

# Trends in Postacute Care Spending Growth During the Medicare Spending Slowdown

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## ABSTRACT

**ISSUE:** Over the past decade, traditional Medicare's per-beneficiary spending grew at historically low levels. To understand this phenomenon, it is important to examine trends in postacute care, which experienced exceptionally high spending growth in prior decades.

**GOAL:** Describe per-beneficiary spending trends between 2007 and 2015 for postacute care services among traditional Medicare beneficiaries age 65 and older.

**METHODS:** Trend analysis of individual-level Medicare administrative data to generate per-beneficiary spending and utilization estimates for postacute care, including skilled nursing facilities, home health, and inpatient rehabilitation facilities.

**KEY FINDINGS AND CONCLUSIONS:** Per-beneficiary postacute care spending increased from \$1,248 to \$1,424 from 2007 to 2015. This modest increase reflects dramatic changes in annual spending and utilization growth rates, including a reversal from positive to negative spending growth rates for the skilled nursing facility and home health sectors. For example, the average annual spending growth rate for skilled nursing facility services declined from 7.4 percent over the 2008–11 period to –2.8 percent over the 2012–15 period. Among beneficiaries with inpatient use, growth rates for postacute care spending and utilization slowed, but more moderately than observed among all beneficiaries. Reductions in hospital use, as well as reduced payment rates, contributed to declines in postacute spending.

## TOPLINES

- ▶ Traditional Medicare per-beneficiary growth in postacute care spending and service significantly slowed for beneficiaries over age 65 between 2012 and 2015.
- ▶ Postacute spending growth slowed less among Medicare beneficiaries with inpatient use, suggesting that hospitalized beneficiaries may continue to have costly postacute care use patterns.

## INTRODUCTION

Over the past decade, spending growth per person in the Medicare program has been historically low. This is true even for postacute care (PAC), which includes, for example, rehabilitation services a patient may receive after a hospitalization. PAC was one of the fastest growing areas of Medicare spending throughout the 1990s and early 2000s, but has experienced sizeable spending growth reductions since the late 2000s. This spending growth turnaround is notable given recent concerns about appropriateness of PAC service use in the Medicare program. As policymakers seek to contain PAC spending, it will be important to understand why growth slowed in recent years. This issue brief examines how declines in PAC spending growth reflected changes in service use and changes in Medicare payments. We describe changes in how beneficiaries use inpatient services, which usually precede PAC use, as well as changes in PAC services, which include those provided in skilled nursing facilities (SNF), home health agencies, and inpatient rehabilitation facilities (IRF).

## LOOKING AT CHANGES IN POSTACUTE CARE SPENDING TRENDS

We need to look at the changes in PAC spending in the context of the steep decline in inpatient admissions since 2010.<sup>1</sup> Inpatient use may have decreased because Medicare beneficiaries are healthier or because health conditions that formerly prompted a hospitalization can now be treated in alternative outpatient settings. Lower inpatient service use could affect the use of postacute care services in two different ways. Reduced hospitalizations could divert beneficiaries from using associated PAC services. For example, avoiding hospitalizations would prevent beneficiaries from being discharged to an SNF for rehabilitative services. On the other hand, PAC services could substitute for inpatient services, a pattern that emerged in the 1980s when shorter inpatient stays contributed to a rapid increase in PAC spending and use over the next decade.<sup>2</sup> For example, if hospitals are referring more patients at discharge to PAC providers to prevent subsequent readmissions, then PAC use could increase while inpatient readmissions decline. Recent data show that the length of stay in SNF and IRF increased over the years 2000 to 2015 as hospital length of stay decreased.<sup>3</sup>

## Traditional Medicare's Coverage of Postacute Care Services

### Skilled nursing facilities (SNF)

- Part A covers up to 100 days of services following a three-day inpatient stay
- Beneficiaries pay no cost-sharing for the first 20 days of services and then pay a daily copayment (\$167.50 in 2018) for days 21 to 100
- Part A pays SNF providers a daily prospective rate adjusted for several factors, including beneficiary's level of functioning, service use, and specific clinical needs

