percent to 28 percent higher than FFS Medicare rates, respectively. In 2021 and 2022, the national average MA plan prices for dialysis dropped to 23 percent and 22 percent higher than FFS Medicare rates, respectively. The average price paid for dialysis varied widely across contracts: Weighting by treatment volume, prices for dialysis services in 2018 ranged between 1.1 percent below FFS Medicare rates (10th percentile) to 55.6 percent above FFS Medicare rates (90th percentile). The range of treatment volume–weighted MA contract prices for dialysis service was narrower in 2022, between 2.0 percent and 39.1 percent above FFS Medicare rates (10th and 90th percentile, respectively) (Figure 12-19, p. 418).

FIGURE 12–19

Most MA contracts paid more per dialysis treatment than FFS Medicare rates, 2018–2022



Note: MA (Medicare Advantage), FFS (fee-for-service). The dots represent the national average of MA contract prices for dialysis relative to FFS Medicare. The bars represent the 10th and 90th percentiles of treatment volume–weighted MA contract prices for dialysis services relative to FFS Medicare. Estimated MA prices have been adjusted to account for differences in age and facility wage index.

Source: MedPAC analysis of FFS claims, MA encounter data, and MA plan benefits data, 2018–2022.

One reason that MA plans pay more for dialysis than FFS Medicare could be the high level of consolidation in outpatient dialysis facilities. In 2022, two large dialysis organizations (LDOs), DaVita and Fresenius, operated three-quarters of dialysis facilities (Medicare Payment Advisory Commission 2025b). Further, among 1,889 counties in which there was at least one dialysis facility in 2022, either one or both LDOs were the only facilities available in approximately 54 percent of those counties. Increasing MA enrollment by beneficiaries with ESRD, combined with the removal of network-adequacy requirements for outpatient dialysis facilities, may have increased the negotiating leverage for many MA plans, which could have contributed to the drop in MA prices for dialysis in 2021 and 2022. ■

Estimating MA prices for dialysis services relative to FFS Medicare rates

In the March 2021 report to the Congress, we used fee-for-service (FFS) claims and Medicare Advantage (MA) encounter data to estimate average FFS versus MA prices for dialysis services by (1) summing payment amounts for dialysis revenue centers; (2) making adjustments for age and facility wage index (geographic location); and (3) dividing the adjusted payment sum by the total number of dialysis treatments. We defined price as the sum of Medicare program or MA plan payments and beneficiary cost-sharing liability. Therefore, to account for the 20 percent coinsurance for dialysis in FFS, we divided the estimated FFS average from Step 3 by 0.8 to impute the 100 percent FFS price. To account for beneficiary cost sharing in MA, we added the enrollees' cost-sharing liability reported in MA encounter data to the sum calculated in Step 1.[114] Finally, we calculated the ratio of the 100 percent MA price versus the FFS price. We reported that the prices MA plans paid in 2018 for dialysis services, after accounting for differences in age and facility wage index, averaged about 14 percent higher than FFS Medicare rates (Medicare Payment Advisory Commission 2021b).

In this chapter, we updated our methodology for imputing the 100 percent MA price for dialysis services to address a limitation of the previous analysis. Specifically, we changed our specification to use information on beneficiary cost-sharing liability amounts for dialysis services as reported on the MA plan benefits package (PBP) renal dialysis benefits file instead of using enrollees' cost-sharing liability amounts reported in MA encounter data. We made this change to address high levels of missingness in enrollees' cost-sharing liability amounts on encounter records submitted by MA plans: Approximately 87 percent of monthly dialysis claims reported in the encounter data had a $0 cost-sharing liability amount, even though 79 percent of MA enrollees with ESRD were in plans with 20 percent coinsurance in 2018 (discussed in the previous section titled "Cost sharing for dialysis services increased, 2018 to 2022," p. 415). Among beneficiaries with ESRD enrolled in plans with a 20 percent coinsurance for dialysis, 83 percent of encounter records had a $0 cost-sharing liability amount reported. Of the remaining 17 percent of encounter records for enrollees in plans with a 20 percent coinsurance for dialysis, the median enrollee cost-sharing liability amount reported was $853 per month (interquartile range (IQR): $599 to $1,848); using the cost-sharing information from the PBP file, we impute the median enrollee cost-sharing liability amount for these monthly claims to be $728 (IQR: $616 to $848).

Our updated methodology replaces what we suspect is missing beneficiary cost-sharing liability information from MA encounter data with imputed cost-sharing amounts from the PBP file and increases our estimate of MA plan prices for dialysis in 2018 by 10.5 percent. After accounting for differences in age and wage index, the prices MA plans paid for dialysis services averaged about 26 percent higher than FFS Medicare rates. Our new estimates are similar to Lin et al.'s (2022) finding that in 2016 to 2017, MA plans paid 27 percent more than FFS Medicare for dialysis services (Lin et al. 2022). ■

TECHNICAL APPENDIX 12–A

Base comparison

The Commission's method for estimating what FFS spending would have been for MA enrollees before favorable selection and coding effects

The Commission's method for estimating Medicare Advantage (MA) payments relative to what fee-for-service (FFS) spending would have been for MA enrollees includes three components that are estimated separately and then combined into a single estimate. The first of these components (as presented in Chapter 12, p. 379) constructs a base comparison of MA payments and FFS spending that measures how MA payments compare with the spending of FFS enrollees with the same risk scores and county of residence. The Commission's approach appropriately reflects the lower payments that MA plans receive due to the inclusion of Part A–only beneficiaries in benchmarks. The base comparison estimates the difference between actual MA payments and what FFS spending would have been for MA enrollees under the assumption that risk scores and county of residence fully account for differences between the MA and FFS populations. Differences between the MA and FFS populations that are not captured by the base comparison are found in Technical Appendix 12-B (favorable selection) and Technical Appendix 12-C (coding intensity).

Methodology for the base comparison of MA payments and FFS spending

In constructing the base comparison, we compare Medicare's actual payments to MA plans with an estimate of what the program's spending would have been if those enrollees were in the FFS program, under the assumption that risk scores and county of residence fully account for differences between the MA and FFS populations. The analytic framework for our base comparison is similar for MA enrollees with end-stage renal disease (ESRD) and enrollees without ESRD. This appendix describes the methodology for constructing the base comparison for the population without ESRD (about 99 percent of MA enrollees in 2024). The methodology for the population with ESRD (about 1 percent of MA enrollees in 2024) is described in the text box on incorporating this population into our estimates (pp. 379–382).

We compute the base comparison as a ratio in which MA payments are the numerator and FFS spending is the denominator. For each MA enrollee, we first measure the combined payment (bid and rebate) that the Medicare program made to their plan during the year. We compare that payment to the average risk-adjusted spending of FFS beneficiaries living in the same county. We then compute the base comparison of MA payments to FFS spending as the sum of those individual payments for each MA enrollee divided by the sum of each of the FFS spending comparison amounts. Our approach differs slightly for years in which historical data are not available.

The methodology of our base comparison aligns with the population CMS uses for calibrating the hierarchical condition category (HCC) risk model and the risk-adjustment CMS applies to an MA plan's county-level benchmark. We use historical data for years in which data are available (2016 to 2023) to remove the uncertainty from projection errors. Our approach also standardizes for differences between MA and FFS enrollees based on the type of Medicare coverage, county of residence, and risk scores.

Study and comparison populations for beneficiaries

In conducting our base comparison for the non-ESRD population of MA payments and FFS spending for 2016 through 2023, we applied the same set of inclusion criteria for the MA and FFS beneficiaries included in our analysis. We restricted our analysis to beneficiaries who—for the months in which they were alive during a target year—had both Part A and Part B coverage, had Medicare as their primary payer, did not have ESRD, and had at least one nonhospice month. These restrictions are consistent with those used for CMS's non-ESRD HCC risk-model calibration. In addition, to ensure reliability, we required that beneficiaries reside in the 50 states or the District of Columbia and we removed hospice enrollment months (in which MA plans do not have liability for Part A and Part B services), which encompasses months in which an enrollee did not have at least one nonhospice day.

Methodology for comparing MA payments to FFS spending using historical data

For each MA plan, CMS publishes risk-standardized base payment rates (reconciled for actual county-level plan enrollment) and rebate amounts. To calculate total MA spending, we multiplied risk-standardized base payment rates by each beneficiary's final risk

score and actual number of months of MA enrollment, then we added rebate amounts multiplied by actual MA enrollment months. For months in which CMS applied sequestration adjustments to MA payments, we reduced the sum of all base payments and rebates by the applicable sequestration percentage (generally, a 2 percent reduction).[115,116]

For the FFS comparison group, we calculated the monthly average of risk-standardized spending per beneficiary at the county level. We include beneficiary spending from adjudicated claims for Part A and Part B services (removing hospice payments, medical education payments, and kidney-acquisition costs[117,118]), provider settlement amounts (e.g., reconciled payments after cost reports are submitted[119]), provider incentive payments (e.g., shared savings[120]), and CMS's estimate of FFS administrative claims costs.[121] We then risk standardized the average FFS spending within each county using final beneficiary risk scores.[122,123] We used our calculation of the county-based risk-standardized spending average for the FFS comparison group and multiplied this average by the risk-adjusted (using MA enrollee risk scores) MA enrollment months in each county:

$$\sum_i \overline{y}_g \times r_{i,g}$$

We denote an MA enrollee as individual i, residing in county g, with risk score r, and $\bar{y}_g$ is the average risk-standardized spending of FFS enrollees in the same county g (standardized to a 1.0 risk score). Thus, our total estimate compares the aggregate MA payments for MA enrollees (denoted by p as an MA enrollee's individual Medicare payment) with their corresponding aggregate FFS spending amounts (using the same enrollment-weighted risk score and county of residence):

$$\frac{\sum_i p_{i,g}}{\sum_i \overline{y}_g \times r_{i,g}}$$

For 2023, the base comparison—before accounting for the effects of favorable selection and coding—is 100.6 percent without the ESRD population and 100.7 percent including the ESRD population.

Methodology for comparing MA payments to FFS spending using projected data

For years in which we do not have historical data (2024 to 2026), the Commission follows the same analytic framework for our base comparison, but we rely on MA bid and benchmark data from CMS. These data include plan payment rates, plans' projected enrollment in each county, plans' projected average risk score, and CMS's projections of county-level risk-standardized FFS spending. CMS's projections of county-level FFS spending include a different population than our historical estimates (e.g., unlike the population we use for the historical estimate, they include beneficiaries with Part A only, Part B only, or with Medicare as a secondary payer). These population differences include beneficiaries who are either not eligible for MA enrollment or are not used in CMS's calibration of its HCC risk model. Despite those differences, the Commission has found that computing the base comparison using projected MA bid and benchmark data produces very similar estimates to computing the comparison with historical data that apply the appropriate exclusions to the MA and FFS populations. As shown in Figure 12-7 (p. 384), we compared the estimates from these two approaches for years that data are available and found that they produced estimates within 1 percentage point of one another (except for 2020 and 2021, when spending fluctuated during the pandemic). For 2023, the most recent year for which we can compare estimates under both approaches, we estimate that the base comparison was 101 percent of FFS spending using both historical data and projected data.

For the projections of MA spending, we calculate a payment rate for each plan using information from the bid data that MA plans submitted. Bid data include expected payments for Medicare-covered Part A and Part B services, plan rebates that fund extra benefits, and payments resulting from the quality-bonus program. These MA payment rates reflect the projected MA enrollee risk scores in plan-bid data. We then calculate total MA payments by multiplying each plan's estimated payment rate by the projected enrollment that plans also include in their bids. Because employer plans do not submit bids, we use CMS's county-level payment rates for these plans and multiply each of these rates by our projection of employer-plan risk scores and enrollment. These projections use county-level employer-plan enrollment and historic differences in risk scores between employer and nonemployer plans.[124]

To calculate what Medicare FFS would have spent for MA enrollees, we use CMS's projections (as published in the MA rate book), which risk standardize CMS's Part A and Part B spending estimates to reflect average spending for a FFS beneficiary with average risk (i.e., with a 1.0 risk score) in each county. CMS is required to exclude spending for some services that FFS provides but MA plans do not: hospice services, kidney-acquisition costs, and graduate medical education (both direct and indirect). We then calculate total spending by multiplying CMS's county-level estimates of per capita FFS spending by the projected MA enrollment in each county and the MA risk scores that plans include in their bids.

We project our overall base comparison by dividing total projected MA spending by total projected FFS spending (assuming the same county of residence and MA risk score). For 2026, the base comparison is projected to be 99.2 percent without the ESRD population and 99.4 percent when including the ESRD population. This estimate does not include the effects of favorable selection and coding, which are two of the three components of our comparison of MA payments to FFS spending. Favorable selection and coding are vital to understand what FFS spending would have been for MA enrollees, and the methodologies for those components are subsequently explained in Appendix 12-B and Appendix 12-C.

Part A–only beneficiaries are appropriately accounted for in the Commission's approach

The Commission's methodology for comparing MA payments to FFS spending appropriately accounts for the Part A–only population (and the smaller Part B–only population) in both parts of the calculation of the base comparison: MA payments (the numerator) and FFS spending (the denominator).

When measuring MA payments, the Commission uses data that fully reflect the lower payments that MA plans receive due to the inclusion of Part A–only beneficiaries in benchmarks

When measuring MA payments, we use data on the actual payment rates that Medicare uses to pay plans for MA enrollees. Those payment rates are determined by county benchmarks, plans' bids, plans' quality ratings, and enrollee risk scores. The FFS population that CMS uses to compute county benchmarks includes beneficiaries enrolled only in Part A, who have lower average spending than beneficiaries enrolled in both Part A and Part B. The inclusion of Part A–only beneficiaries in the population that CMS uses to compute county benchmarks reduces benchmarks relative to what they would have been if benchmarks were based solely on the Part A and Part B population.

The effect of Part A–only beneficiaries on benchmarks is fully reflected in the data that the Commission uses to measure MA payments in both years when we are able to use historical data (2016 to 2023) and years when we rely on projected data (2024 to 2026). The historical data use the actual payment rates (on a per enrollee basis) that Medicare used to pay plans for MA enrollees applied to each plan's actual enrollment and risk scores. The projected data use CMS's projected plan payment rates applied to each plan's projected enrollment and risk scores. Further detail on the historical and projected payment data is included in the previous section.

The Commission does not have a recent estimate of how much the inclusion of Part A–only beneficiaries reduces benchmarks. However, such an estimate is not necessary for our modeling of the base comparison. Our use of actual payment rates reflects the net effect of actual benchmarks, bids, and quality bonuses. Therefore, we do not require any assumptions or modeling about the Part A–only population for this part of the estimate. In 2017, the Commission recommended excluding Part A–only beneficiaries from the county benchmark population. If Part A–only beneficiaries were excluded from benchmarks, we expect that MA payments would be even higher relative to FFS spending than the Commission currently estimates. The numerator of the base comparison (MA payments) would increase while the denominator (FFS spending) would stay about the same.

When measuring FFS spending, the Commission's analysis of historical data excludes Part A–only beneficiaries

As described earlier, we exclude beneficiaries with Part A–only coverage from our analysis of FFS spending for all years in which historical data are available (2016 to 2023). In 2023, we estimate that MA plans received combined payments (including both the bid and rebate) that were about 1 percent higher than what the Medicare program spent on FFS beneficiaries with Part A and Part B coverage who were living in the

same county as MA enrollees, on a risk-adjusted basis. (After applying adjustments for favorable selection and coding intensity that correct for inaccuracies in risk adjustment, the Commission estimates that MA payments are substantially higher than what FFS spending would have been.)

For the three most recent years (2024 to 2026), we rely on CMS's projections to measure county-level FFS spending. Despite the inclusion of Part A–only beneficiaries in CMS's projections, our analysis indicates that our use of projected data has produced reliable estimates of the base comparison. As Figure 12-7 (p. 384) shows, we compared estimates from the approach using historical data to the approach using projected data for years that data are available and found that the two approaches produced estimates within 1 percentage point of one another (except for 2020 and 2021, when spending fluctuated during the pandemic). Based on that analysis, we have concluded that no adjustment is needed to the projected FFS spending used for the base comparison when historical data are not available. We will continue to analyze more recent data as they become available and will incorporate an adjustment if a difference emerges.

Comparisons of MA payments to FFS spending using projected data have produced similar estimates to comparisons using historical data of FFS beneficiaries enrolled in Part A and Part B, despite the differences in populations included (Figure 12-7, p. 384). Our analysis of historical data suggests that the county FFS rates used for setting benchmarks have roughly tracked the historical spending of the FFS Part A and Part B population used in the Commission's analysis. (As described earlier, the Commission also applies other appropriate exclusions to the Part A and Part B population to align with the MA population.) That analysis suggests that there are one or more factors that offset the effects of including the Part A–only population in the calculation of the county rates that are used for benchmarks. The Commission will continue analyzing these trends and incorporate new data as appropriate. ■

TECHNICAL APPENDIX 12–B

Favorable selection

The Commission's methodology for estimating favorable selection in MA

The risk-adjustment model that CMS uses to adjust payments to Medicare Advantage (MA) plans predicts Medicare spending using beneficiary characteristics, including demographics and medical conditions. The model is estimated using data from beneficiaries enrolled in the fee-for-service (FFS) program. For any set of characteristics, some FFS beneficiaries with those characteristics will have actual spending that is more than predicted and others will have actual spending that is less than predicted by the risk-adjustment model. The goal of risk adjustment is to accurately predict spending for a population of beneficiaries, on average. In other words, risk adjustment is accurate for a population when the overprediction errors are balanced with the underprediction errors.

"Favorable selection" refers to the tendency for Medicare's risk-adjustment model to—on average—overpredict the spending that the MA-enrolled population would have had if they were enrolled in the FFS program, even if medical conditions were recorded with similar coding intensity. Favorable selection can occur due to unmeasured differences in health status but can also result from factors such as differences in beneficiaries' propensities to seek, or receive, care for reasons that are unrelated to their health.

The analysis described in this chapter continues to use the analytic framework from our March 2025 report to the Congress but makes technical adjustments to improve the accuracy of the estimated changes in favorable selection during MA enrollment. We made three sets of changes to address those aims:

- First, we improve how we model changes in selection during MA enrollment by including dual-eligibility status in our matching of the MA study population to the FFS proxy group.
- Second, we improve how we extrapolate our estimates of favorable selection to MA enrollees outside of our study population by accounting for the dual-eligibility status of those enrollees (along with mortality status and initial year of enrollment).
- Third, we improve the comparability between our study population and FFS comparison groups by applying a series of technical updates.

