

EXHIBIT C

Two Midnights:
Implausible
Assumptions and
Lack of Detail
Lead to Problems
in Analysis

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Two Midnights: Implausible Assumptions and Lack of Detail Lead to Problems in Analysis

Executive Summary

In the Inpatient Prospective Payment System (IPPS) proposed and final rules for Fiscal Year (FY) 2014, the Centers for Medicare & Medicaid Services (CMS) proposed and then implemented several policies attempting to clarify when a patient should be admitted to a hospital as an inpatient as opposed to receiving care as an outpatient. CMS asserted that the impact of this policy change would increase government expenditures by \$220 million due to an expected net increase in hospital inpatient encounters. CMS wrote that its actuaries had examined FY 2009 through 2011 Medicare claims data and estimated that approximately 400,000 encounters would shift from the outpatient setting to the inpatient setting and approximately 360,000 encounters would shift from the inpatient setting to the outpatient setting, causing a net shift of 40,000 encounters to the inpatient setting. To counteract the estimated increase in government expenditures, CMS cut payments to hospitals in the IPPS rule by 0.2% for FY 2014.

The Moran Company examined the CMS impact analysis after both the proposed and final rules were released. CMS provided limited information about the assumptions made or calculations used to estimate the impact of its new inpatient admissions policies in either the proposed or final rule. But even the information that CMS did make available in the final rule suggests that CMS made assumptions that are implausible and do not appear to be consistent with its subsequent policy implementation directives. In particular, to estimate the number of encounters that would shift from inpatient to outpatient, in their final rule CMS stated that it examined only claims assigned to surgical Medicare Severity Diagnosis-Related Groups (MS-DRGs); the agency said it did not consider claims assigned to medical MS-DRGs in its analysis. CMS did not explain this decision, and through our preliminary assessment, we did not identify a clear reason for CMS to apply such a limitation. The agency's exclusion of medical MS-DRGs is highly material because there are hundreds of thousands of cases assigned to medical MS-DRGs involving conditions that could be treated in the outpatient setting and thus are strong candidates for shifting from inpatient to outpatient under CMS's new inpatient admissions policies. Moreover, limiting the universe of encounters in such a manner is inconsistent with the agency's more recent description of how it expects the inpatient admissions policies to be implemented.

The fact that CMS did not provide information on all of its assumptions and calculations precluded us from replicating the agency's estimates of the shifts of patient encounters from inpatient to outpatient and vice versa. The ability to replicate those estimates is a critical first step to any attempt to analyze the impact of the changes in the inpatient admissions policies

because it allows us to (1) verify whether CMS performed the calculations in the way it describes; (2) evaluate whether the underlying assumptions were reasonable; and (3) examine how sensitive the results are to the various assumptions by altering those assumptions and observing the extent to which such changes affect the results. Based on the information and data provided by CMS, our ability to do these things was limited. Hence, we had limited ability to help our clients comment on the assumptions and calculations underlying the proposed payment cut during the 60 day period for public comment.

Finally, despite the lack of detailed information provided by CMS about the assumptions underlying its analysis, we attempted to model the impact of the changed inpatient admissions policies using assumptions we believed to be reasonable. Our preliminary efforts show that any estimates would be highly sensitive to a number of key issues that CMS did not explicitly address, including the extent to which cases assigned to medical MS-DRGs shift to the outpatient setting and the relationship between the amount of time spent receiving observation services in the outpatient setting and the likelihood that those cases would shift to the inpatient setting. Moreover, our results differed widely from those reached by CMS; in an analysis of three scenarios regarding the shift of cases from the inpatient to outpatient setting and vice versa, we estimated that the new policies would actually *decrease* government expenditures.

Introduction

For FY 2014, CMS implemented a new policy in order to clarify when a patient should be admitted as an inpatient as opposed to being treated as an outpatient, often receiving observation services. In doing so, CMS was trying to address multiple issues. On the inpatient side, CMS was trying to discourage very short inpatient stays, which perhaps could have been treated as outpatient cases. And on the outpatient side, CMS was trying to address the issue of patients being kept in the hospital for multiple days for observation without being admitted as an inpatient.