### Home health

- Part A is the primary payer for services
- No cost-sharing is required
- No inpatient stay is required for services but around 25 percent of initial home health episodes follow an inpatient or institutional stay\*
- A physician must certify that patients are homebound and need skilled care
- A prospective payment rate applies to home health episodes, usually measured in 60-day increments, and adjustment factors include beneficiary's level of functioning, clinical needs, and service use

### Inpatient rehabilitation facilities (IRF)

- Part A covers up to 90 days per episode of services
- The Part A deductible (\$1,340 in 2018) applies to any preceding inpatient stay and the first 60 days of services; a daily copayment (\$335 in 2018) is required for days 61 to 90 of services
- Part A pays IRF providers a prospective payment for each discharge based on beneficiary's diagnosis, functional status, and other adjustment factors

\* Medicare Payment Advisory Commission, "Section 8: Post-Acute Care," in *A Data Book: Health Care Spending and the Medicare Program* (MedPAC, June 2015), 111–32.

PAC spending growth also is linked to changes in Medicare payment rates. In traditional Medicare, coverage of PAC benefits varies by service (see box above). Medicare annually updates payment rates based on a “market basket,” which estimates how much providers’ costs have changed. Several provisions of the Affordable Care Act affected how these annual updates were determined for PAC providers.<sup>4</sup> Starting in 2012, the annual payment rate updates for the SNF and IRF sectors were adjusted to account for increased productivity over time. Another ACA measure specified one-time reductions in select years for SNF, home health, and IRF payment rate changes. In effect, these reductions mean that payments to the PAC sector still increase over time, but at a slower rate of growth than under the previous formula. The Centers for Medicare and Medicaid Services (CMS) also may adjust payment rates to correct previous estimates. For example, the 2012 SNF payment update corrected for unintended overpayments to SNF providers under a 2011 update to the prospective payment system.<sup>5</sup> Finally, sequestration budget cuts have reduced Medicare payments to PAC providers by 2 percent annually since April 2013.

To understand better how PAC spending changed as overall Medicare spending slowed, we examined spending and utilization changes between the 2008–11 period, when PAC per-beneficiary spending increased modestly, and the subsequent period, 2012–15, when PAC per-beneficiary spending growth was almost flat. We focused on traditional Medicare beneficiaries age 65 and older. For inpatient services and three PAC services (SNF, home health, and IRF), we calculated the average annual percentage change in per-beneficiary spending, the number of beneficiaries with any use of services, and the number of days of service use per beneficiary. For PAC services, we estimated how much spending levels would have changed in the absence of any payment rate changes, including annual adjustments and sequestration measures. We also performed separate analyses of PAC service use for beneficiaries in this population who had any inpatient days in a given calendar year. For more details about our methods, see [How We Conducted This Study](#).

