AARP Public Policy Institute

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Research Report

AARP® Real Possibilities

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AARP's Public Policy Institute informs and stimulates public debate on the issues we face as we age. Through research, analysis, and dialogue with the nation's leading experts, PPI promotes development of sound, creative policies to address our common need for economic security, health care, and quality of life.

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EXECUTIVE SUMMARY

When someone becomes seriously ill and goes to the hospital, they typically visit the emergency department. From the emergency department, there are several options. A patient may be admitted as an inpatient, transferred to another facility, discharged home, or placed under observation. Hospital observation status, a designation used to monitor patients during periods of medical uncertainty, has attracted the attention of media, courts, and policy makers due to rapid growth in its use and complaints about high out-of-pocket costs incurred by some Medicare beneficiaries.

Observation status may be appropriate for patients of any age and with any type of insurance. However Medicare makes distinctions between observation and inpatient status that are important to both Medicare beneficiaries and hospitals.

This report summarizes the results of our analysis of growth in the frequency and duration of hospital observation services (OS) by Medicare beneficiaries between 2001 and 2009. Our study found far greater increases in both the frequency and duration of OS use than previous studies that covered shorter periods. Although only about 3.5 percent of Medicare beneficiaries used OS in 2009 during the study period, Medicare claims for OS grew by more than 100 percent, with the greatest increase occurring in cases not leading to an inpatient admission.

The duration of OS visits has also increased dramatically. Observation service visits lasting 48 hours or longer were the least common, but had the greatest increase—almost 250 percent for outpatient OS only, and more than 100 percent for OS with inpatient admission. During the study period, both 1-day inpatient stays and inpatient stays of all lengths declined by about 16 percent, while the ratio of OS use to inpatient stays per 1,000 beneficiaries increased by 94 percent. Comparable rates of growth in the use of OS for Medicare beneficiaries over and under 65 suggest that the rising use of OS is not limited to older patients, but appears to be increasing across the age spectrum.

The magnitude of these changes raises concern that observation is becoming a substitute for inpatient admission and, in the process, may be of questionable clinical benefit. While studies have shown that observation units may increase hospital efficiency and quality of care by allowing emergency departments to triage patients more quickly and accelerate their disposition, these studies apply to relatively short observation stays of 12–24 hours in dedicated units.

Use of observation status may also impose an unnecessary financial burden on Medicare beneficiaries In some cases, Medicare cost sharing for outpatient services, including OS, may be greater than the inpatient deductible that beneficiaries would incur when admitted ($1,184 in 2013). Unlike inpatient coverage, there is no cap on beneficiary cost sharing for OS visits. In addition, some beneficiaries may forego or be denied coverage for necessary care in a skilled nursing facility (SNF) because time spent in OS does not count toward Medicare's 3-day prior inpatient stay requirement for Part A SNF coverage. As a result, some beneficiaries may incur out-of-pocket expenses for SNF care that can amount to thousands of dollars.

This trend also raises questions about the quality of care received by patients in OS, especially for those with OS stays of more than 24 hours. Concerns about the quality of

care, as well as patient comfort, seem especially relevant for patients who may be left on a narrow stretcher in a noisy emergency room setting for long periods of time.

While the reasons for these increases in OS use are not entirely clear, a number of factors appear to have contributed to its growth including: (1) Medicare payment policy changes; (2) increased scrutiny by both public and private payers of short inpatient stays; (3) efficiency advantages for hospitals of OS over inpatient admission; (4) increased reporting; and (5) incentives to reduce hospital admissions by increasing OS use to avoid readmission penalties. Since readmission penalties took effect in 2012, incentives to avoid them appear likely to drive up the use of OS even more.

In light of its rapid growth and potential impact on beneficiaries, policy makers should consider options to address concerns raised by increased OS use, in particular, policies that may reduce the financial impact of OS on beneficiaries. Potential policy solutions include:

- Eliminate Medicare's 3-day prior stay requirement for SNF coverage.[1]
  - This rule is an anachronism from 1965, when Medicare's average hospital length of stay for those age 65 and older was about 13 days. However, by 2010, Medicare's average length of stay had fallen to 5.4 days and more than one-third of beneficiaries had length of stay of less than 3 days.
  - Eliminating the 3-day prior stay rule would level the playing field with other postacute care services, such as home health agencies, inpatient rehabilitation facilities and long-term care hospitals, which do not require prior inpatient admission for coverage. In addition, this change would alleviate much of the financial burden on beneficiaries who need SNF care.
- Until the 3-day prior stay rule is eliminated, credit time spent in OS toward the 3-day prior stay requirement, as proposed by bipartisan legislation pending in Congress, to reduce the impact of more frequent and longer OS use.[2]
- Cap total beneficiary liability for OS and other outpatient services at the inpatient deductible amount.
  - This proposal would limit the maximum financial burden for OS use to the amount beneficiaries would incur for inpatient admission.

INTRODUCTION

Hospital observation status is a seldom-used designation with which many patients are unfamiliar. A patient visiting the emergency room who has undergone initial evaluation and stabilization may require additional time under medical supervision or "observation." Rapid growth in the number and duration of Medicare claims for observation services (OS) and beneficiary complaints about high out-of-pocket costs have attracted attention from media,[3] courts,[4] and policy makers.[5]

From a clinical perspective, the decision to provide OS often originates in uncertainty regarding the correct diagnosis and concern that symptoms may be unstable or evolving. These circumstances may require additional time to observe and monitor the patient or resolve symptoms, such as pain. Time spent under observation may also help to resolve uncertainty as to the safety and appropriateness of discharging a patient home or admitting him or her for inpatient treatment.[6] Other factors may influence the decision to employ OS, including financial incentives and regulatory constraints, as discussed below.

Although observation may be appropriate for patients of any age and for any insurer (public or private), the Medicare program reimbursement policy makes a distinction between observation and inpatient care that is important to both Medicare beneficiaries and the hospitals serving them.

