

**Report to the Congress:  
Medicare and the Health Care Delivery  
System**

**June 18, 2014**

Statement of

Mark E. Miller, Ph.D.

Executive Director

Medicare Payment Advisory Commission

Before the

Subcommittee on Health

Committee on Ways and Means

U.S. House of Representatives

Chairman Brady, Ranking Member McDermott, distinguished Committee members. I am Mark Miller, executive director of the Medicare Payment Advisory Commission (MedPAC). Thank you for inviting the Commission to be here this morning to discuss MedPAC's annual report on Medicare and the healthcare delivery system.

The Medicare Payment Advisory Commission is a Congressional support agency that provides independent, nonpartisan policy and technical advice to the Congress on issues affecting the Medicare program. The Commission's goal is to achieve a Medicare program that assures beneficiary access to high-quality care, pays health care providers and plans fairly by rewarding efficiency and quality, and spends tax dollars responsibly.

## **Introduction**

As part of its mandate from the Congress, each June the Commission reports on issues affecting the Medicare program, including changes in health care delivery in the U.S. and the market for health care services. In this year's report, the Commission has begun to explore the concept of synchronizing Medicare policy across the three major Medicare payment models – traditional fee-for-service (FFS), Medicare Advantage (MA), and the newest model, the accountable care organization (ACO). The Commission's interest in this topic is motivated by concern that Medicare's payment rules and quality measurement programs are different across the three models. The inconsistencies result in different levels of program support for one model over another and an inability to discern whether one provides higher quality care to beneficiaries than another. Synchronizing policy across the models is a longer term policy problem; as Medicare continues to move away from FFS towards value-based payment models, developing consistent policies across models will be critical to supporting an efficient, well-functioning, and high-quality program. In this report, the Commission also identifies a number of areas within FFS where policy changes may be warranted in the shorter term.

The topics covered in the June report are:

- *Synchronizing Medicare policy across payment models.* Medicare currently finances care through FFS, MA, and more recently through ACOs, which are a variation of FFS. In each model, Medicare has different—and sometimes conflicting—policies concerning payment, risk adjustment, quality measurement, and other issues. The Commission believes that, over the long run, Medicare’s payment rules and quality improvement incentives will need to be reconciled across the three payment models. To illustrate this issue, we examine setting a common spending benchmark—tied to local FFS spending—for MA plans and ACOs.
- *Improving risk adjustment in the Medicare program.* Risk adjustment is currently used to ensure that Medicare’s payments track the expected costs of beneficiaries. We examine three models for improving how well risk adjustment predicts cost for the highest cost and lowest cost beneficiaries and suggest that given the limitations of those models, administrative measures may be needed to address problematic incentives for patient selection that are created by the current risk adjustment model.
- *An alternative approach to measuring quality of care.* Current quality measures are overly process oriented and too numerous, they may not track well to health outcomes, and they create a significant burden for providers. Furthermore, many of them may not be appropriate for each of the three payment models, nor support comparing quality across the payment models. We examine which approaches to quality measurement would be appropriate for each payment model and consider using population-based outcome measures (e.g., potentially avoidable admissions and emergency department visits for the population in each model in an area) to compare quality within a local area across Medicare’s three payment models. Provider-specific quality measures may still be needed for FFS payment adjustments.
- *Paying for primary care using a per-beneficiary payment.* The current FFS-based primary care bonus program (Medicare’s Primary Care Incentive Payment Program) expires at the end of 2015. We consider an option to continue additional payments to primary care

practitioners, but in the form of a per-beneficiary payment. The current FFS approach encourages volume. A per-beneficiary approach is intended to foster care coordination, since it would provide some amount of payment for the non-face to face activities the practitioner performs, such as making telephone calls to patients or specialists to whom their patients are referred.

