

# **Medicare Psychiatric Patients & Readmissions in the Inpatient Psychiatric Facility Prospective Payment System**

**Prepared For: National Association of Psychiatric Health Systems**

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## Medicare Psychiatric Patients and Readmissions

### *Executive Summary*

Policymakers have become increasingly concerned about hospital readmissions as indications of quality problems. So far, all of the focus has been on discharges from, and readmissions to, short term acute care hospitals. While readmission patterns associated with any type of hospitalization raise important policy issues, there has not, to date, been any form of readmission analysis focused on the discrete issues raised by the admission and readmission patterns for inpatient psychiatric facilities (IPFs) paid under the Medicare IPF prospective payment system (IPF PPS). Absent that context-specific focus, it is likely that applying some generic readmissions penalty logic to IPFs could be counter-productive.

The Moran Company was engaged by the National Association of Psychiatric Health Systems (NAPHS) to assess what is known about these issues, and to provide policymakers with insights into the policy relevance of readmission patterns in the inpatient psychiatric setting. Analyses throughout this report are based exclusively on data derived from the Medicare IPF PPS. Two types of facilities are included in the IPF PPS: 1) freestanding psychiatric IPFs (both governmental and nongovernmental) and 2) hospital-based psychiatric (“distinct part”) units (both governmental and nongovernmental).

Our findings are as follows:

- The majority of IPF patients exhibit characteristics that the available literature associates as risk factors for hospital readmissions.
  - The majority of patients seen in inpatient psychiatric facilities qualify for Medicare due to a disability (eligibility at the time of admission).
  - The majority are dually-eligible for both Medicare and Medicaid (as measured by state buy-in).
- Additionally, 80% of psychiatric discharges from IPFs had a primary diagnosis of either schizophrenia or episodic mood disorders (including depression), both of which are considered chronic psychiatric conditions. Schizophrenia and depression have been identified in the literature as risk factors for readmissions.
- Beneficiaries who were readmitted to IPFs tended to be younger and more likely to be male. The majority of beneficiaries who were readmitted to IPFs were disabled and dual-eligibles.
- Only 5.4% of all psychiatric discharges from IPFs were readmissions that occurred within 7 days and 15% of all psychiatric discharges from IPFs were readmissions that occurred within 30 days.

- The total average length of stay (of all admissions) for beneficiaries readmitted to IPFs was greater than those who were not readmitted. This suggests that the beneficiaries who are experiencing readmissions have more complex health care needs.
- Some patients received IPF services through a psychiatric partial hospitalization program. Time to readmission for these beneficiaries was 131 days as compared to 59 days for those who did not participate in this program between admissions.

## ***Medicare Psychiatric Patients and Readmissions in the Inpatient Psychiatric Facility Prospective Payment System***

Readmissions to hospitals have become an area of concern to policymakers because excess readmissions may be a sign that hospitals are not providing the highest level of care. According to the Medicare Payment Advisory Commission (MedPAC), hospital readmission may indicate poor care or missed opportunities to better coordinate care in some cases.<sup>1</sup> In addition, it is believed that readmissions occur frequently in certain populations or for certain diagnoses and are very costly. Furthermore, the variability in readmission rates across hospitals may suggest that there is room for improvement.<sup>2</sup>

Additionally, if some hospitals are discharging some patients too early, and that those patients have to be readmitted to the hospital for further treatment, the readmission triggers a new payment episode. When this occurs for a Medicare patient, the Centers for Medicare and Medicaid Services (CMS) pays for both the initial admission and the readmission. Thus, in addition to quality of care issues, readmissions are associated with higher costs of care.

The Affordable Care Act has required that CMS begin to address excess readmissions in short term acute care hospitals paid under the Inpatient Prospective Payment System (IPPS) through the Hospital Readmissions Reduction program.<sup>3</sup> This program requires CMS to reduce payments to IPPS hospitals with excessive readmissions for a set of three conditions—acute myocardial infarction (AMI), heart failure, and pneumonia. The program was finalized in the Fiscal Year (FY) 2012 IPPS final rule and will become active in FY 2013. In FY 2015, the program will be expanded to at least four additional conditions, including chronic obstructive pulmonary disease, coronary artery bypass graft surgery, percutaneous transluminal coronary angioplasty, other vascular conditions, and other conditions the Secretary may deem appropriate.<sup>4</sup>

Excess readmission ratios are calculated using the 30-day readmission measures endorsed by the National Quality Forum (NQF). Hospitals with a 30-day risk-adjusted readmission rate for each condition greater than the national average rates will have their 2013 IPPS payment rates reduced. The penalty will be applied to IPPS payments for all Medicare discharges and not just discharges for the set of three measured conditions.<sup>5</sup>

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<sup>1</sup> Medicare Payment Advisory Commission (2007). *Report to the Congress: Promoting Greater Efficacy in Medicare*. Chapter 5: Payment policy for inpatient readmissions. Washington, DC: MedPAC.

<sup>2</sup> Ibid.

<sup>3</sup> Section 3025 of the Patient Protection and Affordable Care Act of 2010 (Public Law 111-148). Enacted on March 23, 2010.

<sup>4</sup> Medicare Payment Advisory Commission (2012). *Report to the Congress: Medicare Payment Policy*. Chapter 3: Hospital inpatient and outpatient services. Washington, DC: MedPAC.

<sup>5</sup> Ibid.

In the 2013 IPPS Final Rule, CMS has estimated that the Hospital Readmissions Reduction Program would save \$280 million for the first year.<sup>6</sup> This translates to approximately 0.3% of all Medicare spending under the IPPS. It is likely that CMS, MedPAC and other interested parties will turn their attention to readmissions in other hospital settings, including freestanding IPFs and psychiatric units in short-term acute care hospitals paid under the IPF PPS.

While the Hospital Readmissions Reduction Program is currently limited to short term acute care hospitals, it is possible that policymakers will expand it to other types of inpatient stays to reduce healthcare spending and improve quality of care. To date, there has been no analysis of admission and readmission patterns in the inpatient psychiatric setting. The Moran Company was asked by the National Association of Psychiatric Health Systems (NAPHS) to assess what information is available about these issues and to analyze readmission patterns in IPFs, both freestanding and hospital-based psychiatric units.

Before we discuss the results of our IPF PPS readmissions analysis, we provide some background information on IPFs and the types of patients they treat.

### ***IPFs and their patients***

MedPAC has done an analysis of IPF cost reports and claims data from 2008 and reported the findings in their Report to the Congress in June 2010.<sup>7</sup> The Commission's analysis of IPF claims found that, overall, Medicare discharges made up around 25% of IPFs' total discharges in 2008. Within the IPF PPS, freestanding IPFs differed from psychiatric units in a number of ways—they were much larger than psychiatric units (average 113 beds versus average 32 beds) and less likely to be nonprofit (18% of freestanding IPFs were nonprofit compared to 66% of psychiatric units). Psychiatric units paid under the IPF PPS were more likely to be located in rural areas (22% versus 15% of freestanding IPFs) and were more likely to be teaching institutions (18% versus 11% of freestanding IPFs).

In 2008, 73% of all IPF discharges had a diagnosis for psychoses, making it the most common diagnosis, followed by degenerative nervous system disorders. Only 1 percent of patients were assigned to a non-psychiatric Medicare Severity Diagnosis Related Group (MS-DRG) in 2008.<sup>8</sup> The MS-DRG for psychoses is 430 and is comprised of two psychiatric conditions—schizophrenia and mood disorders (including bipolar disorder and major depression). Eighteen percent of IPF patients were admitted with one or more of the comorbidities that are recognized

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<sup>6</sup> Federal Register: Department of Health and Human Services. Centers for Medicare & Medicaid Services. *Medicare Program: Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and Fiscal Year 2013 Rates*; Final Rule. [CMS-1588-F]

<sup>7</sup> Medicare Payment Advisory Commission (2010). *Report to the Congress: Aligning Incentives in Medicare*. Chapter 6: Inpatient psychiatric care in Medicare: Trends and issues. Washington, DC: MedPAC.