When patients are classified as receiving OS or emergency care, Medicare regards them as outpatients rather than inpatients. Under most circumstances, the distinction between outpatient and inpatient care will change both the out-of-pocket cost to Medicare beneficiaries and the payment to providers. Beneficiaries admitted as inpatients incur only the Part A inpatient deductible ($1,184 in 2013); they are not liable for coinsurance associated with individual services received during an inpatient stay, such as tests, procedures, and observation. By contrast, outpatient services are billed separately, so each such service imposes additional costs on beneficiaries.[7] There is no cap on beneficiary cost sharing for OS visits.

The use of OS may also affect beneficiary liability for the cost of postacute care in a skilled nursing facility (SNF). As an outpatient service, OS does not count toward Medicare's 3-day prior inpatient stay requirement for Part A skilled nursing facility coverage.[8] A beneficiary who requires postacute care in a SNF but has not satisfied the 3-day prior stay requirement will be liable for the full cost of SNF care, which can amount to thousands of dollars.[9]

OBSERVATION SERVICES

According to Medicare guidelines, the use of OS is appropriate when a patient does not meet screening criteria for an acute admission, but requires extended care of 8 or more hours. In general, the guidelines indicate that OS should be used for patients whose condition is expected to be evaluated, treated, or significantly improved, usually in less than 24 hours, and should span more than 48 hours only in rare and exceptional cases.[10] Observation service is not appropriate for preoperative or routine postoperative care following outpatient surgery. The decision to admit patients to the hospital as inpatients or place them on observation status is ultimately the responsibility of the attending physician, although the hospital may provide guidance. The change to OS may entail simply reclassifying patients in the emergency department or may involve moving them to another area of the hospital.

Studies have found that increasing numbers of Medicare beneficiaries have been receiving OS. One study found the number of OS claims increased by 25 percent from 2007 to 2009.[11] The same study found a 34 percent increase in the ratio of observation stays to inpatient admissions from an average of 86.9 OS visits per 1,000 inpatient admissions per month in 2007 to 116.6 in 2009. This finding led researchers to conclude that outpatient OS was becoming a substitute for inpatient status. The Medicare Payment Advisory Commission (MedPAC) evaluated the use of OS not leading to an admission from 2006 to 2008 and found that use of outpatient-only OS increased by 22 percent. The average duration of OS visits also increased, especially for the proportion of OS visits exceeding 48 hours.[12] An 18-month study ending in 2011 of patients of all ages at a single academic medical center found that the mean length of stay in observation was 33.3 hours, with 16.5 percent of patients remaining in OS for more than 48 hours.[13]

One study has included data on Medicare beneficiaries' out-of-pocket costs. A report by the Office of Inspector General of the U.S. Department of Health and Human Services found that in 2012, for 6 percent of Medicare OS–only visits, beneficiaries paid more than the inpatient deductible ($1,156). This report also found that beneficiaries had more than 600,000 hospital stays (including OS, long outpatient and short inpatient stays) that lasted at least 3 nights but did not include 3 inpatient nights required to qualify for Medicare Part A SNF coverage. About 4 percent of these cases received SNF care and Medicare paid for it mistakenly. Among those who received SNF care that Medicare did not pay for, beneficiaries were liable for average SNF charges of $10,503.[14]

Studies have provided limited evidence about the positive effects of short-term OS use (e.g., less than 24 hours) on efficiency and quality of care.

Research Approach

Purpose

This study evaluated growth in the frequency and duration of OS between 2001 and 2009. Specifically, we examined the use of OS both for patients who received OS only as outpatients and were *not* admitted as inpatients, and for patients who received OS before inpatient admission. We compared these trends with the frequency of inpatient admissions and, in particular, 1-day hospital stays, that might substitute for OS use in some cases. We also examined changes in the length of time that patients spent under observation. In an effort to understand the potential implications of changes in case-mix on use of OS, we analyzed the most frequent OS diagnoses and changes in the mix of OS diagnoses.

Data Source

This study relied on claims data for a 5 percent sample of Medicare beneficiaries—approximately 2 million older adults and people with disabilities—enrolled in Parts A and B and not enrolled in Medicare Advantage. The data cover 3 calendar years: (1) 2001 (shortly after implementation of Medicare's prospective payment system for outpatient services changed the treatment of observation stays); (2) 2006; and (3) 2009 (the most recent year data were available at the study outset). Our sample was drawn from the universe of all beneficiaries ever enrolled during each of those years. All claims for these beneficiaries were extracted from the Medicare standard analytic files for outpatient and inpatient services.

Analytic Approach

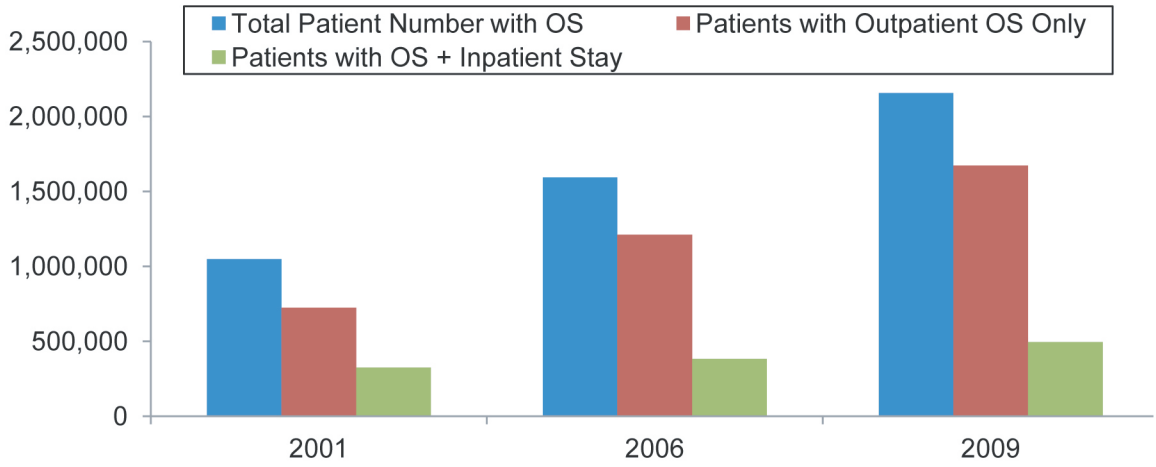
We first identified all beneficiaries who had used OS in each of the 3 study years. These services can be found in both the outpatient and inpatient files (for beneficiaries who were admitted as inpatients after receiving OS). For each beneficiary with at least one OS claim during any of the 3 study years, we linked their claims for outpatient services, including OS, and inpatient services for each OS episode using admission and discharge date. We then extracted age, gender, race/ethnicity, and primary diagnosis from the base claims for all beneficiaries, and created a new variable indicating the number of OS episodes. For each episode, we also calculated the length of the observation stay in hours and the episode length of stay in days. We identified all beneficiaries with at least one inpatient stay. For beneficiaries with a 1-day inpatient stay, we used Medicare's midnight-to-midnight method, where a partial day is counted as a full day if a patient is present at midnight. We also included hospital characteristics (Medicare administrative contractor region, urban vs. rural location, teaching status, and ownership) in the analytic file. For 2006 and 2009, we created beneficiary episodes of care that included all inpatient and outpatient services received for 30 days following the date of an OS claim.