## FINDINGS

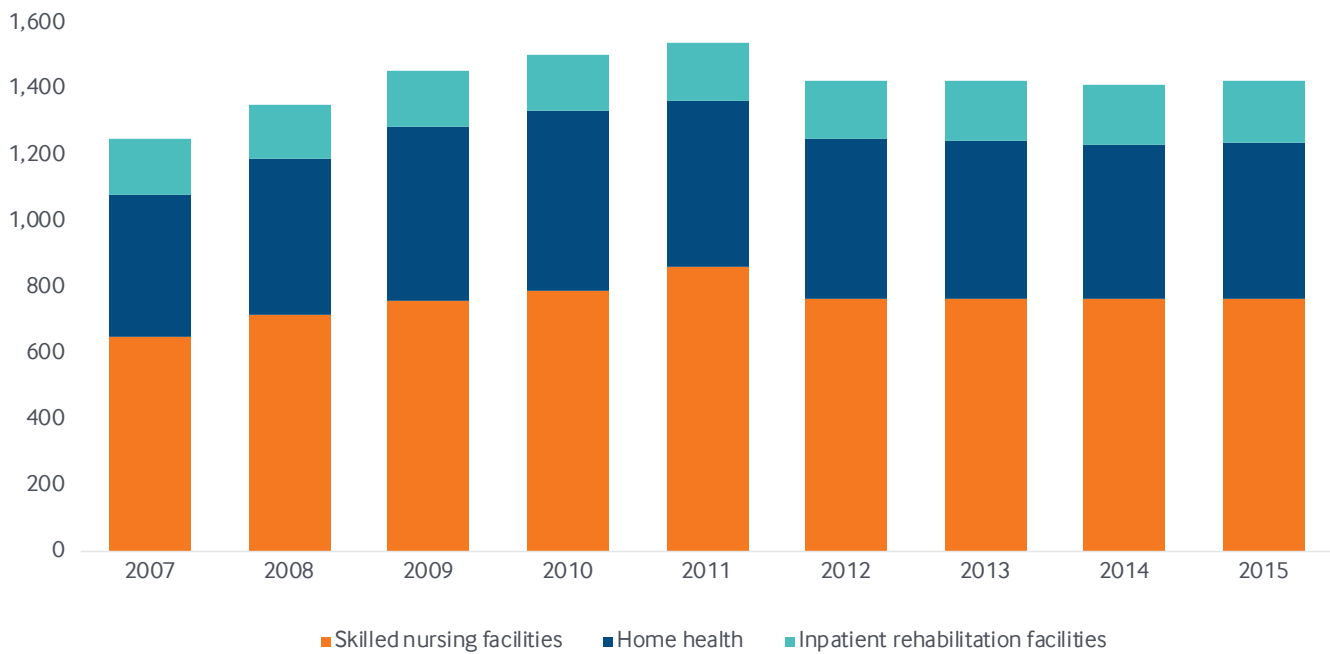
### Changes in Postacute Care Spending and Use Among All Beneficiaries

Among Medicare beneficiaries age 65 and older, per-beneficiary spending for PAC services increased from \$1,248 in 2007 to a peak of \$1,541 in 2011 (Exhibit 1). Per-beneficiary PAC spending declined in 2012 and was relatively flat for the subsequent three years; average spending per beneficiary for PAC services was \$1,424 in 2015. The SNF sector accounted for 54 percent of all PAC spending in 2015, followed by home health (33%) and IRF (13%).

These changes are reflected in the average annual spending growth rates for SNF and home health services (Exhibit 2), which both flipped from high rates of growth in 2008–11 to negative spending growth in 2012–15. Between these two periods, average per-beneficiary annual spending growth declined from 7.4 percent to –2.8 percent for SNF services and from 4.0 percent to –1.8 percent for home health. These declines in spending growth are comparable, albeit more dramatic in their reversal, to concurrent trends observed in the inpatient sector, where the average annual spending growth rate was 1.3 percent from 2008–11 and dropped to –1.5 percent from 2012 to 2015. The PAC spending slowdown also was more pronounced than the slowdown in total Medicare spending growth, which declined from 3.4 percent to 0.6 percent over these two periods. The IRF sector was an exception. Average annual spending growth rate was fairly stable: 1.5 percent in 2008–11 and 1.8 percent in 2012–15.

