

CHAPTER 4

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**Paying for sequential stays in  
a unified prospective payment  
system for post-acute care**

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# Paying for sequential stays in a unified prospective payment system for post-acute care

## Chapter summary

In 2016, Medicare fee-for-service (FFS) spending on post-acute care (PAC) services—skilled nursing facilities (SNFs), home health agencies (HHAs), inpatient rehabilitation facilities (IRFs), and long-term care hospitals (LTCHs)—totaled \$60 billion. For any condition, Medicare’s FFS payments can differ substantially because Medicare uses separate prospective payment systems (PPSs) to pay for stays in each setting. As mandated by the Congress, in June 2016, the Commission evaluated a prototype design and concluded that it was feasible to design a unified PAC PPS that would establish accurate payments using readily available data. The Commission recommended the necessary features of a PAC PPS that spans the four settings and bases payments on patient characteristics. Our initial work concluded that the design would establish accurate payments for most of the more than 40 patient groups we examined and would increase the equity of payments across conditions. In turn, providers would have less incentive to selectively admit certain types of patients over others. In June 2017, the Commission recommended that a PAC PPS be implemented beginning in 2021 with a three-year transition and a corresponding alignment of setting-specific regulatory requirements.

The Commission continues to work on a unified PAC PPS, considering refinements that would improve the design. These refinements should not delay implementing a PAC PPS or the Commission’s recommendation to improve the equity of PAC payments before the PAC PPS is implemented.

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Refinements focus on increasing the accuracy of payment for cases that involve a course of PAC care—that is, sequential stays—which we define as PAC stays within seven days of each other.

In this chapter, refinements focus on two payment issues related to sequential stays. The first has to do with the way the cost of a stay can vary depending on where it falls in a sequence of PAC stays. The reason is that, throughout a course of care, a beneficiary’s clinical condition is likely to change, so later PAC stays could have different average costs—often lower but sometimes higher—compared with initial PAC stays. As with other FFS payment systems, it will be important under the unified PAC PPS to align payments with the cost of each stay throughout a sequence of stays. If payments and costs are not aligned, providers could have a financial incentive to refer beneficiaries for unnecessary subsequent care or could have difficulty placing beneficiaries who require continued care. A second issue involves how to identify, for payment purposes, distinct levels of care for a PAC provider that treats a patient with evolving care needs “in place” rather than referring the patient to another PAC provider. Under the unified PAC PPS, such providers would be financially disadvantaged unless the payment system included a way to trigger payments for different phases of care.

Of 8.9 million PAC stays in the Commission’s analysis, a majority (64 percent) were solo stays, thus, not part of a sequence of stays. Of the 1.9 million multi-stay sequences, half involved stays in the same setting; the most common of these were back-to-back home health stays. Another third involved beneficiaries who transitioned from more intensive to less intensive settings. The most common of these were SNF and IRF stays followed by home health stays. Far less frequently, beneficiaries transitioned from less intensive to more intensive settings, most commonly from home health care to SNF care.

Our analysis of sequential PAC stays, if paid under our prototype PAC PPS (which adjusts payments based on patient characteristics), found that patterns of costs relative to estimated payments over the course of care differed for home health stays and institutional PAC stays. For home health stays, payments under a unified PAC PPS would decrease over the course of a sequence of stays, but the cost of stays would decline more. As a result, later home health stays in a sequence would be more profitable than earlier stays, with stays that occurred later in longer sequences being the most profitable. These results suggest that payments need to be adjusted downward for later stays, similar to the adjustment used in the current HHA PPS. By contrast, PAC PPS payments for institutional stays would remain reasonably well aligned with the cost of stays throughout a sequence of care. This finding indicates that the PAC risk adjustment adequately captures differences in the cost of

institutional stays throughout a sequence of care, indicating no need for a separate adjustment to payments.

However, under its current design, the prototype PAC PPS would not be able to appropriately pay a PAC provider that offered a range of PAC services and was able to treat in place beneficiaries with evolving care needs (that is, not refer them to another PAC provider), even though such in-place treatment might be optimal for beneficiaries requiring PAC and operationally and administratively easier for providers (assuming the regulatory flexibility to do so). Under current policy, these beneficiaries are typically discharged to a second setting, and Medicare makes two payments for the patient's PAC, one to each provider. Under a PAC PPS, providers will have more flexibility to offer a continuum of services to patients with evolving care needs, but, for payment purposes, Medicare will need to define when one "stay" or phase of care ends and the next one begins. Otherwise, with only one admission and discharge date, providers would receive only one payment, creating a financial disincentive to treat in place.

Of the approaches we examined, the most promising would involve episode-based payments; that is, Medicare would pay for all PAC provided during an episode of care. The episode would include only PAC and would exclude other services furnished during the episode, such as hospital care or physician services. Payments for the episode of PAC would be set prospectively using a unified PAC PPS, with no reconciliation to a target benchmark. Payment for the PAC could be made to a hospital, a health system, the PAC provider where the episode starts, an accountable care organization, or a third-party convener that assumes financial risk for the episode of PAC. Under this approach, Medicare would not need to define and set payments for subsequent stays because the entity would be paid for the PAC provided during the episode, regardless of how many stays, settings, or providers were included. Further, a payment adjuster for later home health stays would not be needed because payments for the episode of PAC would be based on the average cost of the PAC for the full duration of the episode, including lower cost PAC later in the episode.

Though episode-based payments could require an entity receiving payment from Medicare to pay all PAC providers involved in the care, such an arrangement would be necessary only for the small share of sequential stays that involved more than one provider. We expect this share to decline under a PAC PPS as entities evolve to offer a continuum of PAC. Entities would gain valuable experience managing PAC across a continuum before they embarked on assuming more responsibility for caring for beneficiaries. The incentive for entities receiving payment to stint on the

amount or quality of services furnished (to keep costs low) could be countered with value-based purchasing. Episode-based payments would require a certain level of infrastructure for the minority of PAC stays that involve multiple providers, but the Commission contends that the advantages of this approach substantially outweigh its complexities.

The Commission will continue to explore episode-based payments over the coming year. Shifting the unit of service from a stay to an episode would change certain incentives (most notably the incentive to initiate PAC stays), but the most important features of a PAC PPS would remain: correcting the biases of the current PPSs and increasing the equity of payments across all types of stays so that providers have less incentive to selectively admit certain beneficiaries over others. Shifting to an episode-based payment would incorporate these strengths into a bolder approach to a PAC PPS. In the meantime, CMS should proceed with implementing a stay-based unified PAC PPS. ■

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## Background

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Post-acute care (PAC) providers—skilled nursing facilities (SNFs), home health agencies (HHAs), inpatient rehabilitation facilities (IRFs), and long-term care hospitals (LTCHs)—offer important recuperation and rehabilitation services to Medicare beneficiaries.<sup>1</sup> In 2016, Medicare fee-for-service (FFS) spending on these services totaled \$60 billion. However, Medicare’s payments for a similar case treated in different settings can differ substantially, in part because Medicare uses separate prospective payment systems (PPSs) to pay for stays in each setting. Some of the difference in payments reflects the considerably different cost structures and the regulatory and statutory requirements for each setting. At the same time, there is a lack of evidence-based criteria guiding decisions about where patients should receive PAC and how much care they should receive. The only study to compare outcomes across the settings for a broad range of clinical conditions did not find consistent differences in rates of readmission to hospitals or in improvement in mobility or self-care (Gage et al. 2012). These factors contribute to considerable variation in the supply and use of PAC providers across the country. Results from the Center for Medicare & Medicaid Innovation’s Bundled Payments for Care Improvement (BPCI) initiative indicate that, while the use of PAC did not decline, the mix of services shifted away from institutional PAC and toward home health care, indicating that patients in the settings overlap.