How Much Has Observation Use Been Increasing?

Growth in the Number of OS Visits

We found that growth in OS use was substantially greater than has been found in previous studies that covered fewer years. Our findings are generally consistent with prior studies, but our analysis covers a longer period, includes Medicare beneficiaries younger than age 65 as well as those aged 65 and older, and accounts for OS with and without inpatient admission. Figure 1 shows the number of Medicare beneficiaries who used OS in calendar years 2001, 2006, and 2009. Among all beneficiaries with an OS visit, about 69 percent were discharged home in 2001, rising to about 78 percent in 2009.

Figure 1
Medicare Beneficiaries with Observation Stay



Source: Authors' tabulations from Medicare outpatient, inpatient, and skilled nursing facility standard analytic files, 5 percent sample of beneficiaries, calendar years 2001, 2006, and 2009.

In 2001, about 1 million beneficiaries used OS, rising to almost 1.6 million in 2006 and more than 2.1 million in 2009. Although OS users represent a small proportion of all Medicare beneficiaries (3.5 percent in 2009), OS use doubled over the 9-year period. On an annual basis, as shown in Table 1, the rate of growth was slightly higher in the later period than in the earlier period (11.8 percent annually from 2006 to 2009, compared with 10.4 percent annually from 2001 to 2006). The greatest growth occurred in OS not

Table 1
Medicare Beneficiaries Using Observation Services
(percent change)

	Annual % Change (2001–2006)	Annual % Change (2006–2009)	Cum. % Change (2001–2009)
Total OS Users	10.4%	11.8%	105.8%
OS Only	13.5%	12.7%	131.3%
OS with Inpatient Stay	3.6%	9.7%	52.5%

Source: Authors' tabulations from Medicare outpatient, inpatient, and skilled nursing facility standard analytic files, 5 percent sample of beneficiaries, calendar years 2001, 2006, and 2009.

leading to an inpatient admission (131 percent). Slower though substantial growth (52.5 percent) occurred in OS followed by an admission. Of those beneficiaries using OS, only a very small proportion (0.5 percent or less) used OS more than once in a given year, but the proportion of beneficiaries with multiple OS episodes grew by a faster rate (150 percent) during the study period than growth in the proportion of OS patients with just one claim (57.9 percent) (data not shown).

The growth rates described above include growth in the size of the beneficiary population, which grew at less than 2 percent per year, a cumulative increase of about 16 percent over the study period.[15] As shown in Table 2, when adjusted for growth in the number of beneficiaries using a standardized rate per 1,000 beneficiaries, the growth in OS use still exceeded 60 percent over 9 years. With respect to inpatient admissions, both 1-day stays, which offer a likely substitute for OS, and inpatient stays of any duration declined by approximately 16 percent per 1,000 beneficiaries during the 9-year period, as shown in Table 2.

Table 2
Medicare Beneficiaries Using Observation Services
(percent change in rate per 1,000)

	Annual % Change in Rate per 1,000 (2001–2006)	Annual % Change in Rate per 1,000 (2006–2009)	Cum. % Change Rate per 1,000 (2001–2009)
All OS	8.0%	5.2%	62.0%
Inpatient Stay (1 day)	0.1%	-5.6%	-16.2%
Inpatient Stay (any LOS)	-1.1%	-3.8%	-16.6%

Source: Authors' tabulations from Medicare outpatient, inpatient, and skilled nursing facility standard analytic files, 5 percent sample of beneficiaries, calendar years 2001, 2006, and 2009.

Comparing beneficiaries aged 65 and older with disabled beneficiaries under age 65, we found the growth rate per 1,000 of OS use was also about 60 percent from 2001 to 2009, as shown in Table 3. The comparability of growth rates for younger and older beneficiaries suggests that the increased use of OS has not been limited to specific age groups, such as the elderly, but has been occurring across the age spectrum.

Table 3
Medicare Beneficiaries Using Observation Services by Age Group
(percent change in rate per 1,000)

	% Change in Rate per 1,000 (2001–2006)	% Change in Rate per 1,000 (2006–2009)	% Cum. Change in Rate per 1,000 (2001–2009)
Under 65	43%	13%	61%
65+	39%	16%	62%

Source: Authors' tabulations from Medicare outpatient, inpatient, and skilled nursing facility standard analytic files, 5 percent sample of beneficiaries, calendar years 2001, 2006, and 2009.

Comparing OS with Inpatient Stays

Comparing the ratio of OS use with inpatient stays per 1,000 beneficiaries in different years (Table 4), we found an increase of 94 percent from 2001 to 2009. This trend suggests that rapid growth in use of OS may be, in part, a response to—or a cause of—declining use of inpatient hospital services.

Table 4
Medicare Beneficiaries Using Observation Services
(rate per 1,000)

	2001	2006	2009
All OS	24.9 per 1,000	34.9 per 1,000	40.3 per 1,000
Inpatient Stay (1 day)	40.1 per 1,000	40.4 per 1,000	33.6 per 1,000
Inpatient Stay (any LOS)	310.1 per 1,000	292.4 per 1,000	258.7 per 1,000

Source: Authors' tabulations from Medicare outpatient, inpatient, and skilled nursing facility standard analytic files, 5 percent sample of beneficiaries, calendar years 2001, 2006, and 2009.