<sup>8</sup> Ibid.

by the IPF payment system as increasing the cost of care, from which the most common comorbidity was infectious disease (7%) followed by developmental disabilities (3%). The table below shows the difference in the average length of stay for government and non-government facilities for 2008.

**Average length of stay in IPFs, by type of IPF for Calendar Year (CY) 2008**

	<b>INPATIENT PSYCHIATRIC FACILITIES</b>			
	<b>Freestanding IPF</b>		<b>Psychiatric Unit</b>	
	Government	Non-government	Government	Non-government
<b>Average length of stay</b>	28.7 days	12.4 days	12.2 days	11.2 days

Compared to free-standing IPFs, psychiatric units were less likely to care for patients with substance-abuse diagnoses but more likely to care for patients with degenerative nervous system disorders such as Alzheimer's disease. Most of the freestanding IPF admissions (59%) were due to a physician or clinic referral, whereas almost one-half of psychiatric unit admission (46%) was through the emergency department. Freestanding IPFs discharged 81% of their patients to the home, as compared to 66% of patients from psychiatric units. Since a greater share of psychiatric units' patients are admitted for degenerative nervous system disorders and mental retardation, they were three times as likely as freestanding IPFs to discharge patients to skilled nursing facilities (SNFs) and twice as likely to discharge patients to intermediate care facilities.<sup>9</sup>

Many beneficiaries treated in all types of IPFs qualify due to a disability (rather than due to age) and thus the majority of IPF patients tend to be younger and poorer than the typical Medicare beneficiary. A majority of IPF users are dually eligible for Medicare and Medicaid, such that 56% of beneficiaries with at least one discharge were dually eligible for at least one month of the year. Dual-eligible beneficiaries were more likely to have more than one IPF stay during the year. Overall, 28% of beneficiaries admitted to an IPF had more than one admission during the 12-month period in 2008 and this share has remained relatively steady over the past several years. Beneficiaries with multiple IPF stays were more likely than other IPF patients to be under 65 years (70% versus 52%), to be diagnosed with psychoses (78% versus 66%), and to be admitted through the emergency department (40% versus 22%). African American beneficiaries were found to represent 17 percent of IPF patients, whereas 77 percent of Medicare IPF patients were white.

MedPAC analysis of IPF claims data has shown an increase in the number of patients with degenerative nervous system disorders.<sup>10</sup> This may be due to the increased incidence of

<sup>9</sup> Medicare Payment Advisory Commission (2010). *Report to the Congress: Aligning Incentives in Medicare*. Chapter 6: Inpatient psychiatric care in Medicare: Trends and issues. Washington, DC: MedPAC.

<sup>10</sup> Ibid.

Alzheimer's disease and other dementias in the Medicare population and may also reflect a growing use of inpatient psychiatric facilities by patients with these diagnoses. It is believed that nursing facilities are increasingly transferring difficult dementia patients to IPFs for stabilization due to either a lack of nursing facility staff to provide the care needed by dementia patients or due to a financial incentive for nursing homes to discharge patients to IPFs. This is because upon return to the nursing facility, patients may qualify for Medicare payment under the Skilled Nursing Facility Prospective Payment System (SNF PPS), if the IPF stay is at least 3 days.<sup>11</sup>

As a group, IPF beneficiaries tend to consume more health care services and are more costly than other beneficiaries due to their complex health care needs. Their medications are also more costly than those used by other beneficiaries (average spending per prescription was \$92 compared to \$54 for all Part D enrollees).<sup>12</sup>

### ***Differences between psychiatric and non-psychiatric patients***

Patients with chronic psychiatric conditions treated in IPFs are different in terms of their health care needs and undergo different treatment pathways as compared to non-psychiatric patients treated in acute care settings. For example, adults with severe mental illness have higher rates of chronic general medical conditions, such as hypertension, HIV/AIDS, and diabetes.<sup>13</sup> Presence of a greater number of co-morbidities may in turn lead to higher rates of premature mortality in these patients.<sup>14</sup> In addition, these co-morbid conditions may have negative consequences on their already high levels of functional impairment.<sup>15,16</sup>

Quality measures in psychiatric care and care pathways for treating chronic psychiatric diseases are in their early stages of development. For example, unlike in medical care for cardiovascular conditions like heart attacks or heart failure, objective endpoints or clinical outcome measures for assessing the effectiveness of psychiatric treatment are not available.<sup>17</sup> Thus, unlike readmissions for conditions such as heart failure, heart attacks or pneumonia in the acute care

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<sup>11</sup> Medicare Payment Advisory Commission (2010). *Report to the Congress: Aligning Incentives in Medicare*. Chapter 6: Inpatient psychiatric care in Medicare: Trends and issues. Washington, DC: MedPAC.

<sup>12</sup> Ibid.

<sup>13</sup> Horvitz-Lennon M., et al. From silos to bridges: Meeting the general health care needs of adults with severe mental illnesses. *Health Affairs* 25, no. 3 (2006): 659-669.

<sup>14</sup> Sokal, J., et al. Comorbidity of medical illnesses among adults with serious mental illness who are receiving community psychiatric services. *Journal of Nervous and Mental Disorders* 192, no. 6 (2004): 421-7.

<sup>15</sup> Dixon, L., et al. The association of medical comorbidity in schizophrenia with poor physical and mental health. *Journal of Nervous and Mental Disorders* 187, no. 8 (1999): 496-502.

<sup>16</sup> Druss, B.G., et al. Understanding disability in mental and general medical conditions. *American Journal of Psychiatry* 157, no. 9 (2000): 1485-91.

<sup>17</sup> Hermann, R.C., et al. Process measures for the assessment and improvement of quality of care for schizophrenia. *Schizophrenia Bulletin* 28, no. 1 (2002): 95-104.

hospital, a readmission to IPF care after initial discharge may not indicate anything meaningful about the quality and extent of care provided during an initial stay.

### ***TMC Analysis of Readmissions in Medicare Psychiatric Patients in the IPF PPS***

Given the potential interest in extending the acute care IPPS Hospital Readmissions Reduction Program to different inpatient settings and the dearth of information on readmissions in freestanding IPFs and psychiatric units, we were engaged to analyze the readmission patterns of Medicare psychiatric inpatient stays.

In CY 2010, 309,759 fee for service (FFS) Medicare beneficiaries had 470,399 inpatient psychiatric discharges from facilities paid under the IPF PPS. The mean age of these beneficiaries was 58.2 years (SD = 18.4). The distribution of the psychiatric discharges was such that 34% were from freestanding IPFs and 66% were from distinct-part psychiatric units in acute care hospitals (both IPPS and Critical Access Hospitals).

Table 1 provides characteristics of psychiatric discharges by provider type and by type of control (i.e., government vs. non-government). More than 60% of freestanding IPF discharges and more than 80% of psychiatric unit discharges are from non-government facilities. Beneficiaries in freestanding IPFs (mean age = 50.5 years, SD = 16.6) tend to be younger as compared to those seen in IPF psychiatric units (mean age = 58.3 years, SD = 18.4). The majority of beneficiaries in freestanding IPFs and psychiatric units qualify for Medicare due to disability and a majority of them are dually-eligible (as measured by state buy-in) for both Medicare and Medicaid.

