

CHAPTER

13

**Status report on the
Medicare Advantage program**

R E C O M M E N D A T I O N

- 13** The Secretary should calculate Medicare Advantage benchmarks using fee-for-service spending data only for beneficiaries enrolled in both Part A and Part B.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

Status report on the Medicare Advantage program

Chapter summary

Each year, the Commission provides a status report on the Medicare Advantage (MA) program. In 2016, the MA program included about 3,500 plan options, enrolled more than 17.5 million beneficiaries (31 percent of all beneficiaries), and paid MA plans about \$190 billion (not including Part D drug plan payments). To monitor program performance, we examine MA enrollment trends, plan availability for the coming year, and payments for MA plan enrollees relative to spending for fee-for-service (FFS) Medicare beneficiaries. We also provide updates on risk adjustment, risk coding practices, and current quality indicators in MA. As a result of the analyses, we include a recommendation to adjust benchmarks.

The MA program gives Medicare beneficiaries the option of receiving benefits from private plans rather than from the traditional FFS Medicare program. The Commission strongly supports the inclusion of private plans in the Medicare program; beneficiaries should be able to choose between the traditional FFS Medicare program and alternative delivery systems that private plans can provide. Because Medicare pays private plans a per person predetermined rate rather than a per service rate, plans have greater incentives than FFS providers to innovate and use care-management techniques.

The Commission has emphasized the importance of imposing fiscal pressure on all providers of care to improve efficiency and reduce Medicare

In this chapter

- Trends in enrollment, plan availability, and payments
- Medicare Advantage risk adjustment
- Quality in the Medicare Advantage program

program costs and beneficiary premiums. For MA, the Commission previously recommended that payments be brought down from prior levels, which were generally higher than FFS, and be set so that the payment system is neutral and does not favor either MA or the traditional FFS program. Legislation has reduced the inequity in Medicare spending between MA and FFS. As a result, over the past few years, plan bids and payments have come down in relation to FFS spending while enrollment in MA continues to grow. The pressure of lower benchmarks has led to improved efficiencies and more competitive bids that enable MA plans to continue to increase enrollment by offering benefits that beneficiaries find attractive.

Enrollment—Between 2015 and 2016, enrollment in MA plans grew by about 5 percent (800,000 enrollees) to 17.5 million enrollees. About 31 percent of all Medicare beneficiaries were enrolled in MA plans in 2016, up from 30 percent in 2015. Among plan types, HMOs continued to enroll the most beneficiaries (11.7 million), with 20 percent of all Medicare beneficiaries in HMOs in 2016. Between 2015 and 2016, enrollment in local preferred provider organizations (PPOs) increased by about 3 percent and enrollment in regional PPOs increased by about 7 percent. As expected because of legislation effective in 2010, enrollment in private fee-for-service (PFFS) plans continued to decrease between 2009 and 2016 from 2.4 million enrollees to about 200,000 enrollees.

Plan availability—Access to MA plans remains high in 2017, with most Medicare beneficiaries having access to many plans. Almost all beneficiaries have had access to some type of MA plan since 2006, and HMOs and local PPOs have become more widely available in the past few years. Ninety-five percent of Medicare beneficiaries have an HMO or local PPO plan operating in their county of residence. Regional PPOs are available to 74 percent of beneficiaries, up from 73 percent in 2016. Forty-five percent of beneficiaries have access to PFFS plans. Overall, 99 percent of all Medicare beneficiaries have access to an MA plan.

An analysis of the market structure of the MA program shows that, compared with 2007, MA enrollment is more heavily concentrated in 2016. The top 10 MA organizations (ranked by enrollment) had 70 percent of total enrollment in 2016, compared with 61 percent in 2007. Enrollment is more concentrated in nonmetropolitan areas, where the top two companies have 52 percent of all enrollment, compared with 39 percent in metropolitan areas. Despite this concentration, on average, an increasing number of MA organizations are participating per county; between 2007 and 2015, the per county average number of MA organizations offering coordinated care plans (HMOs or PPOs) rose from 2.6 to 3.2. However, at the county level, enrollment is often concentrated in the top 10 organizations.

Plan payments—For 2017, the base county benchmarks (in nominal dollars and before any quality bonuses are applied) average approximately 3 percent higher than the benchmarks for 2016, as compared with expected per capita FFS spending growth of 4 percent. The lower growth in MA benchmarks is due to the final year of the transition to lower benchmarks established in the Patient Protection and Affordable Care Act of 2010 (PPACA).

Using the 2017 plan bid data, we estimate that 2017 MA benchmarks (including quality bonuses), bids, and payments will average 106 percent, 90 percent, and 100 percent of FFS spending, respectively. Lower benchmarks have led to more competitive bids from plans as bids have dropped from about 100 percent of FFS before PPACA to about 90 percent of FFS in 2017. For 2017, about two-thirds of plans, accounting for about 75 percent of projected MA enrollment, have bid below FFS.

On average, the quality bonuses in 2017 will add 4 percent to the average plan's base benchmark and will add 3 percent to plan payments. Removing quality bonuses from the benchmarks, we expect the base benchmarks to average 102 percent of FFS in 2017 and thus approach rough equity with FFS.

Nonetheless, there are equity issues surrounding the distribution of MA benchmarks and payments. When CMS calculates the county-level FFS spending measure on which the benchmarks are based, it includes all of a county's FFS beneficiaries in its calculations, regardless of whether these FFS beneficiaries are enrolled in both Part A and Part B. MA beneficiaries, however, are required to enroll in both Part A and Part B to join an MA plan. The Commission has found that FFS spending in Part A is higher for beneficiaries with both Part A and Part B. Therefore, the Commission recommends that the Secretary calculate benchmarks using only the FFS spending of beneficiaries enrolled in both Part A and Part B. Making this change would incur a cost to the Medicare program, which could be offset by implementing our March 2016 recommendation on coding intensity (Medicare Payment Advisory Commission 2016).

Risk adjustment and coding intensity—Medicare payments to MA plans are enrollee specific, based on a plan's payment rate and an enrollee's risk score. Risk scores account for differences in expected medical expenditures and are based in part on diagnoses that providers code. Claims in FFS Medicare are paid using procedure codes, which offer little incentive for providers to record more diagnosis codes than necessary to justify ordering a procedure. In contrast, MA plans have a financial incentive to ensure that their providers record all possible diagnoses because higher enrollee risk scores result in higher payments to the plan. Our

updated analysis shows that higher coding intensity has resulted in MA enrollees having risk scores that were about 10 percent higher than scores for similar FFS beneficiaries, an increase over last year. By law, CMS makes a minimum across-the-board adjustment to MA risk scores to make them more consistent with FFS coding. The adjustment for 2017 will be 5.66 percent. Last year, the Commission recommended that CMS change the way diagnoses are collected for use in risk adjustment and estimate a new coding adjustment that improves equity across plans and eliminates the impact of differences in MA and FFS coding intensity.

Quality measures—MA plans are able to receive bonus payments if they achieve an overall rating of 4 stars or higher in CMS’s 5-star rating system. Between 2015 and 2016, the proportion of beneficiaries in MA plans with bonus-level ratings increased, while between 2016 and 2017, the share decreased. Based on the 2017 star ratings released in October of 2016 and looking at contracts rated in both years, on net about 1.2 million fewer current enrollees are in plans that are in bonus status under the 2017 star ratings. A little over 2 million enrollees are in plans leaving bonus status, while a little over 1 million enrollees are in plans entering bonus status. These changes reflect higher thresholds for the attainment of 4-star ratings for some of the MA quality measures and reduced ratings for one organization based on an audit of contract performance.

This year we continue to see the practice of contract cross-walking (consolidations under one contract) undertaken for the purpose of obtaining bonus payments. Over 700,000 enrollees are being moved to a different contract for this purpose. The largest such movement involves one company that is combining three regional contracts into one contract. The company’s two regional contracts in the South (rated below 4 stars), with over 300,000 enrollees, are being absorbed by the company’s 4-star regional plan in the Northeast, which has 20,000 enrollees. We discuss ways of ensuring that bonus payments are available only for enrollees in high-performing plans when there has been cross-walking of contracts.

The cross-state consolidation of MA contracts that we have seen over the past several years has eroded our ability to evaluate quality in the program and lessened the utility of star ratings as a plan comparison tool for beneficiaries. In many cases, star ratings do not reflect the quality of care in the local market area. The Commission has a long-standing recommendation (see text box, pp. 374–375) that quality measures be reported by market areas (and compared with results for the FFS program in those areas) (Medicare Payment Advisory Commission 2010). Currently, about one-third of MA enrollees are in contracts for which a substantial share of the enrollment is in noncontiguous states across the country. ■

Background

The Medicare Advantage (MA) program allows Medicare beneficiaries to receive benefits from private plans rather than from the traditional fee-for-service (FFS) program. In 2016, the MA program included about 3,500 plan options, enrolled more than 17.5 million beneficiaries (31 percent of all beneficiaries), and Medicare paid MA plans about \$190 billion (not including Part D drug plan payments). The Commission supports including private plans in the Medicare program because they allow beneficiaries to choose between FFS Medicare and alternative delivery systems that private plans can provide. Plans often have flexibility in payment methods, including the ability to negotiate with individual providers; care-management techniques that fill potential gaps in care delivery (e.g., programs focused on preventing avoidable hospital readmissions); and robust information systems that provide timely feedback to providers. Plans also can reward beneficiaries for seeking care from more efficient providers and give beneficiaries more predictable cost sharing; one trade-off is that plans often restrict the choice of providers.

By contrast, traditional FFS Medicare has lower administrative costs and offers beneficiaries an unconstrained choice of health care providers, but it lacks incentives to coordinate care and is limited in its ability to modify care delivery. Because private plans and traditional FFS Medicare have structural aspects that appeal to different segments of the Medicare population, we favor providing a financially neutral choice between private MA plans and traditional FFS Medicare. Medicare's payment systems should not unduly favor one component of the program over the other.

Efficient MA plans may be able to capitalize on their administrative flexibility to provide better value to beneficiaries who enroll in their plans. However, some of the extra benefits that MA plans provide their enrollees result from payments that would have been lower under FFS Medicare for similar beneficiaries. Thus, some of those benefits are financed by higher government spending and higher beneficiary Part B premiums (including for those who are in traditional FFS Medicare) at a time when Medicare and its beneficiaries are under increasing financial stress. To encourage efficiency and innovation, MA plans need to face some degree of financial pressure, just as the Commission recommends for providers in the traditional FFS program. One method of achieving

financial neutrality is to link private plans' payments more closely to FFS Medicare costs within the same market. Alternatively, neutrality can be achieved by establishing a government contribution that is equally available for enrollment in either FFS Medicare or an MA plan. The Commission will continue to monitor the effect of changes mandated by the Patient Protection and Affordable Care Act of 2010 (PPACA) on plan payments and performance and track progress toward financial neutrality.

Each year, the Commission provides a status report on the MA program. To monitor program performance, we examine MA enrollment trends, plan availability for the coming year, and payments for MA plan enrollees relative to spending for FFS Medicare beneficiaries. We also provide updates on risk adjustment, risk coding practices, and current quality indicators in MA.

Trends in enrollment, plan availability, and payments

In contrast to traditional FFS Medicare, MA enrolls beneficiaries in private health plans. Medicare pays plans a fixed rate per enrollee rather than traditional FFS Medicare's fixed rate per service.

Types of MA plans

Our analysis of the MA program uses the most recent data available and reports results by plan type. The plan types are:

- ***HMOs and local preferred provider organizations (PPOs)***—These plans have provider networks and can use tools such as selective contracting and utilization management to coordinate and manage care and control service use.¹ They can choose individual counties to serve and can vary their premiums and benefits across counties. These two plan types are classified as coordinated care plans (CCPs).
- ***Regional PPOs***—These plans are required to offer a uniform benefit package and premium across designated regions made up of one or more states. Regional PPOs have more flexible network requirements than local PPOs. Regional PPOs are also classified as CCPs.
- ***Private FFS (PFFS) plans***—PFFS plans are not classified as CCPs. Before 2011, PFFS plans typically

did not have provider networks, making them less able than other plan types to coordinate care. They usually paid providers Medicare's FFS payment rates (instead of negotiated rates) and had fewer quality reporting requirements. Because PFFS plans generally lacked care coordination, had lower quality measures than CCPs on the measures they reported, paid Medicare FFS rates, and had higher administrative costs than traditional FFS Medicare, they were viewed as providing little value. In response, the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) mandated that, in areas with two or more network MA plans, PFFS plans can be offered only if they have provider networks. PFFS plans are also now required to participate in quality reporting. Existing PFFS plans had to either (1) locate in areas with fewer than two network plans or develop provider networks themselves, which in effect would change them into PPOs or HMOs, or (2) they would operate as network-based PFFS plans.

Two additional plan classifications cut across plan types: special needs plans (SNPs) and employer group plans. SNPs offer benefit packages tailored to specific populations (those beneficiaries who are dually eligible for Medicare and Medicaid, are institutionalized, or have certain chronic conditions). SNPs must be CCPs. 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. (See the Commission's March 2013 report to the Congress, available at <http://www.medpac.gov>, for more detailed information on SNPs.) As we recommended in an earlier report, employer plans no longer submit bids, so we have only enrollment data for them. (See our March 2014 report to the Congress, available at <http://www.medpac.gov>, for more detailed information on employer plans.)

How Medicare pays MA plans

Plan payment rates are determined by the MA plan bid, which represents the dollar amount the plan estimates will cover the Part A and Part B benefit package for a beneficiary of average health status, and the payment area's benchmark, which is the maximum amount of Medicare payment set by law for an MA plan to provide Part A and Part B benefits. (Medicare also pays plans for providing the Part D drug benefit, but the Medicare payments for Part D are determined through the Part

D bidding process, and not all plans include the Part D benefit.) Plans with higher quality ratings are rewarded with a higher benchmark. (The benchmark that is compared with an individual plan's bid is a plan-specific risk-adjusted average, weighted by the plan's enrollment from counties in its service area.) If a plan's bid is above the benchmark, its MA payment rate is equal to the benchmark and enrollees have to pay a premium (in addition to the usual Part B premium) equal to the difference. If a plan's bid is below the benchmark, its payment rate is its bid plus a share (between 50 percent and 70 percent, depending on a plan's quality ratings) of the difference between the plan's bid and the benchmark; the beneficiary pays no premium to the plan for Part A and Part B benefits (but continues to be responsible for payment of the Medicare Part B premium and may pay premiums to the plan for additional benefits). The payment amount above the bid is referred to as the rebate. Plans must use the rebate to provide additional benefits to enrollees in the form of lower cost sharing, lower premiums, or supplemental benefits. (The valuation of the rebate can be fully loaded, meaning that the plan can devote some of the rebate to administration costs and margins.) Plans may also choose to include additional supplemental benefits in their packages and charge premiums to cover those additional benefits. A more detailed description of the MA program payment system can be found in our *Payment Basics* series (http://medpac.gov/docs/default-source/payment-basics/medpac_payment_basics_16_ma_final.pdf?sfvrsn=0.)