- *Medicare payment differences across post-acute settings.* Medicare's payment rates often vary for treating similar patients in different settings, such as inpatient rehabilitation facilities (IRFs) and skilled nursing facilities (SNFs). We examine three conditions and assess the feasibility of paying IRFs the same rates as SNFs for patients recovering from these conditions.
- *Financial assistance for low-income beneficiaries.* We discuss how changing income eligibility for the Medicare Savings Programs could help low-income Medicare beneficiaries afford out-of-pocket costs under a redesigned Medicare FFS benefit package.
- *Measuring the effects of medication adherence on medical spending for the Medicare population.* We examine the effects of medication adherence for congestive heart failure patients and find that greater medication adherence is associated with lower medical costs, but that the effect is dependent on the beneficiaries' previous health status, decays over time, and is sensitive to how the spending effects are modeled.

In an online appendix, as required by law, we review CMS's preliminary estimate of the update to payments under the physician fee schedule for 2015.

## **Synchronizing Medicare policy across payment models**

### **Background**

Historically, Medicare has had two payment models: traditional FFS and Medicare Advantage (MA). Traditional FFS pays for individual services according to the payment rates established by the program. By contrast, under MA, Medicare pays private plans capitated payment rates to

provide the Part A and Part B benefit package (except hospice). Starting in 2012, Medicare introduced a new payment model: the Accountable Care Organization (ACO). Under the ACO model, a group of providers – still paid FFS – is held accountable for the overall spending and quality of care of a group of beneficiaries attributed to them. The goal of the ACO program is to give groups of FFS providers incentives to reduce Medicare spending and improve quality, similar to the incentives given to private plans under the MA program.

The Commission believes that, over the long run, Medicare’s payment rules and quality improvement incentives will need to be reconciled across the three payment models. Without synchronization across the models, the program cannot assert that all three models are providing similar value to the program and the beneficiary. This report represents the Commission’s initial exploration of synchronizing Medicare policy across payment models and is not intended to be a definitive or comprehensive discussion. In this initial analysis, we focus on setting a common spending benchmark—tied to local FFS spending—for MA plans and ACOs as a key element of synchronization. Additional Commission work in this area will include: examining common approaches to quality measurement and risk adjustment, examining beneficiary decision making and choices, and identifying areas where regulatory relief could be granted when providers assume risk.

#### **Comparing Spending Benchmarks Across Models**

The benchmark refers to the level of program spending that will trigger a potential bonus or penalty. For example, if spending in an ACO is materially below the ACO’s benchmark, the ACO would share in savings with Medicare. Similarly, if an MA plan bid is below the plan’s benchmark, the MA plan would keep some of those savings through rebate dollars, which are used to fund the cost of extra benefits or lower premiums to attract enrollees. By contrast, if ACO spending is above the ACO benchmark, the ACO would be penalized by paying a share of the excess to Medicare. If the MA plan bid is above the plan benchmark, it would become less attractive to beneficiaries because the beneficiary would need to pay the difference between the benchmark and the MA bid.

Currently, benchmarks for ACOs and MA plans are set through different formulas, resulting in different levels of payment between the two models, even in the same market. In addition, the method Medicare uses to set ACO's benchmarks can result in markets with multiple ACOs, each with a different benchmark.

As a starting point for our analysis comparing spending benchmarks across the three models, we explore the effects of setting the benchmark for both ACOs and MA plans equal to spending in FFS (). Through a simulation of program spending based on a synchronized benchmark tied to FFS, we illustrate that no single payment model is uniformly less costly than another model in all markets across the country. Which model is least costly—and consequently which ACOs and MA plans may want to enter a given market—would be sensitive to how benchmarks are set.

We used data for 646,000 individuals assigned to Pioneer ACOs and compared the expected FFS spending on these individuals with actual ACO program spending and simulated MA program spending.<sup>1</sup> Comparing the estimated spending for the three models using 2012 MA benchmarks, in the 31 areas we studied, we found that program spending was lowest in the ACO model in 18 of the 31 areas. Simulated MA payment was the lowest-spending payment model in only 1 of 31 markets. This result is generally because MA plans have benchmarks set by law that are above FFS rates, allowing them to bid above FFS costs, and consequently the plans receive payments above FFS levels. When we compared estimated spending using a scenario where MA benchmarks were moved to 100 percent of FFS spending (plus a 3 percent quality bonus), MA would be the lowest program payment model in 12 of the 31 markets in our simulation. In 11 markets, ACOs would continue to generate savings larger than MA; this could happen in cases in which MA plans bid near the FFS benchmark and ACO program spending is below average FFS spending in the county.