Growth in Duration of OS Visits

In addition to increasing frequency of OS use, time spent under observation also increased markedly. Between 2001 and 2009, median time spent under observation for all beneficiaries who received OS increased by 29 percent, from 17 hours to 22 hours (Table 5).

Table 5
Duration of Medicare Observation Services
(median length of stay in hours)

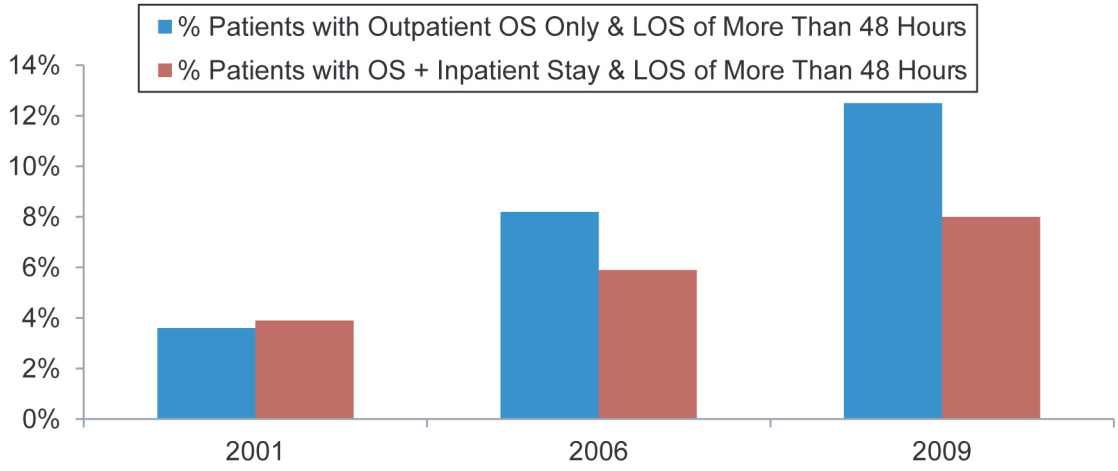
	2001	2006	2009
All OS	17	21	22
Outpatient Only OS	19	22	23
OS before Inpatient Admit	9	14	14

Source: Authors' tabulations from Medicare outpatient, inpatient, and skilled nursing facility standard analytic files, 5 percent sample of beneficiaries, calendar years 2001, 2006, and 2009.

For beneficiaries with no inpatient admission, the median time spent in OS increased by 21 percent—from 19 hours to 23 hours—while for beneficiaries with an inpatient admission, the median duration of OS use increased by 56 percent—from 9 hours to 14 hours. As shown in Figure 2, in 2009, a larger share of beneficiaries who were not admitted as inpatients experienced prolonged observation periods—greater than 48 hours (12.5 percent)—than beneficiaries who were later admitted as inpatients (8.0 percent). OS visits lasting 48 hours and longer were less common than shorter visits but had a greater increase from 2001 to 2009 in the percentage of patients with visits of this length—more than 250 percent for patients with outpatient OS only (from 3.5 percent to 12.5 percent) and more than 100 percent for patients with OS with inpatient admission (from 3.9 percent to 8.0 percent).

Likewise, far more beneficiaries had shorter lengths of stay—no more than 12 hours—in OS when they were later admitted (46.4 percent) than when they were not admitted (14.3 percent). As shown in Table 6, observation time lasting from 25 to 47 hours increased 40.8 percent for beneficiaries with outpatient-only OS and 44.6 percent for beneficiaries with a subsequent inpatient admission, while the percentage of patients spending no more than 12 hours in OS declined by 56.8 percent and 21.8 percent, respectively.

Figure 2
Medicare Beneficiaries with Observation Stay of More Than 48 Hours



Source: Authors' tabulations from Medicare outpatient, inpatient, and skilled nursing facility standard analytic files, 5 percent sample of beneficiaries, calendar years 2001, 2006, and 2009.

As shown in Table 6, OS visits of 48 hours or more increased as a proportion of all OS visits while the proportion of OS visits of less than 12 hours declined during the study period.

Table 6
Duration of Medicare Observation Services
(percentage of OS patients, by duration of OS visit)

Length of Stay (hours)	2001	2006	2009	Cum. % Change (2001–2009)
Outpatient-Only OS	100%	100%	100%	
< 12 hours	33.1%	18.7%	14.3%	-56.8%
12–24 hours	40.2%	42.5%	40.6%	0.9%
25–47 hours	23.2%	30.6%	32.7%	40.8%
≥ 48 hours	3.5%	8.2%	12.5%	254.8%
OS Before Inpatient Admit	100%	100%	100%	
< 12 hours	59.3%	47.8%	46.4%	-21.8%
12–24 hours	22.1%	25.1%	24.3%	9.8%
25–47 hours	14.8%	21.2%	21.3%	44.6%
≥ 48 hours	3.9%	5.9%	8.0%	107.4%

Source: Authors' tabulations from Medicare outpatient, inpatient, and skilled nursing facility standard analytic files, 5 percent sample of beneficiaries, calendar years 2001, 2006, and 2009.

WHAT EXPLAINS THE INCREASE IN OS USE?

The increasing duration of OS use raises questions about the reasons for its increase, the implications for quality of care, and the financial impact on patients. Medicare and other guidelines that indicate OS use usually should not exceed 24 hours suggest that some of these long-stay OS patients should have been admitted as inpatients.[16] Limited evidence described below regarding the impact of extended OS use on quality of care for specific conditions suggests that the increasing duration of OS use may be for nonclinical reasons, such as greater efficiency and financial incentives, also discussed below. Anecdotal evidence from media reports and patient advocacy groups indicates that, for some beneficiaries, longer OS stays result in higher out-of-pocket costs and denial of postacute SNF coverage because of the 3-day prior inpatient stay requirement.[17] In addition, some beneficiaries may remain on a stretcher in the emergency room or adjacent areas for long periods of time, which may become quite uncomfortable.