MA plan enrollment continued to grow faster than total Medicare beneficiary growth in 2016

Between November 2015 and November 2016, enrollment in MA plans grew by about 5 percent—or 0.8 million enrollees—to 17.5 million enrollees (compared with growth of about 3 percent in the same period for the total Medicare population). About 31 percent of all Medicare beneficiaries were enrolled in MA plans in 2016, up from 30 percent in 2015 (Table 13-1; 2015 share of enrollment not shown).

The Commission's previous work suggests that many beneficiaries enroll in MA immediately upon becoming eligible, but most initially enroll in FFS Medicare and subsequently move to MA. For more on enrollment patterns, see our March 2015 report (Medicare Payment Advisory Commission 2015b).

**TABLE
13-1**

Medicare Advantage plan enrollment continued to grow in 2016

	MA enrollment (in millions)		Percent change in enrollment	2016 MA enrollment as a share of total Medicare
	November 2015	November 2016		
Total	16.7	17.5	5%	31%
Plan type				
CCP	16.4	17.3	5	30
HMO	11.0	11.7	6	20
Local PPO	4.2	4.3	3	8
Regional PPO	1.3	1.3	7	2
PFFS	0.3	0.2	-11	<1
Restricted availability plans included in totals above				
SNPs*	2.1	2.3	7	4
Employer group*	3.2	3.2	1	6
Urban/rural				Share of Medicare population in MA
Urban	14.5	15.2	5	33
Rural	2.2	2.3	5	21

Note: MA (Medicare Advantage), CCP (coordinated care plan), PPO (preferred provider organization), PFFS (private fee-for-service), SNP (special needs plan). CCPs include HMO, local PPO, and regional PPO plans. The sum of column components may not equal the stated total due to rounding. Rural areas include counties designated as micropolitan counties and counties that are neither metropolitan nor micropolitan as defined by the Office of Management and Budget. Urban areas include metropolitan counties.
*SNPs and employer group plans have restricted availability. Their enrollment is included in the statistics by plan type and location. We present them separately to provide a more complete picture of the MA program.

Source: MedPAC analysis of CMS enrollment files.

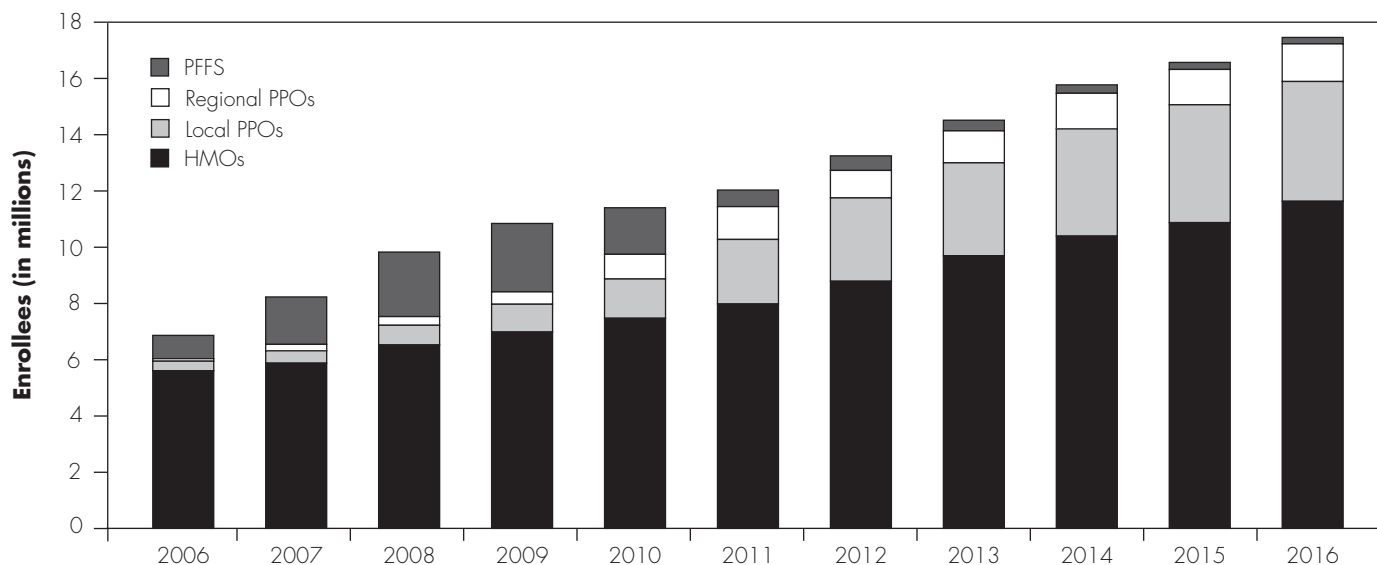
Among plan types, HMOs continued to enroll the most beneficiaries (11.7 million), with 20 percent of all Medicare beneficiaries in HMOs in 2016. Between 2015 and 2016, enrollment in local PPOs grew by about 3 percent. Regional PPO enrollment increased by about 7 percent. As expected because of MIPPA legislation effective since 2010, PFFS enrollment decreased between 2009 and 2016 from 2.4 million enrollees to about 200,000 enrollees. In 2016, SNP enrollment grew by 7 percent, and employer group enrollment grew by 1 percent (Table 13-1).

Enrollment patterns differ in urban and rural areas. A larger share of urban beneficiaries in 2016 were enrolled in MA (about 33 percent) compared with beneficiaries residing in rural counties (about 21 percent) (Table 13-1). About one-third of rural MA enrollees were in HMO plans in 2016 compared with over 70 percent of urban enrollees

(not shown in Table 13-1). By contrast, 5 percent of rural enrollees were in PFFS plans compared with 1 percent of urban enrollees.

Enrollment patterns also differ between those beneficiaries eligible for Medicare because they have reached 65 years of age (aged) and those who are eligible for Medicare on the basis of disability (disabled). Using more detailed data than that used for Table 13-1, we find that 32 percent of aged beneficiaries and 26 percent of disabled beneficiaries were enrolled in MA at the end of 2015 (the most recent CMS data are available only at summary levels and are not split by age and disability status). This difference has been narrowing: In 2011, 27 percent of aged beneficiaries and 18 percent of disabled beneficiaries were enrolled in MA.

The share of Medicare beneficiaries enrolled in MA plans in 2015 varied widely by geography. In some

**FIGURE
13-1****Medicare Advantage enrollment, 2006–2016**

Note: PFFS (private fee-for-service), PPO (preferred provider organization).

Source: MedPAC analysis of CMS enrollment files.

metropolitan areas (e.g., Anchorage, AK—where there are only employer group plans available), less than 1 percent of Medicare beneficiaries were enrolled in MA plans, whereas in other areas (Miami, FL; Pittsburgh, PA; Rochester, NY; and several areas in Puerto Rico), enrollment was 60 percent or more.

Growth in MA enrollment in 2016 continued a trend begun in 2003. Since 2003, overall enrollment has more than tripled (Figure 13-1 shows 2006 through 2016). Trends vary by plan type. HMOs have grown steadily each year since 2003, but growth in other plan types has been more variable.

Plan availability for 2016

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 2017, with most Medicare beneficiaries having access to many plans. Some measures of availability have improved for 2017. While almost all beneficiaries have had access to some type of MA plan since 2006, local CCPs have become more widely

available in the past few years (Table 13-2). In 2017, 95 percent of Medicare beneficiaries have a local CCP (an HMO or local PPO) plan operating in their county of residence, down from 96 percent in 2016 and up from 92 percent in 2011. Regional PPOs are available to 74 percent of beneficiaries, up from 73 percent in 2016. As intended by law, access to PFFS plans in 2017 is lower, at 45 percent of beneficiaries, down from 47 percent in 2016. Overall, 99 percent of Medicare beneficiaries have access to an MA plan, and 98 percent have access to a CCP (not shown in Table 13-2), a decrease from 99 percent in 2016.

The availability of SNPs has changed slightly and varies by the type of special needs population served. In 2017, 86 percent of beneficiaries reside in areas where SNPs serve beneficiaries who are dually eligible for Medicare and Medicaid (up from 83 percent in 2016), 44 percent live where SNPs serve beneficiaries with chronic conditions (down from 54 percent in 2016), and 52 percent live where SNPs serve institutionalized beneficiaries (up from 50 percent in 2016) (Table 13-2). Overall, 88 percent of beneficiaries reside in counties served by at least one type of SNP (not shown in table).

**TABLE
13-2****Access to Medicare Advantage plans remains high****Share of Medicare beneficiaries with access to MA plans by type**

Type of plan	2011	2012	2013	2014	2015	2016	2017
Any MA plan	100%	100%	100%	100%	99%	99%	99%
Local CCP	92	93	95	95	95	96	95
Regional PPO	86	76	71	71	70	73	74
PFFS	63	60	59	53	47	47	45
Special needs plans							
Dual eligible	76	78	82	82	82	83	86
Chronic condition	46	45	55	51	55	54	44
Institutional	47	41	46	47	47	50	52
Zero-premium plan with drug coverage	90	88	86	84	78	81	81
Average number of choices							
County weighted	12	12	12	10	9	9	10
Beneficiary weighted	26	19	19	18	17	18	18
Average rebate for nonemployer, non-SNP plans	\$83	\$85	\$81	\$75	\$76	\$81	\$89

Note: MA (Medicare Advantage), CCP (coordinated care plan), PPO (preferred provider organization), PFFS (private fee-for-service), SNP (special needs plan). CCPs include HMO, local PPO, and regional PPO plans. These figures exclude employer-only plans. Special needs plans are included in the three special needs plan rows but excluded from all other rows. A zero-premium plan with drug coverage includes Part D coverage and has no premium beyond 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 beneficiaries in the county. The plan rebate is the per beneficiary per month amount that the plan is offering as premium-free extra benefits.

Source: MedPAC analysis of CMS bid data and population reports.

In 2017, 81 percent of Medicare beneficiaries have access to at least one MA plan that includes Part D drug coverage and charges no premium (beyond the Medicare Part B premium), unchanged from 2016 (Table 13-2). Thirty-one percent of beneficiaries have access to plans that offer some reduction in the Part B premium (not shown in Table 13-2). Table 13-2 lists the average monthly rebates for nonemployer, non-SNP plans. For 2017, rebates (which can include allocations to plan administration and profit margin) for nonemployer, non-SNP plans will average \$89 per enrollee per month. The rebates are higher than at any point in the program's recent history.

In most counties, a large number of MA plans are available to beneficiaries. For example, in 2017, beneficiaries in Cleveland, OH; Detroit, MI; Houston, TX; and Los Angeles and Orange County, CA, can choose from at least 40 plans. At the other end of the spectrum, about 250 counties, representing 1 percent of beneficiaries,

have no MA plans available; however, many of these beneficiaries have the option of joining cost plans (another managed care option under Medicare).² On average, 10 plans are offered in each county in 2017. The plans offered include an average of nine CCPs. Plan availability can also be calculated weighted by the number of beneficiaries living in the county, to give a sense of the number of plan choices available to the average beneficiary. According to that calculation, in 2017, the average beneficiary has 18 available plans, including 17 CCPs, the same as in 2016 (Table 13-2).

Market structure of the Medicare Advantage program and ensuring stability

In our March 2016 report to the Congress, we provided information about the degree of concentration in the MA market (Medicare Payment Advisory Commission 2016). In 2007, the top 4 organizations had 45 percent

**TABLE
13-3**

Share of Medicare Advantage enrollment by parent organization, October 2016

Metropolitan counties		Nonmetropolitan counties	
Parent organization	Share of total MA enrollment in metropolitan counties	Parent organization	Share of total MA enrollment in nonmetropolitan counties
UnitedHealth Group Inc.	22%	Humana Inc.	29%
Humana Inc.	17	UnitedHealth Group Inc.	23
Kaiser Foundation Health Plan	9	Aetna Inc.	8
Aetna Inc.	8	Blue Cross Blue Shield of MI	4
Anthem Inc.	3	Anthem Inc.	3
Cigna	3	Cigna	2
Blue Cross Blue Shield of MI	2	Highmark Health	2
WellCare Health Plans Inc.	2	BlueCross BlueShield of TN	2
Highmark Health	2	UPMC Health System	2
Centene Corporation	2	Blue Cross and Blue Shield of NC	2
Total, top 10 organizations	70	Total, top 10 organizations	76

Note: Data include only Medicare Advantage plans. Excluded are cost-reimbursed plans and Medicare–Medicaid demonstration plans. Figures may not sum to stated totals due to rounding. Nonmetropolitan counties include counties designated as micropolitan counties and counties that are neither metropolitan nor micropolitan as defined by the Office of Management and Budget.

Source: MedPAC analysis of CMS monthly enrollment reports for October 2016 (which excludes enrollment for contracts in which an organization has fewer than 11 enrollees), and census data on county designations.

of MA enrollment, and the top 10 had 61 percent of total enrollment. In 2015, the top 4 organizations had 54 percent of the enrollment, and the top 10 organizations had 69 percent of the total enrollment. These shares were virtually unchanged in 2016, at 56 percent and 70 percent, respectively.

There are differences between metropolitan counties and nonmetropolitan counties (Table 13-3). In metropolitan counties, the top 2 organizations had 39 percent of the approximately 15.4 million MA enrollees in such counties. In nonmetropolitan counties, the top 2 organizations account for over half the enrollment (52 percent of the approximately 2 million MA enrollees residing in such counties).

In nonmetropolitan counties, it is more likely that a county’s MA enrollment will be in the national top five parent organizations (Table 13-4). Twenty-two percent of all nonmetropolitan MA enrollment is in counties in which the top five organizations have 99 to 100 percent of the MA enrollment in that county. The comparable figure in metropolitan counties is 5 percent; that is, only 5 percent of the total MA enrollment in metropolitan counties is in a county where the top five organizations have 99 percent or

more of the enrollment. However, in each of the two types of counties, metropolitan and not, about two-thirds of the MA enrollment (65 percent and 67 percent, respectively) is in counties in which the top five organizations account for half or more of all enrollment.

Another way of looking at the market structure and level of competition in the MA program is to determine the number of parent organizations offering MA options in markets across the country. As of 2016, 87 percent of Medicare beneficiaries resided in a county where at least three companies offered MA plans to individual Medicare beneficiaries (as opposed to those with employer group coverage) (Table 13-5). Thus, although the MA market is relatively concentrated by some measures, most beneficiaries reside in geographic areas where multiple companies are offering MA options.