Given the overlap among settings for treating similar patients, the Commission has long promoted the idea of moving to a unified system to pay for PAC in FFS Medicare using a PPS that spans the four settings, with payments based on patient characteristics rather than site of service.<sup>2</sup> As mandated by the Improving Medicare Post-Acute Care Transformation Act of 2014 (IMPACT), the Commission, in June 2016, recommended the necessary features of a PAC PPS and considered the implications of moving to such a system (Medicare Payment Advisory Commission 2016). Using readily available data, the Commission’s PAC PPS design accurately predicted the costs of stays for most patient groups. In June 2017, the Commission focused on several implementation issues, including the need for a transition to this new payment system, the level at which to set payments when the system is implemented, and the need for continued monitoring and periodic refinements over time to keep payments aligned with the cost of care (Medicare Payment Advisory Commission 2017). In March 2018,

the Commission recommended that, in anticipation of a transition to a unified PAC PPS, CMS should begin to base payments to providers in each of the PAC sectors on a blend of the sector’s setting-specific relative weights and the unified PAC PPS relative weights. Doing so would begin to improve the equity of payments across conditions (Medicare Payment Advisory Commission 2018).

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## Challenges with paying for sequential post-acute care stays

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The Commission’s initial work on a unified PAC PPS, presented in the June 2016 report to the Congress, considered each PAC stay as an independent event (Medicare Payment Advisory Commission 2016). Yet, many PAC stays are the second or third (or more) in a series of PAC stays, in which patients transition from one setting or provider to another during their course of care. In an FFS payment system like the unified PAC PPS, sequential stays present two potential challenges to payment accuracy. First, throughout a course of care, a beneficiary’s clinical condition is likely to change such that subsequent PAC stays may have different average costs than initial PAC stays. If payments for subsequent stays are too high, providers such as those that are part of a system of care or HHAs that can recertify additional stays have an incentive to refer patients for unnecessary additional PAC stays, which could expose beneficiaries to undue risk and would increase program spending. If payments for subsequent stays are too low, providers could avoid admitting these beneficiaries for necessary additional care.

The second challenge related to sequential stays centers on how to pay institutional providers for treating beneficiaries whose care needs evolve over time.<sup>3</sup> Currently, patients treated in institutional settings who need additional PAC typically transition from one setting to another. For payment purposes, each stay has a clearly defined beginning and end, and Medicare pays for each stay separately. As regulatory requirements for institutional PAC settings begin to be aligned under a unified PAC PPS, institutional PAC providers would have the flexibility to offer a continuum of services to beneficiaries who require different levels of care. In such circumstances, however, the “end” of one stay and the “beginning” of another would not be clear. Yet, being able to distinguish between the stays would be important to pay for these services accurately. Otherwise, providers



would have a financial incentive to discharge patients to another PAC provider, exposing beneficiaries to the risks associated with transitions of care.

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## Summary of the proposed PAC PPS design

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Based on its analysis of 8.9 million PAC stays in 2013 and using readily available administrative data, the Commission concluded that a unified PPS is feasible (Medicare Payment Advisory Commission 2016). A PAC PPS design would establish accurate payments using a uniform unit of service (a stay, which, in the case of home health care, is defined as an episode) and a uniform risk adjustment method. The Commission found the following factors to be important predictors of costs that should be considered in the design: the patient's age, disability status, comorbidities (and the number of body systems involved), severity of illness, risk score, cognitive status, and impairments; the primary reason to treat; the length of stay in an intensive care unit during the prior hospital stay (if any); and the use of select high-cost services (such as dialysis and mechanical ventilation).<sup>4</sup> The design should include an adjustment for stays provided by HHAs because of their much lower costs and for two outlier policies—one for unusually high-cost stays and another for unusually short stays. The Commission examined the accuracy of PAC PPS payments for more than 40 patient groups before concluding that an initial design could be based on readily available data.

The proposed PAC PPS would redistribute payments and narrow the differences in profitability of different types of stays (Medicare Payment Advisory Commission 2017, Medicare Payment Advisory Commission 2016). Payments would decrease for rehabilitation care unrelated to patient characteristics (for example, for patients recovering from hip surgery who receive high amounts of rehabilitation therapy services unrelated to their care needs) and increase for medically complex care (for example, patients with comorbidities that involve multiple body systems). Because PAC PPS payments would be based on the average cost of stays across the four settings, the new payment system would also redistribute payments across settings, with payments shifting from the high-cost LTCH and IRF settings to the lower cost settings.

Because payments would be more accurate and equitable, the Commission recommended implementing a PAC PPS

beginning in 2021, which is sooner than the time table for the studies required by IMPACT. In the Act's schedule of required reports on a PAC PPS design, it is unlikely that a new payment system would be proposed before 2024 for implementation at some later date. And while the Act requires recommendations for a design, it does not require the implementation of a PAC PPS.

In 2017, the Commission reported that the level of current PAC payments was high relative to the cost of stays (14 percent higher) and, for that reason, determined that the implementation of the new system should not be budget neutral. In 2017, the Commission recommended, based on its analysis of 2013 PAC stays (with costs and payments updated to 2017), that the Congress direct the Secretary to implement a PAC PPS beginning in 2021, with a three-year transition and payments lowered by 5 percent (absent any prior payment reductions made to any setting's payments). Concurrently, the Secretary should begin to align setting-specific regulatory requirements (Medicare Payment Advisory Commission 2017). The Commission believes that its recommended design could be adopted on this timetable.

In March 2018, the Commission recommended that the Congress direct the Secretary to begin to increase the equity of each PAC setting's PPS payments before implementing the unified PAC PPS. To do so, CMS would base each PAC setting's payments on a blend of the proposed PAC PPS relative weights and the current setting-specific relative weights. Using this blend would redistribute payments in each setting's PPS toward medically complex stays (Medicare Payment Advisory Commission 2018). This approach would also give providers more time to adjust their costs and practices to the incentives of the new payment system.

Medicare has different regulatory requirements for PAC settings, in part to differentiate one level of care from another, even though the conditions they treat overlap. Under the proposed PAC PPS, with payments based on patient characteristics (and not setting), it would be less important to distinguish among types of institutional PAC providers. Furthermore, it would be unreasonable to maintain different regulatory requirements, with varying associated costs, for providers that will be paid the same amount for the same type of patient. Policymakers would need to align the regulatory requirements across the institutional PAC settings by waiving or altering some of the current requirements. The Commission proposed a two-part strategy. In the near term, concurrent with the implementation of the PAC PPS, some of the current



regulatory requirements would be waived or modified, thereby establishing common requirements across institutional settings that help ensure quality of care. In the longer term, CMS could define a common set of requirements for all PAC providers for participation and additional requirements for providers opting to treat patients with specialized care needs, such as those requiring ventilator or severe wound care.

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## Definition of sequential PAC stays

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Although a majority of beneficiaries have just one PAC stay after discharge from the hospital, many beneficiaries have a series of stays before their episode of illness resolves. To examine these stays, we used beneficiary identifiers and admission and discharge dates to link sequences of PAC stays together. This method allowed us to identify common trajectories of PAC use (e.g., a single IRF stay, a SNF stay followed by a home health stay, back-to-back home health stays).

A *sequential PAC stay* refers to care furnished to a beneficiary with short or no gaps in between the stays (see text box, p. 94, defining sequential PAC stays). For our analysis, we defined a sequential stay as one that began within seven days of another PAC use. These rules are rough proxies for clinical relatedness while allowing some flexibility in how quickly home health care can be arranged (changes in institutional PAC setting stays typically involve transferring the beneficiary with no days in between the stays). Sequences include stays in the same setting and in different settings. A “first” stay was defined as having no PAC use within the previous seven days. A SNF stay followed by a home health episode that began within seven days of discharge from the SNF was considered a two-stay sequence. We assigned stays to the following groups based on the dates of the stay:

- Solo (first-and-only) stays consisted of one admission to one PAC provider, with no subsequent care.
- First-of-multiple stays were the first in a sequence of PAC stays.
- Subsequent stays were the second, third, or later in a sequence of PAC.