---

<sup>1</sup> The simulated level of MA spending is what the Medicare program would have paid MA plans (including rebate dollars) if the 646,000 beneficiaries had chosen to join MA plans in proportion to each MA plan's current market share in each beneficiary's county of residence.

The fundamental lesson from the simulations is that relative to FFS, MA and ACO spending varies by market. Driving volume to one model may not be desirable if that model is not always the best with respect to program cost and quality of care. By setting benchmarks to be equal across each model, the financial performance of each model can be evaluated consistently within a market. With common quality measures, beneficiaries could also judge which model provides better care in their market. Policymakers may want a common benchmark to level the playing field and encourage beneficiaries to choose the model that will most efficiently give them the care and services that fit their individual preferences. However, whether there is a truly level playing field depends on how overall financial neutrality across payment models is achieved.

### **Improving risk adjustment in the Medicare program**

Appropriate risk adjustment is an important part of paying providers and plans fairly and equitably for the care of patients with different clinical needs. In this report, the Commission considers how Medicare's tools for risk adjustment in Medicare Advantage (MA) could be improved.

Health plans that participate in the MA program receive monthly capitated payments for each Medicare enrollee. Each capitated payment has two parts: a base rate, which reflects the payment if an MA enrollee has the health status of the national average beneficiary; and a risk score, which indicates how costly the enrollee is expected to be relative to the national average beneficiary. The purpose of the risk scores is to adjust MA payments so that they accurately reflect how much each MA enrollee is expected to cost. Currently, Medicare uses the CMS–hierarchical condition category (CMS–HCC) model to risk adjust MA payments. This model uses beneficiaries' demographic characteristics and medical conditions collected into hierarchical condition categories (HCCs) to predict their costliness. Although it is an improvement over past models, the Commission finds that the CMS–HCC model predicts costs that are higher than actual costs (overpredicts) for beneficiaries who have very low costs, and lower than actual costs (underpredicts) for beneficiaries who have very high costs. These prediction errors can result in

Medicare paying too much for low-cost beneficiaries and not enough for high-cost beneficiaries, while on average payments are correct. These underpayments and overpayments raise an issue of equity among MA plans. Plans that have a disproportionately high share of high-cost enrollees may be at a competitive disadvantage relative to those whose enrollees have very low costs.

In an effort to identify ways to improve how well risk adjustment predicts costs for the highest and lowest cost beneficiaries, the Commission explores three alternative methods discussed in the literature. We find that all three would introduce some degree of cost-based payment into the MA program, which could reduce incentives for plans to manage their enrollees' conditions to hold down costs. The Commission concludes that because of the limitations of these models, administrative measures, such as penalties for disenrollment of high-cost beneficiaries, may be needed to reduce incentives for plans to engage in patient selection.

This issue is important not only for the MA program; it also has implications for the Medicare program as it concerns equity among MA plans, FFS Medicare, and ACOs. If equity among these three payment models is a goal, risk adjustment that results in more accurate payments for high-cost and low-cost beneficiaries is vital for both the program and the beneficiary. From the program perspective, if the MA sector can attract low-cost beneficiaries (for which Medicare overpays) and avoid high-cost beneficiaries (for which Medicare underpays), Medicare could end up paying more to care for beneficiaries who enroll in MA than it would have if they remained in FFS. From the beneficiary perspective, sicker beneficiaries' access to MA plans could be restricted if the plans avoid these beneficiaries because Medicare underpays for their care.