These data and other findings in this chapter suggest that the MA program is relatively stable at this point. Researchers have found that the risk adjustment system and the move to a lock-in period (a calendar year for most enrollees) and an annual election period have helped address concerns about risk selection as well as the

**TABLE
13-4****Enrollment in the national top five Medicare Advantage organizations as a share of MA enrollment in each county, October 2016**

Percent of enrollment in county that is in national top five organizations	Metropolitan counties		Nonmetropolitan counties	
	Number of counties	Share of total MA enrollment in metropolitan counties	Number of counties	Share of total MA enrollment in nonmetropolitan counties
99 to 100%	223	5%	762	22%
≥95 to <99%	113	4	112	9
≥90 to <95%	82	5	97	7
≥80 to <90%	141	12	144	11
≥70 to <80%	132	13	88	6
≥60 to <70%	102	20	86	6
≥50 to <60%	70	5	76	7
Subtotals	863	65	1,365	67
Total all areas	1,231	100	1,757	100

Note: MA (Medicare Advantage). Totals do not sum due to rounding. Includes only Medicare Advantage plans. Excluded are cost-reimbursed plans and Medicare–Medicaid demonstration plans. Nonmetropolitan counties include counties designated as micropolitan counties and counties that are neither metropolitan nor micropolitan as defined by the Office of Management and Budget. “National top five Medicare Advantage organizations” refers to the top five organizations listed for each type of county in Table 13-3.

Source: MedPAC analysis of CMS monthly enrollment reports by county, October 2016 (which excludes enrollment for counties where an organization has fewer than 11 enrollees), and census data on county designations.

program’s stability and financial viability (Newhouse and McGuire 2014).

Lock-in and enrollment rules

While the lock-in period has contributed to program stability and the reduction of selection bias in the program, the lock-in does not apply to all beneficiaries.³ Low-income

beneficiaries and institutionalized beneficiaries continue to be able to enroll in, and disenroll from, MA plans on a monthly basis. In 2008, the Commission recommended revising this policy to limit enrollment to the annual election period—except in the case of Medicare–Medicaid dually eligible beneficiaries enrolling in special needs plans with state contracts—and to permit these two categories of

**TABLE
13-5****Distribution of population by number of MA organizations operating in the county, October 2016**

Number of MA organizations in county	As share of total Medicare population	As share of MA enrollment
None	1%	0.2%
1	4	1
2	9	5
3	11	7
4	12	11
5 or more	64	75

Note: MA (Medicare Advantage). Excludes plans offered only to employer group–sponsored retirees. Numbers may not sum due to rounding. The 0.2 percent of MA enrollees residing in areas with no MA organizations are “out-of-area” enrollees whose recorded address is outside of the designated service area of their plan.

Source: MedPAC analysis of CMS enrollment reports.

**TABLE
13-6**

Projected benchmarks, bids, and payments as a percentage of fee-for-service expenditures for 2017, by plan type

Share of FFS spending in 2017*

Plan type	Benchmarks	Bids	Payments
All MA plans	106%	90%	100%
HMO	106	88	99
Local PPO	111	101	107
Regional PPO	101	94	98
PFFS	110	108	109
Restricted availability plans included in totals above			
SNP	105	92	100

All values would be increased by 4 percent if coding intensity (discussed elsewhere in this chapter) were to be reflected fully (i.e., payments for all MA plans would average 104 percent of FFS spending if the coding differences were fully reflected).

Note: FFS (fee-for-service), MA (Medicare Advantage), PPO (preferred provider organization), PFFS (private fee-for-service), SNP (special needs plan). Benchmarks are the maximum Medicare program payments for MA plans and incorporate plan quality bonuses. We estimate FFS spending by county using the 2017 MA rate book. We removed spending related to the remaining double payment for indirect medical education payments made to teaching hospitals.
*All numbers in this table have been risk adjusted and reflect quality bonuses, but they have not been adjusted for coding intensity differences between MA and FFS that exceed the statutory minimum adjustment.

Source: MedPAC analysis of data from CMS on plan bids, enrollment, benchmarks, and fee-for-service expenditures.

beneficiaries (low income or institutionalized) to disenroll from an MA plan to go to FFS but not to join another MA plan. This approach addressed the concern about churning of enrollment from plan to plan and the possible incentive that plans might have to encourage the disenrollment of certain beneficiaries based on their health care needs.

A major motivation for the Commission’s 2008 recommendation was concern over reported marketing abuses, with enrollees churned across different plans and “find[ing] themselves enrolled in plans that charge them more cost sharing than under FFS. Another consequence is that these beneficiaries can enroll and disenroll from plans frequently, harming the continuity of care if their providers do not participate in each plan” (Medicare Payment Advisory Commission 2008). Some of the issues that gave rise to the concerns have been addressed through CMS rules on broker compensation, including, for example, a requirement that plans fully recoup broker commissions in cases of “rapid disenrollment,” which occurs when a beneficiary disenrolls from a plan within three months of enrollment (with certain exceptions).

It may be appropriate for the Commission to reconsider what the rules should be on lock-in and what approach best serves the interests of beneficiaries. The concern

that continuity of care is disrupted when beneficiaries change plans frequently was expressed in site visits to plans participating in the Medicare–Medicaid financial alignment demonstration projects. The plans in those programs argue for a lock-in period as a means of improving the care a plan can provide to an enrollee with complex care needs and other vulnerabilities. At the same time, however, dually eligible beneficiaries may face more confusion about the consequences, or the benefits, of enrolling in an MA plan—such as whether MA benefits may duplicate Medicaid coverage. This confusion may arise particularly among dual-eligible beneficiaries enrolled in a Medicaid managed care plan who are enrolled in, or considering enrolling in, the MA plan of a different company.

2017 benchmarks, bids, and payments relative to FFS spending

Using plans’ bid projections, we compare the Medicare program’s projected MA spending with projected FFS spending on a like set of FFS beneficiaries. We calculate and present three sets of percentages: the benchmarks relative to projected FFS spending, the bids relative to projected FFS spending, and the resulting payments

**TABLE
13-7**

Distribution of 2017 MA bids relative to FFS

Bid-to-FFS ratio	Share of bids	Share of projected MA enrollment
Less than 0.7	5%	5%
0.7 to 0.8	11	16
0.8 to 0.9	21	22
0.9 to 1.0	30	33
1.0 to 1.1	24	19
More than 1.1	10	6

Note: MA (Medicare Advantage), FFS (fee-for-service). Employer group plans and special needs plans are not included. Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of data from CMS on plan bids, enrollment, benchmarks, and fee-for-service expenditures.

to MA plans relative to projected FFS spending. Benchmarks are set each April for the following year. Plans submit their bids in June and incorporate the recently released benchmarks. Benchmarks reflect FFS spending estimates for 2017 made by CMS actuaries at the time the benchmarks were published in April 2016. We estimate that 2017 MA benchmarks (including quality bonuses), bids, and payments will average 106 percent, 90 percent, and 100 percent of FFS spending, respectively (Table 13-6). Each of those measures is lower than last year’s, but they do not take risk coding intensity into account.

How Medicare calculates MA benchmarks

Under PPACA, each county’s benchmark, excluding quality bonuses, is a certain share (ranging from 95 percent to 115 percent, subject to caps) of the average per capita FFS Medicare spending for the county’s beneficiaries, which include those with both Part A and Part B coverage and those with only Part A or Part B. Each county’s benchmark, excluding quality bonuses, is determined by organizing the counties into quartiles based on their FFS spending. Each quartile contains 786 or 787 counties. Low-FFS-spending counties have benchmarks higher than FFS to help attract plans, and high-FFS-spending counties have benchmarks lower than FFS to generate Medicare savings.

Counties (excluding the territories) are ranked by 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 county benchmarks

is 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 (the U.S. territories are treated like counties in this low-spending quartile).

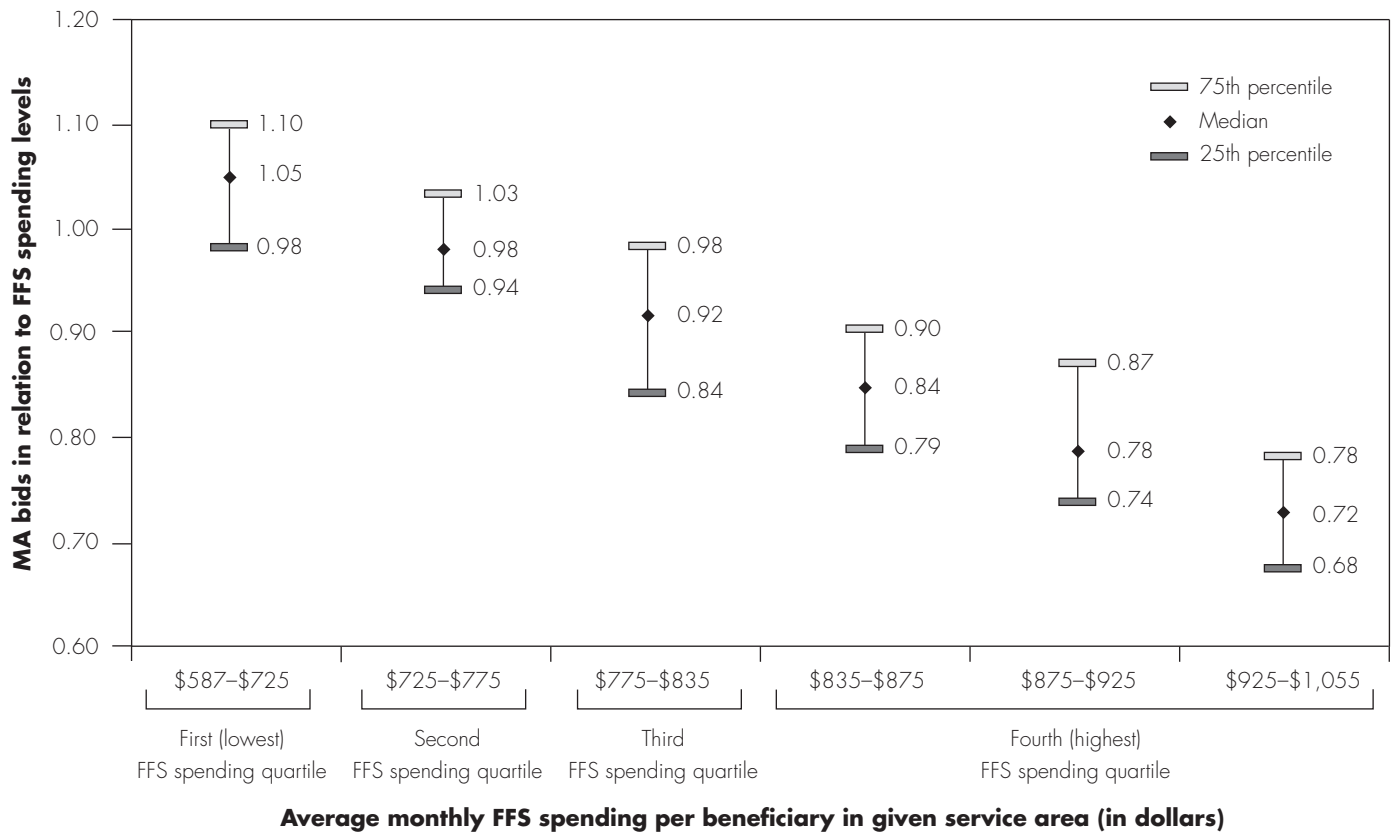
Plans awarded quality bonuses will have benchmarks 5 percent higher than the standard county benchmarks; in certain counties (where plans can receive a double bonus), the benchmarks for plans awarded quality bonuses will be 10 percent higher than the standard benchmarks. In our March 2016 report to the Congress, we provide more detail on double-bonus counties and benchmark growth caps. We recommended eliminating the double bonuses as well as the benchmark growth caps, which limited the benchmarks in many counties (Medicare Payment Advisory Commission 2016).

MA bids and payments for different plan types

The modest growth in benchmarks over the past few years has exerted fiscal pressure on MA plans and encouraged them to better control costs and restrain growth in their bids. The average bid for 2017 is 90 percent of the projected FFS spending for beneficiaries with similar geographic and risk profiles, down from 92 percent for nonemployer plans in 2016. About 67 percent of nonemployer non-SNP plans bid to provide Part A and Part B benefits for less than what the FFS Medicare program would spend to provide these benefits in 2017 (Table 13-7). These plans are projected to enroll 75 percent of nonemployer non-SNP MA enrollees in 2017.

**FIGURE
13-2**

Medicare Advantage bids in relation to FFS spending levels, 2017



Note: FFS (fee-for-service), MA (Medicare Advantage). Excludes employer group plans, special needs plans, and plans in the territories.

Source: MedPAC analysis of MA bid and FFS expenditure data from CMS.

About 5 percent of MA beneficiaries, excluding those enrolled in employer group MA plans, are projected to enroll in plans that bid lower than 70 percent of FFS spending, while 6 percent are projected to enroll in plans that bid at least 110 percent of FFS spending.

Figure 13-2 shows how plans bid relative to FFS for service areas with different ranges of FFS spending. This figure is based on data from over 2,100 plan bids and excludes roughly 1,500 employer plans, SNPs, and plans in the territories. The first three FFS spending ranges roughly correspond to the FFS ranges in the first three quartiles in the payment rules for 2017 described previously. We broke the fourth quartile into three FFS spending ranges because a substantial share of Medicare beneficiaries—about 35 percent—live in counties in the highest spending quartile. Each of the 6 FFS ranges

covers the bids of at least 90 plans and has at least 700,000 projected enrollees.

Plans bid high (relative to FFS) in areas with relatively low FFS spending and low where FFS spending is relatively high. For example, when plans bid for service areas that average less than \$725 in monthly FFS spending, they are likely to bid more than FFS (Figure 13-2). However, when plan service areas average more than \$725 per month in FFS spending, plans are likely to bid below (sometimes far below) the FFS level. This finding suggests that, geographically, plan costs do not vary as much as FFS spending. Ninety-eight percent of beneficiaries live in a county served by at least one plan that bid below the average FFS spending of its service area. However, that does not mean that plans can bid lower than FFS in every county because plans with large

service areas and a geographically dispersed membership are probably not considering exactly how their costs will vary in each county they serve.⁴ The bidding and payment patterns are reported here as averages, but clearly there is much variation within these averages (Table 13-6, p. 356, and Figure 13-2, p. 358).

Although plan bids average less than FFS spending, payments for these plans' enrollees can often exceed FFS spending because the benchmarks (including the quality bonuses) can be high relative to their area's FFS spending. Overall, plan bids average 90 percent of expected FFS spending for beneficiaries with similar geographic and risk profiles in 2017, but because the benchmarks average 106 percent of FFS spending, Medicare pays an average of 100 percent of FFS for beneficiaries enrolled in MA (coding intensity differences are not considered in these numbers). Excluding quality bonuses and assuming no change in bidding, Medicare benchmarks average 102 percent of FFS, and Medicare payments would average 98 percent of FFS for MA enrollees.