The following factors may have contributed to steady growth in the number of Medicare beneficiaries using OS from 2001 to 2009.

Efficiency Factors

Changes in delivery systems and payment models have encouraged providers to deliver care in lower-cost settings, perhaps tilting the balance toward greater use of OS in place of inpatient care. An expansion in the number and types of services, such as OS, that can be provided in outpatient departments may have reduced the need for inpatient admission, even for complex services that previously justified it. As shown in Table 2, the observed 16 percent decline in the number of inpatient stays, especially 1-day stays, from 2001 to 2009, suggests this substitution has been occurring and may reflect greater efficiency of OS compared with inpatient use.

Efficiencies associated with the use of observation units has been identified by the Institute of Medicine as important for reducing overcrowding in emergency departments by improving resource use and patient flow.[18] Observation units may increase efficiency by allowing emergency departments to triage patients more quickly and accelerating their disposition. The use of observation services of limited duration (12–24 hours) in dedicated units has been shown to provide equal or better quality care at lower cost than inpatient care for specific conditions.[19,20,21] These findings may have contributed to growth in specially designated observation units within hospitals. A recent study found that 36 percent of emergency departments had dedicated OS units in 2007.[22]

Increasing OS use may also be driven by financial considerations, as OS may increase hospital revenue by providing an add-on payment for OS only patients in addition to the standard emergency department facility fee.[23] One study estimated that, in theory, the expanded use of dedicated OS units, especially for selected short-stay patients with a maximum length of stay of 24 hours, could save $3.1 billion per year in hospital costs through avoided inpatient admissions.[24] However, a study of a large academic medical center that did not use a dedicated OS unit found that, in practice, the hospital lost money for patients in OS because the reimbursement for OS care was less than the cost of care.[25]

Although these factors may have contributed to the growing *number* of OS visits, they do not explain the increased *time spent* in OS. These conflicting findings suggest that, as some experts have observed, two distinct models of observation care may coexist:

(1) dedicated observation units that improve efficiency through the use of clearly established clinical protocols, and (2) observation care delivered in inpatient areas, which represents merely a change in billing status without changes in care delivery.[26]

Diagnosis and Case Mix

We explored whether changes in diagnosis and case-mix during the study period may explain the increase in OS use. Based on our findings, evidence was mixed as to whether changes in case-mix could account for the increased length of OS visits, but case-mix changes appear unlikely to have contributed to the increased number of OS claims.

Key factors in the use of OS and the frequency of certain diagnoses found in OS are (1) uncertainty surrounding the diagnosis itself, (2) concern that the patient's condition may be unstable or evolving, and (3) the need for monitoring and possible further treatment. Serious cardiac diagnoses often satisfy one or more of these criteria.

Table 7 shows the six most common diagnoses among Medicare beneficiaries with OS use in 2001 and 2009 and ranks them from highest to lowest frequency.

Using 2009 as the reference group, the six most frequent OS diagnoses were (1) chest pain, (2) heart disease (coronary atherosclerosis), (3) cardiac arrhythmias, (4) syncope (fainting), (5) fluid and electrolyte disorders, and (6) congestive heart failure. Among the most common OS diagnoses, five of the top six were cardiac related.[27] From 2001 to 2009, the fastest growing OS diagnoses were (1) chest pain, (2) syncope, and (3) cardiac arrhythmias. All three of these fast-growing OS diagnoses were cardiac related and accounted for 38.9 percent of all OS claims in 2009. Chest pain, a potentially serious cardiac diagnosis that may indicate acute heart attack, was the most common OS diagnosis. Cardiac-related diagnoses made up 42.7 percent of all OS claims in 2001 and grew to 52.6 percent in 2009. Determining whether cardiac-related conditions, in particular chest pain, require more time under observation than other conditions was beyond the scope of our study.

Table 7
Medicare Hospital Observation Most Common Diagnoses
(percentage of OS patients, by principal diagnosis)

Rank (2009)	Principal Diagnosis (CCS)*	All OS Claims (%) (2001)	All OS Claims (%) (2009)	Cum. (%) Change (2001–2009)
1	Chest Pain (102)	14.0%	24.1%	72.1%
2	Heart Disease (Coronary Atherosclerosis) (101)	12.0%	9.4%	-21.6%
3	Cardiac Arrhythmias (106)	7.2%	8.0%	11.1%
4	Syncope (245)	4.5%	6.8%	51.1%
5	Fluid/Electrolyte Disorder (55)	5.8%	6.1%	5.2%
6	Congestive Heart Failure (108)	5.0%	4.3%	-14.0%
Total	**Top 6 in 2009**	**48.5%**	**58.7%**	**10.2%**

* Ranking based on OS use in 2009. Principal diagnosis from the Clinical Classification System (CCS) collapses detailed codes from the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM) into a smaller number of clinically meaningful categories. CCS was developed with support from the Agency for Healthcare Research and Quality.

Source: Authors' tabulations from Medicare outpatient, inpatient, and skilled nursing facility standard analytic files, 5 percent sample of beneficiaries, calendar years 2001, 2006, and 2009.

Because cardiac symptoms such as chest pain often lead patients to visit an emergency room due to potentially life-threatening consequences, this may help explain the high frequency of cardiac diagnoses among OS claims. However, chest pain was also the fastest-growing OS diagnosis, increasing by 72.1 percent—from 14.0 percent to 24.1 percent of all OS claims from 2001 to 2009. This trend persisted, despite a steady decline in the incidence of heart attacks in the United States.[28] These countervailing trends suggest that a change in the cardiac health of Medicare beneficiaries, in general, was unlikely to have contributed to growth in cardiac-related diagnoses of OS claims or growth in the number of OS visits. However, the increase in cardiac-related conditions may have contributed to the length of time spent in OS if deciding on the disposition of these patients, particularly those with chest pain, requires more time under observation than patients with noncardiac conditions. However, this study did not explore this issue.