Whether a patient is classified as an inpatient or outpatient has important financial implications for the government, the hospital, and the Medicare beneficiary. Because inpatient stays are paid on a per stay basis, with payment determined by the DRG, cases where the patient's stay is shorter than the average length of stay for the DRG are profitable to the hospital. CMS has tried to discourage inappropriate inpatient admissions by instituting Recovery Audit Contractors (RACs) who perform post-discharge review of claims and recover payments made for inpatient cases that should have been treated in the outpatient department. Hospitals, in reaction to the RACs, became more cautious in admitting certain types of cases, and instead held some patients in outpatient observation status, sometimes for several days. This is problematic for patients who then transfer to a Skilled Nursing Facility (SNF) because Medicare will not cover the SNF charges because a 3 day inpatient stay prior to admission to the SNF is required for coverage.

Given the complex issues involved, CMS proposed a new "2-midnights" policy in an effort to provide more guidance to physicians regarding the decision to admit a patient as an inpatient. In the FY 2014 IPPS Proposed Rule, CMS wrote:

“We are proposing to clarify and specify in the regulations that an individual becomes an inpatient of a hospital, including a critical access hospital, pursuant to an order for inpatient admission by a physician or other qualified practitioner and, therefore, the order is required for payment of hospital inpatient services under Medicare Part A. We are proposing that hospital inpatient admissions spanning 2 midnights in the hospital would generally qualify as appropriate for payment under Medicare Part A. This would revise our guidance to hospitals and physicians relating to when hospital inpatient admissions are determined reasonable and necessary for payment under Part A. We also are proposing to use our exceptions and adjustments authority under section 1886(d)(5)(I)(i) of the Act to offset the additional IPPS expenditures under this proposal by reducing the standardized amount, the hospital-specific amount, and the Puerto Rico-specific standardized amount by 0.2 percent.”¹

The Moran Company was asked to review CMS’s methodology and the assumptions for the estimated shifts of patient encounters underlying this 0.2% reduction. This included examining the description of how CMS determined this final impact of 0.2%, and evaluating whether or not the calculations were appropriate. Because CMS did not provide sufficient information about the assumptions that it made in the proposed rule, and provided only slightly more information in the final rule, our ability to perform an in-depth analysis was constrained. However, even the limited information provided in the IPPS Final Rule suggests that CMS made at least one material implausible assumption.

Background on the IPPS Rulemaking

CMS first proposed the 0.2% reduction for public comment in the IPPS proposed rule for FY 2014, which was published in the Federal Register on May 10, 2013.² We conducted our initial research based on information published in the IPPS Proposed Rule and quickly determined that there were significant and material gaps in CMS’s description of how it had estimated the impact of the new inpatient admissions policies. This lack of information made it impossible for us to replicate CMS’s analysis and help our clients comment on the assumptions and calculations underlying the proposed payment cut during the 60 day period for public comment.

Specifically, in the IPPS Proposed Rule, CMS described the steps of its impact analysis in the following broad terms:³

- Examined FY2009 through FY2011 Medicare claims data for “extended hospital outpatient encounters and shorter stay hospital inpatient encounters.”

¹ 78 Fed. Reg. 27, 486, 27,496 (May 10, 2013).

² 78 Fed. Reg. at 27,486.

³ 78 Fed. Reg. at 27,649–50.

- Estimated that approximately 400,000 encounters would shift from outpatient to inpatient.
- Estimated that approximately 360,000 encounters would shift from inpatient to outpatient.
- Estimated a net shift of 40,000 encounters.
- The net shift of 40,000 encounters represents an increase of approximately 1.2 percent in the number of shorter stay hospital inpatient encounters paid under the IPPS.
- Shorter stay encounters represent 17 percent of IPPS expenditures, estimated that 17 percent of IPPS expenditures would increase by 1.2 percent.
- Estimated that on average the per encounter outpatient payments would be approximately 30 percent of the per encounter payments for the inpatient encounters.
- Estimated \$220 million in additional IPPS expenditures.