We aggregated the three institutional-type stays into a single “institutional PAC” group to reflect how a PAC PPS would pay for this care. The PAC PPS would ignore

differences among institutional settings in establishing payments for these providers and would separately adjust payments for home health stays to align payments to the considerably lower costs of this setting.

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## Characteristics of sequential PAC stays

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As background to our analysis of the costs of and payments for sequential stays, we first examined the patterns of PAC (Figure 4-1, p. 95). Of the thousands of multi-stay sequence patterns, the 10 most frequent patterns made up three-quarters of these sequences. Multiple home health stays were the most common. Stay sequences with decreasing intensity were three times as frequent as those with increasing intensity.

Beneficiaries with solo stays differed from those with multi-stay sequences. Among home health stays, beneficiaries with multi-stay sequences were more likely to be dually eligible for Medicare and Medicaid, disabled, and admitted from the community, while beneficiaries with multiple institutional PAC stays were less likely to have those characteristics. Compared with providers of solo home health stays, providers of multi-stay sequences were more likely to be for profit and freestanding. In contrast, institutional PAC providers of multi-stay sequences were more likely to be nonprofit and hospital based compared with providers of solo institutional PAC stays.

## Frequency of sequential PAC stays

We identified 5,762 combinations of PAC stays in 2013. About two-thirds (64 percent) of the stays were solo events—that is, consisted of a single stay. Of solo stays, home health stays made up the majority (67 percent), while SNF stays made up 28 percent, IRF stays another 4 percent, and LTCH stays about 1 percent.

About one-third (36 percent) of the combinations involved multiple stays, with beneficiaries transitioning from one PAC setting or provider to another during their course of care. Pairs of PAC stays were the most common multi-stay sequence (see online Appendix 4-A, available at <http://www.medpac.gov>, for information on the 25 most common sequences). Half of the sequential stays were lateral transitions within the same setting. The most frequent of these lateral, same-setting sequences consisted of home health stays only. Beneficiaries who moved from more intensive PAC care to less intensive care made up one-third of multi-stay sequences.<sup>5</sup> Transitioning from a

## Defining sequential PAC stays

Consistent with previous work, characteristics of beneficiaries and stays were assigned based on information from claims, Medicare Advantage risk scores, and the beneficiary enrollment file.

To create sequences of post-acute care (PAC), we began with the 8.9 million PAC stays in 2013 that we used in our previous analysis of the unified PAC prospective payment system (PPS) (Medicare Payment Advisory Commission 2017, Medicare Payment Advisory Commission 2016). Beneficiaries with overlapping start and end dates for institutional PAC stays or with duplicate start dates for institutional PAC stays were excluded from the analysis. These exclusions removed 12,479 stays from the analytic file. Home health stays with start and end dates that overlapped with institutional PAC stay dates remained in the analysis because a beneficiary could discontinue a home health care episode and enter into an institutional PAC setting before the end of the 60-day home health episode.

A “first” stay was defined as having no PAC use within the previous seven days. Subsequent stays were defined as stays that began within seven days of another PAC use. Consistent with prior work, we aggregated a beneficiary’s separate skilled nursing facility (SNF) claims to create a stay. Sequences could include any combination of home health or institutional

PAC. Dates were used to establish the sequence and assign stays to a position in the sequence, such as “second stay,” “third stay,” and so on. For example, a second home health stay was second in a sequence (of any length) that included either another home health stay or an institutional PAC stay as the first stay. In our analyses of costs and payments, we examined position and sequence length to separate the effects of sequence length from position in the sequence. Our final analytic sample included 5,334,377 sequences comprising 3,435,192 solo stays and 1,899,185 multi-stay sequences.

Current billing rules govern what constitutes a stay, and our analysis did not redefine stay parameters. Given the separate PPS for each of the four settings, differences exist among settings in how intervening events, such as hospitalizations, define stays. In SNFs, for example, stays interrupted by a hospitalization are considered separately (as two stays), while a single home health episode continues after an intervening hospitalization. An interrupted stay in inpatient rehabilitation facilities and long-term care hospitals can trigger a separate stay, depending on the length of the interruption and the intervening event.<sup>6</sup> In the future, when a common set of requirements is developed for PAC providers’ participation, billing rules and the treatment of interrupted stays could be defined uniformly. ■

SNF or an IRF to home health care was the most common combination of stays of decreasing PAC intensity. Far less frequently (10 percent of multi-stay sequences), beneficiaries were discharged from a lower level of PAC to a more intensive setting. Presumably, this trajectory reflects a change in care needs of the beneficiary and capabilities of the provider or caregiver at home. Of those, transitions from a home health stay to a SNF stay were the most frequent. The remaining 7 percent of sequences were a mixed pattern of transitions (of increasing and decreasing intensity over the course of care), the most frequent being transitions back and forth between SNFs and HHAs.

Of the thousands of multi-stay sequence patterns, the 10 most frequent made up three-quarters of these sequences.

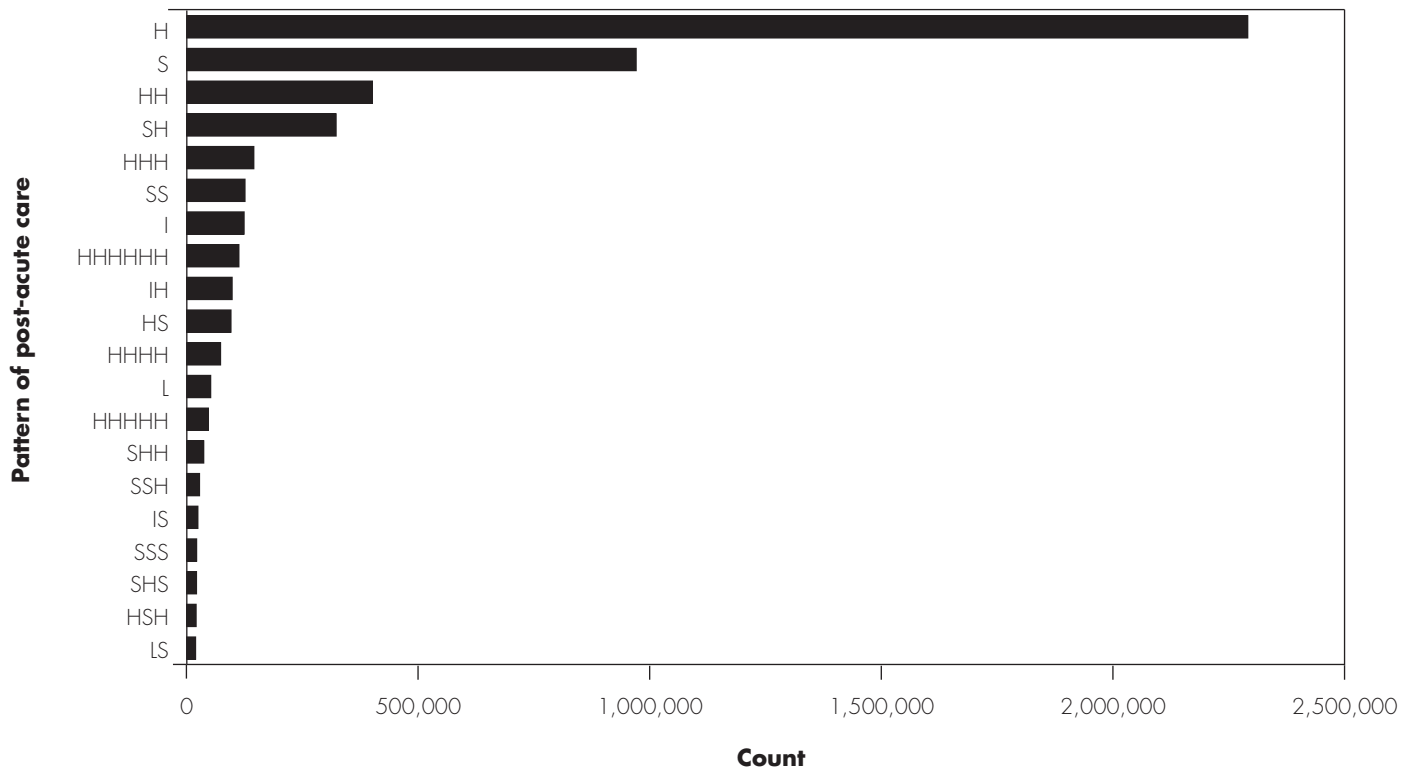
Multiple stays in HHAs were the most common: Sequential home health stays made up 42 percent of all multi-stay sequences, with a pair being the most frequent (21 percent of multi-stay sequences). What appears to be continuous home health care during the year (six or more episodes) made up 7 percent of multi-stay sequences.