Chapter 12 presents estimates from two methods of estimating the effect of favorable selection in the MA population. The first is a comprehensive method that we apply to estimate a selection effect for the entire MA-enrolled population—except for those with end-stage renal disease (ESRD)—in each year from 2015 to 2023. We also use estimates from that method to project the effect of favorable selection for 2024 to 2026, years in which we do not yet have data available. The second is a simple method that estimates favorable selection for the portion of ESRD MA enrollees who were on dialysis and who were enrolled in the FFS program in the previous year, referred to as "recent switchers." This simple method compares the FFS spending of recent switchers in the year before they enrolled in MA with the spending of beneficiaries who remained in FFS ("stayers") and were alive for all 12 months, standardizing for differences in risk score and state of residence. We use that simple method to estimate selection for the years in which MA enrollees on dialysis were allowed to switch from FFS to MA and for which we have data (from 2021 to 2023).[125] Because the population of dialysis switchers into MA is relatively small, we are not able to reliably construct the cohorts of MA switchers and FFS proxy groups necessary for our comprehensive method. Instead, we use our simple method for estimating favorable selection because it is not dependent on large subcohorts of switchers by year of initial enrollment into MA and by mortality. In addition, because beneficiaries with dialysis only began switching into MA in 2021, there are fewer years for the effects of mean reversion to meaningfully change the initial estimated effects of selection. For the ESRD population in transplant status or functioning-graft status, we did not have a sufficient population to estimate selection using our simple method. We applied estimates of selection from the dialysis ESRD population to those other segments of the ESRD population. The methodology for estimating favorable selection for the ESRD population is described in more detail in the text box on incorporating MA enrollees with ESRD into our comparison of payments to MA plans relative to FFS spending (pp. 379–382).

In this appendix, we also include estimates from a simple method of estimating selection for recent

switchers into MA among the non-ESRD population. Similar to the simple method applied to estimate selection for the ESRD population, this approach compares the FFS spending of recent switchers in the year before they enrolled in MA with the spending of stayers who were alive for all 12 months, standardizing for differences in risk score and county of residence. Estimates from that simple method are an easily interpretable indicator of selection and can be more readily compared with some papers in the literature that follow the same approach. However, estimates from the simple method do not account for several important aspects of selection that are accounted for in the estimates derived from our comprehensive method. That is why we use estimates of favorable selection using our comprehensive method when reporting our overall comparisons of MA and FFS payments.

Simple methodology for estimating favorable selection of the MA population

Below, we present our analysis using a simple version of our favorable-selection method that compares the FFS spending of beneficiaries who switched from FFS to MA in the following year ("recent switchers") with the spending of stayers, standardizing for differences in risk score and county of residence.[126] For example, we calculated the ratio of 2022 FFS spending for beneficiaries who switched to MA in 2023 with the 2022 FFS spending for beneficiaries who remained in FFS in 2023. We then converted the result to a percentage that we call the "selection percentage." (When calculating benchmarks, CMS adjusts for geographic distribution (i.e., county-level enrollment) of beneficiaries and differences in risk scores. Similarly, we adjusted the spending of beneficiaries who remained in FFS to have the same geographic distribution and risk scores as the beneficiaries who switched to MA.) We calculated an initial selection percentage for each cohort that entered MA in 2008 through 2023.

Using the simple method, we found evidence of favorable selection among recent switchers into MA during their last year in FFS throughout the period from 2007 to 2022 (Figure 12-B1, p. 428). We estimate that the selection percentage ranged from 87 percent to 96 percent during the period. Favorable selection using the simple method was highest in 2022. (MA enrollee local-area spending was 13 percent less than predicted by their risk score, a selection percentage of 87.)

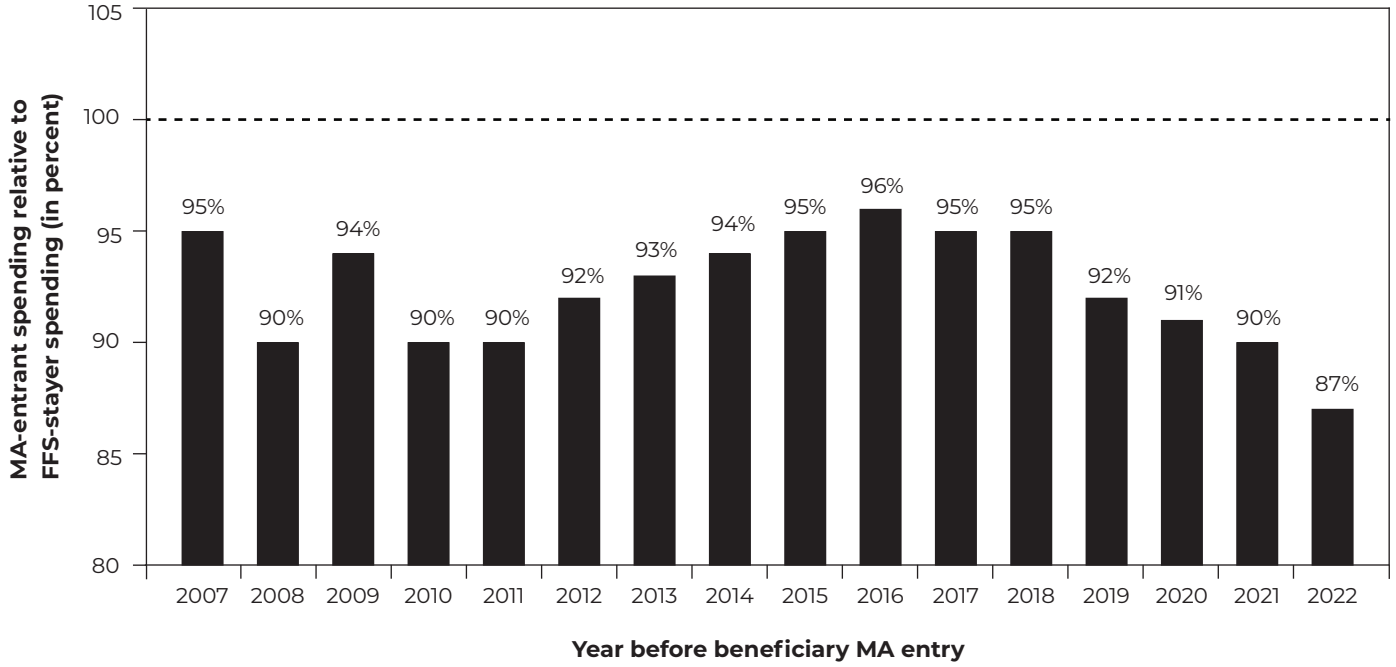
Comprehensive methodology for estimating favorable selection of the MA population

We use our comprehensive method to estimate an aggregate selection percentage for the entire population of non-ESRD MA enrollees in each year, beginning in 2015. That aggregate selection percentage represents the amount by which the predicted spending used for MA payments (estimated using the FFS population in Medicare's risk-adjustment model) overpredicted (or underpredicted) the actual spending that the MA population would have had if those beneficiaries had been enrolled in the FFS program in that year. It is computed as a ratio of (1) the estimated spending that the FFS program would have incurred for the MA-enrolled population had they been enrolled in the FFS program (the numerator) and (2) the estimated FFS spending that the Medicare payment system predicted for that population (the denominator). We label that ratio the "selection percentage." We cannot directly observe the selection percentage of beneficiaries during their enrollment in MA because we cannot observe what their spending would have been had they instead been enrolled in FFS in that year. However, we can directly estimate the selection percentage of MA enrollees who were previously enrolled in the FFS program in the year before they switched to MA. For that reason, we use data from MA enrollees who were previously enrolled in the FFS program as our study population and model how their selection percentage changed between the year before they enrolled in MA and their most recent year of MA enrollment.

Our study population consists of beneficiaries who had at least two years of prior enrollment in the FFS program before switching to MA ("previous switchers") and who met our other inclusion criteria, approximately 26 percent of non-ESRD MA enrollees in 2023 (8 million MA enrollees).[127] For those enrollees, we have complete data on their spending and risk scores while they were in FFS that we can use as the basis for estimating a selection effect. The remaining non-ESRD MA population had at least two years of prior enrollment in the FFS program but did not meet all of our inclusion criteria (9 percent in 2023), switched from FFS to MA but had less than two years of prior FFS enrollment (30 percent in 2023), or enrolled in MA upon their initial eligibility for Medicare Part A and Part B and had no FFS months (35 percent in 2023).[128]

FIGURE 12–B1

Beneficiary FFS spending in the year before MA enrollment indicates favorable selection for recent entrants from 2007 to 2022



Note: FFS (fee-for-service), MA (Medicare Advantage). Estimates were constructed using the Commission's simple method for estimating favorable selection. "MA entrants" are beneficiaries who switched from FFS to MA in the following year. "FFS stayers" are beneficiaries who remained in FFS in the following year. "Spending" reflects the year before MA entry and is risk standardized. Values farther below 100 percent indicate greater favorable selection. The analysis excludes beneficiaries without at least two full years of enrollment in FFS Part A and Part B before the year of MA entry as well as those who joined a non-MA private plan (e.g., cost plan), had end-stage renal disease, had Medicare as a secondary payer, resided in multiple counties during the year, or resided in Puerto Rico (due to the relatively small number of FFS beneficiaries in that territory).

Source: MedPAC analysis of Medicare enrollment (2006–2023), Medicare claims spending (2007–2022), and risk-adjustment files (2007–2022).

For enrollees outside our study population, we assign a selection percentage using data from our study population of previous switchers who joined MA in the same year and had the same dual-eligibility status during the target year and mortality status in the following two years. Assigning selection percentages to the nonstudy population using the estimated selection of enrollees in our study population with the same year of entry, dual-eligibility status, and mortality status adjusts for many of the differences between the study and nonstudy populations. MA enrollees with ESRD, who accounted for 1 percent of the MA population in 2023, are assigned a selection effect equal to zero on the basis of the analysis described later.[129]

We estimate selection for the study population of MA enrollees who were previous switchers using two main components: the selection percentage before each beneficiary was enrolled in MA ("base-year selection") and the estimated change in selection between the base year and the most recent year of MA enrollment. We describe below how we measure base-year selection and the change in selection for that population.

Study and comparison populations

We include beneficiaries in our study population if they (1) were enrolled in MA for at least one month of the year for which we are estimating selection (referred to

as the "target year," which is 2023 for the most recent estimate); (2) had joined MA between 2010 and 2023; and (3) had been enrolled in FFS and had both Part A and Part B coverage for at least two full calendar years before enrolling in MA. Because hospice enrollees receive their Medicare Part A and Part B coverage only from FFS and not from MA plans, we remove MA enrollment months while the beneficiary is in hospice (unless they were participants in CMS's value-based insurance design hospice demonstration). We address the issue of decedents separately (discussed below).

Consistent with our comparisons of MA payments and coding relative to FFS spending, we include beneficiaries enrolled in conventional MA plans (available to all beneficiaries), special-needs plans, and employer plans because the Medicare program makes payments to plans for all of these populations, and they all can experience favorable selection. We require beneficiaries to have at least two full calendar years of FFS enrollment because the CMS hierarchical condition category (HCC) risk-adjustment model calculates risk scores using diagnoses from the prior year's claims. Thus, we require data on MA beneficiaries with two years of prior FFS enrollment to calculate risk scores for their last year of FFS enrollment. We divide the study population for each target year into 14 annual cohorts based on the year that they previously enrolled in MA (2010 through 2023). The study population of MA enrollees is used to construct the numerator of the selection percentages we estimate.

For the comparison population used to construct the denominator for the selection percentages, we include FFS beneficiaries who generally would have met the inclusion criteria for CMS's calibration of its HCC risk model and had the necessary data to construct risk scores. We also apply an additional exclusion to the FFS population used by requiring the comparison population to have had both Part A and Part B FFS coverage for at least one full calendar year before the base year and at least one month of nonhospice coverage in the base year (the study population's last year of FFS enrollment). That exclusion is applied to enhance similarity to the MA-enrolled population and to align with the population used to construct the base spending component of the Commission's comparison of MA to FFS spending. Restricting to beneficiaries enrolled in both Part A and Part B also aligns with the population used to calibrate the risk-adjustment model. In addition, we exclude from our FFS comparison population beneficiaries with any Part A–only, Part B–only, or MA months during the base year.

We exclude beneficiaries from both the study and comparison populations if they had characteristics that would have excluded them from CMS's non-ESRD HCC risk-model calibration: ESRD coverage, Part A–only coverage, Part B–only coverage, hospice election, or if they had another source of health coverage for which Medicare acted as a secondary payer.[130] CMS excludes beneficiaries with ESRD from benchmark calculations, pays MA plans state-based FFS rates for ESRD beneficiaries, and adjusts benchmarks and payments for those with Medicare as a secondary payer to remove the secondary-payer effect. In addition, we exclude beneficiaries who did not reside in the 50 states and the District of Columbia. Further, to ensure geographic comparability, we exclude beneficiaries who did not reside in the same county during any year in which their spending is calculated. That restriction allows beneficiaries in our study population to change their county of residence provided that it does not interfere with the calculation of spending in the base year and the target year.

Base-year selection percentage

Each beneficiary has a selection percentage that represents by how much their predicted spending estimated using Medicare's risk-adjustment model ("predicted spending") in year t underpredicts or overpredicts the actual spending they would have had if they were enrolled in the FFS program in that year. That individual-year-level selection percentage is denoted as $S_{i,g,t}$, for individual i, residing in county g, in time t. Time t indexes the time since individuals in each cohort of MA switchers switched from FFS to MA, with $t = 0$ representing the year before the switch occurred and $t = 1$ representing the first year the cohort was enrolled in MA. We use year $t = T$ to denote the "target year" in which we are measuring selection of the MA population. For example, consider a group of MA enrollees in 2023 who previously switched from the FFS program to MA in 2019 (and stayed in MA through at least one month in 2023). For those enrollees, $t = 0$ is 2018, $t = 1$ is 2019, and $t = T$ is 2023.

We refer to a beneficiary's selection percentage in the year before switching to MA as the base-year selection

percentage and denote the base year as $t = 0$. Because MA switchers were enrolled in FFS in year $t = 0$, we can use their actual FFS spending to estimate their selection percentage in that year.

We estimate their base-year selection percentage as the ratio of each individual's actual spending relative to an estimate of their predicted spending (which is specific to their county g):

(1)

$$S_{i,g,t=0} = \frac{y_{i,g,t=0}}{\bar{y}_{g,t=0} \times r_{i,g,t=0}}$$

Where $y_{i,g,t=0}$ is the individual's actual FFS spending in year $t = 0$, $\bar{y}_{g,t=0}$ is the average risk-standardized spending of FFS enrollees in the same county g (standardized to a 1.0 risk score), and $r_{i,g,t=0}$ is the individual's risk score in year $t = 0$.[131] That initial selection percentage represents by how much Medicare's risk-adjustment model underpredicted or overpredicted the actual spending that the MA switchers had during their last year in FFS.

Selection in the base year is measured with a very high degree of accuracy for the population of MA switchers with the requisite two prior years of enrollment in FFS. However, our primary objective is to measure the degree of selection for the population of MA enrollees during the target year in which they were enrolled in MA in time $t = T$.

An individual's selection percentage at time $t = T$ could differ from their selection in the base year for several reasons, which can be seen from considering the terms in the formula above. First, the spending an individual would have had in FFS (the numerator) could get closer to their predicted spending over time, holding constant the risk model and the composition of the FFS population used to calibrate risk scores and calculate average spending. That phenomenon is known as "mean reversion."[132] Second, an individual's predicted spending in the denominator could get closer to or farther from the numerator, holding the numerator constant. That could occur if changes to the risk model between $t = 0$ and $t = T$ improve the accuracy of predicted spending or if changes in the composition of the FFS population used to calibrate the risk model and compute predicted spending change over time. The composition of the FFS population can change due to the net effect of inflows of people who newly enroll in FFS and outflows of beneficiaries who die or switch to MA. Our approach to estimating the change in selection accounts for all of those reasons.

Change in selection

We are interested in measuring the selection percentage in year $t = T$, when beneficiaries are enrolled in MA and we cannot directly estimate their selection percentage. To estimate their selection percentage in that year, we note that selection in later years can be expressed as the sum of an individual's base-year selection percentage (which we can directly estimate) and the change in their selection percentage:

(2)

$$S_{i,g,t=T} = \underbrace{S_{i,g,t=0}}_{selection\ in\ base\ year} + \underbrace{\left(S_{i,g,t=T} - S_{i,g,t=0}\right)}_{change\ in\ selection}$$

We can estimate the change in selection for each MA enrollee as the average change in selection percentage calculated for a proxy group of similar enrollees who were enrolled in the FFS program between $t = 0$ and $t = T$.[133] We define $P^{c,T}_{b,d,m}$ as the set of beneficiaries that serve as the proxy group for any given cohort, c, of MA enrollees in year T (defined by the year they first enrolled in MA) who have the same base year ($t = 0$), selection percentage b, year of death d relative to the target year ($t = T$), and Medicaid eligibility status m. The average change in selection for the proxy group is calculated as

(3)

$$\Delta S^{p}_{T} = \sum_{i \in P^{c,T}_{b,d,m}} \left(S_{i,g,t=T} - S_{i,g,t=0}\right) \times \alpha_i$$

Each individual's weight in the calculation is represented by α_i.[134] The term $S_{i,g,t=0}$ is defined in equation (1), and $S_{i,g,t=T}$ is defined similarly as the ratio of each individual's actual spending in the target year relative to an estimate of their predicted spending in that same year:

(4)

$$S_{i,g,t=T} = \frac{y_{i,g,t=T}}{\overline{y}_{g,t=T} \times r_{i,g,t=T}}$$

Proxy groups are constructed by segmenting the population of beneficiaries who were enrolled in FFS from $t = -1$ through at least one month of $t = T$ into 110 mutually exclusive groups.[135,136] Those FFS enrollees are assigned to groups according to three key characteristics. First, they are assigned to one of three mortality groups based on their mortality in year $t = T$, $t = T + 1$, and $t > T + 1$. Second, they are assigned to a group based on their base-year selection percentage at $t = 0$. Third, for beneficiaries assigned to mortality in year $t > T + 1$, they are assigned to a group based on their dual-eligibility status for Medicaid (fully dual, partially dual, nondual).[137] Each MA enrollee is matched to the proxy group that has the same mortality status, level of base-year selection, and dual-eligibility status (where applicable). The enrollee is then attributed the average change in selection for their matched proxy group.