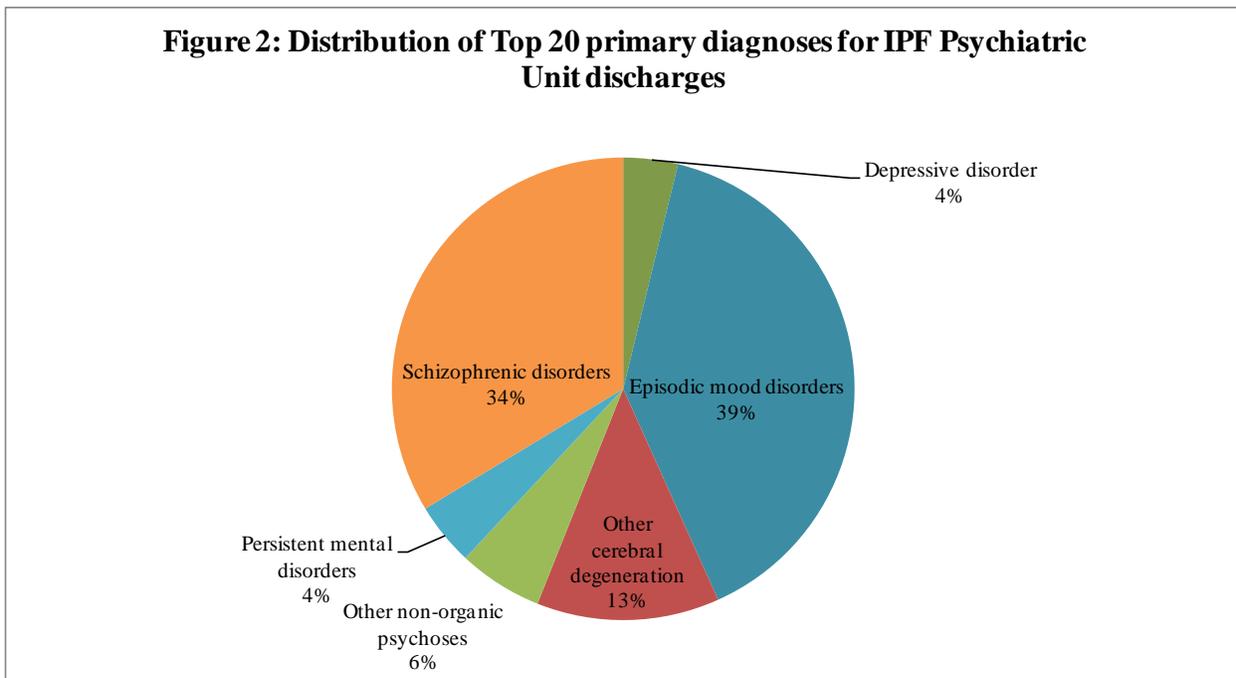
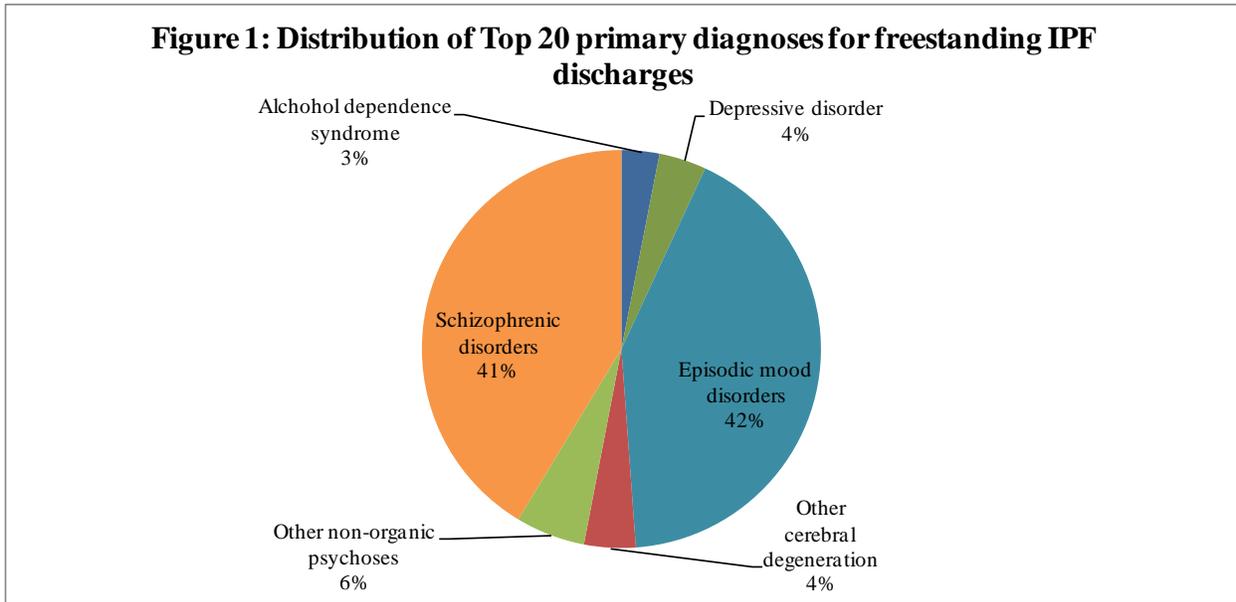
Primary diagnoses for psychiatric discharges in freestanding IPFs and psychiatric units are similar (Figures 1 and 2). Approximately 80% of discharges in freestanding IPFs and psychiatric units had a primary diagnosis for schizophrenia or episodic mood disorders (which include bipolar disorder and major depression) in CY 2010. Both these diagnoses fall under the MS-DRG for psychoses. Thus the majority of patients in freestanding IPFs and psychiatric units are being treated for chronic psychiatric diseases. Compared to freestanding IPFs, psychiatric units were more likely to treat patients with cerebral degenerative disorders such as Alzheimer's disease or other types of dementia, such that primary diagnoses for cerebral degenerative disorders accounted for 13% of all primary diagnoses in psychiatric units as compared to 4% freestanding in IPFs for CY 2010. On the other hand, freestanding IPFs were more likely to treat patients with alcohol dependence as compared to psychiatric units.

**Table 1: Characteristics of IPF Psychiatric Discharges, by Provider Type, 2010 (at the discharge level) \*\***

	INPATIENT PSYCHIATRIC FACILITIES			
	Freestanding IPF N = 158,530*		Psychiatric Unit N=310,981*	
	Non- government (n = 101,939)	Government (n = 48,007)	Non- government (n = 251,023)	Government (n = 52,258)
<b>Mean age (SD)</b>	50.8 (16.8)	49.1 (15.5)	58.5 (18.4)	55.4 (17.8)
<b>Age group (yrs)</b>				
≤ 20	0.50%	0.50%	0.30%	0.30%
21-40	28.90%	30.50%	18.30%	21.60%
41-64	47.90%	51.60%	40.90%	45.80%
≥ 65	22.70%	17.50%	40.50%	32.20%
<b>Sex</b>				
Male	52.00%	58.00%	46.30%	50.60%
Female	48.00%	42.00%	53.70%	49.40%
<b>Current reason for entitlement</b>				
Old age & survivors insurance	23.10%	17.90%	40.80%	32.60%
Disability insurance benefit (DIB)	76.80%	82.00%	58.80%	67.00%
End stage renal disease (ESRD)	0.10%	0.10%	0.20%	0.20%
Both DIB & ESRD	0.10%	0.10%	0.20%	0.20%
<b>Eligibility status</b>				
Dual eligible	62.80%	60.20%	57.30%	63.50%
Non dual eligible	37.20%	39.80%	42.60%	36.50%
<b>Discharge destination</b>				
Home/ self-care	81.50%	64.90%	64.40%	69.90%
Skilled nursing facility (SNF)	4.10%	3.20%	14.10%	10.30%
Intermediate care facilities	3.30%	3.30%	5.90%	4.10%
Home care	0.80%	0.80%	4.00%	3.50%
Other short term hospital	3.20%	3.20%	4.80%	3.80%
Psych hospital or unit	0.60%	0.60%	2.10%	3.00%
Still patient	0.70%	21.50%	0.10%	0.10%
Other/ unknown	5.80%	2.60%	4.50%	5.50%

\*\* Total discharges across all settings does not total to 470,399 discharges due to missing data in denominator file.