In the IPPS Final Rule, published in the Federal Register on August 19, 2013,⁴ CMS largely reiterated its previous discussion of its impact analysis. CMS did provide information about two assumptions that it used in its analysis, stating:

- “In determining the estimate of the number of encounters that would shift from inpatient to outpatient, our actuaries examined inpatient claims containing a surgical MS-DRG. Claims containing medical MS-DRGs were excluded. The number of claims spanning less than 2 midnights based on the length of stay that were expected to become outpatient, after excluding encounters that results in death or transfers was approximately 360,000.”
- “In determining the number of encounters that would shift from outpatient to inpatient, our actuaries examined outpatient claims for observation or a major procedure. Claims not containing observation or a major procedure were excluded. The number of claims spanning 2 or more midnights based on the dates of service that were expected to become inpatient was approximately 400,000. This estimate did not include any assumption about outpatient encounters shorter than 2 midnights potentially becoming inpatient encounters.”⁵

CMS also noted that not every potential case would shift:

- “For example, we fully expect that not every single surgical MS-DRG encounter spanning less than 2 midnights will shift to outpatient and that not every single outpatient observation stay or major surgical encounter spanning more than 2 midnights will shift to inpatient.”⁶

⁴ 78 Fed. Reg. 27,486.

⁵ 78 Fed. Reg. at 50,953.

⁶ *Id.*

However, even the information made available with the IPPS Final Rule was not sufficient to permit us to replicate CMS's estimates or thoroughly evaluate its conclusion that hospitals would receive \$220 million in additional IPPS payments.

CMS also described the data it analyzed slightly differently, and it is unclear if that difference is material. The proposed rule states:

“Specifically, our actuaries examined FY2009 through 2011 Medicare claims data for extended hospital outpatient encounters and shorter stay hospital inpatient encounters and estimated that”⁷

But in the final rule, the data is described as:

“The estimates of the shifts in encounters as described above were primarily based on FY2011 Medicare inpatient and outpatient claims data. However, our actuaries also examined FY 2009 and FY 2010 Medicare inpatient and outpatient claims data and found results for the earlier years were consistent with the FY 2011 results.”⁸

The Limited Information CMS Provided in the IPPS Final Rule Includes Implausible Assumptions

Even though there are numerous issues that CMS does not address in the IPPS Final Rule, or that CMS addresses without giving sufficient detail to allow us to perform a thorough evaluation of CMS's assumptions, as we normally would, the limited information that CMS did provide suggests that CMS made at least one material implausible assumption.

Specifically, CMS excluded all of the claims containing medical MS-DRGs from its analysis, effectively assuming that no patient encounter involving a medical MS-DRG would shift from the inpatient to the outpatient setting. CMS offered no reason for that exclusion in the IPPS Final Rule, and our analysis suggests that this choice has a significant impact on the agency's results.

There are hundreds of thousands of cases assigned to medical MS-DRGs that are possible candidates for shifting from inpatient to outpatient under CMS's new inpatient admissions policies.

To take only one example, MS-DRG 313, the medical MS-DRG for chest pain, has an average length of stay of 1.8 days,⁹ meaning that a significant number of cases assigned to that MS-DRG

⁷ 78 Fed. Reg. at 27,649.

⁸ 78 Fed. Reg. at 50,953.

⁹ See CMS, FY 2014 Final Rule Data Files, AORv.29 File, <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/FY2014-IPPS-Final-Rule-Home-Page.html> (click on “FY 2014 Data Files and download the “AOR/BOR File”); CMS, CMS, FY 2014 Final Rule Tables, Table 5,

involved shorter stays. Short-stay cases of MS-DRG 313 have been an approved issue for Recovery Audit Contractor (RAC) review since April 2011.¹⁰

Table 1 Five Medical MS-DRGs with Significant Numbers of Short Stay Cases

DRG	Description	Zero Day Stay Count	One Day Stay Count	Total Short Stay Count	All Stays	Percent of DRG that are short stays
302	Atherosclerosis with MCC	199	1,043	1,242	6,175	20.1%
303	Atherosclerosis without MCC	2,516	12,706	15,222	38,596	39.4%
310	Cardiac arrhythmia & conduction disorders without CC/MCC	5,670	36,209	41,879	118,274	35.4%
312	Syncope & collapse	4,193	33,312	37,505	147,595	25.4%
313	Chest Pain	10,701	52,949	63,650	134,774	47.2%

The table above shows short stay information for five medical MS-DRGs with significant numbers of short stay cases in FY2011. As the table shows, for these five medical MS-DRGs there were nearly 160,000 short stay cases. If one quarter of the cases in these five DRGs shift to the outpatient setting under the new policies, then there would be no net increase in the number of inpatient stays. And if more than 25 percent of these 0 and 1 day cases assigned to these medical MS-DRGs shift to the outpatient setting under the new policies, then the net effect of the policies could be a *decrease*, rather than an increase, in the number of inpatient cases. Looking beyond these five medical DRGs, we found that more than half of short stay cases occur in medical DRGs.