### Characteristics of solo and multiple home health stays

To assess whether there were differences between beneficiaries with solo home health stays and beneficiaries with multiple stays that included home health stays, we compared the beneficiaries’ characteristics and primary reason for treatment. We compared home health stays that were solo, first of multiple stays, and subsequent stays

**FIGURE  
4-1**

**The 20 most frequent patterns of post-acute care, 2013**



Note: H (stay treated in home health agency), S (stay treated in skilled nursing facility), I (stay treated in inpatient rehabilitation facility), L (stay treated in long-term care hospital). A sequence shows the order and setting of the stays. For example, “LS” refers to a sequence that started with a long-term care hospital stay and was followed by a skilled nursing facility stay. The 8.9 million post-acute care (PAC) stays were provided in 5,334,377 sequences of PAC.

Source: Analysis of 2013 PAC stays conducted for the Commission by the Urban Institute (Wissoker and Garrett 2018).

in a sequence. (Home health stays that were the first of multiple could be followed by PAC stays of any type—including SNF, IRF, and LTCH stays. Subsequent home health stays could be preceded and followed by any type of PAC care.)

Among home health stays, first-of-multiple stays were more likely to be for beneficiaries who were dually eligible, disabled, and admitted from the community compared with solo stays (Table 4-1, p. 96). For example, 73 percent of first-of-multiple home health stays were for beneficiaries who were admitted from the community (thus, 27 percent had a prior hospital stay). In contrast, 55 percent of solo home health stays were admitted from the community (and 45 percent had prior hospital stay). Among subsequent stays, the shares of dually eligible, disabled, and community admissions increased with the

position in the sequence (second stay in a sequence, third stay in a sequence, etc.). The shares of the most frail and chronically critically ill decreased as the position in the sequence increased. There were not large differences between solo home health and first-of-multiple home health stays in the shares of very old (85 years or older), cognitively impaired, beneficiaries with end-stage renal disease, and the least frail (data not shown).

The primary reasons for treatment were similar for solo home health and first-of-multiple home health stays, with two exceptions. A higher share of solo home health stays (10 percent) were for beneficiaries recovering from an orthopedic surgical condition (such as a joint replacement) compared with 2 percent for first of multiple (Table 4-1). Because home health care often follows an institutional stay (in a SNF or IRF) for beneficiaries recovering from

**TABLE  
4-1**

**Characteristics of beneficiaries with single or multiple PAC stays**

Position in sequence	Number of stays	Dual eligible	Disabled	Community admission	Most frail	Chronically critically ill	Multiple body systems	Orthopedic surgery	Cardiovascular medical	Unusually high cost
All	8,877,513	32%	26%	50%	11%	5%	N/A	10%	15%	11%
<b>Home health stays</b>										
Solo	2,290,337	29%	24%	55%	7%	3%	N/A	10%	13%	8%
First of multiple	1,020,688	38	29	73	6	2	N/A	2	19	16
Second	1,388,388	32	26	66	7	3	N/A	9	17	11
Third	581,866	36	30	86	4	1	N/A	1	21	10
Fourth	319,637	39	32	90	4	1	N/A	1	22	10
Fifth	196,815	41	33	92	4	0	N/A	0	22	9
Sixth	125,718	43	34	94	3	0	N/A	0	22	8
<b>Institutional post-acute care stays</b>										
Solo	1,144,855	33%	24%	11%	21%	11%	18%	17%	8%	11%
First of multiple	847,483	24	21	7	21	12	15	25	7	9
Second	479,783	31	24	12	22	8	18	10	11	11
Third	164,420	32	25	15	22	6	19	8	12	11
Fourth	59,590	33	26	15	22	6	21	8	12	11
Fifth	24,018	34	27	15	23	6	23	8	12	12
Sixth	9,255	34	27	15	25	7	23	8	12	15

Note: PAC (post-acute care), N/A (not applicable). "Institutional post-acute care" refers to stays in skilled nursing facilities (SNFs), inpatient rehabilitation facilities (IRFs), and long-term care hospitals (LTCHs). The table shows the share of stays with the respective characteristic(s). Because each row and column is independent, the rows and columns will not sum to 100 percent. "First-of-multiple" PAC stays are stays discharged to subsequent PAC settings—either home health or institutional PAC. Second, third, fourth, fifth, and sixth stays could be preceded and/or followed by PAC stays of any type, home health or institutional. For example, a third home health stay was third in a sequence of PAC stays, and the sequence could include home health and institutional PAC stays before and after the third stay. Dual-eligible beneficiaries are eligible for Medicare and Medicaid. "Most frail" refers to stays assessed as having most frail patients using the JEN Frailty Index. (The JEN Frailty Index is an algorithm that identifies frail older adults who may be at risk for institutionalization.) "Chronically critically ill" refers to stays for beneficiaries who spent eight or more days in an intensive care or coronary care unit. "Severely ill" refers to stays for patients who were treated in institutional PAC and categorized as severity of illness level 4 during the immediately preceding hospital stay. "Multiple body systems" refers to stays for patients with diagnoses that involved five or more body systems and were treated in institutional PAC settings (thus, "not applicable" in the home health portion of the table). "Unusually high cost" refers to stays that would be included in an outlier pool set at 5 percent for home health stays and 5 percent for institutional PAC stays. About 12,000 stays were excluded from the analysis because the dates on the claims overlapped. Other combinations of visits with seven or more stays in the sequence are not shown.

Source: Analysis of 2013 PAC stays conducted for the Commission by the Urban Institute (Wissoker and Garrett 2018).

orthopedic surgery, the share of second stays for this condition jumps to 9 percent. The share of stays for beneficiaries being treated for a cardiovascular medical condition was higher among first-of-multiple stays compared with solo stays (19 percent vs. 13 percent).

### Characteristics of solo and multiple institutional PAC stays

To assess whether there were differences between beneficiaries with solo institutional PAC stays versus beneficiaries with multiple stays that included one or more institutional PAC stays, we compared the beneficiaries' characteristics and primary reason for treatment. We compared institutional solo stays, first-of-multiple sequences, and subsequent stays in a PAC sequence.

(Institutional stays that were the first of multiple could be followed by PAC stays of any type—including SNF, HHA, IRF, and LTCH. Subsequent institutional stays could be preceded and followed by any type of PAC care.)