For example, consider the set of MA enrollees in 2023 who were last enrolled in FFS in 2017 (including all of 2016), died after 2024, were full duals, and had a selection percentage of 92 percent in 2017. The proxy group for those enrollees consists of beneficiaries who were enrolled in FFS in 2017 (including all of 2016) through 2023, died after 2024, were full duals, and had a selection percentage between 90 percent and 100 percent in 2017.[138] The average change in selection percentage for that proxy group between 2017 and 2022 is used as the estimate for the change in selection percentage for the MA enrollees who match that proxy group.

Matching on base-year selection percentage is important for capturing the potential for mean reversion because people who begin the period with a large degree of favorable (or unfavorable) selection may be more likely to experience larger changes that bring them closer to the mean. Matching on mortality is important because people closer to death tend to have higher spending on average, both in absolute terms and relative to their predicted spending. Matching on dual-eligibility status is important because these beneficiaries comprise a larger share of MA enrollees compared with FFS enrollees. The average change in selection for the proxy group also accounts for changes to the Medicare risk-adjustment model, changes in the composition of the FFS population, and secular trends in FFS spending over the period. For example, changes to Medicare's risk-adjustment model are reflected in the calculation through changes in risk scores for the proxy group, which we include when measuring change in selection for MA enrollees.

Cohort-level estimates of MA switchers

We construct aggregate selection percentages at the mortality–dual status–cohort-group level by aggregating the estimates of individual-level selection effects, weighting by predicted spending and number of months enrolled in MA during year $t = T$.

(5)

$$S_{c,d,m,T} = \sum_{i \in C^{d,m,T}} \left(S_{i,g,t=0} + \Delta S_T^p\right) \times w_{i,T}$$

Because the risk scores of MA enrollees at year $t = T$ are influenced by the coding practices of their plans, in constructing the weights for this calculation we estimate what each individual's risk score would have been in year $t = T$ had they been enrolled in FFS.[139] To do this estimate, we take the beneficiary's FFS risk score from the base year before they switched to MA and trend it forward based on the change in risk score for members of their proxy group.

Assigning cohort-level estimates to the remaining MA population

About 26 percent of the MA-enrolled population in 2023 (8 million enrollees) are in our study population and have their selection percentage estimated using the method outlined above. The bulk of the remaining MA population either switched from FFS to MA but did not have sufficient data (39 percent) or enrolled in MA upon their initial eligibility for Medicare and had no prior FFS months (35 percent).[140] For those enrollees, we assign a selection percentage as the estimated selection percentage of switchers in our study population who joined MA in the same year, had the same mortality status in the following two

years, and had the same dual-eligibility status in the target year. That is, selection percentages are assigned to MA enrollees outside the study population at the mortality–dual status–cohort-group level. (We also assign selection percentages to all beneficiaries who enrolled in MA before 2010 using the estimated selection percentages for the 2010 cohort of our study population. This group consists of beneficiaries who had any prior Medicare FFS enrollment and those who had no prior Medicare FFS enrollment.)

The decision to generalize estimates of selection from our study population to switchers outside our study population and enrollees who joined upon initial eligibility for Medicare is supported by our own analysis and external studies. Our analysis suggests that MA enrollees who switched from FFS but had less than two years of prior FFS coverage had favorable-selection effects that were at least as large as the MA enrollees in our study population with at least two years of prior FFS coverage. In our March 2024 report to the Congress, we used risk scores constructed from concurrent diagnoses to examine the effect of favorable selection for beneficiaries who had only one full year of prior FFS enrollment (before switching to MA). We estimated favorable-selection effects that were consistently larger for these beneficiaries than for our study population of MA switchers (i.e., beneficiaries who had at least two years of FFS enrollment before joining MA) (Medicare Payment Advisory Commission 2024c).

For beneficiaries who enroll in MA upon initial Medicare eligibility, the available evidence is also consistent with favorable selection. One study used mortality as a rough proxy for MA favorable selection and found substantially lower mortality rates among enrollees who elected MA during their first year of Medicare eligibility relative to those who elected FFS during their first year of Medicare eligibility (Newhouse et al. 2019). Further, another group of researchers examined pre-Medicare spending for a sample of about 11,000 beneficiaries who enrolled in MA at age 65 between 2015 and 2019. When comparing the risk-adjusted pre-Medicare spending of these MA enrollees with the pre-Medicare spending of a sample of beneficiaries who elected FFS at age 65, these researchers found about 13 percent lower risk-adjusted spending in the MA sample relative to the sample of FFS beneficiaries (Teigland et al. 2025a). That estimate of favorable selection exceeds our estimate of favorable selection for MA switchers throughout the 2015 to 2019 period, which we estimate to be 4 percent to 9 percent using the Commission's simple method, which is most comparable with that study's methods. Moreover, a recent study examined Medicaid enrollees immediately before becoming eligible for Medicare from 2017 to 2022 (Pelech et al. 2025). Using the spending and risk-score data in Appendix Table 11 of that study, MA enrollees had 23 percent lower risk-standardized medical spending than the FFS population before Medicare eligibility. Our analyses combined with the results of other research suggest that the effect of favorable selection for MA entrants who have less than two years of prior FFS coverage, or none at all, may be even larger than what we observed in our study population.

Final aggregate selection percentage of MA population

The final aggregate selection percentage of the entire MA enrolled population in year $t = T$ is a dollar-weighted average of the individual selection percentages. Each enrollee is weighted by the number of months they were enrolled in MA in year $t = T$, their FFS county-level risk-standardized spending in year $t = T$, and their projected FFS risk score (using the change in risk score of the proxy group during MA enrollment). This weighting reflects each individual's predicted spending in year $t = T$ as a share of the MA population's predicted spending in year $t = T$.

Our approach to estimating selection for the MA population in the target year using data from people who were enrolled in MA in that year implicitly accounts for the role of selective attrition out of the MA program. "Selective attrition" refers to the tendency for the beneficiaries who either die or disenroll from the MA program to FFS to have risk scores that underpredict their spending. Analyses by the Commission and other researchers have found evidence of selective attrition, suggesting that the size of favorable selection in the MA population could be higher than estimates using data from all people who initially enrolled in MA. By defining our study population as beneficiaries who are enrolled in MA during the target year, we exclude beneficiaries who disenrolled from MA in earlier years. Because

we require more than one year of FFS data for beneficiaries to be included in our FFS comparison population, we may slightly underestimate the effect of selection because we exclude beneficiaries who disenrolled from MA in years $t = 0$ or $t = T$ but did not have enough FFS experience to be counted in our comparison population for those respective years. However, those beneficiaries account for a very small share of enrollees and are not likely to have a substantial effect on our estimate. This approach to accounting for selective attrition implicitly through the construction of the study population remains the same in the current version of the methodology and the methods used in our March 2024 and March 2025 reports to the Congress.

Technical changes relative to the methods used for the March 2025 report to the Congress

The analysis described in this chapter continues to use the analytic framework from our March 2025 report. We also continued to make refinements to improve the accuracy of our estimates and address some of the limitations of our prior method. The methodology outlined above reflects three main types of technical updates to our methods from last year. First, we now include dual-eligibility status in our matching of the MA study population to the FFS proxy group when modeling changes in selection. Second, we now account for dual-eligibility status when applying estimates outside our study population, along with continuing to account for differences in mortality status and year of initial enrollment. Those updates address the two main areas of uncertainty in the Commission's methodology (see below for further discussion). Third, we apply a series of technical updates to improve comparability between our MA and FFS populations. Overall, these changes improved the accuracy of the Commission's estimates of favorable selection but, on net, did not substantially change the magnitude of our estimates.

We now describe each of the technical updates more thoroughly:

- Matching the MA study population to proxy groups using dual status (fully dual, partially dual, or nondual): When modeling changes in selection during MA enrollment, for beneficiaries with a mortality status $t > T + 1$, we now match MA cohorts and their proxy cohorts by dual-eligibility status (using the target year dual-eligibility status), mortality (using the number of years to death relative to the target year $t = T$) and the initial selection percentage in year $t = 0$. This modification allows our estimate to better account for changes in selection that may be different for fully dual-eligible beneficiaries and partially dually eligible beneficiaries. Previously, we assumed that full duals and partial duals had the same change in selection percentage as MA enrollees who were nondually eligible. In general, the selection estimates in target year $t = T$ were similar after including dual eligibility as a matching characteristic. To maintain a reliable number of beneficiaries in each of our MA and proxy group subcohorts, we are unable to apply our dual status match to the smaller decedent ($t = T$) and near-decedent ($t = T + 1$) populations. Matching on dual status is likely to be less important for those populations because we anticipate fewer differences in the changes in risk-standardized spending between duals and nonduals among these mortality groups. In other words, we expect being close to death to be the most consequential factor for modeling changes in selection for both duals and nonduals.

- Assigning selection percentages to the nonstudy MA population using dual status: We use estimates of favorable selection for MA enrollees in our study population to assign selection percentages to MA enrollees outside of our study population. Under the previous version of our method, we matched MA enrollees who were outside our study group to those in our study group based on their year of entering MA and their mortality status. For example, individuals who entered MA in 2018 but did not have the required number of years in FFS to be in our sample were assigned the average selection percentage of members of our study cohort who entered MA in 2018 and who had the same mortality status (using the number of years to death relative to the target year $t = T$). Under our updated method, we now also match MA enrollees outside our study population to those in our study population by dual status (using dual status in the target year $t = T$) when assigning them a selection percentage. (To maintain a reliable estimate, we apply this match only to MA enrollees with a mortality status of $t > T + 1$.) In

addition, we trend forward the initial average risk score of each individual in each study-population cohort by the increase in risk score of their proxy cohort–dual status–mortality group. We apply this trended risk score to the broader MA cohort–dual status–mortality group, which is used to weight individuals in different cohorts. Thus, under our updated method, each MA enrollee in the nonstudy population receives a selection percentage and expected risk score based on their MA entry year, dual status, and mortality status in year $t = T$. We previously implicitly assumed that enrollees outside our study population had the same average selection percentage as individuals with the same mortality status and year of MA entry within the study population. That did not allow our estimates to reflect any differences in selection percentage by dual status within those subcohorts when assigning selection percentages outside our study population. Because MA enrollees in our study population have a somewhat larger share of dually eligible beneficiaries relative to the general MA population, reflecting those differences allows us to more fully account for differences between our study and nonstudy populations and increases the accuracy of our estimates.[141] Thus, this update to our method more accurately accounts for dual-status differences between MA enrollees included and not included in our study populations.

- Other updates to enhance comparability of the MA and FFS populations include:
  - Ensuring consistent county of residence in the MA study population and FFS comparison population: We rely on an annual spending file for each beneficiary to estimate the average risk-standardized spending in each county for the FFS population. This county-level spending is used to construct the denominators of the selection percentages for MA enrollees in our study population and FFS enrollees in our proxy group. Under our previous method, we allowed beneficiaries to reside in multiple counties during the year in which spending was calculated. Thus, we assumed that county-level differences in spending would not be altered by beneficiaries who may have resided in a different county during the year. Under our updated method, we exclude beneficiaries who did not reside in the same county during the years in which spending is calculated. This change applies to the FFS comparison group in each year of our study, and it applies to the MA study population and proxy group during the base year ($t = 0$) and during the target year ($t = T$). While this update did not affect our overall estimates of favorable selection, it ensures that we better account for geographic differences in spending.
  - Removing the weighting of hospice months from spending calculations: Because MA plans are not liable for Medicare spending during hospice enrollment, we exclude beneficiaries who were in hospice status for the entire year from our analysis. For beneficiaries who were in hospice status for part of the year, we would ideally exclude all of their hospice and nonhospice spending that was incurred during hospice months. However, our ability to do so is imperfect because we rely on annual spending totals divided by the number of enrolled months to construct average monthly spending. To exclude spending on hospice services, we subtract hospice spending from the annual totals we use to calculate spending for our MA study population, proxy group, and FFS comparator. Under our prior method, we included all of a beneficiary's enrolled months (including months in hospice status) when converting those annual totals into average monthly spending amounts for beneficiaries who were enrolled in hospice for part of the year. Under our current method, we remove hospice months from the calculation of average monthly spending in order to better measure average spending during nonhospice months, which increases the average monthly spending of beneficiaries who were in hospice status for part of the year.[142] While this update did not affect our overall estimates of favorable selection, it ensures better comparability between the MA and FFS populations when calculating risk-standardized spending differences.
  - Correcting for historical errors in the count of decedent months from 2016 to 2020: In our March 2024 report to the Congress, our estimates relied on beneficiaries who were enrolled in

Medicare from the base year ($t = 0$) through the target year ($t = T$), and all beneficiary months were scaled to a full year (i.e., 12 months). In our March 2025 report to the Congress, we updated our method to include decedents. Under our current method, we correct two discrepancies that had moved our estimates in two different directions. First, we correct a discrepancy in the 2017 to 2020 estimates published in the March 2025 report that undercounted decedents. This discrepancy scaled decedent months to a full year instead of reflecting the number of months in the year that the decedents were alive. This error did not affect our 2021 and 2022 estimates of favorable selection, which were the basis for our projections of favorable selection for 2023 to 2025 that we published in the March 2025 report. Second, we corrected an error in our 2016 estimate of favorable selection that overcounted decedents. This discrepancy assigned decedents in 2017 as decedents in 2016. This adjustment increased our 2016 estimate of selection by 2 percentage points.

We compared the estimates that we published in the March 2025 report to the Congress for the MA population from 2016 to 2022 with our estimates for the 2016 to 2022 MA population under the updated methodology. The updated methodology did not meaningfully change our overall estimates of favorable selection for 2021 and 2022. However, our overall estimate of the MA selection percentage in 2016 decreased by 2 percentage points (a 2 percentage point increase in MA payments relative to FFS spending) and increased our selection percentage in 2017 through 2020 by 2 percentage points to 3 percentage points (a 2 percentage point to 3 percentage point decrease in payments relative to FFS spending) each year. Overall, our updates make our estimate of favorable selection much more consistent over the entire 2016 to 2022 period (Figure 12-B2, p. 436). We will continue working to update our methods where appropriate.

Sensitivity analysis to assess the robustness of modeling how selection changes over time

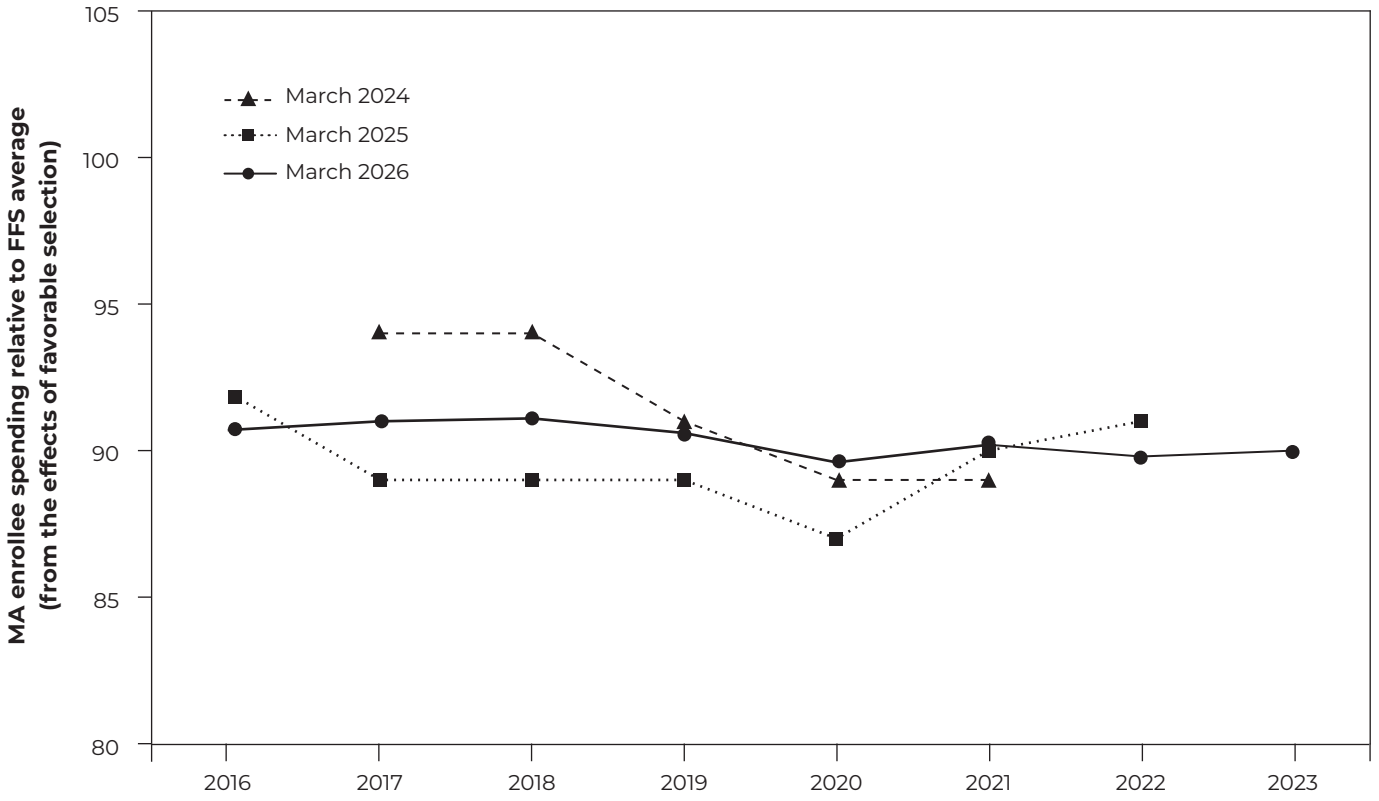
One of the most uncertain aspects of the Commission's methodology for estimating favorable selection is the modeling of how selection changes over time (reverts to the mean) while beneficiaries are enrolled in MA. We rely on data from our MA-switcher study population and the FFS population for that modeling. Our modeling goes through two steps of matching:

- First, we match our study population of MA switchers to our FFS proxy group using base-year (i.e., year in which our study population switched into MA) mortality status, base-year selection percentage, and dual-eligibility status. The average change in selection percentage experienced by each FFS proxy group is used to estimate the change in selection during MA enrollment for the study population of MA switchers with the same characteristics.
- Second, we match our study and nonstudy populations by assigning selection percentages to the nonstudy population using the estimated selection of enrollees in our study population with the same year of entry, dual-eligibility status, and mortality status.