Moreover, CMS's exclusion of the medical MS-DRGs from its impact analysis is not consistent with the agency's description of how it expects the new inpatient admissions policies to be implemented. The IPPS Final Rule does not suggest that the effect of those policies will be limited to only surgical MS-DRGs:

<http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/FY2014-IPPS-Final-Rule-Home-Page.html> (click on "FY 2014 Final Rule Tables and download the "Table 5 File") (listing the geometric and arithmetic average length of stay for all MS-DRGs).

¹⁰ E.g., CGI Federal, Medicare RAC Region B Web Site: Approved Issues, <https://racb.cgi.com/Issues.aspx> (last visited Jan. 13, 2014) (search claim type "inpatient" and issue type "complex" and scroll to find issue "Acute Inpatient Hospitalization- Conditions of the Circulatory System MS DRG : 286, 287, 288, 289, 290, 292...313, 314, 315, 316 (Medical Necessity Review)").

Under this proposal, Medicare's external review contractors would presume that hospital inpatient admissions are reasonable and necessary for beneficiaries who require more than 1 Medicare utilization day (defined by encounters crossing 2 "midnights") in the hospital receiving medically necessary services. If a hospital is found to be abusing this 2 midnights presumption for nonmedically necessary inpatient hospital admission and payment (in other words, the hospital is systematically delaying the provision of care to surpass the 2 midnight timeframe), CMS review contractors would disregard the 2 midnights presumption when conducting review of that hospital. Similarly, we would presume that hospital services spanning less than 2 midnights should have been provided on an outpatient basis, unless there is clear documentation in the medical record supporting the physician's order and expectation that the beneficiary would require care spanning more than 2 midnights or the beneficiary is receiving a service or procedure designated by CMS as inpatient-only.¹¹

Absent explicit instructions from CMS to the contrary, we would expect hospitals to apply the new inpatient admissions policies equally to medical and surgical MS-DRGs. Assuming that is in fact what CMS intends, CMS's review contractors such as RACs presumably will continue to review claims for inpatient stays involving medical MS-DRGs. That means that hospitals are likely to continue to treat on an outpatient basis beneficiaries for whom the expected length of stay is uncertain, and for the large number of stays that are shorter than two midnights, hospitals will bill for those services as outpatient services.

CMS's exclusion of medical MS-DRGs from its estimate of the number of patient encounters that will shift from inpatient to outpatient also is not consistent with the agency's more recent description of the expected impact of the new inpatient admissions policies. In a Frequently Asked Questions (FAQs)¹² on the 2-midnights policy, CMS stated that it expected that the "majority of short (total of zero or one midnight) Medicare hospital stays will be provided as outpatient services." CMS described the majority of "short stay" cases, not the majority of "surgical" cases. And based on our analysis, if CMS had included both surgical and medical MS-DRGs, there are 1 million 0 and 1-day stay cases. The majority of 1 million cases would be at least 500,000 cases, which is more than 30% larger than the 360,000 that CMS stated would shift. That shift of an additional 140,000 cases at a minimum, would significantly tip the net flow of cases from shifting towards inpatient to shifting towards outpatient. That change would then shift the flow of dollars. Because inpatient cases tend to have higher payments than outpatient cases, we would expect lower overall payments.

In short, CMS's descriptions of its new inpatient policies instruct hospitals to apply the new inpatient admissions policies to all MS-DRGs, which would include medical MS-DRGs, and

¹¹ 78 Fed. Reg. at 50,746.

¹² CMS Frequently Asked Questions, "2 Midnight Inpatient Admission Guidance & Patient Status Reviews for Admissions on or after October 1, 2013," Q4.9, last updated 12/23/13.

those medical MS-DRGs involve hundreds of thousands of short-stay cases. We believe it is likely that at least some of those cases would shift from the inpatient to the outpatient setting.