### **Measuring quality of care in Medicare**

The Commission has been making quality measurement recommendations for Medicare since 2003, and has long supported public reporting of quality measures. Over the past decade, the Commission has recommended that Medicare measure quality of care in FFS Medicare separately for each provider type (hospitals, physicians, etc.) and MA plans, using a small set of process, outcome, and patient experience measures to minimize the administrative burden of



measurement on providers and CMS. The Commission has also held that Medicare should base a small portion of FFS providers' or MA plans' payments on their performance on the selected quality measures. The Commission has stated that outcome measures, such as mortality and health-care-associated infection rates, should be weighted most heavily when adjusting payment.

Since 2003, the Congress has enacted quality reporting programs for all of the major FFS provider types and MA plans, and has mandated payment adjustments, referred to as value-based purchasing, for hospitals, dialysis facilities, MA plans, and physicians. Adjustment of payment based on quality is also a central component of Medicare policy for ACOs. Overtime, the Commission has become concerned about the direction of Medicare's quality measurement programs, particularly in FFS Medicare. These programs rely primarily on clinical process measures for assessing quality—measures that are often not well correlated to better health outcomes. Additionally, the Commission believes there are too many measures, which—coupled with the diversity of measures required by private payers—places a heavy reporting burden on providers. In short, Medicare's quality measurement systems are becoming overbuilt, too process focused, and out-of-synch with private payers. The Commission is concerned that this direction is becoming incompatible with the goal of promoting clinically appropriate, coordinated, and patient-centered care.

In this report, we examine alternative approaches to quality measurement and consider the appropriateness of different types of measures for each of the three payment models in Medicare: FFS Medicare, MA, and ACOs. One alternative we explore in greater depth is using population-based outcome measures. Examples of population-based outcome measures include potentially avoidable hospital admissions and potentially avoidable emergency department visits.

Population-based outcome measures are intended to gauge the experience of care across all patients in an area and reflect the quality of the entire health care delivery system, not just one provider. Many of these measures would be less burdensome to providers to report, since they could be gleaned from the Medicare claims data (data for patient experience measures would need to be gathered through patient surveys). Also, unlike many of the clinical process measures currently being used by Medicare, population-based outcome measures are, by definition, directly

related to patients' health outcomes. Such an approach could be useful for public reporting of quality and making payment adjustments within the MA and ACO models, and would more readily allow a common set of quality measures across public and private payers.

The Commission believes it may be desirable and feasible to transition Medicare over the next decade to a quality measurement system that uses a small number of population-based outcome measures to evaluate, compare, and publicly report on quality within a local area across Medicare's three payment models—FFS Medicare, MA, and ACOs. The same population-based measures also could be used to make payment adjustments within or across the MA and ACO models, but may not be appropriate for adjusting FFS Medicare payments in an area, because FFS providers have not explicitly agreed to be responsible for a population of beneficiaries. Therefore, at least for the foreseeable future FFS Medicare will need to continue to rely on provider-based quality measures to make payment adjustments. The program should endeavor to keep this set of measures small and focused on outcomes.

In addition to population-based outcomes, another area of quality measurement that the Commission is exploring is the feasibility of measuring the potentially inappropriate use of clinical services (i.e. "overuse" measures). While overuse is more likely to occur in payment models such as FFS Medicare that create incentives to provide services with little or no benefit for patients, evidence of overuse also has been found in capitated payment arrangements. Because of the potential for harm to beneficiaries and wasteful program spending resulting from overuse, the Commission is examining the potential for applying overuse measures in Medicare, particularly in FFS.

### **Per-beneficiary payment for primary care**

The Commission has a long-standing concern that primary care services are undervalued by the Medicare fee schedule for physicians and other health professionals compared with procedurally based services. That undervaluation has contributed to compensation disparities—average compensation for specialist practitioners can be more than double the average compensation for

primary care practitioners. For example, annual compensation for radiologists was approximately \$460,000 in 2010, compared to \$207,000 for primary care physicians. Such disparities in compensation could deter medical students from choosing primary care practice, deter current practitioners from remaining in primary care practice, and leave primary care services at risk of being underprovided. While Medicare beneficiaries generally have good access to care, in both patient and physician surveys, access for beneficiaries seeking new primary care practitioners raises more concern than access for beneficiaries seeking new specialists.