Neither step in our matching process originally included dual-eligibility status, and we now add this characteristic to our matching steps to better account for the ways in which the MA population (both the study and nonstudy populations) is demographically distinct from the FFS population. While dual-eligibility status is one important factor that makes the MA population distinct, we wanted to understand how using other characteristics as matching factors may affect our estimate of the MA selection percentage. We started with our original matching characteristics that were restricted to base-year selection percentage (for the FFS proxy group only), year of entry into MA, and mortality status. We compared the selection percentage of that original matching with our estimated selection percentage when adding one additional matching factor in 2022 and 2023. For example, Figure 12-B3 (p. 437) reports that the estimated selection percentages when matching only on base-year selection percentage, year of entry into MA, and mortality status was 90.3 percent for 2022 and 90.5 percent for 2023. When adding one further matching factor to the FFS proxy group—base-year risk score—those percentages slightly changed to 90.2 percent (2022) and 90.4 percent (2023). The remaining columns in that figure report the estimated selection percentage when adding one factor to the original matching characteristics (rather than report effects

FIGURE 12–B2

Updated favorable selection estimates are consistent across years



Note: MA (Medicare Advantage), FFS (fee-for-service). Estimates are for beneficiaries without end-stage renal disease and were constructed using the Commission's comprehensive method for estimating favorable selection. Selection percentages are computed as the ratio of the estimated spending that the FFS program would have incurred for MA enrollees relative to the spending predicted by their county benchmark and Medicare's risk-adjustment model. Selection-percentage values farther below 100 percent indicate greater favorable selection. Estimates are rounded to the nearest percent.

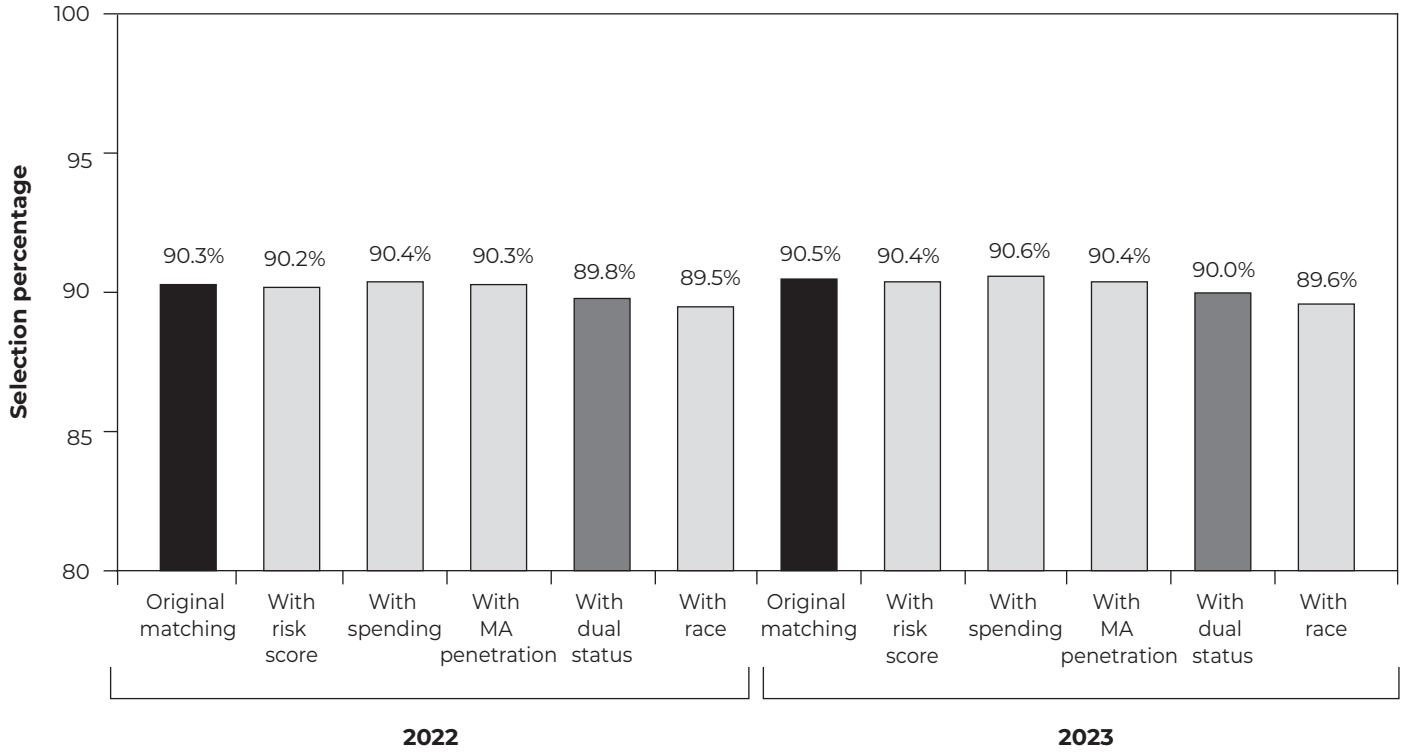
Source: MedPAC analysis of Medicare enrollment (2006–2023), Medicare claims spending (2007–2023), and risk-adjustment files (2007–2023).

from cumulative matching characteristics, which would have compromised the reliability of our subcohort estimates). One set of factors—base-year risk-score level and base-year spending level—were applied only to the matching of our study population of MA switchers with our FFS proxy group, not to matching our study population with the nonstudy population.[143] (We are not able to match risk-score level and spending level to our nonstudy MA population.) A second set of factors—base-year MA market-penetration level, dual-eligibility status, and race—were applied to both steps in our matching process.

For 2022 and 2023, our estimates of selection percentages under the different matching scenarios were all within 1 percentage point, indicating that our estimate is relatively robust to alternative specifications (Figure 12-B3). For example, our original matching—year of MA entry and mortality status—resulted in a selection percentage of 90.5 percent in 2023. When we added risk-score level, spending level, or MA market-penetration level, our overall selection percentage was nearly identical, indicating that we do not estimate different levels of favorable selection when accounting for these characteristics. Alternatively, we found that

FIGURE 12–B3

Accounting for the effects of dual eligibility and race slightly increases the effects of favorable selection



Note: MA (Medicare Advantage). Estimates were constructed using the Commission's comprehensive method for estimating favorable selection. Estimates do not include beneficiaries with end-stage renal disease. Each estimate contrasts the matching approach used to construct the proxy groups that are used to model changes in selection during MA enrollment. The original matching approach used in our March 2025 report is based on initial selection percentage, year of entry into MA, and mortality status. The other estimates use one of the specified additional factors as a matching factor when constructing the proxy groups. Risk scores, spending, and MA penetration are based on base-year (i.e., the year before MA enrollment) tiers. "Dual status" consists of categories for fully dual eligible, partially dual eligible, and nondually eligible during the target year (e.g., 2023). Categories of race consist of White, Black, Hispanic, and other. Selection percentages are computed as the ratio of the estimated spending that the FFS program would have incurred for MA enrollees relative to the spending predicted by their county benchmark and Medicare's risk-adjustment model. Selection percentage values farther below 100 percent indicate greater favorable selection.

Source: MedPAC analysis of Medicare enrollment (2006–2023), Medicare claims spending (2007–2023), and risk-adjustment files (2007–2023).

dual-eligibility status (a selection percentage of 90.0 percent in 2023) and race (a selection percentage of 89.6 percent in 2023) had a marginal impact on our results. These social risk factors produced marginally lower selection percentages (i.e., higher estimates of favorable selection) in both 2022 and 2023. Thus, dually eligible beneficiaries and Black and Hispanic beneficiaries have somewhat different levels of favorable selection that are not captured in the original matching method. To better capture the increasing share of dually eligible beneficiaries in MA (and any differences in dual status between our study and nonstudy populations), our estimates of favorable selection now explicitly adjust for dual-eligible status (i.e., fully dual, partially dual, and nondual).[144] Adding further matching characteristics, such as race, is challenging because maintaining adequate sample sizes in each subgroup is not always possible. An additional challenge with using race as a matching characteristic is that the data are incomplete for some beneficiaries. We will continue to explore other opportunities to refine our methods in estimating favorable selection.

Sources of uncertainty in the Commission's estimate of favorable selection

There are four main sources of uncertainty in the Commission's estimate of favorable selection. Below, we discuss those sources. We have tried to make reasonable modeling assumptions where there is uncertainty. This year, we incorporated two modeling updates to address two of the sources of uncertainty and conducted additional sensitivity analyses; however, our estimate of favorable selection could be higher or lower if actual trends differ from those assumptions.

- We have a high degree of confidence in our estimate of favorable selection for beneficiaries in our study population before they enter MA ("base-year selection"). However, there is uncertainty in our estimate of the change in selection while our study population was enrolled in MA because that change cannot be observed directly with available data and must be estimated using a different population of beneficiaries who are enrolled in FFS. We make the best use we can of available data to estimate the change in selection by matching our study population to FFS "proxy groups" using their base selection before entering MA and their mortality status and dual-eligibility status during the year of MA enrollment. Our previous analysis suggests that this portion of the estimate is conservative because using narrower proxy groups of FFS beneficiaries who later enrolled in MA produced larger selection effects (Medicare Payment Advisory Commission 2025b). The sensitivity analyses we conducted this year to assess the impact of matching on additional characteristics when constructing FFS proxy groups demonstrated that the estimated change in selection was robust to alternative specifications. However, the actual change in selection could be higher or lower than we estimate.

- There is also uncertainty regarding the selection effect for MA enrollees outside our study population. Due to a lack of data, we assign a selection percentage to those beneficiaries using data from MA beneficiaries in our study population. Our analysis, described earlier in the appendix, indicates that assigning selection percentages that we estimate by using our study population to the remaining MA population is appropriate and may be conservative. This year, we improved our methodology for assigning selection effects to MA enrollees outside our study population. We now account for differences in dual-eligibility status when applying estimates outside our study population, along with continuing to account for differences in mortality status and year of initial enrollment. That refinement, along with the studies cited earlier that found substantial selection in the newly eligible population, gives us greater confidence in our approach to modeling selection for this population. We will continue looking for ways in which we can better account for differences between our study population and the general MA population in our modeling.

- Another source of uncertainty stems from data limitations that require us to exclude beneficiaries who lack a full prior year of FFS enrollment from the FFS comparison population used for the denominators. That method excludes some beneficiaries from the FFS comparison group (denominator) whom studies have demonstrated to have unfavorable (that is, higher) risk-standardized spending if they had recently disenrolled from MA to FFS (Fuglesten Biniek et al. 2024). This suggests that our FFS comparison group should have slightly larger risk-standardized spending than what we currently estimate, and our estimated selection effects would be slightly larger if FFS beneficiaries who recently (within 12 months of the target year) disenrolled from MA were included in our study. In addition, we also exclude FFS beneficiaries who recently became eligible for Medicare. Their risk-standardized spending may be higher or lower than the population of FFS beneficiaries with complete data who are in our comparison group, so omitting those beneficiaries may cause our estimate of favorable selection to be either higher or lower.

- Finally, there is uncertainty in our estimate of roughly zero favorable selection for MA enrollees with ESRD. Because our estimate of favorable selection is limited by observing plan switching, it is particularly difficult to estimate favorable selection for this small population. However, our analysis using the simple method (detailed on pp. 379–382 of Chapter 12) suggests that it is appropriate to estimate a zero-selection effect

for MA enrollees with ESRD, given our limitations. We include this zero selection effect in our overall estimate of favorable selection. Because payments to MA plans for ESRD enrollees account for a projected 6 percent of total payments to MA plans in 2026, the inclusion of ESRD enrollees did not have a large effect on our overall estimate. ■

TECHNICAL APPENDIX 12–C

Coding intensity

The Commission's method for estimating MA coding intensity

The Commission's method for estimating coding intensity is based on the demographic estimate of coding intensity (DECI) method, originally developed by Kronick and Chua (2021). In prior years, we applied the DECI method to estimate coding intensity for Medicare Advantage (MA) enrollees without end-stage renal disease (ESRD) but had not yet analyzed coding intensity for ESRD enrollees. This year, we have incorporated enrollees with ESRD in our analysis of coding intensity. Analyzing coding intensity for ESRD enrollees must be conducted separately from analysis of coding intensity for enrollees without ESRD because payments for ESRD enrollees are adjusted using separate risk models. The estimates presented in this chapter reflect our combined estimate of coding intensity for the overall MA population, including both enrollees with and without ESRD. We first explain the methodology used to estimate coding intensity for beneficiaries without ESRD. Subsequent sections explain additional analysis for beneficiaries with ESRD and how we combine estimates for beneficiaries with and without ESRD to arrive at a final estimate of overall MA coding intensity.

Estimating coding intensity for MA enrollees without ESRD

The Commission's method for estimating coding intensity for the non-ESRD population uses the same DECI methodology used last year. The DECI method implicitly assumes that MA enrollees have a similar average prevalence of health conditions as fee-for-service (FFS) Medicare beneficiaries with similar demographic characteristics. The method first estimates the ratio of the national average MA CMS hierarchical condition category (CMS–HCC) risk score to the national average FFS CMS–HCC risk score. This ratio reflects differences in risk scores due to coding intensity and true differences in health condition prevalence between the two populations. Second, the method estimates the ratio of the national average MA demographic-only risk score to the national average FFS demographic-only risk score. The DECI estimate is the result of dividing the MA-to-FFS CMS–HCC risk-score ratio by the MA-to-FFS demographic-only risk-score ratio. Therefore, the DECI method attributes higher demographic-adjusted MA risk scores relative to FFS to higher MA coding intensity rather than worse health acuity or complexity among MA enrollees than FFS beneficiaries. Figure 12-C1 (p. 442) shows how the DECI method estimates coding intensity.

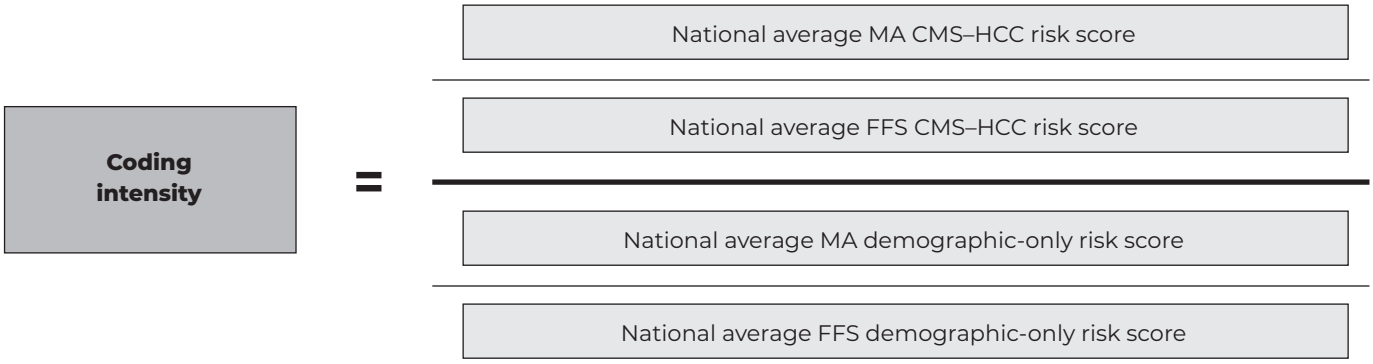
National average CMS hierarchical condition category risk scores

We use data from the Medicare common enrollment files and risk-score files to construct national average CMS–HCC risk scores for the MA and FFS populations. To define the two populations, we identify monthly MA or FFS enrollment using the plan identifier in the Medicare common enrollment file, and we require all MA and FFS beneficiaries to have both Part A and Part B using the "Medicare enrollment code" data field. We exclude beneficiaries residing in Puerto Rico based on their monthly county of residence. (Starting with our March 2025 report, we excluded beneficiaries residing in Puerto Rico from our coding-intensity estimate because Puerto Rico's Medicaid program does not use the full-, partial-, or no-benefit structure, which is necessary for our coding-intensity estimation method.) Then we use monthly indicators in risk-score data to exclude beneficiary months in which an ESRD risk score would be applied and to assign "new-enrollee" and institutional risk scores as appropriate. For all remaining months, we assign the appropriate community-model risk score using the monthly Medicare–Medicaid dual status code from the enrollment file to adjust for full, partial, or no Medicaid benefits, and we use the beneficiary's age from risk-score data to determine aged or disabled status. In each year, we use the version of the risk model or blend of versions that was used for payment to MA plans. Finally, we aggregate the monthly risk scores to calculate national average MA and FFS CMS–HCC scores for the four groups identified below.

When developing this method, we benchmarked our estimate of the national average risk score for all FFS beneficiaries in 2019 (including those with Part A only) of 1.0682 against the national average published by CMS of 1.0685 to confirm that we were assigning risk scores appropriately. (When estimating the effects of coding intensity, we exclude beneficiaries with Part A–only coverage.) Our estimate of the average risk score for all FFS beneficiaries was similarly close to CMS's published results for 2017 and 2018.

FIGURE 12–C1

DECI method estimates coding intensity as the ratio of two ratios



Note: DECI (demographic estimate of coding intensity), MA (Medicare Advantage), CMS–HCC (CMS hierarchical condition category), FFS (fee-for-service).

Source: Kronick and Chua 2021.

National average demographic risk scores

We calibrate an annual risk model based only on demographic characteristics for FFS beneficiaries with both Part A and Part B (excluding beneficiaries with ESRD) by including age category (from the CMS–HCC model), sex, Medicaid eligibility (full benefits, partial benefits, or no benefits), and institutional status (see text box, p. 444). We use the same enrollment and risk-score indicator variables as in the CMS–HCC risk-score analysis described above.

We calculate monthly Medicare spending by summing the annual spending amounts in the Medicare beneficiary summary file (excluding beneficiaries with any hospice use) and dividing by the months of Part A and Part B enrollment in the year. We calculate a single risk model (with dollar-value age and sex coefficients) with fully interacted indicators for beneficiary age category × sex × Medicaid or institutional status (if not in institutional status, we identify eligibility for full Medicaid benefits, partial Medicaid benefits, and no Medicaid benefits). The dollar coefficients are then converted to risk scores by dividing each coefficient by the average spending for all beneficiaries in the analytic sample. Note that this step reflects a technical revision to the approach used in prior years. The change resulted in our 2023 coding-intensity estimate being 0.3 percentage points lower than under the prior method, and the effect was smaller on earlier years of analysis. Previously, we divided the coefficients for each group by the average spending for beneficiaries in that group. Given this change, the average risk score for the whole model is 1.0. Finally, we apply those demographic risk scores to MA and FFS beneficiaries with both Part A and Part B and aggregate them to national averages for each of the four groups identified below.

Calculate coding-intensity accounting for Medicaid eligibility and institutional status

For MA and FFS, we calculate average CMS–HCC and demographic risk scores separately for continuing (not new-enrollee) beneficiary months with institutional status, full Medicaid benefits, partial Medicaid benefits, and no Medicaid benefits. We then calculate average CMS–HCC and demographic risk scores for continuing enrollees by using the share of MA enrollees in each of the four groups as weights for both the MA and FFS averages. Then we calculate a DECI estimate for continuing enrollees using the formula in Figure 12-C1.