OS with vs. without Inpatient Admission

We explored the use of OS both with and without admission to determine whether the growth in OS use was affected by differences in the disposition of patients. The proportion of OS claims without an inpatient admission has increased from about 69 percent in 2001 to about 78 percent in 2009. During this time, OS claims without an inpatient admission have been of consistently longer median duration than OS claims followed by admission (Table 5). In part, this difference may be due to clinical uncertainty about whether the patient's condition will deteriorate and whether he or she will need continuing medical supervision. This uncertainty may result in longer durations of OS, leading clinicians to err on the side of caution in deciding whether and when to discharge a patient from close hospital-based medical supervision to an unsupervised environment, such as home.

However, financial factors may encourage more selective decisions about the disposition of OS patients, 80 percent of whom return home, because, for those who are

admitted as inpatients, Medicare will pay only a standard predetermined rate for the entire episode of that patient's care, without regard to whether he or she has received OS or other outpatient services.[29] This "bundled" reimbursement rate may discourage admission of OS patients because hospitals will receive the same payment regardless of service use. The incentives created by these bundled payments may help explain the widening gap between OS-only use and OS with inpatient admission shown in Figure 1. On the other hand, careful management of OS patients may allow hospitals to avoid certain types of inpatient admissions that would otherwise have resulted in a financial loss while allowing inpatient beds to be filled by another type of more profitable patient.[30]

Medicare Payment Policy Impact

Medicare's payment policy may also have contributed to increased use of OS. Starting in 2002, Medicare created a separate OS outpatient payment for three specific primary diagnoses—(1) chest pain, (2) congestive heart failure, and (3) asthma—provided the patient received a minimum of 8 hours of OS. Because chest pain was one of only three diagnoses for which Medicare provided separate payment for OS, this was likely to have been a major contributor to the high prevalence of chest pain among OS claims. In 2009, chest pain ranked first and congestive heart failure (a second Medicare-allowable OS diagnosis) ranked sixth. Together, these two diagnoses accounted for 28.4 percent of combined outpatient and inpatient OS claims in 2009, up from 19 percent in 2001, an increase of almost 50 percent. Asthma (the third allowed OS diagnosis) did not rank in the top 15 OS diagnoses in either 2001 or 2009, probably because asthma is not a common diagnosis among Medicare beneficiaries.

Another change in 2008 allowed patients with *any* diagnosis to receive OS, which may also have contributed to the increasing number of OS claims.[31] However, this change alone would not explain an increase in the length of OS visits.

Changes in hospital billing procedures may have contributed to the increased reporting of OS claims that exceed 48 hours shown in Table 6. Although Medicare policy has never strictly limited the duration of OS claims and does not pay OS claims based on their duration (as long as they exceed the minimum threshold of 8 hours), guidelines stress that time spent in OS should not exceed 48 hours except in rare and exceptional cases.[32]

Before 2006, it was difficult to count the total number of observation hours because hospitals were not required to report packaged observation hours on Medicare claims. As a result, many hospitals set their billing systems to truncate OS claims at 48 hours.[33] Thus, many claims for 48 hours of OS may actually represent longer stays. Since 2006, hospitals have been modifying their billing systems to capture the entire duration of OS visits. These changes may have contributed to the appearance of increased duration of OS claims due to statistical artifact.

Increased Scrutiny

Increased scrutiny of the decision to admit inpatients by payers may have contributed to increased OS use. When MedPAC examined these issues in 2010, it concluded that increased use of OS from 2007 to 2009 was the result of a broad national trend in

increased scrutiny of short inpatient stays by all payers, private and Medicare.[34] In an effort to identify and recover improper Medicare payments, starting in 2005 with demonstrations in three states, recovery audit contractors have been directed, on a contingent fee basis, to review and identify provider claims that lack "medical necessity" and related payment errors. Recovery audit contractors have focused on short, especially 1-day, inpatient stays. These recovery audit contractor audits can result in denial of claims for inpatient care, and recovery of substantial Medicare payments from hospitals and potential prosecution under the False Claims Act.[35] Hospitals have responded by establishing a careful case management review process to evaluate a patient's condition against criteria used by Medicare to determine medical necessity for inpatient admission. In response to this increased scrutiny, many hospitals may have shifted patients to OS and increased the duration of their stays in OS, rather than admit them for short inpatient stays and risk denial of all payment for the claim.

Reportedly, both providers and payers sometimes retroactively change the status of patients from inpatient to OS,[36] even though Medicare rules state that hospitals are not supposed to change a patient's status after discharge.[37] Some experts assert that hospitals may alter a patient's status to avoid denial of short-stay inpatient claims, rather than to increase revenue.[38] Such patient status recategorization could increase both frequency and duration of OS claims.

In addition, recent efforts to reduce avoidable readmissions and associated penalties may encourage hospitals to substitute OS for inpatient admission. Under Medicare's Hospital Readmission Reduction Program, which started in 2012,[39,40] hospitals may be financially penalized for certain avoidable readmissions. However, patients who are sent home from OS and later return to be admitted as inpatients are not counted as readmissions, so no penalty would apply. Similarly, patients who are discharged from an inpatient stay and later return to receive only OS are not counted as readmissions.

Although our data were collected before readmission penalties went into effect in 2012, our analysis of episodes of care following OS found the percent of patients who returned for an inpatient admission within 30 days following an OS only visit increased by about 5 percent, from 5.8 percent to 6.0 percent, from 2006 to 2009. While involving only a small portion of OS patients, this increase occurred on top of the 12 percent annual increase in total OS users during the same period shown in Table 1. Since readmission penalties took effect in 2012, incentives to avoid them appear likely to drive up the use of OS even more.