\*Due to missing data on type of control, government and non-government admissions do not add up to the total for IPF and Psychiatric Unit admissions

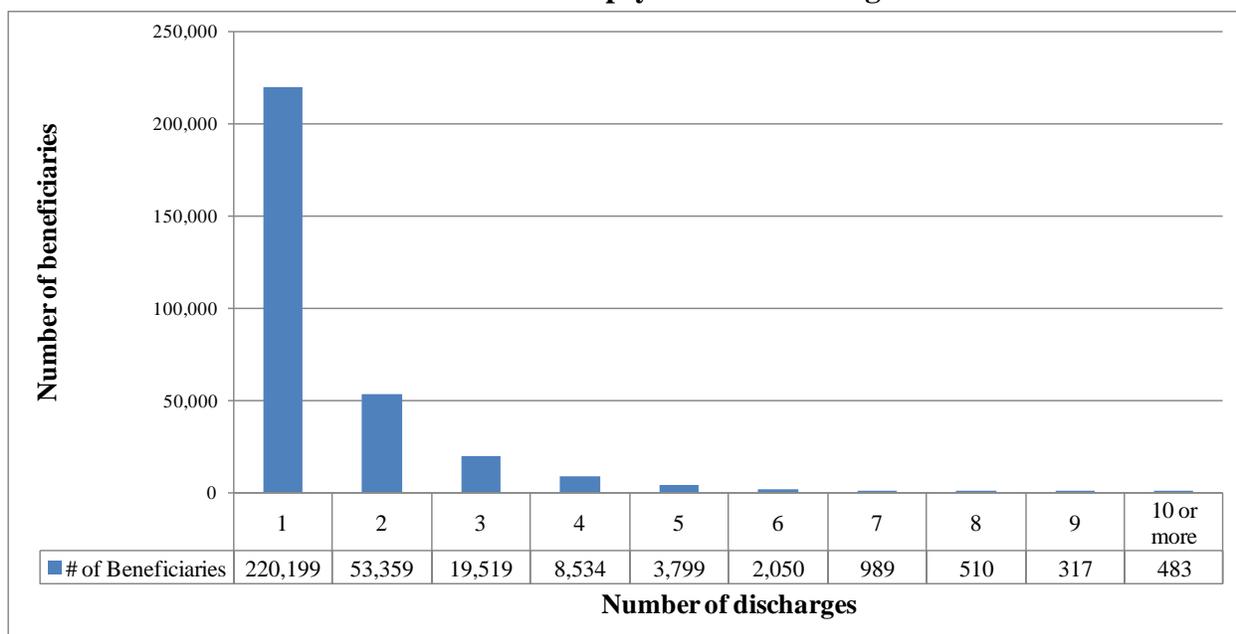


***Readmissions in Medicare Psychiatric Patients in the IPF PPS***

In CY 2010, of the 309,759 unique Medicare beneficiaries with psychiatric discharges from IPFs, 220,199 beneficiaries (71%) were not readmitted during the same calendar year, whereas the remaining 89,560 beneficiaries (29%) had 2 or more discharges during the same year. Figure

3 provides the distribution of psychiatric discharges per beneficiary with at least one psychiatric discharge from a freestanding IPF or psychiatric unit in CY 2010.

**Figure 3: Number of IPF psychiatric discharges per beneficiary, with at least one psychiatric discharge**



Beneficiaries who were readmitted had different characteristics as compared to beneficiaries that were not readmitted (Table 2). Beneficiaries who were readmitted to IPFs (i.e., those with two or more discharges) tend to be younger than beneficiaries that were not readmitted (i.e., those with one discharge). The percentage of beneficiaries who were eligible for Medicare due to a disability and who were dually-eligible for Medicare and Medicaid were higher in the category of readmitted beneficiaries as compared to the category of beneficiaries with only one discharge. This may suggest that beneficiaries who are readmitted are more likely to be disabled and poor as compared to beneficiaries that are not readmitted.

For beneficiaries who were readmitted to IPFs, the average length of stay of all admissions (15.3 days) was greater than the average length of stay for beneficiaries that were not readmitted (12.8 days), indicating that beneficiaries who tend to get readmitted may require higher levels of care and thus need to stay longer.

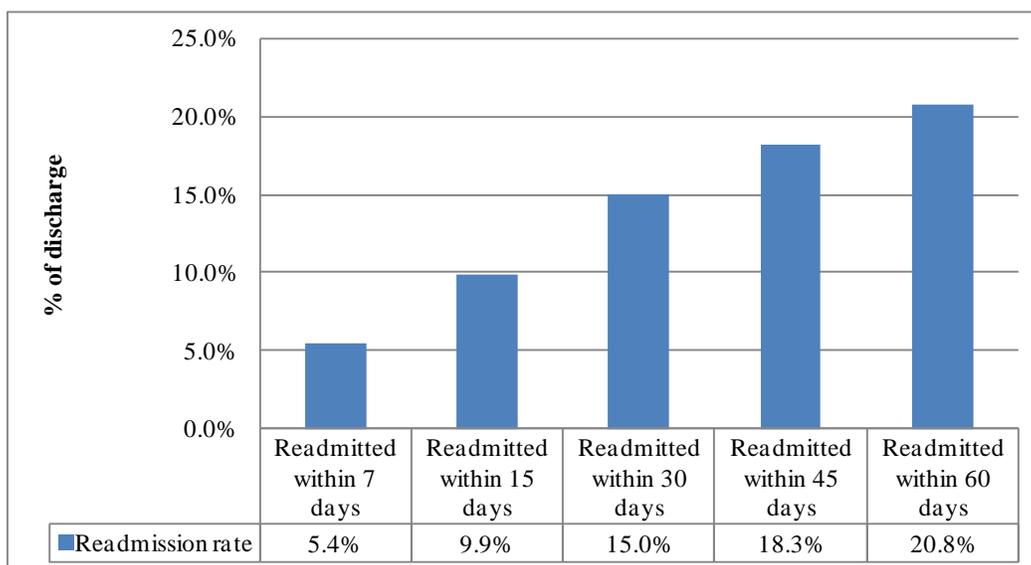
**Table 2: Characteristics of beneficiaries with IPF psychiatric discharges, by number of discharges, 2010**

	<b>Overall</b> (N=309,210)*	<b>Beneficiaries with one discharge</b> (N=219,825)*	<b>Beneficiaries with two or more discharges</b> (N=89,385)*
<b>Mean age (SD)</b>	58.2 (18.4)	60.2 (18.5)	53.3 (17.3)
<b>Sex</b>			
Male	46.9%	45.2%	51.1%
Female	53.1%	54.8%	48.9%
<b>Current reason for entitlement</b>			
Old age & survivors insurance	40.2%	45.1%	28.1%
DIB	59.5%	54.5%	71.6%
ESRD	0.2%	0.2%	0.1%
Both DIB & ESRD	0.2%	0.2%	0.1%
<b>Eligibility status</b>			
Dual eligible	55.3%	51.6%	64.5%
Non dual eligible	44.7%	48.4%	35.5%
<b>Average total length of stay (days)</b>	14.1 days	12.8 days	15.3 days

\* Due to missing data in denominator file, these numbers are slightly lower than the total number of beneficiaries reported earlier.

Since CMS has previously used a 30 day readmission interval to set quality measures for certain condition in acute care hospitals, we also determined readmission rates at 7, 15, 30, 45 and 60 days (Figure 4). About 5% of all IPF psychiatric discharges were readmissions that occurred within 7 days and 15% of all IPF psychiatric discharges were readmissions that occurred within 30 days.