TABLE 12–C1 **Calculation of MedPAC's coding-intensity estimate for beneficiaries without ESRD, 2024**

Beneficiary group	CMS–HCC risk-score average		Demographic risk-score average		MA share of continuing enrollees
	MA	FFS	MA	FFS	
Continuing enrollees					
No Medicaid	1.067	0.950	0.911	0.921	76.8%
Partial Medicaid	1.363	1.078	1.001	0.997	8.1
Full Medicaid	1.645	1.342	1.246	1.204	14.2
Institutional	2.436	2.203	4.847	4.815	1.0
MA weighted average risk scores	1.186	1.028	1.004	1.005	

Beneficiary group	CMS–HCC MA/FFS risk-score ratio	Demographic MA/FFS risk-score ratio
Continuing enrollees	1.186 / 1.028 = 1.153	1.004 / 1.005 = 0.999

Beneficiary group	DECI estimate	MA share of enrollees	MA average HCC risk score	Group weight
Continuing enrollees	1.153 / 0.999 = 1.154 (15.4%)	91.9%	1.186	95.6%
New enrollees	1.000 (0.0%)	8.1	0.624	4.4
All enrollees	**1.147 (14.7%)**			

Account for coding adjustment: Multiply 1.147 × (1 – 5.9 percent) = 1.079

All enrollees after coding adjustment	**1.079 (7.9%)**

Note: ESRD (end-stage renal disease), CMS–HCC (CMS hierarchical condition category), MA (Medicare Advantage), FFS (fee-for-service), DECI (demographic estimate of coding intensity). Analysis excludes beneficiaries with ESRD and beneficiaries residing in Puerto Rico. Risk scores reflect the two-thirds V24 and one-third V28 risk model blend that was used for payment in 2024. The DECI estimate is the ratio of the MA/FFS CMS–HCC risk score ratio and the MA/FFS demographic risk score ratio. New enrollees are constrained to have no coding intensity because their risk scores are not based on diagnostic coding. For 2024, we use the most recently available (2023) Master Beneficiary Summary File for the FFS spending used to calculate the demographic risk-score models. Components may not sum to 100 percent due to rounding.

Source: MedPAC analysis of 2024 Medicare enrollment and risk score files and 2023 Medicare enrollment and Master Beneficiary Summary Files.

Finally, we calculate a DECI estimate for all enrollees by adding together the continuing-enrollee DECI estimate multiplied by the risk-score-weighted share of continuing MA enrollees and the new-enrollee DECI estimate multiplied by the risk-score-weighted share of new enrollees in the analysis. This final step constrains risk scores for new enrollees to have no coding intensity because their risk scores are not based on diagnostic coding. We use a risk-score-weighted new and continuing enrollment share to combine new and continuing enrollee DECI estimates because those weights reflect the share of MA payment associated with each group. Table 12-C1 shows an example DECI calculation for 2024 that accounts for Medicaid-eligibility and institutional status in MA and FFS.

Calculating the effect of CMS's coding adjustment

CMS's adjustment reduces MA risk scores by 5.9 percent. To account for this adjustment, we multiply

Sensitivity estimates of alternative demographic risk-model specifications

Applying the demographic estimate of coding intensity (DECI) method involves calibrating a risk model based only on demographic characteristics. That model is used to construct an alternative measure of Medicare Advantage (MA) and fee-for-service (FFS) population-level risk that, unlike the CMS hierarchical condition category (HCC) model, is not affected by coding intensity. The ratio of MA and FFS demographic risk scores is used to measure the relative risk of the two populations, and any population-level differences in risk scores that are greater than what would be predicted using the demographic model are attributed to coding intensity.

Because the demographic risk model is how the DECI method controls for differences in the MA and FFS populations, including additional demographic characteristics that are not affected by plan coding may improve the model's ability to measure differences in population risk. Commissioners and other researchers have provided suggestions about other demographic characteristics that could be included in the demographic model. This year, we modeled alternative demographic risk models to assess the robustness of our coding-intensity estimates.

We tested three alternative model specifications that add race, original reason for entitlement code (OREC), or both to the demographic risk model. Race was identified for each beneficiary based on the RTI race code in the common Medicare enrollment file and defined as Black, Hispanic, non-Hispanic White, or other (including Asian/Pacific Islander, American Indian/Alaskan native, other, and unknown categories). For original reason for entitlement, we combined entitlement based on ESRD and disability with entitlement based on ESRD to create three categories: aged, disabled, or ESRD. For each alternative model specification, we started with our primary demographic model, which has 96 fully interacted variables: 12 age categories × 2 sexes × 4 statuses (eligible for full, partial, or no Medicaid benefits or in institutional status). The first alternative model added race by fully interacting the four race categories with each of the 96 variables in our original model for a total of 384 variables. The second alternative model added original reason for entitlement by including indicator variables for OREC being disabled and OREC being ESRD (OREC being aged is the reference category) for a total of 98 variables. We did not fully interact OREC with the other demographic variables because of the small number of beneficiaries with OREC being ESRD. The third alternative model added both race and original reason for entitlement by starting with the first alternative model that has race fully interacted with our original model variables and adding two indicator variables for OREC being disabled and OREC being ESRD, for a total of 386 variables.

We found that adding race notably increased the accuracy of the demographic–only risk model as measured by the R^2 statistic, but adding original reason for entitlement did not improve model accuracy. The R^2 statistic is an indicator of the proportion of variance in the dependent variable (annual Medicare spending for all models in this analysis) that can be explained by the independent variables in the model.

Coding-intensity estimates for all alternative demographic models were within 1 percentage point of coding intensity when using our original demographic risk model for both V24 and V28 risk models in 2024. The largest difference in coding intensity occurred for the alternative demographic model that adds race and had coding-intensity estimates that were 0.7 percentage points or 0.6 percentage points larger than estimates for our original demographic model for V24 and V28 risk models, respectively. Overall, we found the two alternative specifications had little effect on our estimates of coding intensity. ■

our estimate of coding intensity by 1 minus 5.9 percent. For example, for 2024 we multiply 1.147 percent (average MA risk score due to coding intensity if average FFS risk score is 1.0) by 94.1 percent and subtract 1 to get a coding-intensity estimate after adjustment of 7.9 percent (last row of Table 12-C1, p. 443).

To align with our overall comparison of spending on MA relative to FFS, we estimate MA coding intensity relative to FFS risk scores (i.e., MA risk scores are 14.7 percent higher than FFS risk scores due to coding intensity). The denominator for CMS's coding adjustment, however, is the average MA risk score. Because the average MA risk score is larger than the average FFS risk score, the two percentages are not equivalent. Based on our MA coding-intensity estimate of 14.7 percent above FFS, we estimate that CMS's coding adjustment would have had to reduce MA risk scores by 12.8 percent to fully account for the effects of coding intensity in 2024. We calculate this amount as (1 – (1.0 / 1.147)) = 0.128 or 12.8 percent. However, coding intensity varies significantly across MA organizations. As a result, CMS's across-the-board adjustment for coding intensity, which reduces all MA risk scores by the same amount, generates inequity across organizations by reducing net revenue for plans with lower coding intensity and allowing other plans to retain a significant amount of revenue from higher coding intensity. Increasing CMS's across-the-board coding adjustment to 12.8 percent would increase the penalty for plans with lower coding intensity while still not addressing the effects of coding intensity for the organizations with higher coding levels. A policy addressing coding intensity more fairly would reduce risk scores more for plans with the highest coding intensity.

Estimating coding intensity for MA enrollees with ESRD

Beginning this year, we conducted a separate analysis of coding intensity for enrollees with ESRD using the Commission's DECI method. Payments to MA plans for beneficiaries with ESRD are made using a different risk model than for beneficiaries without ESRD, and the ESRD risk model is different for beneficiaries in dialysis, transplant, or postgraft status. Because different segments of the ESRD population have their payments adjusted using different risk models, we assessed coding intensity separately for the three segments. First, beneficiaries in dialysis status have a model calibrated on FFS claims for beneficiaries in dialysis status that aligns with the state-based dialysis payment rates that MA plans receive. Second, Medicare uses a risk model for beneficiaries in transplant status for the three months following transplantation. That model includes one variable that varies depending on the month after transplantation (first, second, or third). Transplant risk scores do not vary by demographic characteristics or by diagnosis codes, so there can be no differences in coding intensity between the MA and FFS populations in transplant status. Last, Medicare uses a separate risk model for beneficiaries with ESRD who are more than three months posttransplant. The postgraft risk model is adapted from the non-ESRD risk model and is modified to remove conditions that are common to all beneficiaries in postgraft status and adds several interacted indicators to capture differences related to being 4 to 9 months posttransplant versus 10 months or more posttransplant, aged versus disabled status, eligibility for full versus partial versus no Medicaid benefits, and original reason for entitlement being disability. The postgraft risk model has separate segments for beneficiaries residing in the community or in an institutional setting for longer than 90 days.

Below, we describe steps taken to estimate coding intensity for beneficiaries in dialysis status and those in postgraft status. Beneficiaries in transplant status cannot have coding intensity because diagnoses are not used in that model, so we assign them a coding-intensity estimate of zero.

Estimating coding intensity for beneficiaries in dialysis status

To estimate coding intensity for beneficiaries in dialysis status, we applied our method for calculating coding intensity by:

- limiting our analysis to beneficiary months in dialysis status for both MA and FFS populations when calculating national average HCC scores and
- including only beneficiaries in dialysis status for all 12 months of the calibration year when calibrating the demographic risk model.

The method follows the same calculation as for beneficiaries without ESRD shown in Table 12-C1 (p. 443). We estimate that coding intensity for

TABLE 12–C2

Calculation of MedPAC's coding-intensity estimate for beneficiaries with ESRD before coding-intensity adjustment, 2015 to 2026

Payment year	Dialysis DECI	Transplant DECI	Postgraft DECI	Dialysis share	Transplant share	Postgraft share	ESRD DECI
2015	9%	0%	5%	89%	2%	9%	9%
2016	9	0	5	89	2	9	9
2017	9	0	4	89	2	9	9
2018	10	0	6	89	2	9	9
2019	12	0	6	89	2	9	11
2020	12	0	6	89	2	9	12
2021	9	0	9	89	2	9	9
2022	10	0	13	89	2	9	10
2023	8	0	14	89	2	9	8
2024	8	0	14	89	2	9	8
2025*	9	0	15	89	2	9	9
2026*	9	0	16	89	2	9	9

Note: ESRD (end-stage renal disease), DECI (demographic estimate of coding intensity). Analysis excludes beneficiaries without ESRD and beneficiaries residing in Puerto Rico. Risk scores reflect the ESRD risk-model version used for payment to Medicare Advantage (MA) plans in each year. New enrollees are constrained to have no coding intensity because their risk scores are not based on diagnostic coding. Dialysis, transplant, and postgraft shares represent the estimated share of payments to MA plans for beneficiaries in each status in 2024. CMS's adjustment for coding intensity applies to the postgraft risk model but does not apply to the dialysis or transplant risk models.
* To project estimates for 2025 and 2026 for dialysis enrollees, we used the average estimate for 2022, 2023, and 2024. To project estimates for 2025 and 2026 for postgraft enrollees, we used the average annual trend from 2022 through 2024, or 0.7 percentage points. Both projection factors reflect coding-intensity patterns after the end of the coronavirus pandemic and since the implementation of the 21st Century Cures Act of 2016.

Source: MedPAC analysis of 2014 through 2024 Medicare enrollment and risk-score files and 2014 through 2023 Master Beneficiary Summary Files.

beneficiaries in dialysis status ranged from 8 percent to 12 percent over the period 2015 to 2024 (Table 12-C2). The coding adjustment does not apply to beneficiaries in dialysis status.

Estimating coding intensity for beneficiaries in postgraft status

To estimate coding intensity for beneficiaries in postgraft status, we applied our method for calculating coding intensity by:

- limiting our analysis to beneficiary months in postgraft status for both MA and FFS populations when calculating national average HCC scores,
- including only beneficiaries in postgraft status for all 12 months of the calibration year when calibrating the demographic risk model, and
- combining age categories with small numbers, which resulted in two categories that are broader than the categories otherwise used in the risk model: 0 through 45 and 85+.

The method follows the same calculation as for beneficiaries without ESRD shown in Table 12-C1 (p. 443). We estimate that coding intensity for beneficiaries in postgraft status ranged from 4 percent to 14 percent over the period 2015 to 2024 before accounting for the effect of the coding adjustment (Table 12-C2).

Estimating coding intensity for the full ESRD population

To combine estimates for the dialysis, transplant (assigned to be zero), and postgraft populations, we calculated a weight for each estimate based on total payments to MA plans for that population. For example,

we estimated total spending for the dialysis population as the number of months that MA enrollees were in dialysis status × the average risk score for the dialysis population × the monthly denominator for the dialysis risk model ($7,271 for 2024). The monthly denominators for transplant and postgraft risk models are $7,271 and $874, respectively. We estimate that payments to MA plans for enrollees with dialysis reflect 89.1 percent of all payments for enrollees with ESRD. The share of payments was 9.2 percent for enrollees with transplant status and 1.7 percent for enrollees with postgraft status.

Table 12-C2 shows how we calculated the overall ESRD coding-intensity estimate for 2015 through 2026. To project dialysis coding intensity for 2025 and 2026, we used the average dialysis coding intensity for 2022, 2023, and 2024, representing coding-intensity patterns after the end of the coronavirus pandemic and after the implementation of policies under the 21st Century Cures Act of 2016. To project postgraft coding intensity for 2025 and 2026, we used the average annual trend from 2022 through 2024, or 0.7 percentage points per year. Projecting changes in coding intensity over time is challenging. The actual coding intensity in 2025 and 2026 may be higher or lower than what we project. We used estimates since the implementation of the 21st Century Cures Act to try to limit projection errors. Finally, we note that none of the risk models used for the different groups of beneficiaries with ESRD are affected by the implementation of the V28 risk model that is used for payments to MA plans for beneficiaries without ESRD.

Estimating overall MA coding intensity

To combine our estimates of coding intensity for MA enrollees with and without ESRD, we weight each estimate based on the share of payments to MA plans for enrollees with and without ESRD.

To estimate the impact of coding intensity on payments to MA plans, we first estimate residual MA coding intensity after applying the coding-intensity adjustment, which reduces most MA risk scores by 5.9 percent. The coding adjustment applies to risk scores for beneficiaries without ESRD and to beneficiaries with ESRD who are in postgraft status. The coding adjustment does not apply to dialysis or transplant risk scores, which use a different denominator during risk-model calibration. We then repeat the same process of aggregating these postadjustment coding-intensity estimates for ESRD beneficiaries and MA enrollees overall. As noted earlier, the denominator for our coding-intensity estimate is the average FFS risk score, whereas the denominator for CMS's coding adjustment is the average MA risk score. Because the average MA risk score is larger than the average FFS risk score, accounting for the effect of the coding adjustment reduces our coding-intensity estimates (for the populations to whom the adjustment is applied) by more than 5.9 percentage points. ■

Endnotes

1 CMS includes FFS-claim administrative costs in MA benchmarks, which account for about 0.20 percent of FFS spending (Centers for Medicare & Medicaid Services 2023a, Centers for Medicare & Medicaid Services 2021). Expenses for FFS-claim administration are included in our comparison of FFS spending with MA payments and differ from the expenses found in Medicare's Trustees' reports, which include the administration and oversight of the MA program and the enrollment of all Medicare providers (which is required for contracting with MA plans). The Medicare Trustees reported that administrative expenses (including those for MA enrollees) accounted for 1.04 percent of CMS's total Medicare benefit costs in 2020 (Boards of Trustees 2021).

2 MA enrollees could have lower cost-sharing liability in FFS if they do not use many services or if they obtain a Medigap policy when they switch to FFS. While there is no maximum out of pocket limit in FFS like there is in MA, Medigap policies limit the out-of-pocket expense by covering an enrollee's cost-sharing. Beneficiaries have a federal guaranteed-issue right to a Medigap policy with no medical underwriting, even if they have a preexisting condition, if they purchase it during the six-month Medigap open enrollment period that begins on the first day a beneficiary is both 65 years old and enrolled in Medicare Part B. Only four states (Connecticut, Maine, Massachusetts, and New York) require guaranteed-issue rights to Medigap for aged (65 and over) beneficiaries in FFS Medicare, regardless of medical history, meaning that insurers cannot deny a Medigap policy to applicants based on preexisting conditions (Boccuti et al. 2018). MA enrollees joining an MA plan when they are first eligible for Part B or who leave FFS and a Medigap policy to join an MA plan have what are known as federal "trial rights" during the first year of MA enrollment, when they may return to FFS during the first year of MA enrollment and purchase a Medigap plan with guaranteed-issue rights. There are also limited circumstances (e.g., a beneficiary moves outside of their MA plan's service area) when beneficiaries have additional federal or state guaranteed-issue rights.

3 Because private FFS (PFFS) and medical savings account (MSA) plans have a very small number of enrollees, we do not describe them further. PFFS plans that operate without a network are limited to counties where fewer than two network-based plans are offered (32 counties, or about 1 percent of counties for 2026); by the end of 2025, PFFS plans covered about 40,000 beneficiaries. MSA plans combine a high deductible and a medical savings account, and by the end of 2025 they covered about 1,400 beneficiaries.

4 One study found that additional benefits and limits on out-of-pocket spending were the two leading reasons that MA enrollees chose an MA plan (Leonard et al. 2022).

5 Part B spending represents about 60 percent of all FFS Medicare spending (which is assumed to be the same share of spending on Part B services by MA plans). Twenty-five percent of Part B spending is financed through premiums paid by all Medicare Part B enrollees. The estimate does not account for the reduction in Part B premiums that is offered by some MA plans as a supplemental benefit.

6 Hospice services and kidney-acquisition costs are carved out of MA benefits, so plan bids and benchmarks do not include spending for these services. Payments described here do not apply to the relatively small number of enrollees with end-stage renal disease (ESRD). How Medicare pays MA plans for enrollees with ESRD is described later, in the section titled "Medicare payments and MA plan costs for enrollees with ESRD."

7 If a plan bids above the benchmark, the plan's base rate is set at the benchmark and enrollees must pay a premium (in addition to the usual Part B premium) equal to the difference between the bid and the benchmark. For 2026, almost 100 percent of plans bid below their benchmark.