With the goal of directing more resources to primary care and rebalancing the fee schedule, the Commission made a recommendation in 2008 for a budget-neutral primary care bonus payment, funded by a reduction in payments for non-primary care services. The Patient Protection and Affordable Care Act of 2010 (PPACA) created a bonus program, but it was not budget neutral and thus required additional funding. The program provides a 10 percent bonus payment for primary care services performed by primary care practitioners from 2011 through 2015.

The primary care bonus program expires at the end of 2015. While the amount of the primary care bonus payment is not large and will probably not drastically change the supply of primary care practitioners, it is a step in the right direction. Additionally, the Commission has become increasingly concerned that FFS is ill suited as a payment mechanism for primary care. FFS payment is oriented toward discrete services and procedures that have a definite beginning and end. In contrast, ideally, primary care services are oriented toward on-going, non-face-to-face care coordination for a panel of patients.

In this report, we consider an option to continue to support primary care practitioners, but in the form of a per-beneficiary payment financed from within the fee schedule. Replacing the primary care bonus payment with a per-beneficiary payment would be a move away from a FFS volume-oriented approach toward a beneficiary-centered approach that encourages care coordination, including the non-face-to-face activities that are a critical component of care coordination. In establishing a per-beneficiary payment for primary care, several design issues would need to be considered.

- *Practice requirements for receipt of the payment.* One policy design question is whether to be eligible to receive the per-beneficiary payment, a practice should meet certain requirements. On the one hand, given the current inequities in the fee schedule, Congress may wish to make this payment for primary care available *without* practitioners having to meet requirements. On the other hand, Congress could impose requirements that relate to practice services, such as providing after-hours access and phone and email contact to patients. However, evidence concerning the effect of practice requirements on reducing health care spending and improving quality is not clear.
- *Attribution of beneficiaries to primary care practitioners.* Unlike the service-based, primary care bonus payment, a per-beneficiary payment necessitates attributing a beneficiary to a practitioner to ensure that the right practitioner gets paid and that Medicare does not make duplicate payments to multiple practitioners on behalf of the same beneficiary. In an ideal world, a Medicare beneficiary would designate her primary care practitioner. The designated primary care practitioner would provide the majority of the beneficiary's primary care for that year and for years to come, fostering a strong relationship and continuity of care. However, in practice, attributing a beneficiary to the right practitioner can be complicated, and the report includes further discussion of methods for attribution.
- *Funding.* One funding method is to apply an equal percentage reduction to the payments of those services most likely to be overpriced, such as procedural services, or all services in the fee schedule except those eligible for the primary care bonus. Another funding method is to reduce the payments of services specifically identified as overpriced, service by service, and fund the per-beneficiary payment with the savings. Under both funding methods, we are assuming that beneficiaries are not charged cost sharing to fund the per-beneficiary payment for primary care.

The Commission will continue to consider these and other issues and may consider recommendations to the Congress on a per-beneficiary payment for primary care.

## **Site-neutral payments for select conditions treated in inpatient rehabilitation facilities and skilled nursing facilities**

The Commission holds that the same services for similar patients should be paid comparably, regardless of where the services are provided. This will help ensure that beneficiaries receive appropriate, high-quality care in the least costly setting consistent with their clinical conditions. Two settings where certain groups of patients with similar care needs are treated are inpatient rehabilitation facilities (IRFs) and skilled nursing facilities (SNFs). In this report, the Commission compares Medicare payments for three conditions frequently treated in both settings. Because there is some overlap in the patients treated in both settings, there is a need to develop site-neutral policies that eliminate unwarranted payment differences. The Commission is not alone in its interest in aligning payments between IRFs and SNFs. Since 2007, administrations' proposed budgets under presidents from both parties have included proposals to narrow prices between IRFs and SNFs for select conditions commonly treated in both settings.