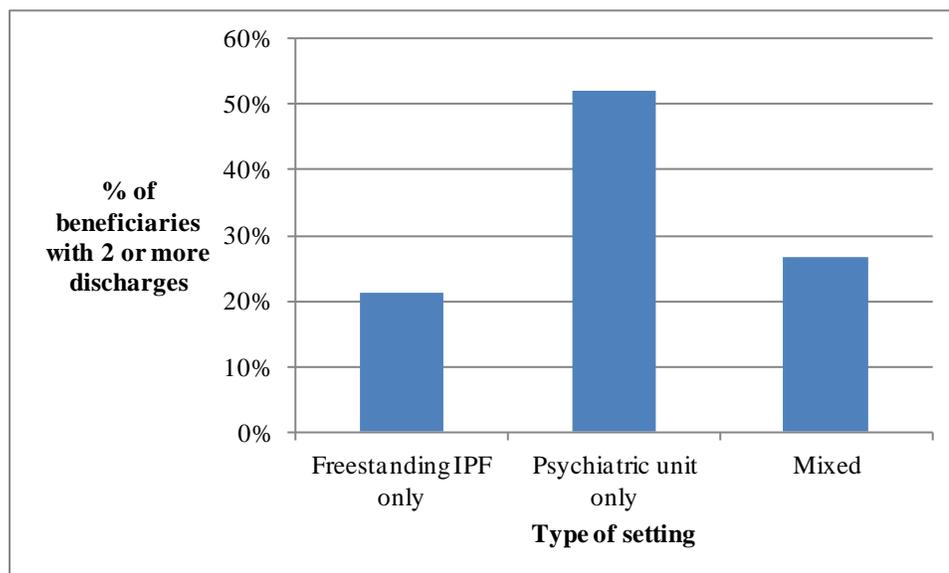
**Figure 4: IPF Psychiatric readmission rates within 7, 15, 30, 45 and 60 days of discharge\***



*\*Universe is total number of IPF psychiatric discharges with positive readmit times, i.e. 457,202 (Note: This number is less than the total 457,202 IPF psychiatric discharges reported earlier since only discharges with positive readmit times were included while determining readmission rates)*

Beneficiaries may either be treated only in freestanding IPFs, only in psychiatric units or may move from one provider to the other. From the 89,560 beneficiaries that were readmitted in CY 2010, 21% were seen only in freestanding IPFs, 52% were seen only in psychiatric units, and 27% were seen in multiple settings, i.e., both freestanding IPFs and psychiatric units (Figure 5).

**Figure 5: Distribution of type of IPF setting for beneficiaries with 2 or more discharges**

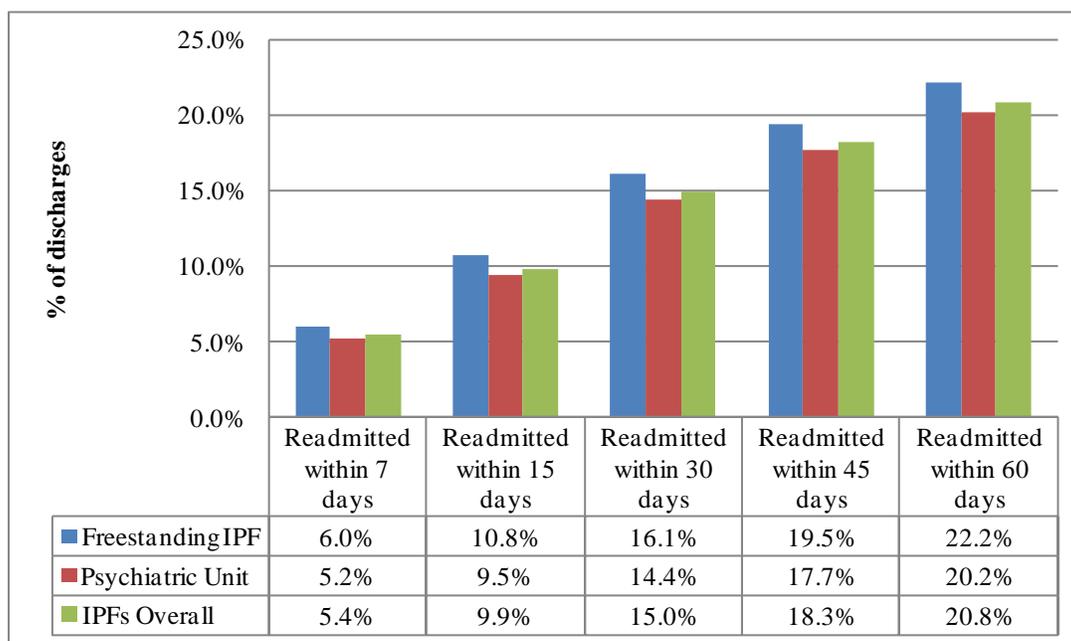


***Readmissions in Medicare Psychiatric Patients in the IPF PPS by Provider Type***

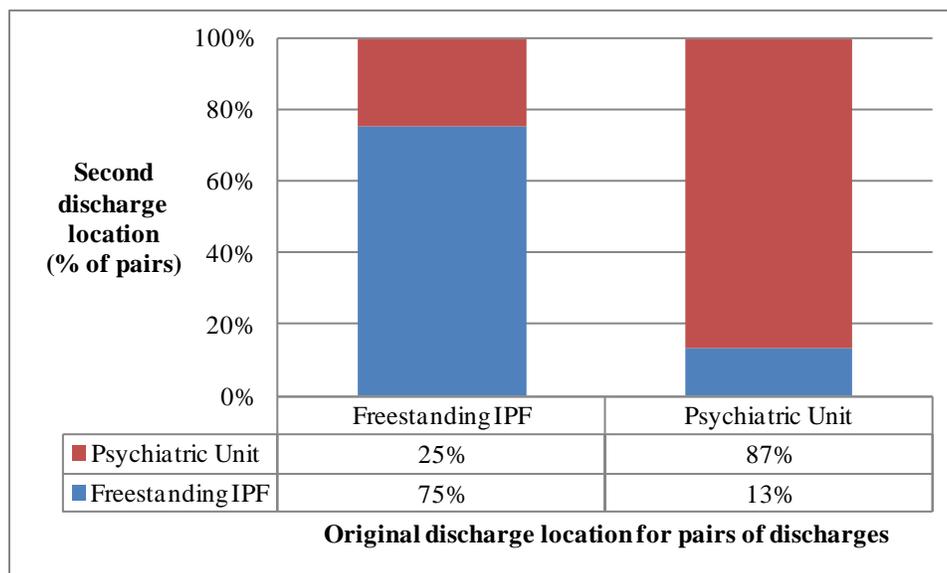
We defined the overall rate of IPF readmission in the following way: the number of psychiatric discharges from either a freestanding IPF or psychiatric unit that were readmissions during a calendar year divided by the total number of psychiatric discharges from a freestanding IPF or psychiatric unit during that calendar year. In addition to defining the readmission rate during the calendar year, we also defined readmission rates at 7, 15, 30, 45, and 60 days, both overall and by provider type.

Of the total 470,399 psychiatric discharges in CY 2010, 147,443 were readmissions from either a freestanding IPF or psychiatric unit. Thus the overall readmission rate was 31.4%. The readmission rate did not vary by provider type (31.7% for freestanding IPFs vs. 31.3% for psychiatric units). However, readmissions in freestanding IPFs tend to occur slightly faster than readmissions in psychiatric units. For example, 16.1% of freestanding IPF discharges were readmissions that occurred within 30 days as compared to 14.4% of psychiatric unit discharges that were readmissions occurring within 30 days (Figure 6).