8 Examples of non-Medicare-covered supplemental benefits include dental, vision, and hearing coverage. Plans can offer such benefits on a mandatory or optional basis. Mandatory supplemental benefits are automatically included in the benefit package for all enrollees in a plan. Plans may use rebates to finance mandatory supplemental benefits and may charge enrollees a premium to cover costs not covered by the rebate. Additionally, plans may offer optional supplemental benefits. Plans are not permitted to apply rebate dollars toward optional supplemental benefits; enrollees pay an additional premium to access these benefits. Optional supplemental benefits cannot include reduced cost sharing for Medicare Part A and Part B services.

9 Benchmarks are calculated using FFS spending for all Medicare beneficiaries, including those with both Part A and Part B coverage and those with only Part A or Part B. For Puerto Rico, CMS uses data for FFS beneficiaries who have both Part A and Part B enrollment. (This is because Medicare beneficiaries in Puerto Rico must opt in to Part B coverage, in contrast to other beneficiaries who are generally automatically enrolled in Part B unless they opt out.) In our March 2017 report to the Congress, we recommended that CMS change the calculation to include FFS spending for only

those beneficiaries with both Part A and Part B coverage (that is, expenditures for only those beneficiaries eligible to enroll in MA plans) (Medicare Payment Advisory Commission 2017). This change would make the assumptions about FFS spending in the calculation of MA benchmarks and payments more reflective of the MA-eligible population.

10 CMS determines FFS spending quartiles using their projected FFS spending from the prior year. For example, benchmark quartiles in 2026 were determined using FFS spending from the 2025 MA ratebook.

11 An MA plan's benchmark may be as high as 125 percent of CMS's local-area projected FFS spending. The ACA caps any county's benchmark at the higher of (1) its pre-ACA level, projected into the future with a legislatively modified national growth factor, or (2) 100 percent of its estimated FFS spending in the current year. Our March 2016 report to the Congress provides more detail on double-bonus counties and benchmark-growth caps. In that report, we recommended eliminating the double bonuses as well as the benchmark-growth caps, which limited the benchmarks in many counties (Medicare Payment Advisory Commission 2016c).

12 Before 2022, MA plans also submitted diagnostic information through the Risk Adjustment Processing System (RAPS). The use of RAPS data was phased out from 2016 through 2021, except for contracts in the Program of All-Inclusive Care for the Elderly, which continue to use a combination of RAPS and encounter data as the source of diagnostic data for risk scores.

13 Other possible sources of diagnostic information—such as encounters for home health services, skilled nursing, ambulatory surgery, durable medical equipment, lab and imaging tests, and hospice services—are not used to determine payment through the risk-adjustment model for several reasons. First, CMS has found that adding diagnoses from these sources does not improve the model's ability to predict medical expenditures. Second, concerns exist about the reliability of diagnoses from providers with less clinical training (e.g., home health and durable medical equipment providers). Third, a high proportion of reported diagnoses from certain settings (e.g., lab and imaging tests) are used to rule out having a diagnosis (Pope et al. 2004).

14 CMS tied its decision to end the MMP demonstration to such factors as the Congress's decision to make dual-eligible SNPs (D–SNPs) permanent, greater flexibility for MA plans in offering supplemental benefits, and regulatory changes that incorporate some MMP features into D–SNPs. The Commission's review of evaluations of the MMP demonstrations, as well as CMS's, found that they tended to result in statistically significant increases in Medicare spending and had mixed effects on service use (Center for Medicare & Medicaid Innovation 2024, Medicare Payment Advisory Commission 2024c).

15 In 2025, 16 percent of MA enrollees and 18 percent of MA-eligible enrollees resided in rural areas.

16 Our measurement of beneficiary access to plans uses 2026 plan bids and July 2025 county-level enrollment for the Medicare population with both Part A and Part B coverage. Plans are included in a county only if they project enrolling at least one beneficiary in that county.

17 All beneficiaries enrolling in Medicare Part B, regardless of their decision to receive benefits through FFS or MA, are required to pay the Medicare Part B premium. Some MA plans use rebate dollars to pay a portion of their members' Part B premium as a supplemental benefit. Beneficiaries enrolling in Part D may pay a separate Part D premium, although MA Prescription Drug plans may use rebate dollars to reduce the amount a beneficiary pays for drug coverage under the plan. Plans bidding above the local benchmark or offering more supplemental benefits than can be financed by the plan rebate charge enrollees an additional plan premium. We refer to plans that do not charge a separate plan premium (including any Part D premium) as "zero-premium" plans. In 2026, 93 percent of MA-eligible beneficiaries had an available zero-premium local PPO plan, and 97 percent of beneficiaries had an available zero-premium HMO plan.

18 From 2011 to 2018, CMS required that insurers with multiple MA plans in the same county had to demonstrate that their plans had "meaningful differences" from each other. CMS only approved bids if the plan benefit package or plan cost structures (e.g., premiums, cost-sharing, formulary structure, benefits offered) were substantially different from those of other plans offered by the same organization.

19 In most cases, beneficiaries without an available MA plan must enroll in FFS. In some cases, beneficiaries who meet certain criteria may enroll in an MA plan when there is not an available conventional plan. For example, in about 1 percent of counties in 2026, beneficiaries have an available special needs plan but not an available conventional plan. In addition, some beneficiaries may have an available employer plan. Further, some beneficiaries may have an available non-MA private plan, such as a cost plan.

20 In 2026, about 1 percent of eligible beneficiaries have an available MA plan offered by only one organization (unchanged from 2025).

21 In the rare circumstance in which a plan's bid is above the benchmark (after both have been adjusted to reflect a person

of average risk), the plan's base payment rate is set at the benchmark and enrollees must pay a premium (in addition to the usual Part B premium) equal to the difference. In an analysis of plans' bid data for 2022, the Government Accountability Office found that 83 percent of MA plans, enrolling 86 percent of MA enrollees, expected to finance supplemental benefits solely with rebates; for special-needs plans, the share was even higher, at 96 percent (Government Accountability Office 2023).

22 In previous years, MedPAC has reported rebates only for plans that included Part D coverage (i.e., MA Prescription Drug plans (MA–PDs), excluding employer plans). This year, we include plans that do not offer Part D coverage (sometimes referred to as "MA-only" plans). Rebates for the combined group of MA–PDs and MA-only plans tend to be very similar to the rebates for MA–PDs since the vast majority of MA plans are MA–PDs. For 2026, 92 percent of MA plans are MA–PDs, and 97 percent of MA enrollees are projected to be in such plans. Additionally, in our previous reports to the Congress, we have typically used enrollment projections from plan bids as the basis for the enrollment weighting when calculating average MA rebates. In this year's report, we use plans' actual enrollment to calculate average rebates for 2015 through 2025. The weights are based on non-ESRD member months since plans do not receive rebates for members with ESRD. Non-ESRD enrollment is calculated by subtracting ESRD enrollment from total enrollment. For 2025, data on ESRD enrollment were not available at the time of our analysis, so we used information from plans' 2025 bids to account for ESRD enrollment. Figures for 2026 are weighted using enrollment projections from plans' 2026 bids. For almost all of the years we analyzed, averages calculated using actual enrollment were slightly higher (generally within 1 percent or 2 percent) of those calculated using projected enrollment.

23 We exclude employer group plans because they do not submit bids and so do not receive a rebate in the same manner as bidding plans. Instead, starting in 2019, CMS began paying employer group plans based on the bidding behavior of non–employer group plans in the prior year: The employer group plans receive a base payment rate that is based on the average bid-to-benchmark ratio of non–employer group plans (by quartile of FFS spending and plan type), plus a share of the difference between the base payment rate and a county-specific benchmark.

24 Part D benefit enhancements include, for instance, lowering Part D cost sharing and providing coverage of additional drugs. Using rebate dollars for such enhancements is sometimes described as a reduction in Part D supplemental premiums because the rebate enables the plan to offer the enhancements without a commensurate increase in beneficiary premiums.

25 MA plans do not allocate administrative expenses or margins for Part B premium buydowns, Part D premium buydowns, or Part D supplemental benefits when submitting Part C bids.

26 In 2026, of the rebate dollars plans project using to reduce cost sharing, conventional plans project that 12 percent will be used for plan administrative costs and profit (SNPs project using 14 percent). Of the rebate dollars plans project using to provide non-Medicare supplemental benefits, conventional plans project that 13 percent will be used for plan administrative costs and profit (SNPs project using 14 percent).

27 The plan liability for the MOOP cap is not analogous to the amount spent by FFS beneficiaries who have out-of-pocket costs that exceed the MA MOOP limit. Most beneficiaries in FFS Medicare have supplemental insurance and are unlikely to have cost-sharing expenses that exceed the OOP cap for MA enrollees. In addition, MA enrollees are prohibited from purchasing Medigap coverage because MA plans are expected to provide cost-sharing reductions as supplemental benefits in lieu of Medigap coverage. The MOOP liability reported in plan bids is less than half of the 2.8 percent MOOP value estimated by Wakely in a report commissioned by AHIP, which used FFS claims data to estimate the MOOP value. The Wakely estimate did not account for the lower MOOP liability accrued by MA plans because of out-of-network care, claims denials, plan switching during the year, and cost-sharing reductions that are financed through plan rebates. In addition, the Wakely estimate did not consider cost-sharing reductions for FFS beneficiaries with supplemental coverage that would have reduced the MOOP liability in FFS. Further, Wakely did not adjust for Medicare Part A and Part B services that were financed by FFS on behalf of MA enrollees (e.g., Medicare services during hospice election). Wakely counted these services toward the MOOP estimate even though these types of services were not financed by MA plans.

28 In contrast to prior years, we now include out-of-network MOOP liability in our estimates. While MA plans have enrolled a growing number of beneficiaries with ESRD who, on average, have higher expenditures relative to beneficiaries without ESRD, MA plans' projected MOOP liability remained at 1 percent of projected payments annually from 2023 to 2026.

29 Beneficiaries who are eligible for special enrollment periods include (but are not limited to) those who move outside of their plan's service area, move to a new county with additional plan options, live in or move out of a nursing home

or rehabilitation hospital, are eligible for Medicaid coverage, or lose Medicaid coverage.

30 The Commission previously estimated that Medicare would spend $86 billion on MA rebates in 2025 (Medicare Payment Advisory Commission 2025a). The updated estimate of $84 billion reflects updated data about non-ESRD enrollment, and it accounts for the effects of sequestration, which were not reflected in our previous estimate. Because of rounding, our estimate of the effect on Part B premiums is unchanged. We estimate that Medicare will pay approximately $71 billion and $13 billion in rebates to non–employer group plans and employer plans, respectively, in 2025. Rebates paid to non–employer group plans were estimated using rebate amounts from MA bids and monthly enrollment data for non–employer group plans. Employer plans do not submit bids. Instead, starting in 2019, CMS began paying employer plans based on the bidding behavior of non–employer group plans in the prior year. Because employer plans are mostly PPOs, their payment in 2025 largely reflects the average bidding behavior of non–employer group PPOs in 2024. We use employer-plan enrollment data for 2025 and apply 2025 employer-plan payment rates (adjusted to reflect recent employer-plan risk-score trends) to estimate Medicare's payments to employer plans. Rebates for employer plans are estimated using the same method CMS uses to determine employer-plan payment rates, in which the difference between the county-specific benchmark and base payment rate for employer plans (based on the average bid-to-benchmark ratio for non–employer group plans in the respective county's payment quartile) is multiplied by the plan-specific rebate percentage (based on the plan's star rating) and the risk score.

31 Title 42 U.S.C. 1395w–23 describes the rebate for plans "for which there are average per capita monthly savings described in Section 1395w–24(b)(3)(C) or 1395w–24(b)(4)(C)." Sections 1395w–24(b)(3)(C) and 42 U.S.C. 1395w–24(b)(4)(C) define "average per capita monthly savings" as the difference between the plan's risk-adjusted benchmark and bid.

32 We estimate that total rebate spending for 2025 will be $84 billion. Roughly 60 percent of Medicare payments to MA plans are made from the Part B Trust Fund, and beneficiary premiums finance roughly a quarter of Part B spending. Thus, roughly 15 percent (60 percent × 25 percent) of rebate spending is financed by beneficiary premiums. Roughly 15 percent of FFS enrollees are dually eligible and thus receive Part B premium assistance through Medicaid.

33 Beginning in 2019, CMS relaxed one of the criteria for eligible supplemental benefits—that the benefit be primarily health related—to include items and services that are used to diagnose, compensate for physical impairments, ameliorate the functional and psychological impact of injuries or health conditions, and reduce avoidable emergency and health care utilization. A supplemental benefit is not primarily health related if it is an item or service that is solely or primarily used for cosmetic, comfort, or general-use purposes or to address social determinants of health.

34 MA plans are required to maintain an MLR of 85 percent (42 CFR Sec. 422.2410(b)). The MLR is the minimum percentage of revenue that an insurer is required to spend on benefits for their members. An MLR requirement of 85 percent means that the insurer is required to spend at least 85 percent of their revenue on care for their enrollees and can use no more than 15 percent of their revenue for administrative costs and profit. MLR requirements for MA organizations are monitored at the contract level. The numerator of the MLR includes incurred expenses for members' medical claims, including both Medicare and non-Medicare services (i.e., basic and supplemental benefits).

35 MA plans can include more generous supplemental benefits than can be fully financed by the rebate they receive from Medicare. In such cases, plans can charge enrollees an additional premium. Further, plans can offer "optional" supplemental benefits, which enrollees can access by paying an additional premium.

36 The MLR reporting instructions label this category "Non-Primarily Health Related Benefits – Other" but do not specifically mention the MA–VBID demonstration (Centers for Medicare & Medicaid Services 2025d). MedPAC's interpretation of the reporting instructions is that non–primarily health-related benefits offered under the demonstration would be reported in this category and that those benefits should likely account for the majority of the reported spending. However, it is possible that some plans reported spending for other types of services in the category as well.

37 We estimate total MA payments by using CMS's projected MA enrollment and incurred MA payments per enrollee (Boards of Trustees 2025).

38 Our estimate of MA payments relative to FFS spending does not account for other potential factors that are more difficult to measure with certainty, including the potential spillover of provider behavior that can occur from large increases in MA market share into FFS or potential spillover from FFS alternative payment models into MA, and any effect of MA and FFS improper payments found retrospectively.

39 Because the Trustees do not separate ESRD payments from their enrollment and per capita payment projections, we separately estimate the share of MA payments for ESRD enrollees (an estimated 6 percent in 2026). Our estimate is guided by correspondence with CMS's Office of the Actuary. Separately estimating payments for ESRD is necessary

because MA plans do not submit bids for ESRD enrollees, and these enrollees use a different payment rate with a different risk-score model.

40 We note that our 2026 estimate of spending on MA relative to the amount Medicare would have spent for comparable FFS beneficiaries (114 percent) reflects some changes from the method used in the Commission's 2025 comparison (reported to be 120 percent for the year 2025 in our March 2025 report) (Medicare Payment Advisory Commission 2025b). First, in the 2025 report, we did not include the ESRD population in our projections because we had not yet constructed the analytic framework for including that population. For 2026, we included the ESRD population in our estimates. We also made technical updates to refine our methodology for estimating favorable selection; those updates resulted in similar projections in our estimates of favorable selection—continuing to account for 11 percentage points of the difference in spending. Second, we revised our estimated effect of phasing in the V28 model using newly available V28 risk scores from 2024. We also updated our estimates to reflect the slower trend in coding intensity between 2023 and 2024 that we observed using the newly available data from 2024, and we revised our method of estimating coding intensity to use a single denominator for the demographic risk model. The net effect of newer data (including access to V28 risk scores) was –3.9 percentage points on our projected coding-intensity estimate for 2025. To project coding intensity from 2025 to 2026, we reduced the 2025 projection for coding intensity by 2.3 percentage points to reflect the final phase-in of the V28 risk model and an additional year of coding intensity trend (see text box "Updates to coding-intensity estimates reflect newly available data and other factors," p. 392–393, for more details).

41 Only 5 of the 5,555 MA bids submitted in 2026 (0.1 percent) are above their benchmarks. Plan bids are typically far below plan benchmarks in 2026; 93 percent of bids (representing 97 percent of projected enrollees) are below 90 percent of their benchmarks; 58 percent of bids (representing 71 percent of projected enrollees) are below 80 percent of their benchmarks; 13 percent of bids (representing 13 percent of projected enrollees) are below 70 percent of their benchmarks. On average (on a dollar-weighted basis), plans bid 77 percent of their benchmarks. On average, non-SNPs and SNPs bid 76 percent and 78 percent of benchmarks, respectively. D–SNPs and C–SNPs bid 79 percent and 74 percent of benchmarks, respectively; I–SNPs bid 91 percent of their benchmarks. HMOs both with and without a point-of-service option bid 76 percent of benchmarks; local PPOs bid 78 percent of benchmarks. Plan bids relative to benchmarks have relatively narrow differences by payment quartile in 2026. Plans in the lowest- and highest-FFS-spending quartiles (excluding Puerto Rico) bid 77 percent of benchmarks.

42 Multiple studies have found that plan bids tend to decrease as plan benchmarks decrease or plan bids tend to increase as plan benchmarks increase (Cabral et al. 2018, Medicare Payment Advisory Commission 2020a, Pelech and Song 2018, Song et al. 2013).

43 Another study assessing the effect of MA enrollment on medical spending relied on a very small sample of 541 MA enrollees from one insurer and 541 enrollees in Medicare FFS who had Medigap coverage from the same insurer (Schwartz et al. 2021). The small sample led to imprecise estimates with the 95 percent confidence interval spanning a spending effect between –$282 and $0 per beneficiary per month. Schwartz and colleagues acknowledged that the true effect could be substantially smaller or larger than estimated and may not be generalizable. The authors used a difference-in-differences design with propensity score matching to control for preexisting differences between the MA treatment and FFS control group and found that MA enrollment reduced medical spending by 36 percent. The result was driven primarily by reducing inpatient spending on the 74 stays used by the MA population relative to the 56 stays for the FFS population. However, the pre-Medicare inpatient utilization patterns appeared to differ between the treatment and control groups, raising questions about whether the FFS control group provided an accurate counterfactual estimate for the MA treatment group. The study population also differed from the overall MA population in several ways, potentially limiting the study's generalizability. For example, individuals in the matched MA treatment and FFS control groups had a much higher prevalence of chronic conditions and were much more likely to reside in the Northeast compared with the insurer's overall MA membership of similar ages. Moreover, this study included members of the treatment and control group from disparate geographical locations but did not standardize Medicare rates.