The patterns for institutional PAC stays were opposite those for home health stays. First-of-multiple stays were less likely than solo stays to be for beneficiaries who were dually eligible, disabled, or admitted from the community. For example, 24 percent of first-of-multiple stays were for dual-eligible beneficiaries compared with 33 percent of solo stays. The frequency of these characteristics increased with the timing of the stay, though differences were small. In multi-stay sequences, indicators of patient complexity (the shares of beneficiaries who were most frail or who had conditions that involved multiple body systems)

**TABLE  
4-2**

**Provider characteristics of post-acute care stays,  
by position of the stay in a sequence of care**

Position in sequence	Number of stays	Nonprofit	For profit	Hospital based	Freestanding
All	8,877,513	27%	70%	11%	89%
<b>Home health stays</b>					
Solo	2,290,337	36%	61%	14%	86%
First of multiple	1,020,688	21	76	8	92
Second	1,388,388	25	72	9	91
Third	581,866	19	79	7	93
Fourth	319,637	17	81	6	94
Fifth	196,815	16	82	6	94
Sixth	125,718	15	82	5	95
<b>Institutional post-acute care stays</b>					
Solo	1,144,855	28%	67%	11%	89%
First of multiple	847,483	32	63	19	81
Second	479,783	34	71	8	92
Third	164,420	23	73	8	92
Fourth	59,590	22	74	8	92
Fifth	24,018	21	76	8	92
Sixth	9,255	19	76	8	92

Note: "Institutional post-acute care" includes stays in skilled nursing facilities (SNFs), inpatient rehabilitation facilities (IRFs), and long-term care hospitals (LTCHs). "First-of-multiple" post-acute care (PAC) stays include stays discharged to subsequent PAC—either home health or institutional PAC. Second, third, fourth, fifth, and sixth stays could be preceded and/or followed by PAC stays of any type, home health or institutional. For example, a third home health stay was third in a sequence of PAC stays, and the sequence could include home health and institutional PAC stays before and after the third stay. About 12,000 stays were excluded from the analysis because the dates on the claims overlapped. The 3 percent of stays provided in government providers are not shown.

Source: Analysis of 2013 PAC stays conducted for the Commission by the Urban Institute (Wissoker and Garrett 2018).

increased with the sequence's stay count. For example, 15 percent of first-of-multiple stays had conditions that involved multiple body systems compared with 23 percent of institutional stays that were the fifth and 23 percent that were the sixth in a sequence of PAC stays.

Differences in the clinical reasons for treatment were similar across institutional PAC stays, except that a larger share of first-of-multiple stays compared with solo stays were for beneficiaries recovering from orthopedic surgery (25 percent of first-of-multiple stays vs. 17 percent of solo stays). Stays in longer sequences were for beneficiaries who were generally more medically complex than for beneficiaries with shorter sequences.

**Characteristics of providers of solo and multi-stay sequences**

In addition to differences in the ownership and type of providers (freestanding and hospital based) treating solo

and multi-stay sequences, differences also were found between home health and institutional PAC stays (Table 4-2). Among home health stays, a larger share of first-of-multiple stays (76 percent) were provided by for-profit agencies compared with solo stays (61 percent), and the share increased for stays later in the sequence, reaching 82 percent of fifth and sixth stays. By type of HHA, a smaller share of solo home health stays (86 percent) were furnished by freestanding HHAs compared with 92 percent of first of multiple and, again, the shares of stays provided by freestanding HHAs increased for later stays, comprising 95 percent of sixth stays.

Differences in ownership and facility type were smaller among institutional PAC stays. Compared with solo institutional PAC stays, first-of-multiple stays were more frequently (32 percent) treated in nonprofit facilities compared with 28 percent of solo stays, and the share of



## Estimates of PAC costs and PAC PPS payments

The 8.9 million post-acute care (PAC) stays in 2013 that have been used in previous Commission research on the unified PAC prospective payment system (PPS) were the starting point for this work on sequential stays (Medicare Payment Advisory Commission 2016). To estimate the costs of each stay, information from claims and Medicare cost reports and—as required by the Improving Medicare Post-Acute Care Transformation Act of 2014—data from CMS’s Post-Acute Care Payment Reform Demonstration (PAC-PRD) were used. Therapy and nontherapy costs were estimated using 2013 PAC claims and 2013 Medicare cost reports (see online Appendix 4-A, available at <http://www.medpac.gov>, for a full discussion of the methodology). We took advantage of the unique stay-level information on routine costs collected in the PAC-PRD (and not available elsewhere) to estimate routine costs using a

regression model and applied this model to the 2013 PAC stays. The cost of each stay reflects, in part, the differences in costs across settings.

To estimate payments, the PAC PPS design relies on models that predict the cost of each stay using patient and stay characteristics. The following patient and stay information was used to predict the cost of each stay: patient demographics (e.g., age and disability), primary reason to treat, comorbidities, cognitive status, impairments (e.g., difficulty swallowing and bowel incontinence), measures of severity, and use of special treatments (e.g., ventilator care). We included these factors in the risk adjustment because they captured different dimensions of a patient that could influence the cost of care. The Secretary could consider other dimensions or other measures of the same dimensions in the final design.

*(continued next page)*

stays treated in nonprofit facilities decreased in later stays. A higher share of first-of-multiple institutional PAC stays were furnished by hospital-based providers (19 percent) compared with solo institutional PAC stays (11 percent), but the mix across later stays was the same.

We did not explore whether providers that are members of vertically integrated systems (with different settings included in their holdings) have different patterns of care. Given a common financial stake, providers with these linkages would have an incentive to refer beneficiaries to subsequent care.

### **PAC PPS payments need to align with the cost of stays throughout a sequence of post-acute care**

Our analysis found that the average cost of stays declined over the course of sequential PAC stays, especially for home health stays (see text box on estimates of PAC

costs and PAC PPS payments). Although estimated PAC PPS payments (which adjust for differences in patient characteristics) for institutional PAC stays would be aligned with the lower average costs of later stays, PAC PPS payments for home health stays would not be. As a result, later home health stays would be increasingly profitable. These findings suggest the need for a payment adjustment for later home health stays similar to the adjustment in the home health PPS. Otherwise, providers will have an incentive to furnish additional stays.

### **Why costs might vary throughout a sequence of care**

It is possible that the average costs of stays differ throughout a sequence as patients’ care needs evolve. Early stays are more likely to include beneficiaries recovering from acute events and receiving services aimed at getting the beneficiaries functioning as independently as possible. Later PAC stays may focus on strengthening beneficiaries and managing chronic conditions, which may require fewer resources. In addition, stays may

## Estimates of PAC costs and PAC PPS payments (cont.)

We used Poisson regression models and developed one model to predict the costs of routine and therapy care for stays in the four PAC settings and a separate model to predict nontherapy ancillary (NTA) costs for stays in skilled nursing facilities, independent rehabilitation facilities, and long-term care hospitals. We developed a separate model for NTA services because the home health care benefit does not cover these services. A home health indicator was included in the model to account for this setting's considerably lower costs compared with institutional PAC. Without this adjustment, home health stays would be substantially overpaid and the other PAC providers would be substantially underpaid. The design does not consider differences in costs across institutional settings in establishing payments for stays.

Payments also include two outlier policies—one for unusually high-cost stays and another for unusually short stays. A high-cost outlier policy protects providers from incurring exceptionally large losses from treating

unusually high-cost stays and helps ensure beneficiary access to services. A short-stay policy protects the program and taxpayers from excessive payments that would otherwise be paid for unusually short stays. Instead of being paid a full stay amount, short stays are paid a daily rate for the duration of the stay. (For details of these designs, see the Commission's June 2016 report to the Congress (Medicare Payment Advisory Commission 2016).) Payments were adjusted for budget neutrality so that total payments across the four settings are the same as under the current payment systems.

The payments and costs were updated from 2013 to 2017 (Medicare Payment Advisory Commission 2017). To estimate payments in 2017, payments were updated using each setting's market basket update net of the adjustments made by CMS (e.g., for productivity and any coding adjustments). Costs were updated to 2017 using the average cost increases by PAC setting. ■

have different average costs throughout a sequence if they involve a different mix of settings. Beneficiaries may transition between settings as they no longer meet coverage requirements for a given setting. However, distinctions between the costs of home health care and institutional PAC were already considered in a PAC PPS design, while differences across institutional PAC settings are intentionally not factored into payments (payments are “site neutral”). Therefore, the cost differences due to setting should not be a factor in evaluating whether payments require further adjustment.