Using several criteria, we selected three conditions frequently treated in IRFs and SNFs—patients receiving rehabilitation therapy after a stroke, major joint replacement, and other hip and femur procedures (such as hip fractures)—and assessed the feasibility of paying IRFs the same rates as SNFs for these conditions. We examined the characteristics of patients admitted to SNFs and IRFs and did not find large differences, especially for the orthopedic conditions, but there was more variation across the stroke patients. There was considerable overlap of risk scores, ages, comorbidities, functional status at admission, and predicted costs for therapy and nontherapy ancillary services (such as drugs). The average functional status at admission and patients' comorbidities overall did not differ substantially and the two settings admitted similar shares of dual-eligible and minority beneficiaries. Differences in outcomes between IRFs and SNFs were mixed: unadjusted measures showed larger differences between the settings, and risk-adjusted measures generally indicated small or no differences between the settings.

For the three conditions, we found that if IRFs were paid at the SNF rates, their aggregate payments for the three select conditions would decline. To provide protection for IRFs, the site-neutral policy could also be structured to maintain the add-on payments many IRFs receive for the select conditions. The impact of this policy was consistent across different types of IRFs (e.g., for-profit, non-profit). Although certain types of providers have higher shares of site-neutral cases, they also tend to have higher add-on payments that dampen the impact of a site-neutral policy.

If payments for select conditions were the same for IRFs and SNFs, the Commission believes that Medicare should consider waiving certain regulations for IRFs when treating site-neutral cases to level the playing field between IRFs and SNFs. Waiving certain IRF regulations would allow IRFs the flexibility to function more like SNFs when treating comparable cases. Selecting a handful of conditions to study allowed us to explore potential for site-neutral payments between IRFs and SNFs. We found that the patients and outcomes for the orthopedic conditions were similar and represent a strong starting point for a site-neutral policy. Patients receiving rehabilitation care after a stroke were more variable, and we conclude that additional work needs to be done to more narrowly define those cases that could be subject to a site-neutral policy and those that could be excluded from it.

### **Financial assistance for low-income Medicare beneficiaries**

The fee-for-service (FFS) Medicare benefit package has remained essentially unchanged for Part A and Part B since the creation of the program in 1965. Under this structure, beneficiaries in FFS are not protected against high out-of-pocket (OOP) medical expenses. To protect against such high expenses, most beneficiaries have some degree of supplemental coverage. This coverage provides protections but is often a low value product for the beneficiary, and research has shown that supplemental coverage can lead to beneficiaries using more discretionary services because they have no financial incentive to consider the value of a service before choosing it. To address these concerns, in 2012, the Commission made a set of recommendations for a redesigned benefit

package that give beneficiaries better protection against high OOP spending, while creating financial incentives for them to make better decisions about their use of discretionary care.

Specifically, the Commission recommended that a redesigned traditional FFS benefit include:

- Catastrophic protection through an out-of-pocket maximum;
- Rationalized deductible or deductibles for Part A and Part B services;
- Improved OOP predictability by replacing coinsurance with copayments;
- Secretarial authority to alter or eliminate cost sharing based on the evidence of the value of services, including cost sharing after the beneficiary has reached the out-of-pocket maximum.

Under the recommended benefit design, the aggregate beneficiary cost sharing liability would remain unchanged. Some beneficiaries who incur very high Medicare spending would see their liability reduced, while others who incur low Medicare spending may experience higher liability. Overall, the added benefit protections are designed to make supplemental coverage less necessary. For those beneficiaries who wish to keep or initiate supplemental coverage after the benefit is redesigned, the Commission recommended that an additional charge be placed on supplemental policies to cover at least some of the added costs imposed on Medicare for having first dollar coverage. Depending on the level of additional charge and the resulting take-up of supplemental coverage, net program savings are realized.