**Figure 6: IPF psychiatric readmission rate by provider type, compared to overall rate**



Each readmission may be considered as a “pair” of discharges, that is, an initial discharge from the first admission and a discharge from the readmission. From our analysis we found 147,443 pairs of IPF discharges, from which 33.5% pairs of discharges were from freestanding IPFs and 66.5% pairs of discharges were from psychiatric units. Within a pair of discharges, the readmission location was the same as the initial location more than 75% of the time (Figure 7). Thus the most common outcome was to stay at the same type of provider. Times to readmission based on pair combinations were similar across all settings (Table 3).

**Figure 7: Distribution of type of IPF setting for pairs of discharges****Table 3: Time to IPF readmission based on pair combination**

Combination of initial and second placement	Mean (days)	Median (days)
<b>Overall</b>	<b>60.20</b>	<b>35</b>
<b>Freestanding IPF to any</b>	<b>60.84</b>	<b>36</b>
Freestanding IPF- Freestanding IPF	59.42	35
Freestanding IPF-Psychiatric Unit	65.18	40
<b>Psychiatric Unit to any</b>	<b>59.88</b>	<b>35</b>
Psychiatric Unit-Freestanding IPF	58.10	32
Psychiatric Unit- Psychiatric Unit	60.15	35

### ***The Effect of Partial Hospitalizations on IPF Psychiatric Readmissions***

Partial hospitalization is an intensive outpatient program of psychiatric services provided to patients as an alternative to inpatient psychiatric care for individuals who have an acute mental illness.<sup>18</sup> Section 1861(ff)(3)(A) of the Social Security Act specifies that a partial hospitalization program (PHP) is a program furnished by a hospital to its outpatients or by a community mental

<sup>18</sup> Federal Register: Department of Health and Human Services. Centers for Medicare & Medicaid Services. *Medicare Program: Hospital Outpatient Prospective Payment System 2013*. [CMS-1589-P]

health center (CMHC), and “which is a distinct and organized intensive ambulatory treatment service offering less than 24-hour-daily care other than in an individual’s home or in an inpatient or residential setting.”<sup>19</sup> Partial hospitalization includes items and services such as diagnostic services, individual and group therapy, occupational therapy, family counseling, and drugs and biologicals furnished for therapeutic purposes that cannot be self-administered. This includes intensive psychiatric outpatient services that are not typically available in an ambulatory setting. According to Section 1861(ff)(1) of the Act, these items and services are provided “under the supervision of a physician pursuant to an individualized, written plan of treatment established and periodically reviewed by a physician (in consultation with appropriate staff participating in such program), which plan sets forth the physician’s diagnosis, the type, amount, frequency, and duration of the items and services provided under the plan, and the goals for treatment under the plan.”<sup>20</sup>

Overall, 18.3% of pairs of IPF psychiatric discharges had a partial hospitalization between a discharge and the next admission in CY 2010. Table 4 shows the distribution of partial hospitalization by provider type. Mean time to readmission is 131 days with partial hospitalization and 59 days when there is no partial hospitalization following a discharge, suggesting that partial hospitalization following IPF inpatient psychiatric discharges may have an effect on increasing the time between readmissions (Figure 8).

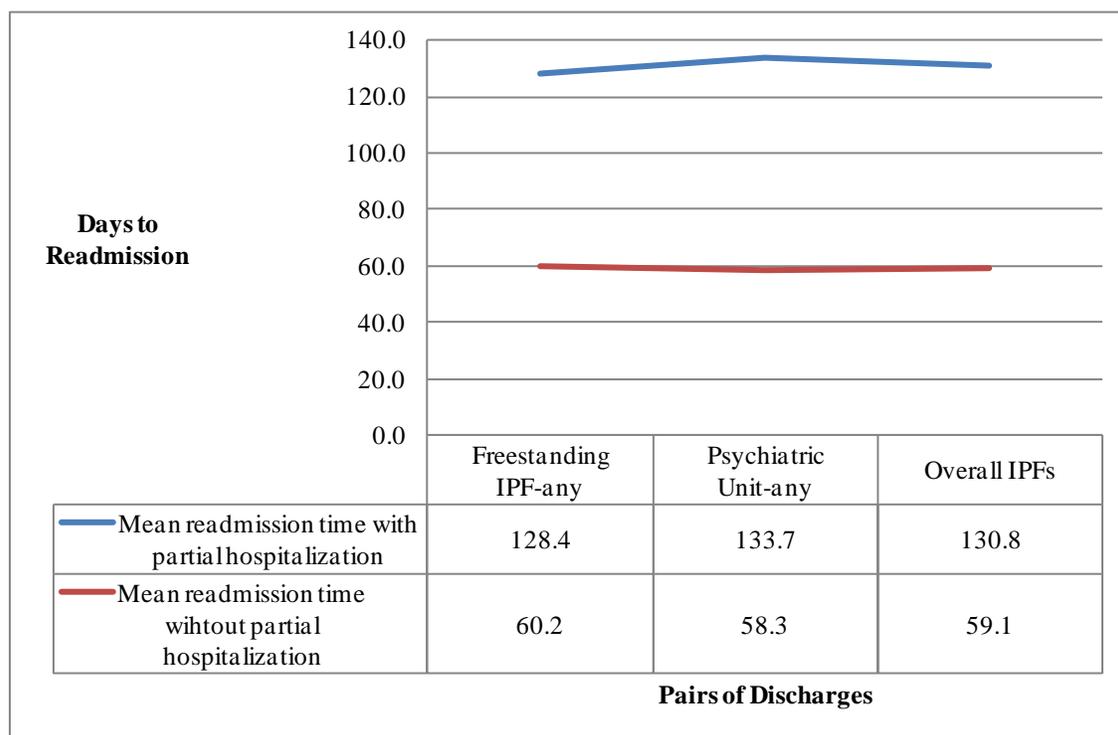
**Table 4: Partial hospitalization for pairs of IPF discharges**

<b>Pairs of Discharges</b>	<b>Count of Pairs</b>	<b>% with Partial Hospitalization</b>
Freestanding IPF-any	158,772	22.8%
Psychiatric Unit-any	209,221	15.0%
IPFs Overall	367,993	18.3%

<sup>19</sup> Section 1861(ff)(3)(A) of the Social Security Act (42 U.S.C. 1395x).

<sup>20</sup> Ibid.

**Figure 8: Mean time to readmission for pairs of IPF discharges**



Partial hospitalization is just one type of outpatient mental health service covered by Medicare. In addition, beneficiaries may be receiving other outpatient mental health services such as psychiatric evaluation, diagnostic testing, psychotherapy, and medication management. However, our assessment of outpatient follow-up for mental health services provided to psychiatric patients was limited by the use of billing data that do not capture these visits or most visits to non-physician providers who may be providing some of these services.

### ***Potential Implications of Expanding the Hospital Readmissions Reduction Program to the IPF PPS***

The potential for decreased costs and increased quality of care may make policymakers want to expand the Hospital Readmission Reduction Program to other inpatient settings. However, there are several reasons why the readmission penalty program may not be suitable for IPFs, both freestanding and psychiatric units.

First, CMS has chosen to measure readmission within 30 days of discharge, which may not be appropriate for readmissions to IPFs. Their rationale for measuring 30-day readmissions is that “it is an important outcome assessed in a standard period that can be strongly influenced by hospital care and the early transition to the outpatient setting. The timeframe of 30 days is a clinically meaningful period for hospitals to collaborate with their communities in an effort to reduce readmissions.”<sup>21</sup> However, treatment response to medications for psychiatric patients with conditions such as depression and schizophrenia generally takes longer than 8 weeks and thus very few patients are in remission upon discharge from the IPF.<sup>22,23</sup>

In addition, a growing body of evidence suggests that certain patient characteristics are associated with higher rates of readmission. Some of these characteristics are listed in the table below and patient characteristics that are italicized are those that are commonly observed in the psychiatric patient population. As can be seen, some of the drivers of readmissions are mental illness, poor social support, and poverty. Furthermore, these factors may be related to the type of patient populations that are served by the hospital and may be difficult to change.<sup>24</sup> Thus hospitals that care for patients with a high burden of mental illness may be disproportionately affected by a readmission penalty program, and especially one with 30-day readmission measure, if the program is not risk adjusted or does not otherwise take these factors into account.