### **The average cost of stays declines throughout a sequence of care**

The average cost of home health and institutional PAC stays declined throughout a course of care. For home health stays, the average cost of last stays in the sequence was considerably lower than the cost of a first stay in the sequence (Table 4-3, p. 100). For example, in two-stay sequences, the cost of the first stay averaged \$2,699 compared with \$2,278 for the second stay (16 percent lower

than the first). In a five-stay home health sequence, the average cost of the fifth stay was 26 percent lower than the first stay (\$1,896 compared with \$2,574 for the first stay). Beneficiary characteristics are unlikely to explain these large cost differences, which is consistent with findings from extensive work conducted for the Commission on the cost of home health episodes (Wissoker and Garrett 2015) (see online Appendix 4-A, available at <http://www.medpac.gov>, for more information). That work found that clinical characteristics explain little of the variation in costs across episodes. If payments are not aligned to the declining cost of stays, later stays will be increasingly profitable and create an incentive for HHAs to furnish additional stays.

The average cost of institutional PAC stays generally declined throughout a sequence, though the pattern was a little more variable and the differences were smaller compared with home health stays. Except for the two-stay sequence, the costs of later stays were between 7 percent and 12 percent lower than first-stay costs. Compared with later stays, first-stay costs were higher in part because they involved a costlier mix of settings (with higher



**TABLE  
4-3**

**Average costs of stays generally decline over a sequence of care**

Position in sequence	Sequence length (number of stays)					
	1 stay	2 stays	3 stays	4 stays	5 stays	6 stays
<b>Home health stays</b>						
First	\$2,190*	\$2,699	\$2,611	\$2,592	\$2,574	\$2,174
Second		2,278	2,565	2,430	2,356	2,056
Third			2,087	2,343	2,226	1,986
Fourth				1,982	2,204	1,982
Fifth					1,896	1,979
Sixth						1,790
<b>Institutional post-acute care stays</b>						
First	\$14,245*	\$13,948	\$15,191	\$16,097	\$16,740	\$17,506
Second		14,318	14,334	14,785	15,162	16,147
Third			14,100	14,821	15,205	15,966
Fourth				14,287	15,052	15,784
Fifth					14,677	16,016
Sixth						16,246

Note: Second, third, fourth, fifth, and sixth home health stays could be preceded and followed by post-acute care (PAC) stays of any type—including skilled nursing facility (SNF), inpatient rehabilitation facility (IRF), and long-term care hospital (LTCH) stays. Second, third, fourth, fifth, and sixth institutional stays could be preceded and followed by PAC stays of any type—including SNF, home health, IRF, and LTCH. For example, a third home health stay was third in a sequence of PAC stays, and the sequence could include home health and institutional PAC stays before and after the third stay.  
\*The first stay in a one-stay sequence is a solo stay.

Source: Analysis of 2013 PAC stays conducted for the Commission by the Urban Institute (Wissoker and Garrett 2018).

shares of stays in IRFs: 21 percent of first-of-multiple stays compared with 10 percent of fifth stays (data not shown)). If risk adjustment does not adequately capture the differences in patient complexity throughout the sequence, later stays will be less profitable, and providers of subsequent stays could be discouraged from admitting these beneficiaries, creating placement problems for beneficiaries with extended PAC needs.

**Profitability would increase throughout a sequence of home health care but remain relatively uniform for institutional PAC stays**

We found that payments estimated by our prototype PAC PPS design for home health stays were not evenly aligned with these stays’ declining costs, so that later stays were considerably more profitable than earlier stays (Table 4-4). PAC PPS payments are risk adjusted for differences in patient characteristics (see text box on estimates of costs and payments, pp. 98–99). For example, in a three-stay

sequence, payments for the first stay would be 5 percent higher than the average cost (a payment-to-cost ratio (PCR) of 1.05), but payments for the third stay would be 24 percent higher than costs (PCR = 1.24). The pattern of increasing profitability was consistent across sequences, and later stays in longer sequences were more profitable compared with earlier stays. For example, the PCR for the last stay in the two-stay sequence was 1.16 but increased to 1.41 for the last stay in a six-stay sequence. Ideally, differences in the cost of stays would be captured by the case-mix adjusters. However, the higher profitability for later home health stays suggests the need for an adjustment to payments based on the timing of the stay to more closely align payments with costs. Otherwise, HHAs could generate additional profits by recertifying beneficiaries for additional home health care, assuming the beneficiary continued to meet coverage rules. Such a refinement of the PAC PPS would be consistent with the current payment system for HHAs that lowers payments

**TABLE  
4-4**

**Under our proposed PAC PPS, payment-to-cost ratios would increase for later home health stays but would be relatively uniform for institutional PAC stays**

Position in sequence	Sequence length (number of stays)					
	1 stay	2 stays	3 stays	4 stays	5 stays	6 stays
<b>Home health stays</b>						
First	1.16*	1.01	1.05	1.06	1.07	1.22
Second		1.16	1.08	1.13	1.16	1.22
Third			1.24	1.16	1.21	1.31
Fourth				1.29	1.22	1.31
Fifth					1.34	1.31
Sixth						1.41
<b>Institutional post-acute care stays</b>						
First	1.14*	1.17	1.12	1.10	1.08	1.05
Second		1.13	1.14	1.12	1.12	1.08
Third			1.14	1.11	1.10	1.07
Fourth				1.14	1.11	1.08
Fifth					1.13	1.08
Sixth						1.06

Note: PAC (post-acute care), PPS (prospective payment system). The ratio of payments to costs is a measure of profitability. Payments are estimated PAC PPS payments. Institutional post-acute care includes stays in skilled nursing facilities (SNFs), inpatient rehabilitation facilities (IRFs), and long-term care hospitals (LTCHs). Second, third, fourth, fifth, and sixth home health (HH) stays could be preceded and followed by PAC stays of any type—including SNF, IRF, and LTCH stays. Second, third, fourth, fifth, and sixth institutional stays could be preceded and followed by PAC stays of any type—including SNF, HH, IRF, and LTCH. For example, a third home health stay was third in a sequence of PAC stays, and the sequence could include home health and institutional PAC stays before and after the third stay.  
\*The first stay in a one-stay sequence is a solo stay.

Source: Analysis of 2013 PAC stays conducted for the Commission by the Urban Institute (Wissoker and Garrett 2018).

for third and later episodes of home health care. The changes to the HHA PPS proposed by CMS in 2017 also include a large adjustment for subsequent stays to reflect the lower average resource use for these episodes (for example, a 39 percent reduction for later stays admitted from the community) (Centers for Medicare & Medicaid Services 2017).

In contrast, PPS payments for institutional PAC stays would be more consistently aligned with the cost of stays throughout sequences, with much smaller variation in the profitability across stays in a sequence. Although the profitability of stays would generally increase for later stays, the patterns would be more uneven and the differences would be much smaller. For example, the PAC PPS payments for three-stay sequences would range from 12 percent to 14 percent higher than the average cost of stays (payment-to-cost ratio of 1.12 to 1.14). For five-stay sequences, the PCR would range from 1.08 for the first stay to 1.13 for the fifth stay. While profitability would

be lower for institutional PAC stays, they would remain well above the cost of stays. The results for institutional PAC stays indicate that the risk adjustment included in the proposed PAC PPS design would do a reasonable job capturing the differences in patients’ characteristics across stays in a sequence. An additional payment adjustment based on the order of the stay in a sequence of care is not needed for institutional PAC stays.

**Defining the beginning and end of stays when treating in place**

Under a unified PAC PPS with modified regulatory requirements, some providers may choose to treat a broader range of patients than they can under current policies, opting to treat “in place” patients who require changing levels of care during an episode of illness rather

**FIGURE  
4-2**

**Comparison of the number of stays under the proposed PAC PPS design when institutional PAC providers refer beneficiaries to another provider and when they opt to treat in place**

**There would be two stays when a beneficiary is referred to a second provider for additional care.**

**When a beneficiary is treated in place by the same provider under the proposed PAC PPS, there would be one stay unless a second stay is established for the second phase of care.**



Note: PAC (post-acute care), PPS (prospective payment system).

than refer them to another provider. A patient could remain at the same facility and receive intensive services for the early portion of care and less intensive services as recovery progresses. IRFs and LTCHs could opt to treat patients with less intensive care needs (as opposed to transferring them to SNFs), while SNFs could opt to offer services that previously had been furnished by IRFs and LTCHs. Reducing the number of handoffs between providers would lower the risk of poor transitions.