The ratio of MA plan payments to FFS spending varies by plan type. For example, HMOs as a group bid an average of 88 percent of FFS spending, yet 2017 payments for HMO enrollees are estimated to average 99 percent of FFS spending because of benchmarks averaging 106 percent of FFS spending. Local PPOs and PFFS plans have average bids above FFS spending. As a result, payments for local PPO and PFFS enrollees are estimated to be 107 percent and 109 percent, respectively, of FFS spending. Payments for beneficiaries enrolled in regional PPOs averaged 98 percent of FFS because of the relatively low benchmarks for the regional PPOs.

We analyzed bids and payments to SNPs separately because these plans are available only to subpopulations of Medicare beneficiaries and bidding behavior may differ from that of other plan types. In the past, payments to SNPs and their bids tended to be slightly higher relative to FFS spending than payments to the other nonemployer MA plans. This year in aggregate, however, SNP bids are slightly higher, but their payments are similar to the average plan because their benchmarks are slightly lower.

In the past, we recommended that CMS pay employer plans differently because the employer bids were not usually submitted for a competitive purpose, while the bids for nonemployer plans are submitted to compete

for enrollment. (For more details on employer plans and our recommendation, see our March 2014 report to the Congress (Medicare Payment Advisory Commission 2014).) CMS no longer pays the employer plans based on their bids but instead pays them based on the bidding behavior of the nonemployer plans. As a result, we expect that payments to employer plans will look like the payments to the nonemployer plans analyzed here.

The absence of employer plan bids limits our ability to determine the average margin level in the MA sector. We last reported margins for 2013 based on historical data included in plan bids (Medicare Payment Advisory Commission 2016). In that analysis, we found that average revenue-weighted margins in 2013 were at 4.2 percent, with employer group plans and Part D margins included. If employer plans are excluded from the data and the margins for Part D are excluded, the 2013 margins would average 3.1 percent. The comparable 2015 average margin—for nonemployer plans and excluding Part D drugs—is 1.4 percent. Including Part D drug margins we estimate would raise the margin by approximately 0.5 percent; if employer plan data were available, the margin would likely be higher. Two additional factors affecting this margin estimate are (1) MA plans are subject to payment of insurer fees (which we estimate as representing 1.5 percent of plan revenue, but which will be suspended in 2017) and (2) as of 2014, plans are subject to an 85 percent medical loss ratio requirement, which could also result in reduced margins. Other indicators in the marketplace suggest that companies operating in the MA market are doing well financially, as evidenced by Securities and Exchange Commission filings and by recent merger activity prompted by a desire to have a larger presence in the MA market (Evans 2015).

Perspective on MA plans and payments

Enrollment in MA has reached 17.5 million enrollees (31 percent of all Medicare beneficiaries) and continues to grow faster than Medicare FFS enrollment. Plans are available to 99 percent of Medicare beneficiaries, and some measures of availability have improved over the last year. Rebates, which must be used to fund extra benefits, have risen over the past year and are now the highest in recent program history. In 2017, excluding quality bonuses and assuming no coding intensity differences, MA benchmarks average 102 percent of FFS and MA payments average 98 percent of FFS. However, including the quality bonuses and assuming the higher coding

**TABLE
13-8**

The share of Medicare enrollment in managed care is increasing, and the share of Medicare FFS enrollment in both Part A and Part B is declining, 2009–2015

	2009	2010	2011	2012	2013	2014	2015
Share of all Medicare beneficiaries enrolled in managed care*	24.0%	24.6%	25.3%	26.7%	28.3%	30.2%	31.6%
Share of all FFS beneficiaries enrolled in:							
Part A and Part B	88.8	88.6	88.3	87.7	87.3	87.0	86.8
Part A but not Part B	10.2	10.4	10.8	11.5	11.8	12.1	12.4
Part B but not Part A	1.0	1.0	0.9	0.9	0.8	0.8	0.8

Note: FFS (fee-for-service). These data provide a snapshot of enrollment from July of each year. They are unlikely to match other available data because of the timing and data organization for purposes of this analysis, but they best display the trends shown here.

*In addition to MA plans, managed care includes Medicare cost plans, which are paid based on cost reports.

Source: MedPAC analysis of CMS enrollment data and population reports.

intensity we discuss later in this chapter, MA payments average 104 percent of FFS spending.

Overall, the payment indicators are mostly positive. As a result, we conclude that the MA program is more efficient than in the past. However, some payment issues remain, related to intercounty payment equity, coding intensity, and quality measures.

Over the last few years, we have made recommendations and suggestions related to these issues:

- **Risk adjustment**—Include two years of data, the number of conditions, and full/partial Medicaid dual status in the CMS–hierarchical condition category (CMS–HCC) model (in our June 2012 report to the Congress and our 2016 comment letter on the Program of All-Inclusive Care for the Elderly).
- **Quality measures**—Adjust the quality-star bonus payments for socioeconomic differences (in our March 2016 report to the Congress).
- **Employer group plan bids**—Treat like bids from nonemployer plans (in our March 2014 report to the Congress).
- **Intercounty equity**—Eliminate both the benchmark caps and the double quality bonuses (in our March 2016 report to the Congress).
- **Coding intensity**—Improve MA coding practices (in our March 2016 report to the Congress).

How Medicare calculates FFS spending for MA benchmarks

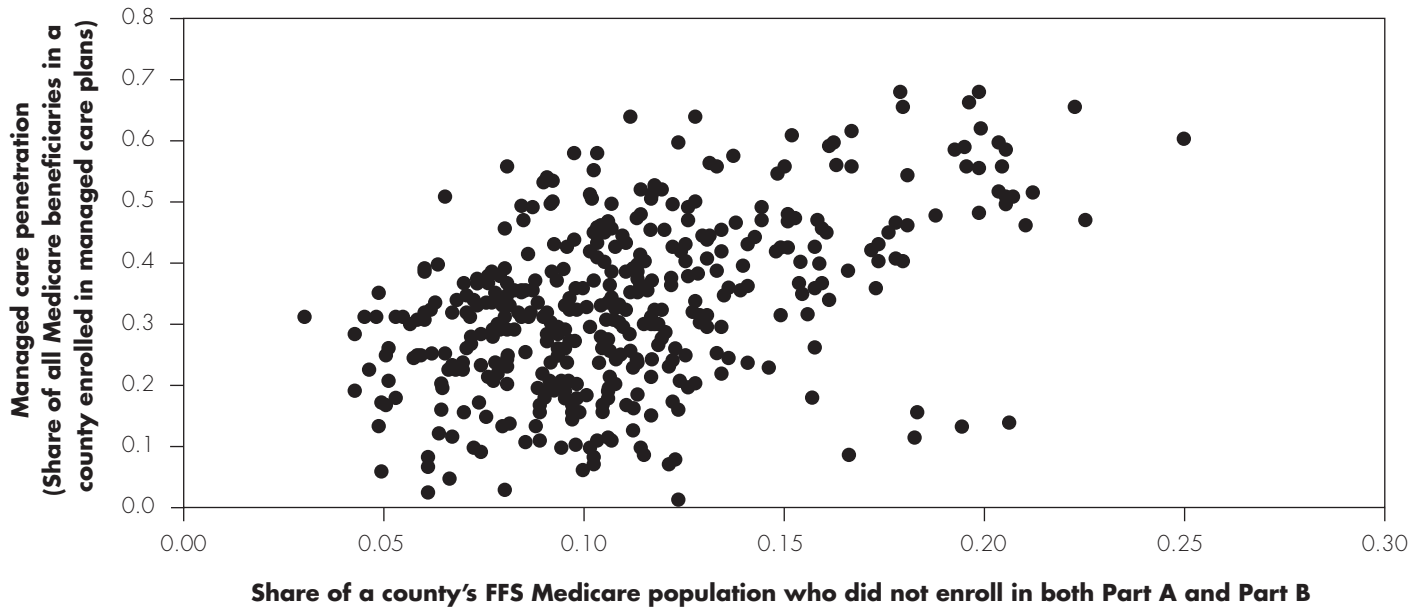
Currently, CMS measures average FFS spending based on all FFS beneficiaries in a county (who have either Part A or Part B of Medicare or both).⁵ Average Part A spending is calculated using all beneficiaries enrolled in Part A (those beneficiaries enrolled in both Part A and Part B as well as those enrolled in Part A only). Similarly, average Part B spending is calculated using all beneficiaries enrolled in Part B (those beneficiaries enrolled in Part A and Part B as well as those enrolled in Part B only). Those two averages are added to get the total average FFS spending amount. However, to be eligible to join an MA plan, a beneficiary must be enrolled in both Part A and Part B.

Over the last few years, a smaller share of FFS Medicare beneficiaries have enrolled in both Part A and Part B. We find that the average risk-adjusted per beneficiary spending is higher for beneficiaries enrolled in Part A and Part B than the sum of the average spending for all beneficiaries enrolled in Part A and the average spending for all beneficiaries enrolled in Part B, as currently calculated.

Over time, a larger share of Medicare beneficiaries are joining managed care plans (MA plans and Medicare cost plans—a type of plan that is paid based on cost reports and that accounts for more than 1 percent of the Medicare population), and a larger share of those remaining in FFS Medicare do not enroll in Part B (Table 13-8). From July of 2009 to July 2015, the share of beneficiaries in

**FIGURE
13-3**

The greater the MA penetration rate, the greater the share of FFS beneficiaries who opt not to enroll in both Part A and Part B, 2014



Note: MA (Medicare Advantage), FFS (fee-for-service). Each dot represents 1 of the 396 counties with at least 25,000 Medicare beneficiaries in 2014.

Source: MedPAC analysis of CMS 2014 Medicare enrollment data.

Medicare managed care plans rose from 24 percent of all Medicare beneficiaries to almost 32 percent. Of those remaining in FFS, the share of beneficiaries who had both Part A and Part B declined between 2009 and 2015 from about 89 percent to about 87 percent. That change is due entirely to the increase (from about 10 percent to about 12 percent) in the share of FFS beneficiaries who did not enroll in Part B. During that period, the share of all Medicare beneficiaries who did not enroll in Part B increased only modestly (not shown in Table 13-8) from about 8 percent to about 8.5 percent. That increase is amplified, however, because all of it is contained in the FFS population since beneficiaries not enrolled in Part B cannot enroll in managed care plans. Thus, as more beneficiaries enroll in MA, those beneficiaries remaining in FFS are less likely to have enrolled in both Part A and Part B.

The pattern of increasing Medicare managed care penetration leading to a larger share of the remaining FFS population not enrolling in both Part A and Part B can also be seen across counties within a given year. Figure 13-3

shows the relationship between the share of a county's FFS Medicare population who did not enroll in both Part A and Part B for all of 2014 and the share of beneficiaries in Medicare managed care plans. The figure is a scatter plot in which each dot represents one of the 396 counties with at least 25,000 Medicare beneficiaries in 2014. There is a strong relationship between a county having a high rate of beneficiaries who opt not to enroll in both Part A and Part B and having a high Medicare managed care penetration rate.

Beneficiaries may choose not to enroll in Part B for different reasons. Some beneficiaries may be active workers and get health insurance through their employer. In this circumstance, the beneficiary still is enrolled in Part A, but Medicare may be the secondary payer after the employer. Other beneficiaries may feel they cannot afford the premium (roughly \$100 per month). Some beneficiaries may feel they are healthy enough or use health care services rarely enough that it would not be a good deal for them. Beneficiaries whose income requires them to pay the income-related premium (IRP) may not see Part B as a good value, as the premium including the

IRP reached almost \$400 per month in 2016. Since the IRP has been affecting more beneficiaries, we suspect that it may be a factor in the trend to opt out of Part B. Regardless of why a beneficiary chooses not to purchase Part B, it is likely that these beneficiaries use fewer services in Medicare and have lower risk than the average beneficiary who does purchase Part B.

We examined the Part A and Part B FFS spending for beneficiaries who were in Medicare FFS for all of 2014 and enrolled in either Part A (with or without Part B) or in Part A and Part B. We found that Part A spending for beneficiaries enrolled in Part A and Part B all year averaged 8 percent more than average Part A spending for beneficiaries enrolled in Part A (with or without Part B). Beneficiaries in Part A who choose not to buy Part B are, on average, healthier than those who buy Part B. We found that the average risk score of beneficiaries enrolled in both Part A and Part B is 6 percent higher than all beneficiaries enrolled in Part A (with or without Part B), without accounting for the effect of Medicare Secondary Payer status. Therefore, after risk adjustment, we found the difference in Part A spending between these two groups of beneficiaries is about 2 percent higher for those in both Part A and Part B.

We did the same analysis for Part B FFS spending as for Part A FFS spending. We found that more than 99 percent of beneficiaries enrolled in Part B all year also enrolled in Part A all year. We also found that the beneficiaries with Part B coverage (with or without Part A) were similar in spending and health risk to beneficiaries with both Part A and Part B. There was virtually no difference in risk-adjusted Part B spending between those beneficiaries with Part B (with or without Part A) for 2014 and those with both Part A and Part B. So, the difference in FFS spending comes from beneficiaries who do not buy Part B coverage. Overall, total average FFS risk-adjusted spending for beneficiaries enrolled in both Part A and Part B is about 1 percent higher than spending for all beneficiaries enrolled in FFS Medicare.

Given that a lower share of all beneficiaries are enrolling in Part B, and that increasing MA enrollment is leaving a lower share of people in FFS buying Part B coverage, certain counties are likely to have MA benchmarks based on FFS baseline spending inaccurately measured with a relatively low proportion of beneficiaries enrolled in both Part A and Part B. As this problem is expected to grow, it may be more equitable across counties for CMS to calculate the county-level FFS spending using only FFS

beneficiaries who are enrolled in both Part A and Part B. Compared with the current CMS process of calculating the county-level FFS spending based on all beneficiaries enrolled in FFS Medicare, we believe that the average FFS spending used in the benchmark calculations would rise by about 1 percent nationally and thus result in an increase in payments to MA plans.⁶

While the overall increase in average FFS spending used in benchmark calculations is likely to be small if FFS spending is calculated using only beneficiaries enrolled in both Part A and Part B, the effect will vary by county. Counties with 15 percent to 25 percent of all their FFS beneficiaries not enrolled in both Part A and Part B would likely see their benchmarks rise by 2 percent or 3 percent. Alternatively, counties with significantly lower than average (13 percent) enrollment that is not in both Part A and Part B would be likely to see little or no increase in benchmarks if this change were made.