#### Medicare Patient Characteristics Associated with Risk of Readmission<sup>25</sup>

Socio-demographic	<ul style="list-style-type: none"> <li>• Gender (male)</li> <li>• <i>Poverty (Medicaid or uninsured)</i></li> <li>• Age (Medicare)</li> <li>• <i>Lack of stable living situation and/or support at home</i></li> <li>• Low English and/or health literacy</li> </ul>
Healthcare history	<ul style="list-style-type: none"> <li>• Index admission for HF, AMI, PN or certain types of surgery</li> <li>• Recent admission(s)</li> <li>• Frequent ED visits</li> </ul>

<sup>21</sup> QualityNet: *Readmission Measures Overview*.

(<http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1219069855273>)

Accessed August 2, 2012.

<sup>22</sup> Gallego, J.A., et al. Time to treatment response in first-episode schizophrenia: should acute treatment trials last several months? *Journal Clinical Psychiatry* 72, no. 12 (2011): 1691-6.

<sup>23</sup> Medicare Payment Advisory Commission (2010). *Report to the Congress: Aligning Incentives in Medicare*. Chapter 6: Inpatient psychiatric care in Medicare: Trends and issues. Washington, DC: MedPAC.

<sup>24</sup> Joynt, K.E., et al. Thirty-day readmissions—truth and consequences. *New England Journal of Medicine* 366, no. 15 (2012): 1366-9.

<sup>25</sup> Metzger, Jane. Preventing hospital readmissions: The first test case for continuity of care. *CSC's Global Institute for Emerging Healthcare Practices*. ([http://assets1.csc.com/health\\_services/downloads/CSC\\_Preventing\\_Hospital\\_Readmission.pdf](http://assets1.csc.com/health_services/downloads/CSC_Preventing_Hospital_Readmission.pdf)) Accessed August 8, 2012.

Disease burden	<ul style="list-style-type: none"> <li>• Takes six or more medications</li> <li>• Congestive heart failure, diabetes, Chronic obstructive pulmonary disorder</li> <li>• <b><i>Depression, psychoses</i></b></li> <li>• Cancer, renal or lung disease</li> <li>• <b><i>Alcohol or drug dependency</i></b></li> </ul>
Physical burden	<ul style="list-style-type: none"> <li>• <b><i>Disabled</i></b></li> <li>• <b><i>Frail</i></b></li> <li>• Signs of poor nutrition</li> </ul>
Other	<ul style="list-style-type: none"> <li>• Discharged during a weekend or holiday</li> </ul>

### ***Readmission risk factors in psychiatric inpatients***

Understanding the risk factors for readmissions in psychiatric patients is a key factor in developing targeted interventions to improve the quality of care. According to the medical literature, certain patient characteristics and diagnoses of psychiatric patients are risk factors for rehospitalization. For example, diagnoses or a history of diagnoses such as depression, schizophrenia, and affective disorders, and patient characteristics such as low socioeconomic status and substance abuse have been shown to be associated with higher rates of rehospitalization.<sup>26</sup> In a study of adult inpatients in an urban academic medical center with a history of hospitalizations in the 6 months prior to the index hospitalization, a positive screen for major depression at admission were 3 times more likely to be rehospitalized within 90 days.<sup>27</sup> In another study of medical and surgical inpatients, patients with a psychiatric comorbidity such as depression spent twice as many days rehospitalized over a 4-year period.<sup>28</sup> The effects of the severity of functional impairment, age, cognitive impairment, and number of admission or days spent hospitalized before the index admission were accounted for in this study. A study of older patients in a Swiss hospital found that medical inpatients with depressive symptoms had higher inpatient service utilization and were more likely to be readmitted than inpatients without depressive symptoms, independent of functional and health status.<sup>29</sup>

<sup>26</sup> Kartha, A., et al. Depression is a risk factor for rehospitalization in medical inpatients. *Journal of Clinical Psychiatry* 9, no. 4 (2007): 256-262.

<sup>27</sup> Ibid.

<sup>28</sup> Saravay, S.M., et al. Four-year follow-up of the influence of psychological comorbidity on medical rehospitalization. *American Journal of Psychiatry* 153, no. 3 (1996): 397-403.

<sup>29</sup> Bula, C.J., et al. Depressive symptoms as a predictor of 6-month outcomes and services utilization in elderly medical inpatients. *Archives of Internal Medicine* 161, no. 21 (2001): 2609-15.

Similar results have also been demonstrated in older patients in a Medicare managed care plan admitted to an academic hospital.<sup>30</sup> A history of depression was one of the five risk factors independently associated with unplanned readmissions within 30 days of discharge.

Several mechanisms by which depression may lead to readmissions have been proposed. The neuroendocrine changes seen in depression can worsen physical illness.<sup>31</sup> In addition, depression may itself impair health-related quality of life and lead to lower thresholds for admission. Furthermore, depressive symptoms may contribute to poor social skills and a reduced social support network may further lead to increased stress, worry and thus longer time to recovery for depressed patients.<sup>32,33</sup> These factors may thus potentially increase the risk of rehospitalization in depressed patients.

Alcohol and drug abuse and non-adherence to medications are common features in mentally ill patients, and these factors were found to be associated with higher rates of readmission in patients from psychiatric units of four state hospitals.<sup>34</sup> Additionally, low socioeconomic status has been associated with higher readmission rates. As we have already seen from previous MedPAC work, Medicare beneficiaries with mental illnesses are more likely to be dually-eligible for Medicaid and Medicare due to their lower socioeconomic status.

Our analysis shows that many of these risk factors for readmission—a schizophrenia diagnosis, low socioeconomic status, alcohol or drug abuse for example—occur with high frequencies in the population of Medicare beneficiaries with psychiatric inpatient stays. Despite this, we found that more than 70% of beneficiaries with a psychiatric inpatient stay in 2010 were not readmitted within that calendar year. This suggests that a specific subgroup of patients is at risk for readmissions. Policy interventions to reduce readmissions in inpatient psychiatric settings may be most successful if they are targeted to this subgroup of high risk patients. Below we provide information on potential policy interventions that may be successful in reducing readmissions.

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<sup>30</sup> Marcantonio, E.R., et al. Factors associated with unplanned hospital readmission among patients 65 years of age and older in a Medicare managed care plan. *American Journal of Medicine* 107, no. 1 (1999): 13-7.

<sup>31</sup> Kartha, A., et al. Depression is a risk factor for rehospitalization in medical inpatients. *Journal of Clinical Psychiatry* 9, no. 4 (2007): 256-262.

<sup>32</sup> Ibid.

<sup>33</sup> Tse, W.S., et al. The impact of depression on social skills. *Journal of Nervous and Mental Disorders* 192, no. 4 (2004): 260-8.

<sup>34</sup> Weissman, J.S., et al. The impact of patient socioeconomic status and other social factors on readmission: a prospective study in four Massachusetts hospitals. *Inquiry* 31, no. 2 (1994): 163-72.

*Payment policy options with a potential to affect psychiatric readmissions*

**Current payment incentives by CMS to ensure quality of care in the IPF PPS**

Of the many reasons to implement a hospital readmission penalty program, one of them is to ensure and improve quality of care received by the beneficiaries. Maintaining the quality of care furnished to beneficiaries with serious mental illnesses may require looking beyond the IPF stay. CMS is developing various initiatives to ensure quality of care. For example, the Patient Protection and Affordable Care Act (ACA) mandated the development of a quality reporting program for IPFs by 2014, which includes a payment incentive.<sup>35</sup> For rate year 2014 and beyond, annual Medicare payment updates are required to be reduced by 2.0 percentage points for any freestanding IPF or psychiatric unit paid under the IPF PPS that does not comply with quality data submission requirements.