Defining a stay is straightforward when a beneficiary is discharged from one provider and admitted to another; the stay begins at admission to the first PAC provider and ends when discharged to the second (or when discharged home for home health care) (Figure 4-2). Sequential home health care stays are also easy to identify because the unit of service is 60 days, with another home health stay triggered on day 61 of service. In both cases, Medicare makes two payments, one for each stay.

For institutional PAC providers furnishing a continuum of care, the end of one stay and the beginning of another would be less clear. CMS will need a way to distinguish between the different phases of care. Otherwise, with one admission and one discharge, a provider opting to treat in place would receive one payment that may not be sufficient to cover the costs of an extended phase of PAC. Providers that treat in place would then be at a financial disadvantage compared with providers that refer the beneficiary to another level of care. Yet, if treating in place would offer comparable care and reduce the risk of

untoward outcomes from a poor transfer, providers opting to treat in place should not be discouraged.

### **Define a stay based on time**

One approach to defining the beginning and end of stays when treating in place would be to use a fixed period of time—a threshold—to define when the first stay ends.<sup>7</sup> A provider would be paid a PAC PPS amount for the initial stay, but if the stay reaches a certain length, providers would conduct a new assessment and would receive a separate payment based on it. This method would be similar to the day-based definition of home health episodes (currently 60 days, but the Balanced Budget Act of 2018 changes this period to 30-day episodes beginning in 2020). A day-based definition of a stay could be considered for all stays, not just those furnished by providers treating in place.

The advantage of an approach based on length of stay is that it would be clear and relatively simple to administer. The large downside is that it would encourage PAC providers to extend stays beyond the pre-set threshold to establish a subsequent stay and receive an additional payment. Providers' likely response to this financial incentive would increase the share of stays that extend beyond the threshold. Medicare's experience with thresholds illustrates how providers typically adjust their practices in response to thresholds (e.g., HHAs and SNFs have been known to provide additional therapy visits or minutes—respectively—to qualify for higher case-mix

payments and LTCHs to extend stays beyond the short-stay outlier threshold to qualify for full payment).

### **Strategies to counter the incentive to increase the volume of subsequent stays**

Because providers would have an incentive to extend care past a threshold to generate subsequent stays, CMS would need to undertake multiple activities to guard against uncontrolled volume increases. First, it would need to use a relatively long unit of service that would encompass the majority of stays. Second, it would need to develop a short-stay outlier policy, which would weaken the incentive to extend initial stays to garner payment for a second stay. That is, providers would have to extend a stay beyond the day threshold to a number exceeding the short-stay outlier cut-off for the stay to qualify for another full payment. Third, recertification by a beneficiary's physician could be required for the PAC provider to receive an additional payment. Under such a policy, the physician would be required to review the plan of care, attest to the continued need for PAC, and estimate how much longer services would be required, as is done for recertification for home health episodes. Finally, a value-based purchasing program that included a measure of resource use, such as Medicare spending per beneficiary, could also counter the incentive to generate volume since the added spending would count against the provider's performance.

CMS would need to monitor the frequency of subsequent PAC and examine providers with aberrant patterns. Inevitable differences in stay-level profitability, even if small, could make certain practice patterns more attractive. For example, a large increase in subsequent PAC could indicate that providers are delaying care until after the stays are complete, thereby obtaining full payments for stays and lowering their costs or taking undue advantage of the ability to treat in place to generate an additional stay. Periodic reevaluation of the alignment of payments and costs would indicate whether the Secretary needed to revise the PAC PPS. The Commission previously recommended that the Congress grant the Secretary the authority to revise and rebase the PAC PPS over time to keep payments aligned with the cost of care (Medicare Payment Advisory Commission 2017).

While it would be feasible to design and implement these counter-incentive strategies, Medicare's experience with them suggests that they would not be effective. Many of these strategies are currently in place but have not deterred the provision of PAC of questionable value.

### **Change the unit of service to an episode of post-acute care**

Another approach would circumvent the multiple issues raised by sequential stays by shifting the unit of service from a stay to an episode of PAC. The episode would include only PAC and would exclude other services. This approach differs in a couple of ways from the "virtual" bundled payment the Center for Medicare & Medicaid Innovation (CMMI) is testing with the Bundled Payments for Care Improvement (BPCI) initiative. Under the BPCI, Medicare continues to make FFS payments to each provider, with retrospective reconciliation between total actual spending and a benchmark amount. The entity is at risk for the cost of all services furnished during the episode, including any hospital care, additional PAC, physician services, and ancillary services. The approach that the Commission will explore is narrower in concept. The unit of service for the PAC PPS would include all PAC for an episode of care, but no other services. Medicare could make one payment to an entity to cover all PAC within the episode. There would be no benchmarks or reconciliation.

If the unit of service for the PAC PPS were an episode of PAC, Medicare would not need to define and set payments for subsequent stays because the entity would be paid for all PAC services provided during the episode, regardless of how many stays that included. Further, a payment adjuster for later home health stays would not be needed because payments for the episode would be based on the average cost of the PAC for the full duration of the episode, including lower cost care toward the end.

An episode-based payment would require one entity to be financially at risk for the entire episode of care. The entity could be the first PAC provider, a health care system, a hospital, an accountable care organization (ACO), a physician group practice, or a third-party convener. This entity would need to have the infrastructure to receive a lump-sum payment from Medicare and, in turn, make payments to any "downstream" PAC provider furnishing care during the episode. If the first PAC provider is the entity at risk, it could opt to furnish all PAC for the episode or refer the beneficiary to another PAC provider that it would pay. Given current practice patterns, we estimate that a minority of episodes (about 18 percent) would involve paying more than one provider, and we would expect this share to decline substantially under a PAC PPS as providers opt to offer a continuum of PAC.<sup>8</sup>

Episode-based payments for providers choosing to treat beneficiaries in place underscores the need to align Medicare coverage rules and beneficiary cost-sharing requirements across PAC settings. For example, a prior hospital stay of three days is currently required for SNF coverage but not for HHA, IRF, or LTCH services. As distinctions between particular institutional settings blur and providers opt to offer a broader mix of services, it would make sense to have one set of coverage rules. Likewise, beneficiary cost-sharing requirements currently vary by setting. Standardized cost sharing would enable beneficiaries to select PAC based on their care needs and preferences rather than on financial considerations.

### **Advantages of episode-based payments**

Using episodes as the unit of care would have numerous advantages. First, an episode-based payment would overcome the distortions inherent in volume-driven FFS payment. Providers would have an incentive to furnish a mix of services to meet a beneficiary's care needs over the entire PAC episode rather than to furnish more stays. Results from CMMI's BPCI initiative indicate participants lowered their use of PAC, which may translate to fewer sequential stays (Lewin Group 2017).

If providers opted to treat in place rather than transfer beneficiaries to another provider, there would be fewer handoffs between providers, and beneficiaries would be less likely to experience poorly coordinated care. Having one entity responsible for payment could also improve care coordination among providers. Entities would be incentivized to improve their follow-up care and use case managers to oversee the PAC, strategies used by some ACOs, bundled payment conveners, and Medicare Advantage plans. In this case, beneficiaries and their families would have a better idea of whom to contact with questions and concerns, thus overcoming a common criticism of FFS care.