POLICY RECOMMENDATIONS

In light of the rapid growth in the use of OS, uncertainty regarding the appropriateness of its use, and its potential financial impact on Medicare beneficiaries, policy makers may want to consider a number of options to address concerns raised by increased OS use. These options include:

- Eliminate Medicare's 3-day prior stay requirement for Part A SNF coverage.[41]
  - The current rule is an anachronism from 1965, when Medicare's average length of stay for beneficiaries 65 and older was about 13 days, whereas, by 2010, the average lengthen of stay had fallen to 5.4 days and more than one-third of beneficiaries with an inpatient admission had a length of stay of less than 3 days.
  - Medicare does not require a prior inpatient stay for coverage of services by other postacute care providers, such as home health agencies, inpatient rehabilitation facilities, or long-term care hospitals.
  - This proposal would require Congressional action to change the Medicare statute and would probably increase Medicare spending. However, it could improve beneficiary clinical outcomes and would reduce the potential financial burden on beneficiaries who require medically necessary postacute SNF care.
- As long as the 3-day prior stay requirement remains in place, count all time spent in OS, as well as time as an inpatient, toward time required to qualify for SNF coverage.[42,43]
  - This proposal would reduce the potential financial burden and unfairness associated with OS for beneficiaries who require SNF care.
- Cap the total beneficiary liability for OS use at the inpatient deductible amount.
  - This proposal would limit the maximum financial burden for OS use to the amount that beneficiaries would incur for inpatient admission ($1,184 in 2013).
- Count OS use as an inpatient admission for purposes of the readmission reduction program.
  - This change would strengthen provider incentives to reduce avoidable readmissions and reduce potential gaming by closing a loophole that may encourage the inappropriate use of OS to avoid readmission penalties.
- Provide written notice to Medicare beneficiaries of their status when they are classified as outpatients receiving OS and the implications of OS status for beneficiary out-of-pocket costs associated with outpatient care and postacute SNF coverage.
  - Written notice of OS status might reduce later beneficiary confusion about whether SNF care will be covered by Medicare.
- Clarify Medicare criteria for OS and inpatient admission.[44]
  - Such clarification could reduce provider confusion and potential misuse of OS that may be associated with nonclinical considerations.

- Prohibit the retroactive reclassification of patient status from inpatient to OS.
  - — Limiting reclassification could enhance certainty for both providers and beneficiaries.

Policy changes such as those described above could increase certainty for providers and beneficiaries; make it less likely that beneficiaries would face large, unforeseen out-of-pocket expenses; and reduce the potential for inappropriate use of OS.

CONCLUSION

Over the past decade, OS has grown rapidly as an approach to managing patients whose clinical condition and need for inpatient admission is uncertain. Although some of the growth in OS use may be a statistical artifact from relaxed reporting criteria for OS claims, much of this growth appears real. None of the factors discussed, including changes in Medicare payment policy, increased payer scrutiny, greater efficiency, financial incentives, or statistical artifact, may separately explain the growth in OS services, but in combination these factors are likely to account for much of it. Regardless of the reason for the increased use of OS, prolonged use of OS unnecessarily blurs the line between outpatient and inpatient services. In addition to the need to reduce the financial impact of greater OS use on Medicare beneficiaries, such a dramatic change in practice that may be of questionable clinical benefit warrants further inquiry into its effect on patients.

ENDNOTES

1. This recommendation was included in the Report to Congress by the Commission on Long-Term Care; established by the *American Taxpayer Relief Act of 2012*, Sec. 643 (P.L. 112-240) (Sept. 18, 2013). Accessed at: http://www.ltccommission.senate.gov/.

2. This recommendation was also included in the Report to Congress by the Commission on Long-Term Care. (*Ibid.*)

3. S. Jaffe, "Medicare Rules Give Full Hospital Benefits Only to Those with 'Inpatient' Status," *Washington Post* (September 7, 2010). P. Span, "In the Hospital, But Not Really a Patient," *New York Times* (June 22, 2012). Accessed at http://newoldage.blogs.nytimes.com/2012/06/22/in-the-hospital-but-not-really-a-patient/.

4. *Landers v. Leavitt*, 545 F3d 98 (2nd Cir. 2008), cert. denied, 129 S.Ct.2878 (2009). *Bagnall v. Sebelius* (No. 3:11-cv-01703, D. Conn).

5. "Improving Access to Medicare Coverage Act of 2013," S. 569/H.R. 1179, 113th Congress, First Session (2013).

6. A. M. Sheehy et al., "Hospitalized but Not Admitted," *JAMA Internal Medicine* (Jul. 8, 2013). Accessed at http://archinte.jamanetwork.com/article.aspx?articleid=1710122.

7. Beneficiary liability for hospital outpatient services typically exceeds 20 percent of Medicare allowed charges. Under Medicare, the beneficiary copayment for each hospital outpatient service may reach 40 percent of the cost but may not exceed the Part A deductible. *Medicare Explained 2013*, ¶ 874 (Chicago, IL: Wolters Kluwer). In 2011, hospital outpatient coinsurance rates varied by type of service from 21 percent to 28 percent, with the average being about 23 percent. *MedPAC Data Book*, Chart 7-14 (2012).

8. The 3-day prior stay rule for SNF coverage requires that a patient be admitted for inpatient services for at least 3 days prior to being discharged to a SNF. This rule is a statutory requirement under Medicare that was originally enacted in 1965. (See Social Security Act § 1861[i]; PL 89-97 [July 30, 1965].) When the 3-day prior stay rule was adopted in 1965, the average length inpatient hospital stay for those aged 65 and older was about 13 days. Since then, the average Medicare length of stay has declined to about 5.4 days in 2010, with more than a third of Medicare inpatients staying for less than 3 days. See M. R. Chassin, "Variations in Hospital Length of Stay: Their Relationship to Health Outcomes" (Washington, DC: Congressional Office of Technology Assessment, August 1983); Center for Strategic Planning, Centers for Medicare & Medicaid Services (CMS), "Medicare Short-Stay Hospital Utilization," Table V.1 & Table V.2 (Washington, DC: Department of Health and Human Services, December 2011).The 3-day prior stay rule was repealed by the Medicare Catastrophic Coverage Act of 1988, which itself was repealed in 1989.

9. Medicare does not require a prior inpatient stay for coverage of services by other postacute care providers, such as home health agencies, inpatient rehabilitation facilities, or long-term care hospitals. Medicare Payment Advisory Commission (MedPAC), *Report to Congress* (Washington, DC: MedPAC, March 2013).

10. CMS, Outpatient Observation Services, *Medicare Claims Processing Manual*, Ch. 4, Sec. 290 (Baltimore, MD: CMS, 2012). (Rev. 2453, 04-26-12; Pub No. 100-04). Accessed at https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads//clm104c04.pdf.