The Limited Information CMS Provided Precludes Replication of Its Results

The fact that CMS did not provide information about all of its assumptions and calculations precluded us from replicating the agency's estimates of the impact of the new inpatient admissions policies. To examine a proposed policy, we often attempt to replicate the CMS impact analysis first before we model any potential policy changes. Replication is an important first step because it allows us to determine if the calculations were done in the way they were described, determine the appropriateness of the assumptions used in the analysis, and potentially examine how sensitive the results are to the various assumptions by altering those assumptions and observing the extent to which such changes affect the results. Based on the information and data provided by CMS, our ability to do these things was limited.

Below, we first examine each factor necessary for replication, and discuss the information that CMS provided to identify what information is present or lacking.

CMS's impact analysis projected that inpatient payments would increase by \$220 million if the 2-midnights policy were finalized. The \$220 million represents the combination of the changes in payments due to outpatient cases shifting to inpatient, and the changes in the payments due to inpatient cases shifting to outpatient. To calculate these two payment changes, it is necessary to determine how many cases are shifting in each direction, and the payments associated with those cases. The payments can be estimated in two different ways: at the individual case level, or on a more general level, by estimating the number of cases and the average payment difference for each case. Unfortunately, CMS did not describe in enough detail what assumptions were made about the types of cases shifting and the payments associated with those cases.

Cases shifting from inpatient to outpatient

In the IPPS Proposed Rule, CMS wrote that they expected 360,000 cases to shift from inpatient to outpatient. Based on narrative in other parts of the rule, we expect that they excluded cases that were transfer cases or death. However, it is still unclear how they defined these cases. For example, we don't know if they assumed a particular proportion, or if they identified particular cases that did not shift.

Inpatient Only Procedures

Of particular interest for the measurement of the group of cases that did not shift from inpatient to outpatient are the claims which have a procedure present which is on the "inpatient only" list. In their proposed methodology, CMS assumes that claims with a procedure on the inpatient only

list would not shift.¹³ However, the inpatient only list is a part of the Outpatient Prospective Payment System (OPPS) rule, and is listed in terms of CPT/HCPCS codes. The inpatient data uses ICD-9 procedure codes to identify procedures, and there is not a one-to-one correspondence between the CPT/HCPCS codes. CMS has not released a version of the inpatient only list in terms of ICD-9 codes. So while CMS provides some information on excluded cases, it is not detailed enough to allow an outsider to replicate the analysis.

In the final rule, after the proposed rule comment period closed, CMS released additional information on the methodology, stating that claims with medical DRGs (as opposed to surgical DRGs) were excluded from the analysis. However, as noted above, there was no explanation of why that exclusion was made.

In addition, CMS stated that they did not expect that all short stay inpatient claims would shift to outpatient. However, they did not give any additional information on the claims that would not shift, or how to identify them.

Payments associated with the cases shifting from inpatient to outpatient

In the proposed and final rules, CMS wrote that they expected the outpatient claims to be 30% of the payment for the inpatient claims. However, the agency did not explain how this estimate was developed. Additional narrative comparing the average claim amounts, and how those amounts were calculated would be necessary for replication, especially since the average payment calculations are so sensitive to the number and types of cases included.

Cases shifting from outpatient to inpatient

In the proposed rule, CMS wrote that 400,000 cases would shift from outpatient to inpatient, but didn't provide any additional information on the categories of cases included. Since we do not know how they selected these cases, it is not possible to determine if their assumptions for selecting the cases were appropriate, and if the assumptions were implemented properly.

For example, if a Medicare beneficiary came to the hospital for outpatient treatment on two consecutive days and did not stay overnight, it would be improper to treat that case as a candidate for shifting to the inpatient setting. However, the Part B claims a hospital submits for outpatient services typically list all of the care provided within a period of 30 days. Although the claims contain a field for the hospital to enter the dates of service for each of the procedures performed, in most cases, the Part B claim does not include a record of the number of hours that a patient was at the hospital, so it can be difficult to determine whether the patient stayed overnight or simply visited the hospital on two separate days. CMS necessarily would have needed to make a number of assumptions about how to identify and treat such cases, and those assumptions are likely material to any estimate of the number of cases that would shift from the

¹³ 78 Fed. Reg. at 50,944.

outpatient to the inpatient setting. CMS did not provide any of these details in the IPPS Proposed Rule, effectively precluding us from determining whether CMS's assumptions were appropriate or if those assumptions were implemented properly. This limited our ability to assist our clients in providing meaningful comments on the Proposed Rule.