Episode-based payment should, in no way, limit a beneficiary's choice of PAC provider. Because the entity in charge could seek to influence a beneficiary's decision about where to get their PAC, Medicare would need to ensure that information given to beneficiaries to aid their decision making did not limit their choice to poor-quality providers.

Another advantage of episode-based payments is that they would align the incentives of PAC providers with those of alternative payment models (such as ACOs and bundled payments) that encourage low-cost, high-quality care. For

those providers not already participating in alternative payment models, an episode approach would give them valuable experience managing beneficiaries across a continuum of care. For them, episode-based payment would represent a stepping stone to accepting more risk, which will be required under broader payment reforms.

As practice patterns change under episode-based payments, CMS would need to periodically evaluate whether payments continue to be aligned with the cost of care and adjust payments as needed. The Commission previously recommended that the Congress grant the Secretary the authority to revise and rebase the PAC PPS over time to keep payments aligned with the cost of care.

### **Disadvantages of episode-based payments**

There are three potential downsides to episode-based payments. First, providers would have a financial incentive to furnish fewer services than medically appropriate or provide lower quality care if it lowered their costs. The potential for providers to stint on care is inherent in any prospective payment system. Second, with more dollars at stake, episode-based payments could encourage more episodes, resulting in increased program spending. However, the risk of more episodes would be lower than the risk of unnecessary subsequent stays because the decision to use PAC would be made by the beneficiary's physician in consultation with discharge planning staff (as it is now), whereas, under the length of stay approach, the decision to generate additional stays would be made by the PAC provider. Last, an episode-based payment would require the entity at risk to have the infrastructure needed to pay multiple providers. Although episodes that involve multiple providers represent the minority of episodes, some PAC providers would not be ready to accept this level of financial risk or have the administrative infrastructure to set and make payments to other providers. The Commission maintains that the administrative complexities of this approach are far outweighed by the advantages of episode-based payment.

### **Strategies to counter the potential disadvantages of episode-based payments**

To counter these disadvantages, CMS would need to monitor the frequency of PAC use and examine entities with aberrant utilization patterns. Given the financial incentives of the current payment systems to furnish unnecessary therapy care, changes from current practice would not necessarily signal a worrisome trend. To discourage unnecessary episodes, physicians could



be required to attest to the need for PAC. Value-based purchasing that included a measure of resource use could deter providers from delaying care until after the episode window. One such measure, the Medicare spending per beneficiary–PAC, identifies spending during the PAC stay plus 30 days after discharge. To detect stinting, a value-based policy would also need to include quality measures, such as rates of potentially avoidable (or ambulatory care–sensitive) readmissions and emergency room visits. It could also consider measures of care coordination, such as the number of days between hospital discharge and the first physician visit or the number of transitions while the beneficiary is away from her residence.

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## **Conclusion**

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An episode-based PPS would discourage the provision of unnecessary PAC stays and would ready providers for

alternative payment models that require them to assume more risk. The Commission will explore this approach over the coming year. In the meanwhile, CMS should proceed with implementing a stay-based unified PAC PPS. While shifting the unit of service from a stay to an episode would change certain incentives (most notably the incentive to generate unnecessary PAC stays), the most important features of a PAC PPS would remain: correcting the biases of the current PPSs and increasing the equity of payments across all types of stays so that providers have less incentive to selectively admit certain beneficiaries over others. A shift to an episode-based payment should, in no way, be interpreted as a temporary retreat from a PAC PPS. Rather, building on these basic features of a PAC PPS, the Commission will explore bolder approaches that focus providers’ efforts on considering beneficiaries’ PAC needs throughout the duration of a PAC episode. ■

## Endnotes

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- 1 We refer to all care furnished in home health agencies, inpatient rehabilitation facilities, and long-term care hospitals as “post-acute care,” even though some of the beneficiaries were admitted from the community. The chapter includes community admissions in all of its work on the unified PAC prospective payment system.
- 2 In this chapter, we examine PAC use by FFS beneficiaries. We do not include PAC use by beneficiaries enrolled in Medicare Advantage.
- 3 Subsequent care in HHAs does not present the same problem because each stay is clearly defined by the 60-day episode.
- 4 The predictors and their relative importance in estimating payments under a PAC PPS were published in 2016 in a report prepared for the Commission by researchers at the Urban Institute (Wissoker and Garrett 2016).
- 5 The intensity of the setting is based on the following hierarchy: LTCHs were considered the most intensive, followed by IRFs, then SNFs, and the least intensive was home health care.
- 6 Current billing rules establish definitions of stays. In a home health stay, an intervening hospital or institutional PAC stay that occurs entirely during a home health care episode does not change the counting of the 60 days that define an episode and does not establish separate episodes for the care before and after the intervening stay. For SNF stays, an intervening hospital or PAC stay establishes separate SNF stays, one before the intervening event and another after. In IRFs, the duration of the interruption (for a hospital or other PAC stay) and whether the beneficiary returns to the same facility establishes whether the original IRF stay continues after the intervention. If the intervening event is three days or less and the beneficiary returns to the same facility, the original IRF stay continues. If the intervening event is longer than three days or the beneficiary goes to a different facility after the intervening event, there are two IRF stays—one before the event and another after the event. In LTCHs, the duration of the interruption and whether the beneficiary returns to the same LTCH define whether a separate stay is established. An LTCH stay is counted as one if the intervening stay is in an acute hospital and shorter than 10 days, in an IRF and is shorter than 28 days, or in a SNF and is shorter than 46 days. If the intervening stay is longer than those limits or if the beneficiary is transferred to a different LTCH, there are two LTCH stays.
- 7 The Commission considered another approach that would define stays using a phase of care. As care needs evolved, a provider would on paper “discharge” the beneficiary from the first phase and “admit” her to the second phase, triggering two payments. It was not clear whether criteria could differentiate a new phase of care from normal disease progression or healing without the criteria being easily manipulated by providers. The difficulty of designing and monitoring this approach seemed unworkable.
- 8 The estimate is based on the share of stay combinations that are solo (64 percent) and the share of sequences that include lateral stays (18 percent), neither of which would involve paying different providers. Our data suggest that most lateral stays involve the same provider and that most are back-to-back home health stays. Lateral institutional PAC stays are most likely for stays interrupted by a hospitalization that triggered a new PAC stay. Far less frequently, beneficiaries change PAC providers for any number of reasons, including proximity to family or dissatisfaction with the initial provider.



## References

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Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2017. Medicare and Medicaid programs; CY 2018 home health prospective payment system rate update and proposed CY 2019 case-mix adjustment methodology refinements; home health value-based purchasing model; and home health quality reporting requirements. Final rule. *Federal Register* 82, no. 214 (November 7): 51676–51752.

Gage, B., M. Morley, L. Smith, et al. 2012. *Post-Acute Care Payment Reform Demonstration: Final report, volume 1 of 4*. Prepared under contract to the Centers for Medicare & Medicaid Services. Baltimore, MD: CMS.

Lewin Group. 2017. *CMS Bundled Payments for Care Improvement Initiative models 2-4: Year 3 evaluation & monitoring annual report*. Report prepared by the Lewin Group for the Centers for Medicare & Medicaid Services. Baltimore, MD: CMS. <https://downloads.cms.gov/files/cmimi/bpci-models2-4yr3evalrpt.pdf>.

Medicare Payment Advisory Commission. 2018. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2017. *Report to the Congress: Medicare and the health care delivery system*. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2016. *Report to the Congress: Medicare and the health care delivery system*. Washington, DC: MedPAC.

Wissoker, D., and B. Garrett. 2018. *Characteristics, costs, and payments for stays within a sequence of post-acute care*. Washington, DC: The Urban Institute.

Wissoker, D., and B. Garrett. 2016. *Designing a unified prospective payment system for post-acute care*. Washington, DC: Medicare Payment Advisory Commission.

Wissoker, D., and B. Garrett. 2015. *Simulation and analysis of an alternative Medicare home health payment system not based on number of therapy visits*. Washington, DC: The Urban Institute.