44 The two recent white papers that examined the differences in spending for about 10,000 newly eligible Medicare beneficiaries (Inovalon 2025, Teigland et al. 2025a) may overstate the amount of MA spending reductions in three key ways. First, both studies required two consecutive years of enrollment in FFS or the same MA plan, which potentially creates some favorable selection into MA during the study period by removing beneficiaries who switched into a different plan or program. Beneficiaries who switched from MA to FFS or switched MA plans may have had relatively high risk-adjusted spending, and beneficiaries who switched from FFS to MA may have had relatively low risk-adjusted spending. Second, both papers remove decedents, and the effects of MA on reducing decedent spending may be

particularly dampened (especially given that MA is not responsible for spending during hospice election). Third, it is unclear whether the data repository used in both white papers is able to capture the completeness of MA utilization data—particularly for subcapitated arrangements with providers— better than the CMS's MA encounter data. To the extent that FFS data are more complete, the differences in spending between MA and FFS may be overstated.

45 The 2025 Inovalon white paper reported higher pre-Medicare disease burden and mortality risk in the MA population compared with FFS (Inovalon 2025). However, these findings conflict with prior research, including those by Inovalon researchers. One recent white paper found that, immediately before Medicare eligibility, beneficiaries going into MA had less of a disease burden than their FFS enrollee counterparts; the researchers found that MA enrollees had 10 percent lower pre-Medicare risk scores and 12 percent lower Charlson Comorbidity Index scores. In addition, the researchers found that MA enrollees were less likely to have cancer, joint issues, and heart issues before enrolling in Medicare (Teigland et al. 2025b). One peer-reviewed study found that newly eligible beneficiaries who initially enrolled in MA had adjusted mortality rates that were 30 percent lower than FFS beneficiaries in their first year of Medicare (Newhouse et al. 2019).

46 Jung and colleagues' recent study found a 13 percent reduction in spending for MA enrollees under specifications that reduced individual risk scores by excluding diagnoses found only in chart reviews or health risk assessments and adjusted for differences in beneficiary characteristics using a regression estimate (Jung et al. 2025). However, this estimate may overstate the amount of MA spending reductions in three key ways. First, the study adjusted for MA coding intensity by removing chart reviews and health risk assessments from the calculation of MA risk scores. However, our analyses and analysis from Paul Jacobs show that chart reviews and health risk assessments only account for about half of the estimated difference in coding between MA and FFS (Jacobs 2024). Second, Jung and colleagues controlled for potential beneficiary selection by matching on observable beneficiary characteristics (e.g., geography, risk score, race, dual-eligibility status) and risk of mortality. Our estimate of favorable selection suggests that selection persists even after adjusting for observable beneficiary characteristics and mortality differences. Third, Jung and colleagues' results include greater MA spending reductions in earlier years (relative to the later years in their study), which may result from less complete encounter data during those years. These three effects may be somewhat offset by the authors' exclusion of skilled nursing facility and home health spending, which may have relatively high reductions in spending when beneficiaries are enrolled in MA.

47 For beneficiaries with ESRD, MA plans do not submit bids and instead receive separate base payments, which are risk adjusted using a separate risk model.

48 For all MA enrollees with ESRD (in dialysis, transplant status, or functioning-graft status), we excluded MA enrollees with Medicare as a secondary payer and months during hospice election. In addition, we reduced payment rates by 2 percent to reflect the sequestration of Medicare payments that would have occurred after CMS sets rates.

49 For the dialysis and transplant populations, our FFS comparison group consisted of beneficiaries who during the year (1) did not have any Part A–only coverage or any Part B–only coverage, (2) had at least one nonhospice month, (3) were in either dialysis or transplant status for all months with both Part A and Part B coverage, (4) had no months in MA, (5) had no months of Medicare as a secondary payer, and (6) resided in the same state.

50 For our calculation of FFS spending for the dialysis and transplant populations, we take multiple steps to apply provider incentive payments. First, we include any state-based historical provider incentive payments that CMS publishes for its United States per capita cost (USPCC) ESRD baseline. For these incentive payments (e.g., Kidney Care Choices), we calculated our study population's share of Medicare Part A and Part B spending among dialysis and transplant beneficiaries assigned to those programs; we applied this share of spending as a factor to CMS's published estimates. Second, we include an estimate of incentive payments for programs that include the dialysis and transplant populations but are not published because CMS includes the entire payment in its USPCC non-ESRD baseline (physician bonus payments in health professional shortage areas (HPSAs), shared savings for the Medicare Shared Savings Program, shared savings for the Global and Professional Direct Contracting program, and shared savings for the Vermont All-Payer ACO program). For these shared-savings payments, we apply a factor to CMS's payment amounts using our calculation of our study population's share of Medicare Part A and Part B spending for beneficiaries assigned to each of those programs. For the HPSA payments, we calculated our population's share of evaluation and management spending in those areas; we applied this share as a factor to CMS's HPSA payment amounts.

51 We received CMS's aggregate estimate of dialysis and transplant bad-debt payments and provider-settlement payments. We adjusted these payments to reflect our study population using two steps. First, we calculated the share of our study's population Medicare Part A and Part B spending among the FFS dialysis and transplant population. Second, we applied these adjusted payments to each state using our

calculation of the share of our study population's Medicare Part A and Part B spending in each state.

52 For all FFS comparison groups (non-ESRD, dialysis, transplant, and functioning graft), we apply CMS's estimate of FFS-claim administrative costs, which is 0.20 percent of FFS spending.

53 For our calculation of FFS spending for the dialysis and transplant population, we take multiple steps to apply spending exclusions for which MA plans are not liable. First, we exclude the operating-expenses portion of spending on indirect medical education using the state-based historical amounts that CMS publishes for its USPCC ESRD baseline. We estimate the amount applicable to our study population by applying a factor based on the population's share of inpatient hospitalization spending (among all FFS beneficiaries in dialysis and transplant status). Second, because CMS does not publish direct graduate medical education amounts or kidney-acquisition costs in their USPCC ESRD baseline data, we remove these amounts using the pass-through amounts in inpatient hospital claims for our study population. Third, we remove all hospice spending for our study population, and we remove the months during hospice when calculating our monthly spending average.

54 For MA enrollees with ESRD in functioning-graft status, we applied payment rates that corresponded with the plan's star rating for the payment year.

55 For the functioning-graft populations, our FFS comparison group consisted of beneficiaries who during the year (1) did not have any Part A–only coverage or any Part B–only coverage, (2) had at least one nonhospice month, (3) were in functioning-graft status for all months with both Part A and Part B coverage, (4) had no months in MA, (5) had no months of Medicare as a secondary payer, and (6) resided in the same state.

56 For our calculation of FFS spending for the functioning-graft population, we include an estimate of incentive payments for programs that include the functioning-graft population (physician bonus payments in HPSA and an advanced alternative payment model, incentive payments for Maryland Primary Care Plus organizations, shared savings for Kidney Care Choices, shared savings for the Medicare Shared Savings Program, shared savings for the Global and Professional Direct Contracting program, and shared savings for the Vermont All-Payer ACO program). For alternative payment model payments, we apply a factor to CMS's payment amounts using our calculation of our study population's share of Medicare Part A and Part B spending for beneficiaries assigned to each of those programs. For HPSA payments, we calculated our population's share of evaluation and management spending in those areas; we applied this share as a factor to CMS's HPSA payment amounts.

57 Our estimate of provider-settlement payments for the functioning-graft population is based on the experience of our non-ESRD study population. We calculated the share of non-ESRD provider-settlement payments relative to total non-ESRD Medicare Part A and Part B spending. We applied this provider-settlement-payment ratio to the functioning-graft population's total Medicare Part A and Part B spending. We then distributed the resulting provider-settlement-payment estimate to each county using the distribution of our functioning-graft study population's Part A and Part B spending.

58 For our calculation of FFS spending for the functioning-graft population, we take multiple steps to apply spending exclusions for which MA plans are not liable. First, we estimate the operating-expenses portion of indirect medical education (IME) spending based on the experience of our non-ESRD study population. We calculated the share of non-ESRD IME payments relative to total non-ESRD Medicare inpatient hospital spending. We applied this IME payment ratio to the functioning-graft population's total inpatient hospital spending. We then distributed the resulting IME payment estimate to each county using the distribution of our functioning-graft study population's inpatient hospital spending. Second, we remove direct graduate medical education and kidney-acquisition costs using the pass-through amounts in inpatient hospital claims for our study population. Third, we remove all hospice spending for our study population, and we remove the months during hospice when calculating our monthly spending average.

59 For the functioning-graft population, we use a similar framework as CMS for applying credibility adjustments to counties with less than 12,000 FFS enrollment months. For these counties, we blend spending in the county with spending at the state level. County spending is weighted by county enrollment, and spending in the state is weighted by 12,000 minus county enrollment months.

60 We also exclude beneficiaries for whom Medicare is a secondary payer in our comparisons using historical data.

61 For Puerto Rico, CMS uses data for FFS beneficiaries who have both Part A and Part B enrollment. This is because Medicare beneficiaries in Puerto Rico must opt in to Part B coverage, in contrast to other beneficiaries who are generally automatically enrolled in Part B unless they opt out.

62 Our estimates of the base-spending comparison for the years before 2016 continue to rely on CMS's projections of FFS spending (including adjustments that eliminate the effect of the sustainable growth rate) because those were the data we

used under an older version of our methodology when those estimates were first published in earlier reports. We have not updated those estimates because our analysis indicates that results would be similar under our updated methodology that uses historical data. A more detailed description of the change in methodology for the base payment comparison can be found in the Commission's March 2023 report to the Congress, where it is described as a change from the prospective method to the retrospective method (Medicare Payment Advisory Commission 2023c).

63 The Commission's March 2023 report details our methodology for comparing our estimates using CMS's projections with historical spending for MA-eligible beneficiaries (Medicare Payment Advisory Commission 2023c). That report describes several adjustments that should be made when making this comparison. A 2024 analysis by Wakely that was commissioned by AHIP estimated the raw average spending difference between all Medicare beneficiaries and the subset of Medicare beneficiaries with both Part A and Part B coverage (Wakely 2024). This method is inadequate for comparisons of MA payment differences because CMS's payment methodology accounts for (among other things) Medicare as a secondary payer, the geographic differences in risk-standardized FFS spending, the geographic distribution of MA enrollees, and nonclaims FFS spending. The Commission's comparisons adjust for these differences, including the use of county-level FFS-spending data and risk scores, MA enrollment, MA risk scores, and MA payment rates.

64 We also report estimates from a simpler, more suggestive method that focuses on the selection percentage of MA entrants who recently switched from FFS compared with beneficiaries who remained in FFS. The advantages of that simpler method are that it can more easily be compared with estimates from the literature that use similar methods, and we can compute them for more years of data (going back to 2007).

65 Our estimates account for the incentives that beneficiaries have to switch from FFS to MA because of the MOOP limit. However, MOOP limits do not appear to be an important factor in MA plan selection. For example, one study found that more generous OOP maximums did not result in enrollment gains in 2022 (Cates et al. 2022). Instead, the study found that lower premiums and a higher prevalence of supplemental benefits were associated with plans that experienced enrollment growth. This finding is consistent with prior research that found premiums were a driving factor in beneficiary plan selection (Jacobson et al. 2016, Jacobson et al. 2014, Medicare Payment Advisory Commission 2015, Meyers et al. 2019, Skopec et al. 2019).

66 One study found an additional effect of favorable selection that results from CMS's projections. This study found that MA enrollment increased faster in counties with overpredicted spending between CMS's historical baseline years and projected years (Ryan et al. 2023).

67 The studies by Teigland and colleagues (2025a) and Pelech and colleagues (2025) do not themselves estimate selection effects that are constructed to reflect the effect of favorable selection on MA payments, as MedPAC's estimate is designed to do. However, they include estimates of the pre-Medicare spending and risk scores of individuals who go on to enroll in MA and FFS, which can be used to construct selection effects. To do so, we standardized the pre-period spending by the risk scores and converted the risk-standardized spending differences to payments above FFS spending. For the nondual Medicare population aging into the program at age 65, Teigland and colleagues' 2015 to 2019 sample indicated that MA enrollees had 13 percent lower risk-standardized spending than the FFS population (in the same state with the same type of commercial insurance) before Medicare enrollment (Teigland et al. 2025a). For Medicaid enrollees immediately before becoming eligible for Medicare from 2017 to 2022, the estimates reported by Pelech and colleagues indicated that MA enrollees had 23 percent lower risk-standardized medical spending than the FFS population before Medicare enrollment (Pelech et al. 2025).

68 Our projection of favorable selection for 2026 is 11 percent. Similar to the projections in our March 2025 report to the Congress, we use the average selection effect from our two most recent years of historical data (2022 and 2023 in our most recent estimates).

69 We calculate the coding adjustment that is necessary to fully account for 10 percent higher MA coding intensity as 10.3 percent / 110.3 percent = 9.3 percent.

70 The actual dollar amount a plan will receive for coding a new HCC depends on several additional factors, including the version of the HCC model applied to a beneficiary and factors that affect a plan's base rate. Dollar-value coefficients are standardized relative to average FFS spending before being applied to each plan's base rate. CMS maintains separate HCC models for enrollees who lack a full calendar year of diagnostic data or have ESRD. A plan's base rate varies according to the plan's bid and the local area's benchmark.

71 Social Security Act Section 1853(a)(1)(C)(ii).

72 The prior V24 risk model was calibrated using International Classification of Diseases–9 (ICD–9) diagnosis codes and relied on a mapping from ICD–9 to ICD–10 diagnosis codes to implement risk adjustment after October 2015 when

Medicare required diagnosis codes reported on claims or encounters to be ICD–10 codes. The V28 risk model was calibrated with ICD–10 diagnosis codes.

73 In some counties, the full 5 percent or 10 percent quality-bonus increase to a plan's benchmark is limited by the ACA benchmark caps.

74 This organization-level analysis, like our national estimate of coding differences, uses the method of estimating coding intensity that is described in Technical Appendix 12-C (p. 440), except that the MA risk scores are calculated separately for each MA organization and the analysis excludes beneficiaries who reside in Puerto Rico, are enrolled in chronic-condition special-needs plans, or have ESRD, and organizations with fewer than 25,000 enrollees in the analysis.

75 The relatively large difference between the V28 and V24 coding-intensity estimates for the "0 to 5 percent" group is driven by one large organization that had much lower coding intensity under the V28 model compared with the V24 model. Without that organization, the "0 to 5 percent" group would have had an average V28 – V24 estimate difference of –2.6 percentage points.

76 The description in this section is based on MedPAC's interviews with physicians, reporting from Stat News, and documentation from one insurer about their bonus program for documenting suspect conditions (Bannow et al. 2024, Herman et al. 2024, United Healthcare 2025).

77 Recent reporting shows that agents and brokers are often paid by plans to conduct health risk assessments of new enrollees, but such assessments are not allowable for risk adjustment because agents and brokers are not clinicians and do not submit diagnoses from assessments on claims that are used for risk adjustment (Leonard et al. 2023).

78 The general steps we followed were to identify physician and hospital encounter records allowable for risk adjustment; identify each record as a health risk assessment (using procedure codes for annual wellness visits or initial preventive physical exams, or an evaluation and management visit provided in the home), chart review (using a chart-review indicator), or other service; map diagnoses from those records to HCCs; apply HCC hierarchies; compare the HCCs we identified from encounter records with the HCCs in CMS's risk-score file and exclude HCCs not identified in both sources; apply HCC coefficients for the appropriate risk model; and apply Part A and Part B payment rates specific to each plan. We then identified the number of HCCs and associated dollar amounts that were supported through a health risk assessment, chart review, or both.

79 The six HCCs that each generated more than $900 million in payments from health risk assessments and the percentage of the time that a health risk assessment was the only source of the HCC were vascular disease, 45 percent; major depressive, bipolar, and paranoid disorders, 44 percent; disorders of immunity, 64 percent; diabetes with chronic complications, 15 percent; chronic obstructive pulmonary disorder, 26 percent; morbid obesity, 37 percent. We note that diabetes with chronic complications has a constrained coefficient in the V28 risk model, meaning that differences in the level of severity (e.g., diabetes without complications, with chronic complications, or with acute complications) for these conditions are not reflected in the V28 risk-adjustment model coefficients.

80 The legal complaints cited in this section support this statement. One complaint includes exhibits of plan documents that detail the financial performance of the plan's chart-review program (United States of America v. Anthem Inc. 2020).

81 The eight HCCs that each generated more than $1 billion in payments from chart reviews and the percentage of the time that a chart review was the only source of the HCC were vascular disease, 32 percent; chronic obstructive pulmonary disorder, 26 percent; diabetes with chronic complications, 17 percent; major depressive, bipolar, and paranoid disorders, 32 percent; congestive heart failure, 23 percent; disorders of immunity, 40 percent; morbid obesity, 33 percent; and rheumatoid arthritis and inflammatory connective tissue disease, 31 percent. We note that diabetes with chronic complications and congestive heart failure are among the HCCs that have a constrained coefficient in the V28 risk model, meaning that differences in the level of severity (e.g., diabetes without complications, with chronic complications, or with acute complications) for these conditions are not reflected in the V28 risk-adjustment model coefficients.

82 About $5.2 billion in payments to MA plans was made based on HCCs identified on a health risk assessment and a chart review but not during any record of a physician or hospital encounter during the same calendar year.

83 Audit-eligible enrollees were also required to have Part B enrollment for the full data-collection year, continuous enrollment in the contract for the full data-collection year and January of the payment year, and no end-stage renal disease or hospice status.

84 As this chapter went to press, CMS proposed eliminating unlinked chart reviews (those that do not identify an associated encounter) from risk adjustment for payment year 2027 (Centers for Medicare & Medicaid Services 2026).

85 For RADV audits in 2011, CMS grouped all contracts into high, medium, and low levels of coding intensity and selected 20 high-level, 5 medium-level, and 5 low-level contracts at random.

86 The Commission stated in its March 2024 report to the Congress that it would consider not reporting plan margin data in future years. Given our declining confidence in the salience and accuracy of plan-reported margins, we omit these data and focus on more reliable indicators of the financial health of the MA program, such as plan availability and enrollment.

87 Other factors may also influence insurers' decisions to enter new markets. Examples include state and federal regulatory and financial requirements (including licensure requirements), the size of the market, the local MA penetration rate, the number of competitors, benchmark payment rates for the market relative to the health care needs of the population, availability and quality of providers, and the estimated likelihood of achieving a sustainable risk profile after accounting for CMS's coding-intensity adjustment (Buzby et al. 2022, Killian and Swenson 2016).

88 Counties in Connecticut are excluded due to changes over time in how the state's counties are tabulated. Employer plans are excluded because employer plans do not compete directly with non-employer group plans.

89 The study assessed only whether the parent organization listed for a particular MA contract changed; it did not assess whether the company acquired one or all of the acquired insurer's MA contracts or acquired the other insurer altogether.