In the IPPS Final Rule, CMS added some more information, writing that: "Claims not containing observation or a major procedure were excluded."¹⁴ In addition, CMS writes that "not every single outpatient observation stay or major surgical encounter spanning more than 2 midnights will shift to inpatient."¹⁵

While CMS provides some information on how the number and type of outpatient cases were identified, additional information is still necessary to replicate what CMS did. The following questions still are unanswered:

- 1) CMS states that a claim had to have observation time to be included in the analysis. How many hours of observation time? Did the claim have to cover two midnights? Was selection based on a certain number of hours?
- 2) What is a major procedure?
- 3) How was time measured? Merely looking at the first and last dates on a claim form is not sufficient, as an outpatient claim form can contain information on up to 30 calendar days of treatment. The fact that there were two procedures on consecutive days does not necessarily mean that the patient stayed in the hospital the entire time. The patient could have gone home the first day and then returned the next day.
- 4) CMS admits that not everything will shift, what else does not shift and how were these determined?

Without these questions answered, it is not possible to identify the universe of outpatient cases that CMS expected would shift to inpatient, to evaluate whether the underlying assumptions were reasonable, or to examine how sensitive the results are to any of those assumptions.

Major Procedures

In the IPPS final rule, CMS notes that the analysis assumes that outpatient claims with major procedures would shift to inpatient if the claim covered two midnights. This is problematic because an outpatient claim can cover up to 30 calendar days of treatment, and in some cases hospitals are required to bill for certain services on monthly claims.¹⁶ It does not have to be 30 continuous calendar days, but merely 30 days since the first date of service. It is possible to, on the same outpatient claim, have a treatment on day 1 and 3, but that the patient go home in

¹⁴ 78 Fed. Reg. at 50,953.

¹⁵ *Id.*

¹⁶ See Internet Only Manual at 100-4, Chapter 1, Section 50.2.2 (<http://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/clm104c01.pdf>)

between. Depending on how CMS made the case selection, these cases could have been included as possible 2-midnight cases.

Observation Hours

Another possible way to measure the time is through the use of observation codes, which report the number of hours a patient has been in observation status. However, CMS did not identify any threshold that they used to determine how many hours the patient would need to be in observation status to cover the effective two midnights. In theory, this could be as short as 25 hours (e.g., starting at 11:30 pm on day one, and running through 12:30 am on day three) or needing to be longer than 47 hours (e.g., starting as 12:30am on day one, and running through 11:30pm on day two.)

CMS gave no information about the number of hours they used. Use of different thresholds would lead to different estimates of the number of outpatient cases with observation time that switched, which would in turn affect the estimate of the volume of dollars shifting from one setting to the other.

Payments associated with the cases shifting from outpatient to inpatient

If there were enough information to determine the cases that were shifting, and analyze them, the next step would be to calculate the financial impact of the shift. In both the proposed and final rules, CMS said:

- The net shift of 40,000 encounters represents an increase of approximately 1.2 percent in the number of shorter stay hospital inpatient encounters paid under the IPPS; and
- Shorter stay encounters represent 17 percent of IPPS expenditures, so the agency estimated that 17 percent of IPPS expenditures would increase by 1.2 percent.

These numbers still are not sufficient information to understand and replicate CMS' analysis. For example, CMS has not identified the following information:

- 1) What is the universe of "shorter stay hospital inpatient cases"?
- 2) Why did they assume that the new short stay cases are similar to the existing short stay cases in spending? Is this a reasonable assumption?
- 3) What is the base of expenditures that is being expanded by 1.2%? Is that 17% of expenditures the appropriate base?

Our Attempts at Replication and Other Analysis Yield Widely Different Results

Despite the lack of detailed information provided by CMS about the assumptions underlying its analysis, we attempted to model the impact of the changed inpatient admissions policies using assumptions we believed to be reasonable. Our preliminary efforts suggest that any estimate would be highly sensitive to a number of key issues that CMS did not explicitly address in the

IPPS Final Rule. Moreover, our findings were fundamentally different from CMS's, with potential cuts to hospital providers in the billions of dollars. Below, we describe some of the major differences.