CMS has made a special adjustment to the FFS calculation for Puerto Rico because the majority of its FFS population does not buy Part B. Hawaiian plans have recently sought accommodation because about 20 percent of the Hawaiian FFS population does not enroll in Part B. But while Hawaii is near the top in the share of FFS beneficiaries without Part B, other areas such as Albuquerque, NM; Denver, CO; Pittsburgh, PA; Portland, OR; and several areas in California have similar shares of FFS beneficiaries without Part B. These areas all have MA penetration rates over 47 percent, and by determining benchmarks using only beneficiaries with both Part A and Part B, the estimated effects on FFS spending could be large and result in higher benchmarks for these areas. Of course, CMS could make case-by-case adjustments, as it did with Puerto Rico. However, as MA penetration continues to grow, it leaves fewer, and perhaps less representative, beneficiaries on which to calculate FFS spending. At the moment, we do not have evidence that the calculation method has caused harm to the MA program in the affected counties, in terms of plan access or quality, but for the sake of maintaining accuracy and intercounty equity, and avoiding future problems, the FFS calculation should be corrected to ensure that the population used to calculate FFS spending is representative of the expected spending for MA beneficiaries.

RECOMMENDATION 13

The Secretary should calculate Medicare Advantage benchmarks using fee-for-service spending data only for beneficiaries enrolled in both Part A and Part B.

RATIONALE 13

MA enrollees are required to be enrolled in both Part A and Part B. However, MA benchmarks are currently based on the Medicare spending of all FFS beneficiaries. The average Medicare spending of FFS beneficiaries enrolled in both Part A and Part B is higher than the average Medicare spending for all FFS beneficiaries. A growing share of FFS beneficiaries do not have both Part A and Part B, and the share of FFS beneficiaries who do not have both Part A and Part B varies by county. To ensure equity between FFS and the MA program, and equity across MA plans, the Secretary should calculate MA benchmarks using average FFS spending only for beneficiaries enrolled in both Part A and Part B.

IMPLICATIONS 13

Spending

- We would expect Medicare program spending to increase. Under this option, spending would increase between \$750 million and \$2 billion over one year and between \$5 billion and \$10 billion over five years.

Plans

- Most counties would have higher benchmarks, and thus most plans would be paid more. In response, plans could offer more supplemental benefits and/or make higher profits.

Beneficiaries

- Plans would likely get higher Medicare payments and might be able to offer enhanced benefits, which could attract higher enrollment.

Financing the cost of the recommendation

While this single new MA recommendation would raise Medicare program spending, the Commission has made other MA recommendations that would lower program spending. For example, in our March 2016 report to the Congress, we made a recommendation (which will be addressed further in the next section of this chapter) that addresses coding intensity differences between beneficiaries in FFS Medicare and beneficiaries enrolled in MA. The cost of implementing the current recommendation on MA benchmark calculations could be offset by savings derived from the earlier coding intensity recommendation, especially if the two recommendations were implemented concurrently.

There may be other financing and implementation timing considerations. The Commission has estimated that this recommendation could raise Medicare Advantage spending by about 1 percent; however, this is only an estimate, and CBO would make any official estimate of the cost of congressional action. While we have no evidence that the current FFS calculation has undercut the ability of plans to thrive and enroll beneficiaries, the calculation discrepancies are likely to grow with MA penetration, and thus the cost of the calculation change would be likely to grow. Finally, we believe the Secretary has the ability to make case-by-case adjustments which could postpone the need to make the broader change we recommend.

Medicare Advantage risk adjustment

Medicare payments to MA plans are adjusted to account for differences in beneficiary medical costs through the CMS hierarchical condition category (CMS-HCC) model. The model uses demographic information (e.g., age, sex, Medicaid status, and whether the original reason for Medicare entitlement was disability) and certain diagnoses grouped into HCCs to calculate a risk score for each enrollee. Higher risk scores generate higher payments for beneficiaries with higher expected expenditures and vice versa. CMS designed this risk adjustment model to maximize its ability to predict annual medical expenditures for Medicare beneficiaries. Therefore, in developing the model, CMS used statistical analyses to select certain HCCs for inclusion in the model based on each HCC's ability to predict annual Medicare expenditures, ensuring that the diagnostic categories included in the model were clinically meaningful and specific enough to minimize inappropriate manipulation or discretionary coding (Pope et al. 2004). As a result, CMS determined that only diagnoses resulting from a hospital inpatient stay, hospital outpatient visit, or a face-to-face visit with a physician or other health care professional were acceptable for determining payment through the risk adjustment model, though there are a few exceptions. Other possible sources of diagnostic information—such as encounters for home health, skilled nursing, ambulatory surgery, durable medical equipment, and hospice services—are not used to determine payment through the risk adjustment model, either because adding diagnoses from these sources did not improve the model's ability to predict medical expenditures or because of concerns about the reliability and manipulability of the diagnoses.

Diagnostic data in the CMS–HCC model are used prospectively, meaning that diagnoses collected during one calendar year are used to predict Medicare costs for the following calendar year. A particular diagnosis code needs to be submitted only once during the data collection year for the related HCC to be counted in an enrollee’s risk score in the following payment year. Multiple submissions of the same diagnosis code and submissions of different diagnosis codes that are grouped in the same HCC do not affect an enrollee’s risk score.

Each demographic and HCC component in the risk adjustment model has a coefficient that represents the expected medical expenditures associated with that component. These coefficients are estimated based on Medicare FFS claims data such that all Medicare spending in a year is distributed among the model components. Medicare payment for a particular MA enrollee is equal to the sum of the dollar-value coefficients for all components identified for that enrollee.⁷ For example, the annual Medicare payment to an MA organization in 2017 for an 84-year-old male (\$5,555) with diabetes without complication (\$1,030) would be \$6,585, which is the sum of the two relevant model components. Identifying an additional HCC for an enrollee can significantly increase the Medicare payment. If the same 84-year-old male with diabetes is also found to have vascular disease (\$2,951), the Medicare payment to the MA organization would increase from \$6,585 to \$9,536. The payment for most HCCs when newly identified for an MA enrollee is between \$1,000 and \$5,000, although some HCCs carry payment of \$10,000 or more.

MA plans submit HCC information to CMS for each MA enrollee through a data submission process known as the Risk Adjustment Processing System (RAPS). Through RAPS, plans submit the minimum information necessary to identify which HCCs apply to each enrollee. Since 2012, MA plans have also been submitting detailed information about each health care encounter an enrollee has with a Medicare provider through the Encounter Data System (EDS). Before 2016, CMS used only RAPS data to identify HCCs for risk adjustment, but in 2016, CMS began a transition to EDS as the source of HCC information by generating two risk scores, one based on RAPS data and one based on EDS data. Payment in 2016 was based on a risk score that comprised a blended 90 percent RAPS risk score and 10 percent EDS risk score. CMS intends to gradually increase the portion of the payment that is based on EDS risk scores until payment is fully based on EDS risk scores. As this transition

occurs, MA plans need to submit data supporting each HCC through both RAPS and EDS to maintain consistent payment rates.

Differences in MA and FFS Medicare diagnostic coding

In the CMS–HCC risk adjustment model, CMS uses Medicare FFS claims data to estimate the model coefficients. As a result, the model calculates an expected spending amount based on Medicare FFS costs and Medicare FFS diagnostic coding patterns. To the extent that MA coding intensity differs from Medicare FFS coding, Medicare payments will be higher or lower than intended. In other words, accurate payments to MA plans in the current payment system depend on similar coding patterns in MA and FFS Medicare. However, MA plans have tended to code more diagnoses for their enrollees than would have been coded by providers in Medicare FFS.

In FFS Medicare, physician and outpatient services are paid generally based on procedure codes, and diagnosis codes serve only to justify the procedures provided. Although there is some incentive to report additional diagnoses on inpatient claims in FFS Medicare, diagnoses from inpatient claims represent a small proportion of diagnoses submitted for risk adjustment. Therefore, for the vast majority of FFS services used for risk adjustment, there is no financial incentive to report every possible diagnosis on the claims.

In contrast, given the financial incentive to code all possible diagnoses in MA, plans have used certain coding operations that are not common among FFS Medicare providers and therefore contribute to the difference in coding intensity:

- When MA plans contract with medical groups for physician services, payment to the medical group is often risk adjusted and therefore passes the incentive for diagnostic coding on to physicians who have direct access to patient diagnostic information.
- Medical chart reviews allow plans to document additional diagnoses that were identified during physician and outpatient visits or inpatient stays but not documented on the original encounter or claim. These additional diagnoses are then submitted to Medicare for payment.
- Health risk assessments are often offered through plan-initiated home visits and allow plans to document

chronic conditions and conduct diagnostic tests, particularly for enrollees who may not have seen their doctor in a given calendar year.

Although these actions may serve multiple purposes, such as care coordination and disease management, some plans target these actions toward beneficiaries who had an HCC documented in the prior year that is not yet documented in the current year, suggesting that identifying additional diagnoses for risk adjustment is a motivating factor. Electronic health records can make it possible for plans to monitor the consistent documentation of chronic conditions in each year after an initial diagnosis. In addition, some third-party firms focusing on revenue maximization advertise more sophisticated strategies to target “undercoded” beneficiaries.

Two hypothetical scenarios illustrate how differences in diagnostic coding can affect Medicare payment for MA beneficiaries. Consider two identical beneficiaries who each have \$10,000 in Medicare spending that is explained equally by one demographic and one HCC indicator variable. The demographic variable is correctly identified by the Medicare program and the HCC indicator is identified by FFS claims for FFS beneficiaries or by data MA plans submit to CMS for MA enrollees.

- In the first scenario, FFS claims data correctly identify both beneficiaries as having the HCC indicator. In this case, the model would attribute half of each beneficiary’s spending to the demographic indicator and half to the HCC indicator; in other words, the demographic indicator is estimated to have a coefficient of \$5,000 and the HCC indicator is estimated to have a coefficient of \$5,000.
- In the second scenario, FFS claims data fail to identify the HCC indicator for one of the beneficiaries. In this case, for the beneficiary with both indicators, the model would again attribute \$5,000 to each indicator, but for the beneficiary with only the demographic indicator, the model would attribute all \$10,000 to the demographic indicator. Thus, the estimated coefficients are \$7,500 for the demographic indicator (the average of \$10,000 and \$5,000) and \$5,000 for the HCC indicator (the amount attributed for the beneficiary with both indicators).

Now consider what happens if these beneficiaries enroll in MA, and the MA plans correctly identify the HCC indicators. In scenario 1, FFS and MA coding of the

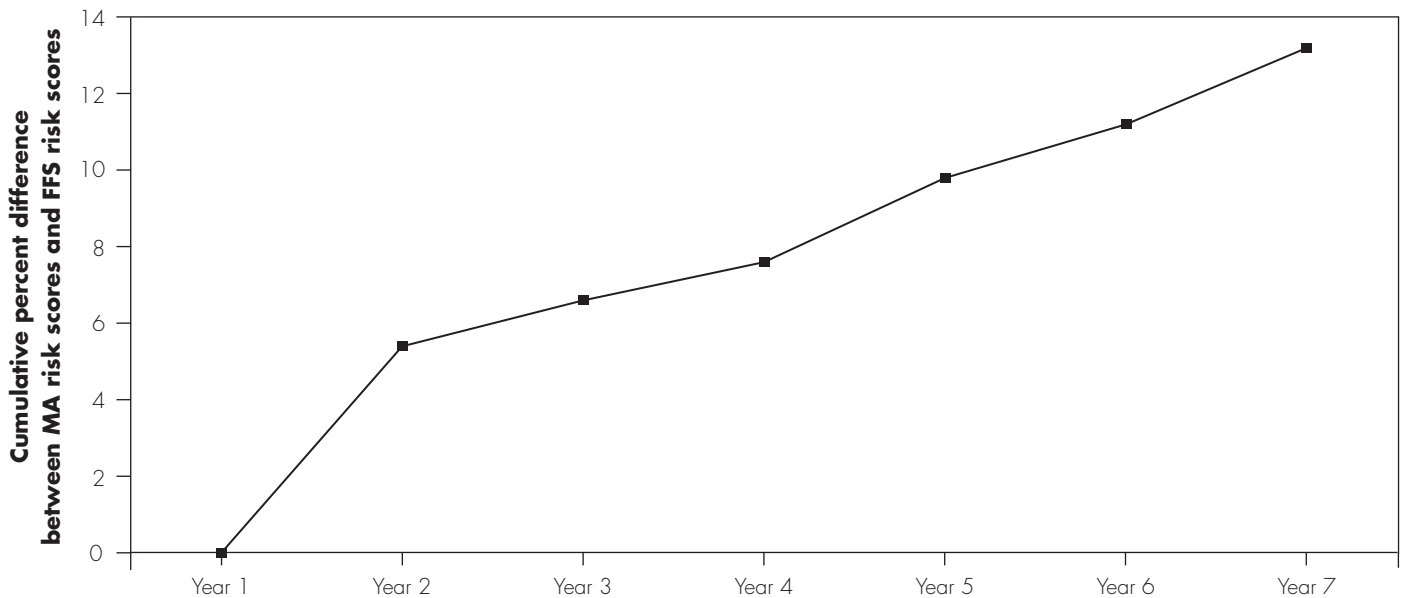
indicators is the same. The risk adjustment model in scenario 1 would estimate a payment amount of \$10,000 to the MA plans for each beneficiary, which is the sum of \$5,000 in expected spending associated with the demographic indicator and \$5,000 in expected spending associated with the HCC indicator. In scenario 2, FFS and MA coding are different in that the HCC was correctly identified for both beneficiaries in MA, but for only one beneficiary in FFS. The risk adjustment model in scenario 2 would estimate a payment of \$12,500 to the MA plans for each beneficiary, the sum of the coefficients \$7,500 and \$5,000. In this hypothetical example, we know that the FFS spending was \$10,000 for each of these beneficiaries and the payment to the MA plan should have been \$10,000 per beneficiary. However, more complete MA coding in scenario 2 resulted in a payment of \$12,500 to the MA plan, which is too high. It is these excess payments to MA plans (the \$2,500 in scenario 2) that the coding adjustment is designed to offset.

Some would argue that FFS coding is the problem and MA plans are being punished by the coding intensity adjustment. Although we have not set out to determine whether FFS or MA coding is more appropriate, we have considered policies to improve FFS coding as a way to reduce coding differences (see discussion of the Commission’s March 2016 recommendation, p. 368). Furthermore, we note that, in aggregate, MA plans are not being punished by the coding adjustment. The risk adjustment system paid an additional \$2,500 to the MA plan, and an adjustment that fully accounts for the impact of coding intensity would offset the excess payments.

Policies to address the impact of coding differences

A series of congressional mandates have required CMS to address the impact of coding differences by reducing MA risk scores. Starting in 2014, the mandates specified a minimum reduction of about 5 percent in 2014, increasing to about 6 percent in 2018, at which level it will remain until CMS estimates a risk adjustment model using MA expenditure data. Because of the mandates, CMS reduced MA risk scores by 3.41 percent in each year from 2010 through 2013, and by the minimum required by law for 2014 through 2017, although larger reductions would have been allowed. For 2017, the minimum reduction is 5.66 percent.