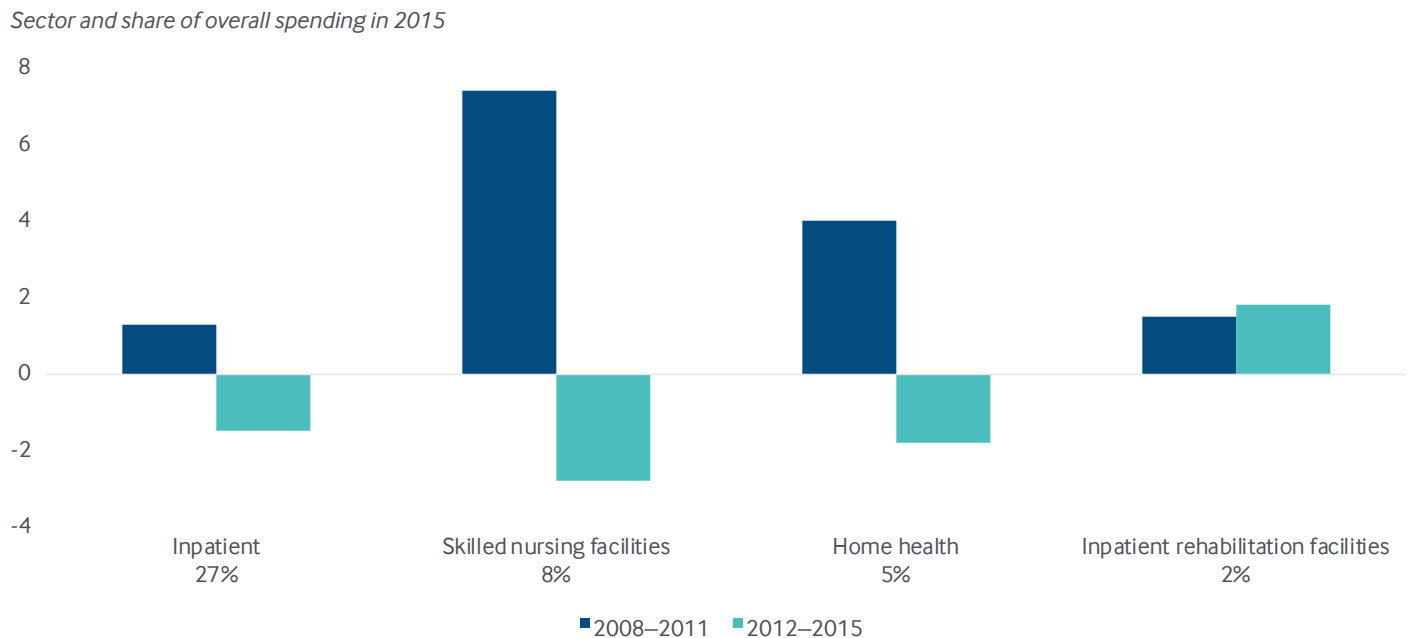
When the analyses included only older beneficiaries with inpatient use, the decline in PAC spending growth is more modest than among all beneficiaries (Exhibit 3). Although inpatient users still experienced lower spending growth in 2012–15 as compared to 2008–11 for inpatient, SNF, and home health services, the spending growth declines are smaller than those observed among all beneficiaries. For the SNF sector, the average annual spending growth decrease for the years 2012–15 was more moderate among inpatients (0.4%) than among all beneficiaries (–2.8%). The average annual growth in home health spending for

Exhibit 1. Mean Annual Medicare Per-Beneficiary Spending for Postacute Care Services, 2007–2015 (dollars)



Data: Authors' calculations using data from the Medicare Master Beneficiary Summary File and Medicare claims data for all traditional Medicare beneficiaries age 65 and older.

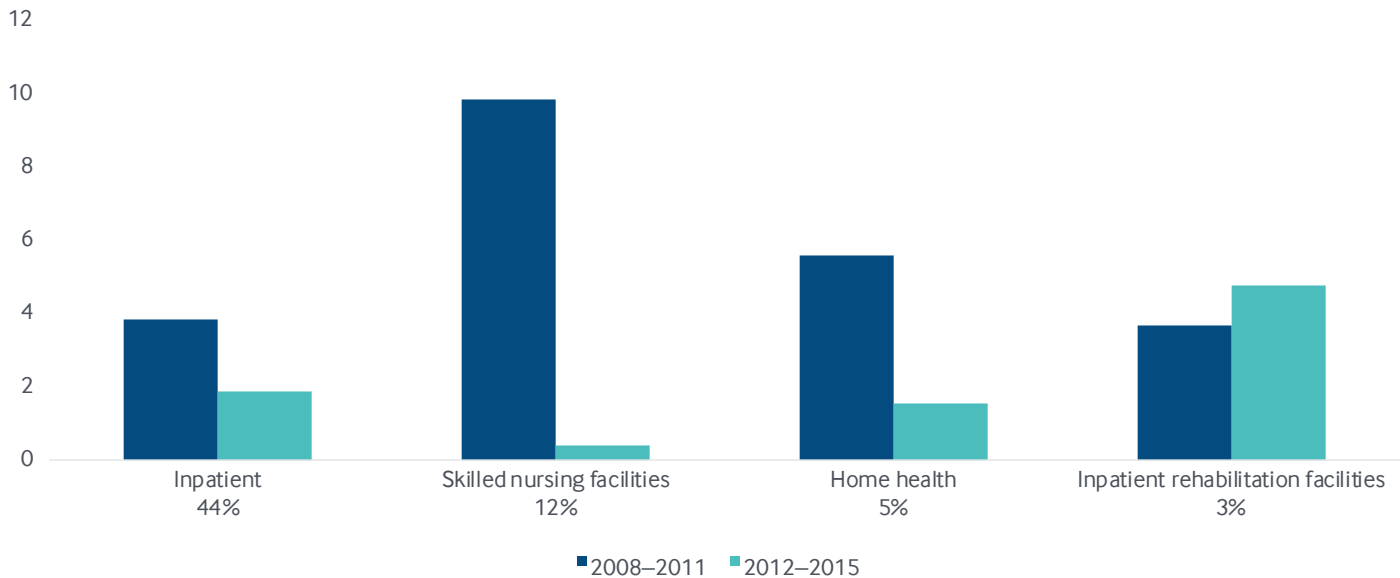
Exhibit 2. Average Annual Growth in Medicare Per-Beneficiary Spending for Inpatient and Postacute Care Services, 2008–11 vs. 2012–15 (percent)