Specifically, we used the inpatient and outpatient 100% Standard Analytical Files (SAFs) for federal FY 2011 for acute care prospective payment system (PPS) hospitals to identify short stay inpatient cases—assigned to both medical and surgical MS-DRGs—and found that approximately 1 million short stay cases (defined as 0 or 1 day stays, after excluding deaths and transfers) could potentially shift. We identified outpatient cases by extracting all claims where an observation code was billed, and stratified the claims based on number of hours of observation care. We also excluded cases that were not at PPS hospitals or were transfers or deaths.

We then developed several scenarios about the percentage of cases that would shift from inpatient to outpatient and vice versa, and used those scenarios to estimate the financial impact of the new inpatient admissions policies. Although the results for each of the three scenarios differed widely, under all three scenarios, we estimated that the effect of new inpatient admissions policies would mean a *decrease* in hospital reimbursement between \$1.2 billion and \$3.3 billion. In other words, the government's expenditures would decrease, rather than increase, as result of the new policies. Those scenarios are shown the Table below.

Table 2 Scenarios used in 2-Midnights Modeling

Scenario characteristic	Scenario A	Scenario B	Scenario C
Percentage of outpatient shifting	90%	100%	100%
Number of outpatient observation hours as threshold for "2 midnights"	36 or more	36 or more	25 or more
Percentage of inpatient medical cases shifting	90%	50%	70%
Percentage of inpatient surgical cases shifting	90%	90%	90%
Net decrease in number of inpatient hospital cases	563,586	243,126	121,148
Net dollar impact (\$)*	\$ -3.3 billion	\$ -2.1 billion	\$ -1.2 billion

*Net dollar impact in 2011 dollars. For an estimate of the 2-midnights policy in 2014, these numbers should be inflated by roughly 3-6%.

We concluded that the estimated impact of the new inpatient admissions policies would be highly sensitive to a number of issues that CMS did not explicitly address, including the extent to which cases assigned to medical MS-DRGs shift to the outpatient setting and the relationship between the amount of time spent receiving observation services in the outpatient setting and the likelihood that those cases would shift to the inpatient setting. In other words, relatively small changes to the assumptions used in analyzing the new inpatient admissions policies could lead to large variations in the estimated financial impact of the policies. We further concluded our analysis showed that had CMS made different assumptions, such as including medical MS-DRG

cases, the new inpatient admissions policies could result in payment cuts to hospitals anywhere from \$1.2 to over \$3 billion.

CMS Typically Provides More Detailed Explanation and More Detailed Data

The level of documentation provided on the proposed 2-midnights policy was significantly less than for other proposed policy changes in the IPPS and other Medicare payment rules. For comparison, we provide information below on a few policies discussed in the IPPS and OPSS rules, and the documentation that accompanies those discussions.

IPPS rule

The IPPS rule provides several different methodology discussions, including explanation of the development of the payment weights and amounts and various other payment policies.

Overall Methodology

In the IPPS Final Rule for FY2014, CMS spends more than 25 pages in the display copy of the final rule discussing their methodology, and listing assumptions or restrictions applied to the data. This level of detail is in contrast to the amount of detail provided by CMS for the 2-midnights proposal. For example, CMS wrote:

“In developing the FY 2014 system of weights, we used two data sources: claims data and cost report data. As in previous years, the claims data source is the MedPAR file. This file is based on fully coded diagnostic and procedure data for all Medicare inpatient hospital bills. The FY 2012 MedPAR data used in this final rule include discharges occurring on October 1, 2011, through September 30, 2012, based on bills received by CMS through March 31, 2013, from all hospitals subject to the IPPS and short-term, acute care hospitals in Maryland (which are under a waiver from the IPPS under section 1814(b)(3) of the Act). The FY 2012 MedPAR file used in calculating the relative weights includes data for approximately 10,363,200 Medicare discharges from IPPS providers. Discharges for Medicare beneficiaries enrolled in a Medicare Advantage managed care plan are excluded from this analysis. These discharges are excluded when the MedPAR “GHO Paid” indicator field on the claim record is equal to “1” or when the MedPAR DRG payment field, which represents the total payment for the claim, is equal to the MedPAR “Indirect Medical Education (IME)” payment field, indicating that the claim was an “IME only” claim submitted by a teaching hospital on behalf of a beneficiary enrolled in a Medicare Advantage managed care plan. In addition, the March 31, 2013 update of the FY 2012 MedPAR file complies with version 5010 of the X12 HIPAA Transaction and Code Set Standards, and includes a variable called “claim type.” Claim type “60” indicates that the claim was an inpatient claim paid as fee-for-service. Claim types “61,” “62,” “63,” and “64” relate to encounter claims, Medicare Advantage IME claims, and HMO no-pay claims. Therefore, the calculation of the relative weights for FY 2014 also excludes claims with claim type values not equal to “60.” The data