CMS has taken an additional step to help control the increased coding in MA. Beginning in 2014, CMS phased in a new CMS–HCC model. Relative to the old model,

**FIGURE
13-4****Average MA risk scores grew fastest relative to average FFS risk scores in the first cohort year, for enrollment cohorts ending in 2013**

Note: MA (Medicare Advantage), FFS (fee-for-service). Analysis includes six MA and FFS cohort pairs ending in 2013 and starting in 2007 through 2012.

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

the new model reduces risk scores for some diagnoses and increases scores for others. CMS acknowledges that scores are lower for diagnoses that were suspected of being more aggressively coded in MA plans. Our analysis, and that of other researchers, suggests that fully implementing the new CMS–HCC model would have reduced 2014 MA risk scores by about 2.5 percent compared with the old model. MA payment in 2014 was based on a blend of 75 percent new model and 25 percent old model. For 2015, we updated our analysis and found that fully implementing the new model would have reduced 2015 risk scores by about 2 percent. MA payment for 2015 used a blend of 33 percent new model and 67 percent old model. Starting in 2016, MA payment is based entirely on the new CMS–HCC model.

Impact of coding differences on payment to MA plans

For the past few years, the Commission has conducted its own analysis of coding differences between beneficiaries in FFS Medicare and those enrolled in MA plans. In the first year of analysis, we tested whether beneficiary risk scores grew faster in MA than in FFS using data from

2007 through 2013. We built cohorts of beneficiaries who spent their first full calendar year of Medicare and all subsequent years through 2013 in the same program, either FFS or MA. For example, one cohort pair consisted of those beneficiaries who joined Medicare FFS during 2006, and then either (1) remained exclusively in FFS through 2013 or (2) switched into MA in January 2007 and remained in MA through 2013. We also examined five similar pairs of cohorts for beneficiaries whose first full years in Medicare were 2008 through 2012. Beneficiaries were assessed starting with their first full year of Medicare enrollment, so that the subsequent differences in the risk score growth between the cohort pairs could be attributed to differences in coding.

Figure 13-4 shows how average MA risk scores changed relative to the change in average FFS risk scores for all pairs of cohorts. From year 1 to year 2, average MA risk scores increased by about 6 percent more than average FFS risk scores across all cohorts. For all subsequent years, average MA risk scores continued to increase more than average FFS risk scores by about 1.5 percent across all cohorts.

**TABLE
13-9**

Diagnostic coding intensity has an increasing impact on MA payment, 2013 through 2015

Cumulative change in MA risk scores relative to FFS risk scores

Risk score model	2013	2014	2015
Old model	8%	9%	10%
New model	N/A	7	8
Payment blend	8	7	10

Note: MA (Medicare Advantage), FFS (fee-for-service), N/A (not applicable). Payments to MA plans are based in part on enrollee risk scores, where higher risk scores generate larger payments. "Old model" refers to the version of the CMS-hierarchical condition category (CMS-HCC) model used for payment through 2013. "New model" refers to the version of the CMS-HCC model introduced in payment year 2014. The payment blend was 75 percent new model / 25 percent old model in 2014 and 33 percent new model / 67 percent old model in 2015.

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

While this analysis showed compelling evidence that a coding difference exists between beneficiaries in FFS Medicare and MA and that the difference grows over time, it did not tell us the overall impact of the coding difference on payments to MA plans in a given year. To answer that question, we conducted a separate analysis using the cohort of beneficiaries who were enrolled in MA during a recent payment year and traced back each year of continuous MA enrollment through 2007. Controlling for differences in age and sex, we then compared these MA enrollee cohorts with similar cohorts of FFS Medicare beneficiaries who were continuously enrolled in FFS for the same years.

Table 13-9 shows the total differences in MA risk scores relative to FFS risk scores for payment years 2013, 2014, and 2015. Because the new CMS-HCC model to calculate risk scores was phased in during 2014 and 2015, payment was based on a blend of old and new model risk scores for those years. The table shows that, for both the old model and new model, MA risk scores diverged from FFS risk scores by about 1 percent more per year. Most importantly, we found that risk scores for the 2015 MA population had grown about 10 percent more than the FFS population when using the blended risk scores used for payment. Analyses of prior payment years found that old model risk scores grew about 9 percent more for the 2014 MA population compared with its counterpart FFS population, and about 8 percent more for the 2013 MA population compared with its counterpart FFS population.

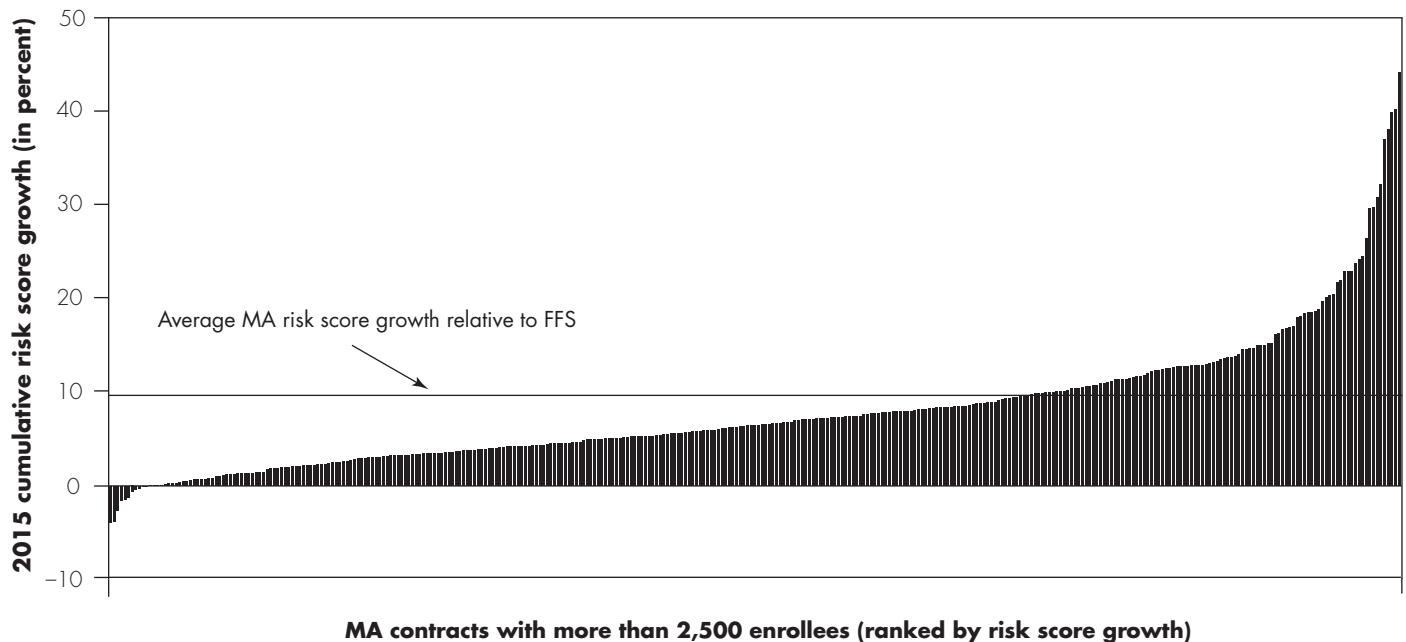
In addition, our findings show that, relative to FFS Medicare, MA risk score growth through 2015 was about

4 percent higher than CMS's adjustment for coding intensity (which was 5.16 percent in 2015), even after accounting for the phasing in of the new risk model. In other words, after accounting for all coding adjustments, payments to MA plans were about 4 percent higher than Medicare payments would have been if MA enrollees had been treated in FFS Medicare. These findings are consistent with those of other researchers showing that the impact of coding differences on MA risk scores is larger than CMS's adjustment for coding (Geruso and Layton 2015, Government Accountability Office 2013, Kronick and Welch 2014). For 2016 and 2017, we expect that unadjusted differences in coding will continue to increase payments to MA plans by about 4 percent, which is net of the increasing difference in coding between MA and FFS, fully phasing in the new risk adjustment model, the transition to EDS-based risk scores, and small annual increases in the mandated coding intensity adjustment.

That Medicare payments are higher for a beneficiary enrolled in MA compared with what FFS Medicare spending would have been for the same beneficiary is inconsistent with the Commission's view that the payment system should be neutral with respect to beneficiaries' choice of MA or FFS Medicare. Additional payments to MA plans allow them to offer additional benefits to enrollees, thus benefiting the MA program and costing taxpayers more than if MA beneficiaries had remained in FFS. Further, the additional payment to MA plans increases the Part B premium for all Medicare beneficiaries. The size of the Part B premium is based on total Part B spending, which for MA is calculated as a proportion of all MA spending.

**FIGURE
13-5**

Cumulative MA risk score growth varies across contracts relative to local FFS, 2015



Note: MA (Medicare Advantage), FFS (fee-for-service). MA contracts with enrollment below 2,500 (representing about 1 percent of total MA enrollment), contracts for the Program of All-Inclusive Care for the Elderly, and special needs plans are not included.

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

This year, the Commission analyzed coding intensity for each MA contract and found wide variation. This analysis is similar to our analysis of the overall impact of coding differences, but the change in risk score for each MA beneficiary was attributed to the contract (excluding contracts for the Program of All-Inclusive Care for the Elderly and special needs plans) in which the beneficiary was enrolled in 2015, thereby capturing the coding impact on 2015 payments to each contract. Figure 13-5 illustrates the variation across contracts with more than 2,500 enrollees in 2015 relative to FFS in their local service area. Our finding that coding intensity varies across MA contracts is consistent with other research (Geruso and Layton 2015, Kronick and Welch 2014). Given this variation, CMS’s across-the-board adjustment for coding intensity, which reduces all MA risk scores by the same amount, generates inequity across contracts by disadvantaging plans with lower coding intensity and allowing other plans to retain a significant amount of revenue from higher 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 and would improve the equity of the adjustment across MA contracts. The recommendation had three parts:

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

Using two years of diagnostic data to identify whether a beneficiary has a particular HCC would improve the accuracy of both FFS and MA diagnostic information used in risk adjustment. It would reduce year-to-year variation in documentation, focusing more on HCCs that are not coded consistently across years. The 21st Century Cures Act appears to address using two years of diagnostic data in MA risk adjustment by stating that “the Secretary may use at least two years of diagnostic data.”

Removing diagnoses documented only through health risk assessments would indicate that treatment was provided for a condition and would exclude conditions that were documented on an assessment but not treated. Diagnoses that were both documented on an assessment and treated during a physician or outpatient visit or during an inpatient stay would continue to count toward risk adjustment. Of the diagnoses documented on health risk assessments in 2012 and 2013, about 30 percent of conditions were not otherwise treated during the year. These two policies would result in a more equitable adjustment across MA contracts than the current across-the-board adjustment because they would more effectively target coding differences. Our analysis suggests that the combined effect of using two years of diagnostic data and excluding diagnoses from health risk assessments would effectively reduce MA risk scores in 2017 by roughly 3 percent to 5 percent relative to Medicare FFS and thus would address up to half of the full impact of coding differences, reducing the need for the coding intensity adjustment described in the third part of the Commission’s 2016 recommendation.

The Commission has also discussed ways to implement the third part of the recommendation and has focused on equity across MA contracts. One way to implement the adjustment would be to group contracts into categories of high, medium, and low coding intensity and then apply a coding intensity adjustment based on the average level of coding intensity for each group. CMS has used this grouping of contracts when selecting MA contracts for risk adjustment data validation audits.⁸ While this policy would leave some inequity within each group of contracts, inequity overall would be reduced. CMS could consider using a greater number of groups to further refine the equity of the overall adjustment.

Quality in the Medicare Advantage program

Since 2012, the MA program has included a pay-for-performance system that gives bonuses to higher performing plans—the quality bonus program, or star rating system. Plans are evaluated on a subset of the available quality measures and, to a lesser extent, on contract performance measures. The bonuses take the form of an increase in plan benchmarks and higher rebate levels for higher quality plans. Bonuses are based on a plan’s overall star rating, with a maximum rating of 5 stars. Part D

measures are included for plans that have Part D coverage (most MA plans). Each of up to 44 measures is assigned a weight: 1.0 for process measures, 1.5 for patient experience and access measures, and 3.0 for outcome measures. Two separate improvement measures that CMS calculates for MA and Part D each have a weight of 5.0. Overall star ratings are given at the contract level. However, because many contracts consist of multiple plan benefit packages across multiple geographic areas, reported results are not necessarily representative of the quality of care where a particular beneficiary resides. A contract is eligible for bonus payments if the weighted average of each of the individual measure stars is at or above 3.75 (rounded to an overall rating of 4.0 stars). Contracts with ratings of 5 stars can enroll beneficiaries outside of the annual election period, and contracts with consecutive years of low ratings are flagged as low performers, with beneficiaries cautioned about joining such plans; low-performing plans can be subject to termination (though implementation of the termination policy has been temporarily suspended under provisions of the 21st Century Cures Act).

Determining whether quality has improved in MA

To evaluate quality in MA, we use data primarily from two sources: the Healthcare Effectiveness Data and Information Set[®] (HEDIS[®]) and additional clinical quality and access measures included as part of CMS’s reporting for the MA quality bonus program. The latter is our source of data for experience of care measures (the Consumer Assessment of Healthcare Providers and Systems[®] for MA (CAHPS[®]–MA)) and for Part D measures applicable to MA plans.

To determine whether there has been meaningful improvement in quality measures in the MA sector on a year-over-year basis, we compare results for plans that reported on a measure in both reporting years (a “same-store” approach).⁹ Over the last year, most measures reported in our two primary data sources were unchanged. A small number of measures showed poorer results, and fewer than one-third of measures improved between 2015 and 2016. However, many of the measures that improved are those more heavily weighted in the star rating system.

HEDIS measures

We examine 40 effectiveness of care and access to care measures from HEDIS, which are measures that health plans report to CMS and other payers. Of the 40 Medicare HEDIS measures, 11 are included in the CMS star

**TABLE
13-10**

MA and FFS CAHPS® performance rates, 2015

Share of beneficiaries

CAHPS measure	MA		
	HMO	PPO	FFS
Getting needed care and seeing specialists	83.0%	84.9%	84.7%
Getting appointments and care quickly	75.7	76.8	74.8
Care coordination	84.9	85.7	85.0
Rating of health plan	85.0	84.3	82.3
Rating of health care quality	85.4	86.4	85.8
Annual flu vaccine*	71.7	74.1	71.9

Note: MA (Medicare Advantage), FFS (fee-for-service), CAHPS® (Consumer Assessment of Health Providers and Systems®), HMO (health maintenance organization), PPO (preferred provider organization).