Data: Authors' calculations using data from the Medicare Master Beneficiary Summary File and Medicare claims data for all traditional Medicare beneficiaries age 65 and older.

### Exhibit 3. Average Annual Growth in Medicare Per-Beneficiary Spending Among Inpatient Users for Inpatient and Postacute Care Services, 2008–11 vs. 2012–15 (percent)

Sector and share of overall spending in 2015



Data: Authors' calculations using 100 percent Medicare Master Beneficiary Summary File and Medicare claims data for all traditional Medicare beneficiaries age 65 and older with inpatient use.

beneficiaries with inpatient use dropped from 5.6 percent to 1.5 percent. This indicates that home health spending levels for inpatients still increased in 2012–15, but did not grow as quickly as spending levels did in 2008–11. IRF spending trends were distinct, with slightly higher rates of growth in 2012–15 (4.8%) than in 2008–11 (3.7%).

#### Changes in Growth of Postacute and Inpatient Service Use

The PAC spending reductions among all beneficiaries corresponded to a lower proportion of beneficiaries with any inpatient or PAC services use (Exhibit 4). The average annual growth rate in the percentage of beneficiaries with any inpatient use was –3.3 percent from 2012–15; the same measure for SNF and home health services was –2.0 percent and –1.3 percent, respectively. Such patterns suggest that declining inpatient service use was accompanied by fewer beneficiaries using PAC services.

However, among beneficiaries with inpatient use there are much smaller changes in PAC service use between 2008–11 and 2012–15 (Exhibit 4). In the SNF sector, both time periods had growth in any service use and number of SNF days per inpatient, a measure of service intensity. The average annual growth in these measures only slightly declined between the two time periods. In contrast, the home health sector experienced more pronounced changes. The number of home health days per inpatient increased at an average annual rate of 5.3 percent in 2008–11, then dropped to 0.7 percent average annual growth in 2012–15. The average annual growth in the proportion of inpatients using IRF care was more consistent: 1.5 percent in the earlier period compared to 2.1 percent in the later period.

### Exhibit 4. Average Annual Percent Growth in Inpatient and Postacute Care Services Among All Beneficiaries and Inpatients, 2008–11 vs. 2012–15

	Percent of beneficiaries with use				Number of days per beneficiary			
	Mean		Mean annual growth rate (%)		Mean		Mean annual growth rate (%)	
	2008–11	2012–15	2008–11	2012–15	2008–11	2012–15	2008–11	2012–15
<b>All beneficiaries</b>								
Inpatient	17.7	15.3	-2.4	-3.3	1.4	1.2	-3.6	-4.3
SNF	5.3	5.0	-0.3	-2.0	2.0	1.8	0.0	-2.9
HH	9.2	9.0	2.1	-1.3	8.2	7.7	4.4	-2.7
IRF	0.9	0.9	-0.5	-0.6	0.1	0.1	-0.7	-0.9
<b>All beneficiaries with inpatient use</b>								
Inpatient					8.2	7.8	-1.1	-1.1
SNF	28.2	30.0	2.1	1.1	10.7	11.2	2.4	0.3
HH	36.2	39.4	3.1	1.7	28.1	30.0	5.3	0.7
IRF	5.0	5.5	1.5	2.1	0.7	0.8	1.4	1.9

Data: Authors' calculations using data from the Medicare Master Beneficiary Summary File and Medicare claims data for all traditional Medicare beneficiaries age 65 and older.