90 The top three organizations nationally also had the highest share of enrollees in both urban and rural areas in 2025. In urban areas, the top three organizations covered 56 percent of MA enrollees (down from 58 percent in 2024). In rural areas, the top three organizations accounted for 65 percent of the MA enrollees (down from 67 percent in 2024).

91 In 2025, 18 percent of MA enrollees were eligible for Medicaid and enrolled in dual-eligible SNPs (D–SNPs). The national D–SNP enrollment is more concentrated than overall MA enrollment (the three largest D–SNP insurers had 61 percent of enrollment in 2025). Enrollment in D–SNPs has been getting more concentrated nationally: The three largest organizations nationally (regardless of plan type) had 59 percent of total enrollment in D–SNPs in 2025, an increase from 49 percent in 2020 but slightly lower than in 2024 (60 percent).

92 The HHI is calculated by squaring the market share of each entity competing in the market and summing the results. The index approaches zero when a market is occupied by a large number of firms of relatively equal size; the index reaches its maximum of 10,000 points when a market is controlled by a single firm. The index rises both as the number of firms in the market drops and as the disparity in size among those firms increases. Under Department of Justice and Federal Trade Commission guidelines, markets with an index above 1,800 are considered highly concentrated (Department of Justice and Federal Trade Commission 2023).

93 A "related party" is defined as any entity that "has a different tax identification number than that of the MAO but is associated with the MAO by any form of common, privately held ownership, control, or investment, including any arrangement in which the MAO does business with a related party through one or more unrelated parties" (Centers for Medicare & Medicaid Services 2023b). Because the MA bids measure the share of MA expenses that are paid to related parties, we assume that Part D benefits paid to related parties (such as an insurer-owned pharmacy benefit manager) are not included in our measure of MA vertical integration.

94 Star rating is a framework that CMS uses across MA and FFS Medicare. On its Care Compare website, CMS publishes star ratings for different types of Medicare providers (like physicians, hospitals, nursing homes, and others) so that beneficiaries can see how providers perform for FFS beneficiaries in their local area. However, there is no single quality evaluation for FFS Medicare in its entirety; star ratings of providers in FFS Medicare reflect their individual performance. The performance of a set of providers in a local area is not directly comparable with an MA star rating, which reflects the joint performance of an MAO and its network of contracted providers, at the contract level.

95 Currently, quality results for MA are reported on a contract-wide basis, and those results are used to determine the star rating for all plans under the contract's offerings.

96 MA–PD contracts were assessed on 43 measures in 2026. MA-only contracts and PDPs were evaluated on 33 and 12 measures, respectively (https://www.cms.gov/files/document/2026-star-ratings-fact-sheet.pdf).

97 Measures are assigned unique weights, and the overall score is a weighted average. The other roughly 60 measures that Medicare collects are display measures that CMS publicly reports on the Medicare.gov website (not the Medicare Plan Finder website). Some display measures were previously incorporated into the star ratings but have been transitioned out. Others may be new measures that are being tested before inclusion in the star ratings or that are otherwise reported for informational purposes only.

98 We discuss FFS–CAHPS results in Chapter 4 (on physicians and other health professionals).

99 Because MA contracts do not represent uniform geographic units, sampling at the contract level generates an average that is not necessarily geographically representative of the MA population.

100 Scores are adjusted for education, self-reported general health status, self-reported mental health status, proxy completion or assistance with survey completion, dual eligibility or low-income-subsidy eligibility, age, and completion of the survey in an Asian language, all of which have been demonstrated to be associated with patient-experience scores (https://www.ma-pdpcahps.org/globalassets/ma-pdp/quality-assurance/2026/quality-assurance-protocols--technical-specifications-v16.0.pdf).

101 The 2019 CAHPS surveys were halted due to the coronavirus pandemic. We report values for 2018 to include a prepandemic comparison year.

102 Our focus-group participants reported similar overall satisfaction with their coverage, but some also provided concrete examples of challenges accessing care in some instances. See our most recent focus-group report here: https://www.medpac.gov/wp-content/uploads/2025/07/Jun25_MedPAC_FocusGroupSiteVisitReport_CONTRACTOR_SEC.pdf.

103 Under the original prohibition, MA plan access was limited to (1) individuals with ESRD in an employer-sponsored health plan, who could enroll in an MA plan offered by the same insurer if one was available when initially enrolling in Medicare; (2) Medicare beneficiaries already enrolled in an MA plan, who could remain in that plan after developing ESRD; or (3) Medicare beneficiaries could enroll in an ESRD chronic-condition special-needs plan (C–SNP) and certain other SNPs. ESRD C–SNPs were created in 2003. In 2000, the Commission recommended that the Congress allow all beneficiaries with ESRD to enroll in private plans (Medicare Payment Advisory Commission 2000).

104 Among FFS beneficiaries without cost sharing covered by Medicaid, those on dialysis are less likely to purchase a Medigap plan than FFS beneficiaries who are not on dialysis (31 percent vs. 50 percent in 2024) because of constraints in federal guaranteed-issue rights in obtaining these supplemental plans and the affordability of a Medigap plan. Outside of the federal guaranteed-issue window, Medigap plans offered to beneficiaries with ESRD are limited; 36 states require insurers to offer at least one Medigap plan to beneficiaries under age 65, but only 26 states require insurers to offer a plan to those entitled to Medicare due to ESRD (Freed et al. 2024).

105 For payment purposes, CMS categorizes beneficiaries with ESRD into three groups based on their treatment status: dialysis, transplant (i.e., within the first 3 months of a kidney transplant), and functioning graft (i.e., 4 to 36 months after a kidney transplant). Unlike payment for beneficiaries on dialysis, payment for functioning-graft beneficiaries is equal to the MA county benchmark rate (FFS spending × quartile adjustment × quality-bonus adjustment), adjusted by the enrollee's risk score (Centers for Medicare & Medicaid Services 2025a).

106 BPT Worksheet 1, Section V, includes information about a plan's financial experience for both enrollees with and without ESRD from a base period, which is two years before the plan year for which the BPT is submitted. For example, BPT data for 2025 include 2023 plan costs and revenues for the vast majority of enrollees with ESRD.

107 We aggregated plan-level BPT data to the MA contract level in our analysis.

108 Adjusting for inflation, the estimated nonbenefit expenses of about $350 PMPM in 2019 for plan administration of benefits for enrollees with ESRD would equal approximately $416 PMPM in 2023.

109 Approximately 33 percent of FFS beneficiaries on dialysis had full Medicaid benefits and were, therefore, not responsible for any cost sharing for dialysis in 2024.

110 Composite-rate services include dialysis services paid for under the former PPS: nursing, dialysis equipment and supplies, social services, and certain laboratory tests and drugs (Medicare Payment Advisory Commission 2024a).

111 The base payment for each dialysis treatment is intended to cover all operating and capital costs that efficient providers would incur in furnishing dialysis-treatment episodes in dialysis facilities or in patients' homes.

112 These patient-level adjustment factors apply to adult beneficiaries with ESRD who are 18 years and older. For beneficiaries under age 18, CMS adjusts the base rate by age and dialysis modality.

113 Out-of-network providers who accept assignment must accept FFS payment rates as payment in full for Medicare-covered services.

114 The form CMS uses to collect encounter records includes fields that plans can use to report the amount they paid to providers as well as the enrollees' cost-sharing liability. The data collected in those fields are not included in the public versions of the encounter data that are available to researchers.

115 CMS suspended sequestration of MA payments from May 2020 through March 2022 and applied a sequester of 1 percent from April through June of 2022.

116 When an MA plan's contracted rate for a federally qualified health center (FQHC) is less than the Medicare prospective payment system rate, Medicare pays the FQHC the difference, less any cost-sharing amounts owed by the MA enrollee. In the past, we added Medicare's supplemental payments to FQHCs for MA enrollees, but these amounts have been negligible in our aggregate comparison of FFS spending to MA payments. We will continue to monitor these supplemental payments for MA enrollees and adjust our estimate if necessary.

117 We removed medical education payments using CMS's county-level medical education payment file. We used the share of our study population's FFS inpatient spending to adjust the amounts in CMS's file to remove payments for beneficiaries with Part A only, Part B only, ESRD, or Medicare as a secondary payer.

118 We removed kidney-acquisition costs using CMS's rate book projections of county-level factors that represent the share of kidney-acquisition costs as a percentage of total Part A and Part B spending.

119 CMS reports provider-settlement amounts on a national basis. To estimate provider settlements at the county level, we distributed national settlement amounts using the county distribution of Part A and Part B spending for our study population. In addition, we excluded provider settlement amounts and provider incentive payments that would have been made for beneficiaries with Part A only, Part B only, ESRD, or Medicare as a secondary payer.

120 CMS reports provider incentive payments on a county basis. We excluded provider incentive payments that would have been made for beneficiaries with Part A only, Part B only, ESRD, or Medicare as a secondary payer. We made this adjustment by calculating our study population's share of Medicare Part A and Part B spending among beneficiaries assigned to those programs. Because physician bonus payments in health professional shortage areas (HPSAs) do not have assigned beneficiaries like a typical alternative payment model, we calculated our population's share of evaluation and management spending in those areas, and we applied this share as a factor to CMS's HPSA payment amounts. For advanced alternative payment model (A–APM) bonuses, we applied our population's share of Part B spending among beneficiaries assigned to the Medicare Shared Savings Program, which comprises most A–APM participants.

121 We used CMS's most recent estimate of administrative claims costs, which have been about 0.2 percent of FFS spending in recent years.

122 For our base comparison, average FFS spending in the county is weighted by enrollment months in the year and standardized to a 1.0 risk score, calculated as

$$\bar{y}_{g,t} = \frac{\sum_i y_{i,g,t}}{\sum_i r_{i,g,t}}$$

for individual i, residing in county g, in year t, where y is the individual's spending and r is the individual's risk score).

123 We use a framework similar to CMS's for applying credibility adjustments to counties with less than 12,000 FFS enrollment months. For these counties, we blend spending in the county with spending in a larger market within the same state (metropolitan statistical areas for urban counties and health service areas (as defined by the National Center for Health Statistics) or nonmetropolitan areas for rural counties). County spending is weighted by county enrollment, and spending in the larger market is weighted by 12,000 minus county enrollment months.

124 For 2026, we assume that employer plans would have a 3.0 percent growth in enrollment relative to 2025, which is lower than non–employer plans experienced in 2025 (4.0 percent). In addition, we calculated the overall risk-score ratio of employer plans to nonemployer MA plans in 2023 (reflecting diagnoses documented in 2022), and we applied this ratio to the average risk score in 2026 MA bids. The resulting adjusted risk score was applied to overall employer-plan payment rates, which CMS standardizes to a risk score of 1.0.

125 Our analysis of selection for the dialysis population excluded beneficiaries that had nondialysis months during the year.

126 Our simple method of estimating favorable selection includes beneficiaries in our study and reference populations if they were enrolled in FFS and had both Part A and Part B coverage for at least two full calendar years. We required beneficiaries to have at least two full calendar years of FFS enrollment because the CMS hierarchical condition category risk-adjustment model calculates risk scores using diagnoses from the prior year's claims. We required our MA study population to have at least one month of MA enrollment in the year following the two years of FFS enrollment. We required our FFS comparison population to have at least one month of FFS enrollment and no months enrolled in MA in the year following the two years of FFS enrollment. For both our MA and FFS comparison populations, we required that beneficiaries live in the same county during the reference year because we used county-level figures in our spending calculations. We excluded beneficiaries from either population if they had ESRD or if they had another source

of health coverage for which Medicare acted as a secondary payer during the reference year.

127 The share of non-ESRD MA enrollees with at least two years of prior enrollment in FFS who meet our inclusion criteria is based on nonhospice and Medicare as the primary payer enrollment months in 2023. About 35 percent of MA enrollees in 2023 had at least two prior consecutive years in FFS Medicare between 2006 and 2022.

128 We exclude beneficiaries with Medicare as a secondary payer. CMS's payment rates to MA plans are adjusted with the goal of removing the effects of having Medicare as a secondary payer.

129 CMS sets MA payment rates using a non-ESRD population. MA plans are separately paid a state-based ESRD rate for MA enrollees with ESRD.

130 MA enrollees who use hospice continue receiving supplemental benefits through their MA plan, but MA plans are immediately no longer paid the base payment for Part A and Part B services for that enrollee. Thus, we remove the MA and FFS months in which a beneficiary used only hospice. We count the months in which an enrollee had at least one nonhospice day. Hospice spending while an enrollee is in hospice is excluded from our analysis entirely and is not included in our FFS denominator.

131 The population of FFS enrollees in each county used in the denominator includes all beneficiaries with at least one month of FFS enrollment in time $t = 0$ who were enrolled in FFS for the entire prior year ($t = -1$). It includes people who switched to MA in the following year. We use a similar framework as CMS for applying credibility adjustments to counties with less than 12,000 FFS enrollment months. For these counties, we blend spending in the county with spending in a larger market within the same state (metropolitan statistical areas for urban counties and health service areas or nonmetropolitan areas for rural counties). County spending is weighted by county enrollment, and spending in the larger market is weighted by 12,000 minus county enrollment months. Our construction is designed to closely align with the population that CMS uses to construct predicted spending while also ensuring that risk scores were constructed using CMS's HCC model. We also require the population of FFS enrollees in the denominator to be enrolled in both Part A and Part B to enhance similarity with the MA population. Average spending in the county is weighted by enrollment months in the year and standardized to a 1.0 risk score, calculated as

$$\overline{y}_{g,t} = \frac{\sum_i y_{i,g,t}}{\sum_i r_{i,g,t}}$$

132 Mean reversion can occur in two directions. When an individual's spending is initially below their predicted spending, mean reversion can occur if their growth in spending exceeds their growth in risk score. Conversely, when an individual's spending is initially above their predicted spending, mean reversion can occur if their growth in spending is lower than their growth in risk score.

133 We bound the selection percentages of the proxy group to match the upper and lower bound of the selection percentage within the MA population. We apply a linear trend of the proxy group to the MA population. In very rare instances, when we apply a linear trend, the selection percentage estimate in base year $t = 0$ will have a more than 5 percentage point difference between the proxy group and the MA subcohorts. When this occurs, we apply a multiplicative trend to the MA population where the base-year selection percentage in year $t = 0$ is multiplied by the growth (as a factor) in selection percentage of the proxy group.

134 The weights represent each individual's share of the total predicted spending in the proxy group. Thus, the individual weight is defined as

$$\alpha_i = \frac{\overline{y}_{g,t=T} \times r_{i,g,t=T}}{\sum_i \overline{y}_{g,t=T} \times r_{i,g,t=T}}$$

135 Each cohort of MA enrollees and their proxy cohort of FFS beneficiaries were placed into 110 mutually exclusive groups and matched on those groups. Beneficiaries were first placed into one of three mortality groups based on the year of death: year $t = T$, $t = T + 1$, and $t > T + 1$. Decedents (death in $t = T$) and near-decedents (death in $t = T + 1$) were assigned to 1 of 10 categories within their respective mortality group based on initial selection percentage in year $t = 0$. Nondecedents (death in $t > T + 1$) were placed into 1 of 3 dual status categories (fully dual eligible, partially dual eligible, and nondually eligible), and each nondecedent in a dual status category was placed into 1 of 30 categories based on initial selection percentage in year $t = 0$. Categories of initial selection percentage were developed based on the distribution of spending and enrollment, with the goal of having meaningful differences between the categories while sustaining a reliable sample of enrollees within each category.

136 Although there is an insufficient number of observations to match MA enrollees to proxy groups by county of residence, we required beneficiaries in the proxy group to reside in counties with at least one MA enrollee in MA cohort c. Conversely, we also required that MA enrollees reside in counties with at least one proxy-group beneficiary.

137 Dual-eligibility status is based on a hierarchy of Medicaid eligibility in the target year. Beneficiaries with at least one month of fully dual status are assigned as "full duals." Beneficiaries without any months of fully dual status and

at least one month of partially dual status are assigned as "partial duals." All other beneficiaries are assigned as "nonduals."

138 Beneficiaries in the proxy group are also required to be enrolled in FFS in the year before the base year (2016 in this example) in order to have a populated HCC risk score for 2017.

139 The weights are constructed to reflect each individual's predicted spending in year $t = T$ as a share of the mortality-cohort group's predicted spending in year $t = T$:

$$w_{i,T} = \frac{\bar{y}_{g,t=T} \times r_{i,t=T} \times m_{i,T}}{\sum_{i \in C^{d,m,T}} \bar{y}_{g,t=T} \times r_{i,t=T} \times m_{i,T}}$$

where $m_{i,T}$ indicates months of enrollment.

140 Due to data limitations, beneficiaries who switched from FFS to MA before 2006 are considered to have no FFS enrollment.

141 We compared our 2023 MA study population with the general non-ESRD population by dual status. Full duals comprised 19 percent of our study population and 17 percent of the general MA population. Partial duals comprised 9 percent of our study population and 8 percent of the general MA population. Nonduals comprised 72 percent of our study population and 75 percent of the general MA population.

142 Because we rely on a beneficiary-level annual spending file, we cannot remove nonhospice spending during hospice months from our calculations. We do not anticipate that this materially affects our results. After removing the weighting of hospice months from each beneficiary's annual spending calculation, we did not observe any difference in our overall estimate of favorable selection.

143 Including risk-score level or spending level resulted in each cohort of MA enrollees and their proxy cohort of FFS beneficiaries being placed into 380 mutually exclusive groups and matched on those groups. Including MA market-penetration level resulted into beneficiaries being placed into 210 mutually exclusive groups.

144 The Commission recognizes that social risk factors are associated with differences in health status and health care use and that switching between MA and FFS may lead to changes in a beneficiary's use of health services and in their Medicaid eligibility. Limited evidence suggests that MA plans do not provide greater access to services overall relative to FFS (Agarwal et al. 2022, Commonwealth Fund 2021, Fuglesten Biniek et al. 2021). In addition, MA plans have a financial incentive to ensure that beneficiaries who are eligible but not enrolled in Medicaid receive those benefits while in MA. These additional Medicaid benefits would potentially reduce the cost-sharing liability for both beneficiaries and MA plans. Further, enrolling beneficiaries in Medicaid who were Medicaid eligible but previously unenrolled also increases beneficiary risk scores because their predicted costs in MA would be under a Medicaid segment in CMS's risk model (rather than a non-Medicaid segment). To the extent that such beneficiaries would have remained unenrolled in Medicaid if still in FFS Medicare, this phenomenon would increase favorable selection in MA. Given our reliance on a beneficiary's FFS experience when estimating favorable selection, we cannot account for these additional changes in a beneficiary's social risk while enrolled in MA.

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