Numbers are the share of beneficiaries giving the highest rating in each category (e.g., rating a plan a 9 or 10 on a 10-point scale or answering “always” when asked about the ability to get appointments when needed). Rates are case-mix adjusted for response bias.

*Annual flu vaccine data show the share of beneficiaries receiving the vaccine. These rates are not case-mix adjusted.

Source: MedPAC Databook 2016; FFS CAHPS benchmarks provided by CMS/Harvard Medical School.

rating system, along with the HEDIS-reported hospital readmission measure.¹⁰

For HMOs, 14 measures, or about one-third of the 40 HEDIS measures, had statistically significant changes between 2015 and 2016, with 12 measures improving and 2 measures declining. Of the 14 measures, 8 had a change that was greater than 3 percent. Of those eight measures, only two are included in the CMS star rating system: medical attention for nephropathy among diabetics (which improved) and fall risk management (which declined). As process measures, each of these two measures has the lowest weight in the star system (weighted at 1.0).

Among local PPOs, for the 40 HEDIS measures, 6 measures had statistically significant improvement from 2015 to 2016 and 2 measures declined, with changes in rates at or above 3 percent for the 8 measures. Of those eight measures, those measures used in the star ratings are the same two measures that changed among HMOs (the measure for nephropathy improved and the measure for fall risk management declined). We continue to see differences between HMOs and local PPOs in HEDIS results. Thirteen of the 40 HEDIS measures had meaningful differences, with HMOs better on 6 of the 13 and local PPOs better for 7 of the 13. (For regional PPOs and PFFS plans, there are too few plans to evaluate changes in performance from year to year.)

Measures from the star system

Our evaluations rely on the data contained in plans’ star ratings for 19 measures. Of these, four showed statistically significant improvement for HMOs only, and two improved for both HMOs and PPOs. The two that improved for both plan types are the measure of beneficiaries’ reported improvement in mental health (improving by 7 percent for each plan type and weighted at 3.0 in the star rating system) and the Part D rate of medication therapy management completion (improving by 46 percent for HMOs and 56 percent for PPOs, and weighted at 1.0 in the star rating system). Of the remaining four measures that improved only among HMOs, two medication adherence measures (weighted at 3.0) improved by 2 percent. The measure of the use of high-risk medications (a weight of 3.0) improved by 25 percent for HMOs. The process measure of care management among special needs plans also improved among HMOs. For the six CAHPS patient experience measures reported through CMS’s star rating system, there was not a meaningful change in plan performance.

Patient experience measures in MA and FFS

CMS collects patient experience measures through a survey of beneficiaries in FFS, and MA plans collect such data through CAHPS surveys of their members. The

**TABLE
13-11**

The threshold for 4-star performance increased between 2016 and 2017 for most of the the highest weighted star measures

Highest weighted star measures	Threshold for 4-star performance		
	2016	2017	Percent change
Higher threshold for 2017 than 2016			
Improving or maintaining physical health	≥69%	≥72%	4%
Improving or maintaining mental health*	≥80	≥85	6
Diabetes care—Blood sugar controlled	≥71	≥76	7
High-risk medication (lower rate is better)*	<6	<3	-50
Medication adherence (diabetes)	≥75	≥79	5
Medication adherence (statins)*	≥73	≥77	5
Medication adherence (hypertension)*	≥77	≥79	3
Lower threshold for 2017 than 2016			
Controlling blood pressure	≥75	≥64	-15
Plan all-cause readmissions (lower is better)	<6	<8	33

Note: For all measures other than readmissions, the rate is the share of beneficiaries achieving the measure. The readmission measure is a contract-wide readmission rate. The 2016 stars are based on performance in 2014 (for most measures), and the 2017 stars are based on performance in 2015. Three measures in this table are from the Healthcare Effectiveness Data and Information Set[®] (HEDIS[®])—the diabetes care measure and the two measures with lower thresholds. Note that the National Committee for Quality Assurance advises caution in the year-over-year comparison of the HEDIS diabetes measure and the readmission measure. Yearly figures presented in the table are rounded, but figures in the percent change column were calculated using unrounded data.
*Indicates that the measures improved in our analysis of “same-store” results.

Source: MedPAC analysis of CMS data on star measures.

most recent group of surveys (for 2015) shows that, at the national level, results for the two sectors are very similar, except that FFS enrollees’ rating of Medicare as a plan are slightly lower than MA enrollees’ rating of their plans, and enrollees of local PPOs are more likely to have received an influenza vaccination (Table 13-10).

Star ratings and changes in the ratings

Although the Commission evaluates changes in plan star ratings, we continue to use the “same-store” analysis of individual measures as a basis for judging whether quality has improved in MA. There are several reasons for doing so. The star rating system uses a subset of measures, and plans may concentrate on improvement for those particular measures. In addition, under the current method used for assigning stars, the star rating system is a comparison of *relative* performance among MA contracts and is not a reference to a predetermined targeted level of improved performance. Theoretically, at least, with a system based on relative performance, all measures could decline among all plans from one year to the next, but the rating system

would still identify certain plans as high-performing plans in relation to the performance levels of other plans.

One reason that star ratings may not be comparable across years, even for a specific plan, is that the measures used to determine overall star ratings can change from one year to the next. Between 2016 and 2017, the star measures remained substantially the same; however, a number of measures saw changes in the thresholds for bonus-level performance—that is, the cut-off points for receiving 4 stars on individual measures. In 2017 compared with 2016, about half of the measures used for the star ratings had a higher threshold for achieving a 4-star rating and about half had a lower threshold. The measures that had a higher threshold accounted for a greater share of the weight used to determine the overall star rating. At the individual measure level, among the measures with the highest weight (3.0), seven had higher thresholds for 4-star performance in 2017 and two had lower thresholds (Table 13-11). This variation suggests that plans are paying the greatest attention to measures that have the greatest weight in the star rating system (with their thresholds for bonus-level performance rising as a result).

The changes in thresholds partly explain the reduced share of beneficiaries in contracts with bonus-level ratings in 2017, with other factors affecting a large number of enrollees in one particular organization, as discussed on page 377.

Moving enrollees to bonus plans

Star ratings are determined at the contract level and apply to all “plans” within the same contract. Each plan under a contract has a separate bid. Contracts can have different plans because the benefits can vary from one plan to another; for example, a contract may include one option with drug coverage (an MA–Prescription Drug (MA–PD) plan option) and an MA-only option; or a local contract can include multiple counties (which are often noncontiguous), with each county having a different benefit package and therefore a different plan and plan bid. If a contract includes special needs plans (SNPs) and non-SNPs, the SNPs are separate plans with separate bids within the contract.

CMS releases star ratings to coincide with the October to December annual election period so that beneficiaries can consider star ratings when choosing a plan. The 2017 star ratings, for enrollments effective in 2017, were released in October 2016. However, for bonus payment purposes, a contract’s bonus status has to be known earlier so that when plan bids are submitted to CMS in June for the following year, the benchmarks include any bonus additions. Bids applicable to the 2017 contract year, submitted in June of 2016, are therefore based on the 2016 star ratings released in 2015.

Over the years, CMS has encouraged companies offering MA plans to consolidate contracts as a means of streamlining contract administration for the companies and for CMS. For example, a company that in 2001 had 4 separate contracts in California across 31 counties combined all contracts into 1 statewide contract for 2002 and thereafter. In relation to bonus payments that became available as of 2012, the contract consolidation process has created two problems. One is that program expenditures can increase because of the way in which quality bonus payments are determined. The contract consolidations, or cross-walking, can result in enrollees being moved from a contract for which the organization would not have received bonus payments for their enrollees to a contract that is in bonus status, as has happened over the past several years (Medicare Payment Advisory Commission 2016). Last year, for example, 900,000 enrollees were cross-walked from nonbonus contracts to bonus-level

contracts, resulting in bonus payments payable to plans that would otherwise have been in nonbonus contracts. The other problem that the cross-walking process creates is that beneficiaries will receive inaccurate information about the quality of care in MA plans available in their area because of the manner in which quality data are reported. Reporting of quality results is done at the contract level, and with cross-walking, contracts can span large geographic areas. Thus, the average performance at the contract level, which is what is reported at the Health Plan Compare site of Medicare.gov, may not be representative of the level of performance in a specific market area (see text box, pp. 374–375).

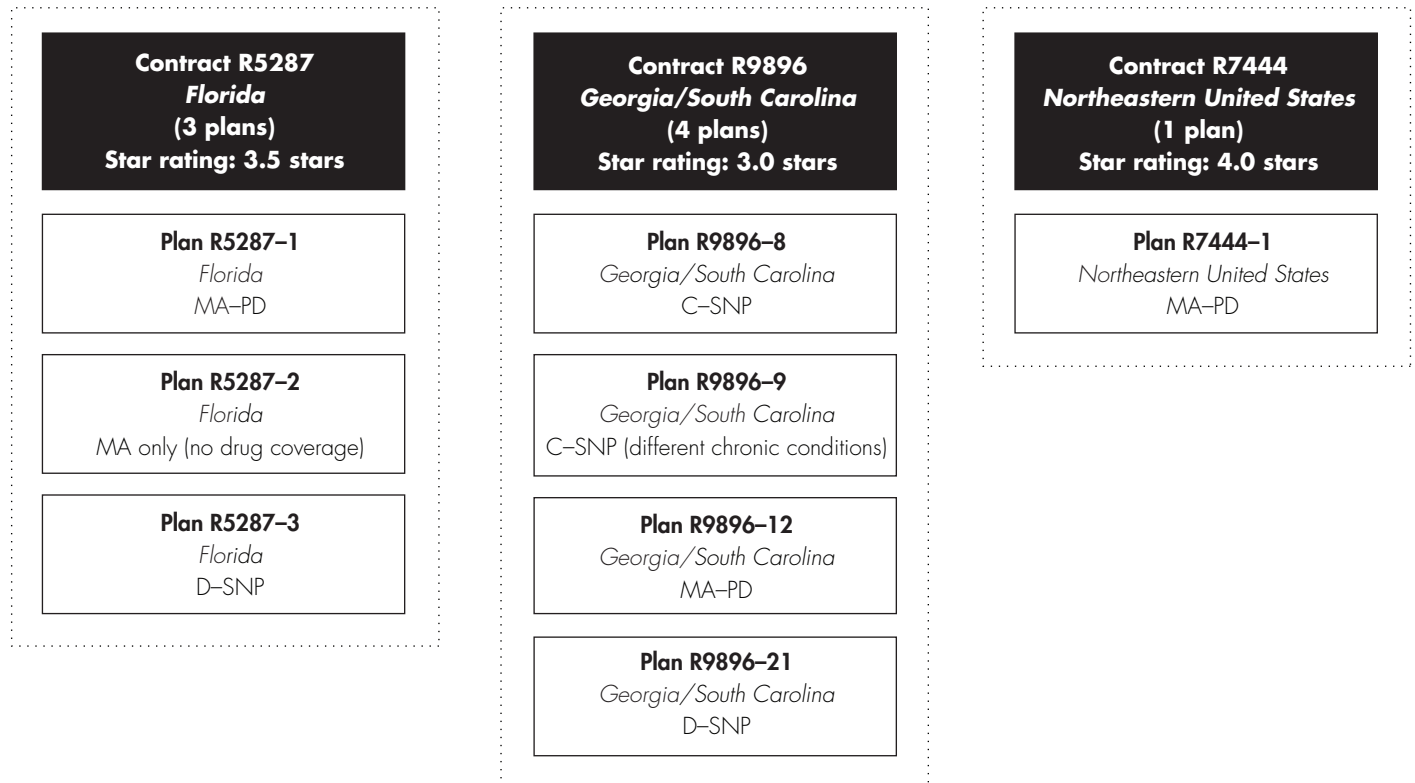
This year, contract consolidation that achieves a bonus-level star rating affected over 700,000 enrollees. Over half of the movement has occurred among regional plans and involved one company. UnitedHealth Group has merged two regional plans operating in the southern United States—with an enrollment totaling 380,000, and rated below 4 stars—into the company’s northeastern regional plan of about 20,000 enrollees, which has a 4-star rating. Figure 13-6a and Figure 13-6b illustrate the configuration of the contracts and plans before and after the cross-walking process. A regional PPO contractor must serve the entire CMS-designated region, but within a region, the contract can include multiple plans. In 2016, in Florida for example, as shown in Figure 13-6a, the contract R5287 has plans R5287–1 (an MA–PD plan), R5287–2 (an MA-only plan—that is, no drug coverage), and R5287–3 (a dual-eligible SNP (D–SNP)). Each plan has a separate benefit package and bid, but all plans under R5287 receive the star rating assigned, at the contract level, to contract R5287. The 2016 star rating determined in October 2015 for R5287 was 3.5 stars; for R9896, with 4 plans, 3.0 stars; and 4.0 stars for R7444 (which has only one plan, R7444–1, an MA–PD option for the northeastern region).

After the cross-walking, there is no change in the nature of the plans offered or in the geographic configuration at the plan level (though plan numbers change under the single contract) (Figure 13-6b). Under the combined contract, R7444, for example, the single northeastern plan (R7444–1) retains the same contract and plan number and covers the same geographic area previously covered. There are still three Florida plans, and they still vary based only on their coverage (MA–PD versus MA only) or the special population served (the Florida D–SNP continues in place). Before the cross-walking, there were eight separate bids submitted to CMS for eight plans, and after the cross-

**FIGURE
13-6**

Example of contract consolidation to improve star ratings

Figure 13-6a: Configuration of contracts and plans before cross-walking



**Figure 13-6b: Configuration of contracts and plans after cross-walking:
Plans now under contract R7444. All plans now qualify for bonus payment.**



Note: MA-PD (Medicare Advantage–Prescription Drug [plan]), MA (Medicare Advantage), D-SNP (dual-eligible special needs plan) C-SNP (chronic condition special needs plan). All plans under a contract that has 4 or more stars receive bonus payments.

Source CMS MA landscape file for 2016 and 2017.

The Commission's March 2010 recommendation on Medicare Advantage: Quality results should be reported by market area

The March 2010 report to the Congress included a mandated study comparing quality among Medicare Advantage (MA) plans and between MA and fee-for-service (FFS) Medicare. We reprint one recommendation from that report:

Recommendation 6-2

The Secretary should collect, calculate, and report quality measurement results in Medicare Advantage at the level of the geographic units the Commission has recommended for Medicare Advantage payments and calculate fee-for-service quality results for purposes of comparing Medicare Advantage and fee-for-service using the same geographic units.

Rationale 6-2

The current collection and reporting of most quality measures in MA occur at the level of the MA contract. Some MA contracts cover very wide geographic areas. Plans in California that cover much of the state report one set of statewide Healthcare Effectiveness Data and Information Set[®] results, for example, even though parts of California have very different health care

markets, with different provider and plan characteristics in each geographic area.