Note: SNF = skilled nursing facilities, HH = home health, IRF = inpatient rehabilitation facilities.

### Changes in Postacute Spending Levels and Contributions from Payment Rate Updates

Payment rate changes for PAC services played an important role in spending growth trends over this period. First, a large share of the spending growth reflects annual increases in payment rates to PAC providers (Exhibit 5). Without payment rate increases, there would have been almost no growth over this period in per-beneficiary spending on SNF and IRF services and modest declines in per-beneficiary spending on home health services. For example, if the volume of SNF services provided in 2015 was reimbursed at 2007 payment rates, per-beneficiary spending on SNF services in 2015 would have been \$105 — or 14 percent — lower.

### IMPLICATIONS

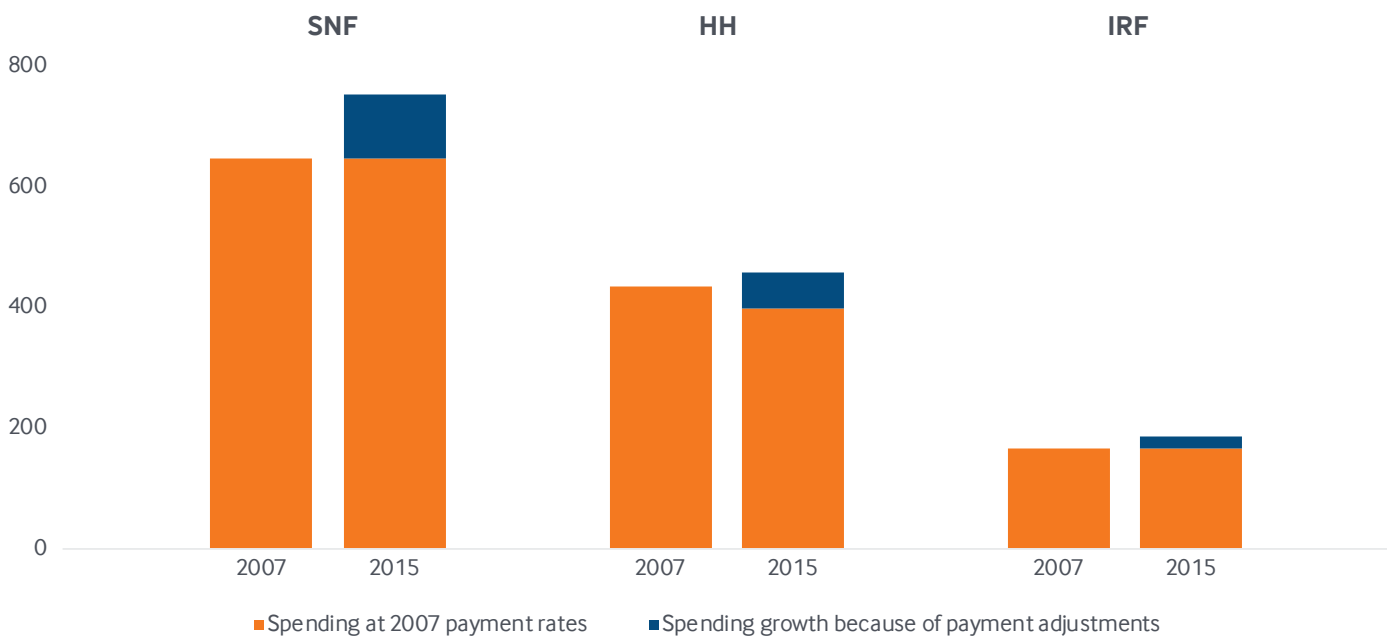
Between 2007 and 2015, per-beneficiary spending levels for PAC services increased modestly for Medicare beneficiaries age 65 and older. These spending changes reflect a dramatic decline in SNF and home health annual spending growth rates between 2012 and 2015. In the IRF sector, spending growth was more consistent in both time periods. The use of inpatient and PAC services overall also declined

for beneficiaries over this period. The slowdown in PAC spending growth and use was more moderate among beneficiaries with inpatient use. Changes to PAC sector payment rates accounted for a large share of spending level increases over this period for all beneficiaries.