Because reducing OOP costs (deductibles, copayments, or coinsurance) can increase program cost dramatically and undermines beneficiaries' incentives to make cost-conscious decisions about discretionary care, the redesigned FFS benefit package keeps those costs in place. However, without additional help, Medicare beneficiaries with limited incomes could have difficulty paying those OOP costs. In this report, the Commission discusses how changing income eligibility for the Medicare Savings Programs (MSPs) could help low-income Medicare beneficiaries afford out-of-pocket costs under a redesigned Medicare fee-for-service benefit package. The Commission made a recommendation in 2008 to align the MSPs income eligibility criteria with the Part D low-income drug subsidy (LIS) income eligibility criteria, effectively

increasing the Part B premium subsidy to beneficiaries with incomes up to 150 percent of the federal poverty level. MSPs provide financial assistance with the Medicare Part B premium for beneficiaries with incomes up to 135 percent of the poverty level. Beneficiaries with incomes up to 100 percent of the poverty level also receive assistance with other OOP costs (i.e., premiums, deductibles, and coinsurance). Medicare's Part D prescription drug benefit incorporates a subsidy structure that provides assistance to beneficiaries with incomes up to 150 percent of the poverty level. Increasing the MSP income eligibility criteria to 150 percent of the poverty level would provide additional financial assistance to lower income beneficiaries by subsidizing their Part B premium, thus giving them resources to pay their OOP costs at the point of service. The Commission believes this is a targeted and efficient approach to help poor and near-poor beneficiaries with their OOP medical expenses.

### **Measuring the effects of medication adherence for the Medicare population**

Medication adherence is viewed as an important component in the treatment of many medical conditions. Adherence to appropriate medication therapy can improve health outcomes and has the potential to reduce the use of other health care services. At the same time, improved adherence increases spending on medications. This issue has led to a proliferation of research on policies that encourage better adherence to medication therapy (e.g., reduced patient cost sharing) and the impact of improved medication adherence on health outcomes, typically measured by the use of other health care services.

In this report, we examine the effects of medication adherence on medical spending for the Medicare population. Our analysis focused on evidence-based medication regimens for one condition—congestive heart failure (CHF). The results of our analysis show that:

- Better adherence to a CHF medication regimen is associated with lower medical spending among Medicare beneficiaries with CHF, but the effects likely vary by beneficiary characteristics (e.g., age).
- Beneficiaries who follow the recommended CHF therapies tended to be healthier before being diagnosed with CHF than nonadherent beneficiaries, with fewer medical conditions



and lower medical spending. Thus, our estimated effects could reflect both the benefit of adhering to the recommended medication and the fact that adherent individuals were already healthier.

- The effects of medication adherence on medical spending diminish over time. Our analysis shows savings in the first six months of the medication regimen, but after six months, these savings decrease.
- The estimated effects of medication adherence on medical spending are highly sensitive to how these effects are modeled. Thus, even within the same data set, it may be possible to reach very different conclusions about the effects of adherence, based solely on how adherence is defined, which criteria are used to select the study cohort and how the model is specified. For example, accounting more completely for beneficiary health status (e.g., mortality) in the model reduced the effect on health care spending by half.

Although our analysis examined only one condition and is therefore not generalizable to other conditions or populations, our findings highlight the complexity of interpreting estimates of the effects of medication adherence as measured by spending differentials between adherent and nonadherent individuals. This difficulty may be exacerbated by the more complex health profiles of the Medicare population compared with the general population often used in studies of medication adherence.

## **Conclusion**

MedPAC's June report identifies several areas within FFS for which restructuring payments to support quality and efficiency may be warranted and for which MedPAC may consider recommendations to the Congress in the future. A number of these issues could be addressed in the shorter term, and could serve as building blocks for broader payment reforms. This report also initiates a longer-term conversation about synchronizing Medicare policy across the three major payment models. MedPAC looks forward to continuing analysis that could support efforts to address inconsistencies within and across Medicare's payment models.