To inform beneficiaries about the relative quality of MA plans and of MA relative to FFS, comparisons should pertain to the geographic area where beneficiaries are making choices. Using a smaller geographic area that is more consistent with the patterns of health care delivery would also facilitate CMS's quality monitoring and evaluation role in both MA and FFS.

Implications 6-2

Spending

- Substantial CMS administrative resources would be required.

Beneficiary and provider

- Beneficiaries' ability to compare plans and systems would be improved, but more beneficiaries would be included in surveys.
- Many plans would face additional costs because of an increase in the number of reporting units.

(continued next page)

walking there will continue to be eight separate bids, with one star rating for all plans under the contract.

In this particular situation—cross-walking contracts because the vast majority of enrollees were in plans with star ratings lower than 4—the overall average quality measured in future years in the surviving contract will likely not reach the 4-star level unless there is improvement in performance in the southern states. Thus, the strategy of increasing bonus payments through cross-walking is likely to have only a short-term effect, which would be true in many other instances of cross-walking. However, in this particular case, the strategy will result in two years of bonus status because when bids were submitted in June 2016, the star rating “of record” for R7444 was 4 stars, giving rise to bonus payments for 2017 (for all plans under all of the superseded contracts included under contract R7444 in Figure 13-6b, p. 373).

When bids are submitted in June 2017 for payment year 2018, the star rating of record applicable to the surviving contract, R7444, will be the star rating determined in October 2016, which was based on quality measures reported in 2015, before the cross-walking of contracts. That is, the quality results for the enrollees of R7444 in 2015 will determine whether all enrollees of R7444 will receive bonus payments in 2018. It would only be in the star ratings announced in October 2017, applying to bonus payments in 2019, that the lower performance of the plans in the southern states would influence the quality results for the R7444 contract (if there is no improvement in quality in the southern states).

Note also that during the 2016 annual election period (for enrollments effective January 1, 2017), because the surviving single regional contract now covers the southern states, beneficiaries living in the southern states

The Commission's March 2010 recommendation on Medicare Advantage: Quality results should be reported by market area (cont.)

At the time the Commission made the above recommendation, many contracts covered wide geographic areas because CMS encouraged a reduction in the number of contracts to simplify contract administration for the agency and for sponsoring organizations. For example, one legal entity in a state could have a single contract for the entire state, or it could include multiple states under one contract if the organization's licensure status across the states permitted such an arrangement. (Originally, companies were not allowed to vary benefit packages by county without having a separate contract; a separate contract was required if a company had different commercial rates in adjoining counties or areas. Likewise, the 50/50 rule was repealed, which had been applied at the contract level and which required an organization to have enrollment that was at least 50 percent non-Medicare, non-Medicaid.)

The practice of cross-walking contracts to obtain bonus payments has exacerbated a situation that was already of concern in 2010—the disconnect between the quality results reported at the contract level and what the quality results are for a given market area. The cross-walking of contracts to obtain bonus payments that would not otherwise be payable raises an additional concern. Having quality reported at the market-area level would address both issues—ensuring appropriate payments under the quality bonus program and providing useful, accurate information to beneficiaries about the quality of care in each MA option available in a given market (which the Commission has suggested should be compared with the quality in the same market in FFS and among accountable care organizations (Medicare Payment Advisory Commission 2015b)). ■

who used the Medicare.gov website were shown the star rating of the surviving contract (R7444) when looking at plans available in the southern states. That is, a resident of Miami, FL, was told that a 4-star regional plan was available in Miami because the surviving northeastern contract has a 2017 4-star rating. Had the contracts not been cross-walked, the Miami beneficiary would have seen that the regional plan had a rating below 4 stars (based on ratings CMS computed for all contracts operating as of October 2016, including those to be cross-walked). The reverse situation will be true in October of 2017 for residents of the northeastern states covered under this contract. Because the performance of the southern states will likely determine the overall contract performance, residents of the Northeast will likely see that the star rating for the contract declined to a level below four stars.

With regard to the issue of how bonus payments should be treated after a cross-walking, the Commission discussed using an averaging method to determine the bonus rating for a surviving contract. For example, in the case of the regional plan cross-walking just described, if the star rating for bonus purposes was an enrollment-weighted average of the three contracts' star ratings before cross-

walking, there would be no bonus payments payable under this contract, given that only 5 percent of enrollees were in a 4-star contract (the 20,000 enrollees in the northeast joining the 380,000 other enrollees). The surviving contract would not be eligible for any bonus payments. In a different scenario, where a 3-star contract is merged with a 5-star contract and enrollment levels are the same in each contract, contract-level weighting would yield a 4-star rating for the combined surviving contract. In such a case, the surviving contract would receive bonus payments for all its enrollees. It could also be argued that the averaging should be done for each of the 44 measures included in the star rating system or, to go even further, that the averaging should be done by the denominators for each measure. For instance, to determine how a cross-walked surviving contract has performed on the various HEDIS measures of diabetic care, the results would be weighted by the number of diabetics in each of the contracts before cross-walking.

A simpler alternative is to award bonus payments as though the cross-walking had not occurred. That is, in the case described, the contract will receive bonus payments for only the 20,000 enrollees in the Northeast. Who those beneficiaries are and what the quality results were

**TABLE
13-12**

Change in the distribution of contract star ratings, 2016 to 2017

Star ratings	2016	2017						Not rated in 2017
	Number of contracts receiving the star rating	Number of contracts receiving the star rating						
		2.5	3.0	3.5	4.0	4.5	5.0	
2.5	8	5	3	0	0	0	0	0
3.0	66	5	34	23	2	0	0	2
3.5	111	1	19	59	25	4	0	3
4.0	97	0	0	28	44	21	2	2
4.5	65	0	0	5	19	36	4	1
5.0	10	0	0	0	1	3	6	0
Total number of contracts receiving a given star rating in 2017 that received a star rating in 2016		11	56	115	91	64	12	
Number of contracts that were not rated in 2016 but have a 2017 rating		6	14	6	7	4	0	
Total 2017 star distribution		17	70	121	98	68	12	

Note: Shaded figures are the number of contracts with a star rating for 2017 that is the same as their 2016 star rating. Table includes only contracts participating in the quality bonus program. Figures include absorbed contracts that had a star rating determined for 2017 but which are absorbed into other contracts.

Source: MedPAC analysis of CMS star ratings data.

for those enrollees is known and can be isolated from the quality results for the cross-walked enrollees. There would be minimal administrative complexity involved in assigning star ratings so that no bonus payments are available for enrollees in cross-walked contracts with ratings below 4 stars. In subsequent years, star ratings would be determined by the totality of enrollees who are in the surviving contract.

Contract and enrollment distribution of the star ratings in 2017

As a result of the changes in star thresholds and changes in plan performance, there have been shifts in the star ratings of contracts operating in both 2016 and 2017.

Table 13-12 shows that, for the higher star rating contracts, changes were likely to result in fewer contracts retaining their star rating as compared with contracts with lower star ratings. For example, among 4-star plans, 44 remained at 4 stars while 23 increased their star rating and 28 declined.

For 3-star plans, of the original 66 contracts, 34 remained at 3 stars, 25 increased their star rating, and 5 declined in their star rating. Some of the increases in star ratings were due to the adjustment for contracts with high shares of low-income enrollees or disabled enrollees, but relatively few such contracts, aside from a high proportion of contracts in Puerto Rico, changed from nonbonus to bonus status in their star ratings because the adjustments affected a small number of measures. In the case of plans operating in Puerto Rico, additional adjustments were made that benefited those plans.

One statistic that we have reported in the past and CMS reports when star ratings are announced is the proportion of current enrollees who are, or are not, in bonus-level plans based on the new star ratings compared with the current enrollees in bonus status based on the preceding year's star ratings (Centers for Medicare & Medicaid Services 2016, Medicare Payment Advisory Commission 2016). CMS has reported that 68 percent of enrollees are in plans with a 4-star rating for 2017, which would

be 72 percent if the 2016 ratings were used (for all plans with star ratings). Using data only for plans eligible for bonuses (that is, excluding cost plans), the figures would be 67 percent and 72 percent of enrollees in bonus status plans for each year, respectively. Such a statistic is somewhat misleading because of the effect of contract consolidations. With a consolidation, only the surviving contract's enrollment can be used in determining this statistic. In the case of the regional plan that moved 380,000 enrollees from 2 contracts (rated 3.0 and 3.5 stars in the 2016 ratings) to a surviving contract with only 20,000 current enrollees, if the 3 contracts were the only ones operating in MA, the 2016 to 2017 comparison would say that 100 percent of enrollees are in 4-star plans as of 2017 because the 20,000 enrollees are in a contract that has a 4-star rating for 2017, and the two contracts with the 380,000 enrollees are no longer represented in the posted ratings for 2017.

A different way of evaluating changes in the star ratings, and the number of enrollees affected, is to compare contracts that had ratings for both 2016 and 2017. As of October 2016, 1.1 million enrollees were in 41 contracts moving from a rating below 4 stars in 2016 to bonus status (4 stars or higher) in 2017. In contrast, 2.3 million enrollees were in 39 contracts rated 4 stars or higher in 2016 but rated lower (or not rated) in the 2017 ratings. On net, therefore, about 1.2 million enrollees are no longer in bonus-rated plans.

Of the 2.3 million enrollees in lower rated contracts, 62 percent are in contracts operated by 1 parent organization that received low scores in a performance audit. For this organization, 40 percent of the weight of the company's declining measures is in administrative measures (processing of appeals and call center issues), and 26 percent is due to a decline in the two improvement measures that CMS calculates. For clinical measures,

the major change was that this organization did not do well on the Part D measure on the avoidance of high-risk medications, which improved in our same-store analysis and which had a large increase in the threshold for 4-star performance (Table 13-11, p. 371).

Conclusions about the current state of the star rating system

We have previously raised the point that plan consolidations and the existence of contracts that span wide geographic areas erode the validity of the star rating system as a measure of plan performance in a given area (Medicare Payment Advisory Commission 2016). The continuing consolidation activity has led to a situation in which, as of 2016, about one-third of MA enrollees were in contracts with substantial enrollment in noncontiguous states across the country, and in many states, statewide contracts serve market areas within a state that have very different characteristics and can have differing levels of quality.

The Commission has advocated moving toward an emphasis on outcome measures, a fixed threshold of performance, and measures that are meaningful to beneficiaries (Medicare Payment Advisory Commission 2015a). The Commission has recommended that quality reporting for MA plans be done at the market-area level and that there should be a comparison with the quality of care in FFS in the same area (Medicare Payment Advisory Commission 2010, Medicare Payment Advisory Commission 2005). We have illustrated the ways in which the current star rating system is inconsistent with these views and may not reflect a plan's performance in the geographic area where a particular beneficiary resides. Furthermore, if the star system is intended as a means of improving the quality of care in the MA sector as a whole, using relative rankings as the basis for assigning stars may not be the best way of achieving that goal. ■

Endnotes

- 1 While all HMOs and PPOs have provider networks, PPOs cover out-of-network care while HMOs typically do not. There are also HMOs that offer a point-of-service option that covers some out-of-network care.
- 2 Cost plans are technically not MA plans. They do not submit bids, but are paid their reasonable costs under provisions of Section 1876 of the Social Security Act.
- 3 The 21st Century Cures Act recently changed the lock-in rules so that, beginning in 2019, beneficiaries enrolled in an MA plan in the first three months of the year, or their first three months of entitlement, are allowed to join a different MA plan or elect fee-for-service (FFS) in the three-month period. This provision replaces a provision that allowed a beneficiary to leave an MA plan only during the first 45 days of the year, and to choose only FFS, not another MA plan.
- 4 If plans were required to bid their costs for each county separately, then in many instances, bids for distinct counties would be different from those we observe in the data.
- 5 Based on CMS's interpretation of SSA Section 1853(c)(1)(D), Calculation of 100 Percent of Fee-For-Service Costs.
- 6 This analysis is based on Medicare beneficiaries who were enrolled in FFS Medicare for all 12 months in 2014, which means that no decedents are included. We excluded beneficiaries from the territories, such as Puerto Rico, whose FFS spending is adjusted separately by CMS. Also, cost-plan enrollees are not considered FFS beneficiaries.
- 7 In practice, dollar-value coefficients are standardized relative to average FFS spending before being applied to each plan's base rate. In addition, coefficients may vary depending on whether the beneficiary is partially, fully, or not eligible for Medicaid.
- 8 For risk adjustment data validation audits in 2011, CMS grouped all contracts into high, medium, and low levels of coding intensity and then selected 20 high-, 5 medium-, and 5 low-level contracts at random.
- 9 For the purpose of this section on evaluating quality measures, we consider a difference between two values to be "meaningful" if the change is statistically significant (p value ≤ 0.05) and it is a difference of at least 3 percent.
- 10 The National Committee for Quality Assurance (NCQA) advises caution in evaluating the trend in measures for the treatment of diabetics because of the manner in which diagnoses are made in the change to ICD-10. NCQA also advises caution in trending the hospital readmission measure. We have used this measure in the past to report on differences in observed-to-expected rates of readmission by plan type, but we have detected issues with the risk adjustment system used to determine the expected rates of readmission and are awaiting NCQA's evaluation of the findings we have shared with them (and with CMS).

References

- Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2016. 2017 star ratings. October 7. Fact sheet. Baltimore, MD: CMS.
- Evans, M. 2015. An insurer's transformation: Humana's evolution into Medicare powerhouse offers strong lure to Aetna. *Modern Healthcare*, July 11.
- Geruso, M., and T. Layton. 2015. *Upcoding: Evidence from Medicare on squishy risk adjustment*. NBER working paper no. 21222. Cambridge, MA: National Bureau of Economic Research.
- Government Accountability Office. 2013. *Medicare Advantage: Substantial excess payments underscore need for CMS to improve accuracy of risk score adjustments*. Washington, DC: GAO.
- Kronick, R., and W. P. Welch. 2014. Measuring coding intensity in the Medicare Advantage program. *Medicare & Medicaid Research Review* 4, no. 2: E1–E19.
- Medicare Payment Advisory Commission. 2016. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2015a. *Report to the Congress: Medicare and the health care delivery system*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2015b. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2014. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2010. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2008. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2005. *Report to the Congress: Issues in a modernized Medicare program*. Washington, DC: MedPAC.
- Newhouse, J. P., and T. G. McGuire. 2014. How successful is Medicare Advantage? *Milbank Quarterly* 92, no. 2 (June): 351–394.
- Pope, G. C., J. Kautter, R. P. Ellis, et al. 2004. Risk adjustment of Medicare capitation payments using the CMS–HCC model. *Health Care Financing Review* 25, no. 4 (Summer): 119–141.