exclude CAHs, including hospitals that subsequently became CAHs after the period from which the data were taken. The second data source used in the cost-based relative weighting methodology is the Medicare cost report data files from the HCRIS. Normally, we use the HCRIS dataset that is 3 years prior to the IPPS fiscal year. Specifically, we used cost report data from the March 31, 2013 update of the FY 2011 HCRIS for calculating the FY 2014 cost-based relative weights.”¹⁷

That text gives clear instructions as to how the data was trimmed and why. In contrast the information from CMS about the 2-midnights proposal is significantly less detailed.

Hospital Readmission Policy

In the FY2012 IPPS Final rule, CMS laid forth the details of the hospital readmission penalty policy, which went into effect in FY2013. In the FY2014 Final rule, CMS summarized what they did:

“The payment adjustment factor set forth in section 1886(q) of the Act did not apply to discharges until FY 2013. In the FY 2012 IPPS/LTCH PPS final rule, we addressed the issues of the selection of readmission measures and the calculation of the excess readmission ratio, which will be used, in part, to calculate the readmission adjustment factor. Specifically, in the FY 2012 IPPS/LTCH PPS final rule (76 FR 51660 through 51676), we addressed the portions of section 1886(q) of the Act related to the following provisions:

- Selection of applicable conditions;
- Definition of “readmission;”
- Measures for the applicable conditions chosen for readmission;
- Methodology for calculating the excess readmission ratio; and
- Definition of “applicable period.”

With respect to the topics of “measures for readmission” for the applicable conditions, and “methodology for calculating the excess readmission ratio,” we specifically addressed the following:

- Index hospitalizations;
- Risk adjustment;
- Risk standardized readmission rate;
- Data sources; and
- Exclusion of certain readmissions.

¹⁷ 78 Fed. Reg. at 50,550-51.

In the FY 2013 IPPS/LTCH PPS final rule (77 FR 53374 through 53401), we finalized our policies that relate to the calculation of the hospital readmission payment adjustment factor and the process by which hospitals can review and correct their data. Specifically, in the final rule, we addressed the portions of section 1886(q) of the Act related to the following provisions:

- Base operating DRG payment amount, including policies for SCHs and MDHs and hospitals paid under section 1814(b) of the Act;
- Adjustment factor (both the ratio and floor adjustment factor);
- Aggregate payments for excess readmissions and aggregate payments for all discharges;
- Applicable hospital;
- Limitations on review; and
- Reporting of hospital-specific information, including the process for hospitals to review readmission information and submit corrections.”¹⁸

Again, the level of detail provided by CMS in describing the hospital readmission penalty policy was substantially greater than what the agency provided on their 2-midnights analysis.

OPPS Rule

As with the IPPS rule, the OPPS rule provides much greater detail in describing the payment methodology, providing detailed information such as case counts at various steps along the calculation. These case counts provide benchmarks for analysts to determine how well they are able to follow and match CMS’ steps. However, CMS provides additional information for analysts, augmenting the rule discussion with the claims accounting document.

For the OPPS methodology, CMS goes through a very complete description of the steps they take through the claims accounting. This information is downloadable from CMS at:

<http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalOutpatientPPS/Hospital-Outpatient-Regulations-and-Notices-Items/CMS-1601-FC-.html>

This 16 page document provides detail about the OPPS methodology and case counts at different points of the CMS methodology for setting outpatient prospective payment system rates. This is in contrast to the very limited level of detail provided by CMS for the 2-midnights analysis.

¹⁸ 78 Fed. Reg. at 50,650.