This combination of results suggests, first, that reductions in inpatient use may have contributed to declining PAC spending among the entire Medicare population. The reductions in inpatient use may reflect both a declining need for acute services among Medicare beneficiaries, as well as the impact of reform to avoid unnecessary hospitalizations among them. Medicare policy can play an important role in encouraging providers to avoid preventable hospitalizations, as demonstrated by the response to the implementation of the readmissions penalty in 2012.<sup>6</sup> Value-based payment models, such as accountable care organizations, also have demonstrated initial success in reducing PAC costs.<sup>7</sup> Bundled payment models that hold providers at risk for costs across inpatient and PAC sectors have been shown to reduce PAC use and spending for joint replacement, but not hospitalizations related to chronic conditions.<sup>8</sup>



Exhibit 5. Change in Per-Beneficiary Postacute Care Spending Levels by Sector and Source of Increase, 2007–2015 (dollars)



Data: Authors' calculations using data from the Medicare Master Beneficiary Summary File and Medicare claims data for all traditional Medicare beneficiaries age 65 and older.

Second, these trends may reflect changes in the health care needs and acuity of Medicare patients with inpatient and PAC use. If providers are successful in avoiding hospitalizations for healthier patients, beneficiaries who do have inpatient and PAC use may be, on average, sicker and in need of more resources, including costly PAC services. It is important to understand these dynamics when considering payment policy for PAC providers. Spending declines related to reductions in hospitalization and avoidable use of PAC services may be partially offset by the greater health care costs of beneficiaries who still need inpatient and PAC services. According to the Medicare Payment Advisory Commission (MedPAC), the complexity of inpatients' health care needs increased during our later study years. In claims data, though, actual changes in patient acuity can be difficult to distinguish from providers' efforts to maximize their revenue through upcoding practices. For example, IRF spending may not have slowed as much as other PAC

sectors because of the increasing number of freestanding IRFs in recent years. MedPAC has noted that this type of IRF has higher margins compared to hospital-based facilities. Based on discrepancies between functional assessments at hospital discharge and in high-margin IRFs, MedPAC has recommended that the coding practices of IRFs be examined to ensure accurate reporting for payment risk adjustment.<sup>9</sup>

Finally, changes in payment rates also may drive changes in use of PAC services. One concern about reducing payment rates is that providers could offset lower rates by increasing their volume of patients or services provided. For example, a home health agency facing smaller increases in payment rates over time could maintain their total Medicare payments by increasing the number of patients served, including some who may have questionable need for home health services. On the other hand, providers might have fewer incentives to

serve Medicare beneficiaries if the reimbursement rates sufficiently diminish profits. Some evidence from earlier SNF payment rate changes suggests that the use of SNF services and number of facilities declined in response to these reductions in payment rates.<sup>10</sup>

Because inpatient and postacute care services together account for almost half of Medicare spending, tracking spending growth and utilization trends will remain an important issue for policymakers. Finding a balance between incentives to reduce unnecessary use of services and adequately compensating providers for providing needed care will be essential for the long-term stability of the Medicare program and the well-being of beneficiaries.

## HOW WE CONDUCTED THIS STUDY

### Data sources

The primary data source for these analyses was the Medicare Master Beneficiary Summary File and its associated Cost and Use segment for the years 2007–2015. This data set provides information about each beneficiary's total annual spending, annual spending by sector, and service use by sector. We supplemented this data with information from Medicare Part A claims to gain additional detail about beneficiaries' use of inpatient rehabilitation facilities and home health services. Information was abstracted from the Federal Register about annual payment rate increases by sector.

### Population

To be included in our estimates, beneficiaries had to be at least 65 years of age and not enrolled in Medicare Advantage in July of a given calendar year. Inpatients were identified on the basis of having at least one inpatient day of use in a given year.



## NOTES

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