11. Z. Feng, B. Wright, and V. Mor, "Sharp Rise in Medicare Enrollees Being Held in Hospitals for Observation Raises Concerns About Causes and Consequences," *Health Affairs*, Vol. 31, No. 6 (2012), pp. 1251–1259.

12. Medicare Payment Advisory Commission (MedPAC), Public Meeting (September 13, 2010). Accessed at http://www.medpac.gov/meeting_search.cfm?SelectedDate=2010-09-13.

13. *JAMA Internal Medicine.* 2013.

14. Office of Inspector General, "Hospitals' Use of Observation Stays and Short Inpatient Stays for Medicare Beneficiaries," Memorandum Report OEI-02-12-00040 (Washington, DC: U.S. Dept. of Health and Human Services, July 29, 2013). Accessed at http://oig.hhs.gov/oei/reports/oei-02-12-00040.pdf.

15. Board of Trustees, *2012 Annual Report of the Board of Trustees, Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds* (Washington, DC: Centers for Medicare & Medicaid Services, 2012).

16. In an effort to discourage longer stay OS use, CMS has proposed to create a time-based presumption of medical necessity for a hospital inpatient stay that spans at least two midnights. 78 Fed. Reg. 27486 (May 10, 2013).

17. See endnotes 3, 4, and 8 above.

18. Institute of Medicine, *Hospital-based Emergency Care: At the Breaking Point* (Washington, DC: National Academies Press, 2007). Accessed at http://books.nap.edu/openbook.php?record_id=11621.

19. M. A. Ross, S. Compton, P. Medado, M. Fitzgerald, P. Kilanowski, and B. J. O'Neil, "An Emergency Department Diagnostic Protocol for Patients with Transient Ischemic Attack: A Randomized Controlled Trial," *Annals of Emergency Medicine*, Vol. 50, No. 2 (2007), pp. 109–119.

20. L. Jagminas and R. Partridge, "A Comparison of Emergency Department Versus Inhospital Chest Pain Observation Units," *American Journal of Emergency Medicine*, Vol. 23, No. 2 (2005), pp. 111–113.

21. M. F. McDermott, D. G. Murphy, R. J. Zalenski, R. J. Rydman, M. McCarren, D. Marder et al., "A Comparison Between Emergency Diagnostic and Treatment Unit and Inpatient Care in the Management of Acute Asthma," *Archives of Internal Medicine*, Vol. 157, No. 18 (1997), pp. 2055–2062.

22. J. L. Wiler, M. A. Ross, and A. A. Ginde, "National Study of Emergency Department Observation Services," *Academic Emergency Medicine*, Vol. 18 (2011), pp. 959–965.

23. C. W. Baugh, A. K. Venkatesh, and J. S. Bohan, "Emergency Department Observation Units: A Clinical and Financial Benefit for Hospitals," *Health Care Management Review*, Vol. 36, No. 1 (2011), pp. 28–37. For beneficiaries who are admitted as inpatients, Medicare will pay only a standard predetermined rate for the

entire episode of that patient's care, without regard to whether he or she has received OS or other outpatient services. 42 C.F.R. § 412.2(c)(5).

24. C. W. Baugh et al., "Making Greater Use of Dedicated Hospital Observation Units For Many Short-Stay Patients Could Save $3.1 Billion a Year," *Health Affairs* Vol. 31, No. 10 (2012), pp. 2314–2323.

25. *JAMA Internal Medicine*. 2013.

26. C. W. Baugh and J. D. Schuur, "Observation Care – High-Value Care or a Cost-Shifting Loophole?" *New England Journal of Medicine*, Vol. 369, No. 4 (2013), pp. 302–305.

27. Although syncope may be related to cardiac or noncardiac causes, the use of observation status can provide medical supervision and monitoring to ensure that symptoms have stabilized and increase diagnostic confidence. (Cleveland Clinic Center for Syncope and Autonomic Disorders, accessed at http://my.clevelandclinic.org/heart/disorders/electric/syncope.aspx.)

28. Centers for Disease Control and Prevention, "Prevalence of Coronary Heart Disease – United States, 2006–2010," *Morbidity and Mortality Weekly Report*, Vol. 60, No. 40 (2011), pp. 1377–1381; R. W. Yeh et al., "Population Trends in the Incidence and Outcomes of Acute Myocardial Infarction," *New England Journal of Medicine*, Vol. 362 (2010), pp. 2155–2165.

29. Medicare imposes a 3-day bundled payment window on all related outpatient services prior to an inpatient admission. 42 C.F.R. § 412.2(c)(5).

30. C. W. Baugh, et al., 2011.

31. CMS, *Medicare Claims Processing Manual*, Ch. 4, Sec. 290.4.3 (Rev. 1760, Issued 06-23-09).

32. *Ibid.*

33. MedPAC 2010.

34. *Ibid.*

35. 31 U.S.C. §§3729 et seq.

36. *JAMA Internal Medicine*. 2013.

37. MedPAC 2010.

38. *Ibid*.

39. CMS, *Readmissions Reduction Program* (2013). Accessed at http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.html.

40. CMS recently released new survey and certification guidelines on hospital discharge planning which are intended to improve quality of care and reduce readmissions. (S&C: 13-32-Hospital; May 17, 2013.)

41. This recommendation was included in the Report to Congress by the Commission on Long-Term Care. See note 1 above.

42. Legislation that would credit time spent in OS toward Medicare's 3-day prior stay requirement for Part A SNF coverage was introduced in March 2013 in both houses of Congress (*Improving Access to Medicare Coverage Act of 2013* [S. 569/H.R. 1179]). See note 5 above.

43. This recommendation was also included in the Report to Congress by the Commission on Long-Term Care. (*Ibid.*)

44. In an attempt to clarify the use of observation status, CMS clarified Medicare rules for inpatient admission by establishing a presumption that inpatient stays spanning less than 2 midnights should have been provided on an outpatient basis. (78 Fed. Reg. 50496; Aug. 19, 2013) However, a report by the Office of Inspector General criticized the CMS rule saying, "…the number of observation and long outpatient stays may not be reduced if outpatient nights are not counted towards the 2-night presumption." (Office of the Inspector General. See note 14 above.)