As a result of this mandate, CMS has already developed a set of quality measures that are required to be reported by all facilities (including freestanding psychiatric hospitals and psychiatric units in general hospitals) that are paid under the Medicare IPF PPS.<sup>36</sup> CMS has chosen six of the Hospital Based Inpatient Psychiatric Services (HBIPS) core measures that were developed in collaboration with the Joint Commission and have received endorsement by the National Quality Forum (NQF).

These HBIPS measures for IPFs and psychiatric units include:

- HBIPS-2: Hours of physical restraint use (patient safety)
- HBIPS-3: Hours of seclusion use (patient safety)
- HBIPDS-4: Patients discharged on multiple antipsychotic medications (clinical quality of care);
- HBIPS-5: Patients discharged on multiple antipsychotic medications with appropriate justification (clinical quality of care);
- ***HBIPS-6: Post discharge continuing care plan created (care coordination); and***
- ***HBIPS-7: Post discharge continuing care plan transmitted to next level of care provider upon discharge (care coordination).***

Post-discharge continuing care planning is an important aspect of care coordination and is also included as a HBIPS measure. Approximately 450 IPFs are already collecting and reporting data on these measures and have been available for use since 2008. Thus, CMS is encouraging IPFs to

<sup>35</sup> Section 10322 of the Patient Protection and Affordable Care Act of 2010 (Public Law 111-148). Enacted on March 23, 2010.

<sup>36</sup> Federal Register: Department of Health and Human Services. Centers for Medicare & Medicaid Services. *Medicare Program: Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and Fiscal Year 2013 Rates*; Final Rule. [CMS-1588-F]

begin reporting quality data and to use this information for quality improvement purposes, with a financial penalty for those that do not report this information. This appears to be an important initiative by CMS which may help to ensure quality of IPF care and thus keep readmissions in IPFs under control or maybe even lower these rates further.

### **Other payment incentives to ensure quality of care in the IPF PPS**

MedPAC has also made several recommendations to CMS to build financial incentives for quality into payments to hospitals, physicians, home health agencies (HHAs), dialysis providers, and Medicare Advantage plans.<sup>37</sup> This includes pay-for-performance (P4P) programs that could link payments to quality in order to increase the value of health care spending by improving quality of care for Medicare beneficiaries.

A similar P4P approach could be adopted for IPFs, wherein providers are rewarded for attaining or exceeding certain benchmarks. Providers who score low at baseline would be given an incentive to improve. Over time, if all providers improve, improvement incentives can be phased out of the system. Once the mandatory reporting of HBIPS measures is implemented, quality and performance data would be available to facilitate the development of such payment incentives for the IPF PPS.

### ***Potential care delivery methods to control readmissions in the IPF PPS***

#### **Care coordination for Medicare beneficiaries**

Due to the fragmentation of service delivery in FFS Medicare, beneficiaries may experience poor transitions between sites of care which may result in gaps in care coordination. This may especially be an issue for those who have or are going to have significant contact with the health care system.<sup>38</sup> Due to the chronic nature of psychiatric conditions and presence of greater number of co-morbidities,<sup>39</sup> beneficiaries with psychiatric conditions are more likely to encounter the health care system. In addition, MedPAC is concerned that poorly coordinated care is more likely to occur for people with lower incomes.<sup>40</sup> As we have seen previously, patients with psychiatric conditions are more likely to have lower incomes than the general Medicare population, and thus ensuring care coordination for these beneficiaries may improve their overall health and reduce disparities in health outcomes.

<sup>37</sup> Medicare Payment Advisory Commission (2007). *Report to the Congress: Promoting Greater Efficacy in Medicare*. Chapter 4: Value-based purchasing: Pay for performance in home health care. Washington, DC: MedPAC.

<sup>38</sup> Medicare Payment Advisory Commission (2012). *Report to the Congress: Medicare and the Health Care Delivery System*. Chapter 2: Care coordination in fee-for-service Medicare. Washington, DC: MedPAC.

<sup>39</sup> Horvitz-Lennon M., et al. From silos to bridges: Meeting the general health care needs of adults with severe mental illnesses. *Health Affairs* 25, no. 3 (2006): 659-669.

<sup>40</sup> Medicare Payment Advisory Commission (2012). *Report to the Congress: Medicare and the Health Care Delivery System*. Chapter 2: Care coordination in fee-for-service Medicare. Washington, DC: MedPAC.

One definition of care coordination is that it “is a conscious effort between two or more participants involved in a patient’s care to facilitate appropriate delivery of health care services”.<sup>41</sup> Models and interventions of care coordination to reduce readmissions are in their early stages of development and most of the evidence on their efficacy comes from observational research studies. These interventions are usually tested in heterogeneous target populations with different chronic conditions, or combinations of different interventions are tested. Some methods of care coordination include patient-centered discharge planning and post-discharge care and support to facilitate care transition. CMS has also been testing the efficacy of various care coordination models as part of the Center for Medicare and Medicaid Innovation (CMMI).

### **1. Discharge planning and post-discharge care and support**

The literature on interventions made during and post-discharge with the aim of reducing readmissions, show that some interventions have been effective in reducing readmissions. A randomized controlled trial demonstrated efficacy of hospital discharge intervention towards reducing 30 day rehospitalization rates.<sup>42</sup> The main features of this Reengineered Hospital Discharge (RED) include patient-centered education, comprehensive discharge planning, and post-discharge reinforcement. It is believed to be practical and easy to apply to general medical patients. Similarly, several other studies have demonstrated efficacy of such programs for reducing readmission rates.

Since each study adopted a different definition of discharge planning or post-discharge care, specific definitions or recommendations of what such a plan would entail is challenging. However, broader elements of these interventions have been identified using the evidence from the literature. The elements of a comprehensive discharge plan include assessing the transition risks (e.g., screen patients for readmission risks, standardize risk assessment), preparing the patients (e.g., personalize education, utilize transition coaches) and developing a post-discharge plan of care (involve all disciplines such as nursing, social work, clinical pharmacist, reconcile medications).<sup>43</sup>

The elements of a post-discharge support and care plan include preparing the next provider of care (e.g., identify next provider of care, assign responsibility for communication), ensuring post-discharge follow-up (e.g., arrange care for patients lacking a regular source of care,

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<sup>41</sup> Agency for Healthcare Research and Quality, Department of Health and Human Services, 2011b. *National healthcare quality report*. Rockville, MD: AHRQ.

<sup>42</sup> Jack, B.W., et al. A reengineered hospital discharge program to decrease rehospitalization: A randomized trial. *Annals of Internal Medicine* 150, no. 3 (2009): 178-187.

<sup>43</sup> Metzger, Jane. Preventing hospital readmissions: The first test case for continuity of care. *CSC’s Global Institute for Emerging Healthcare Practices*. ([http://assets1.csc.com/health\\_services/downloads/CSC\\_Preventing\\_Hospital\\_Readmission.pdf](http://assets1.csc.com/health_services/downloads/CSC_Preventing_Hospital_Readmission.pdf)) Accessed August 8, 2012.

schedule appointments pre-discharge for follow-up clinician care) and ensuring post-discharge support (e.g., provide post-discharge telephone outreach, engage community services).<sup>44</sup>

## 2. Models of care coordination

CMS has developed several care coordination models along with tests to demonstrate their efficacy in FFS Medicare. Some of these models such as the transitions models may especially help to control psychiatric readmissions, since they have already been shown to reduce costs and rehospitalizations in controlled trials for other chronic conditions.

These care coordination models include:<sup>45</sup>

- a. **Practice transformation models:** These models restructure medical practices so they can improve the delivery of coordinated care.
  - i. Chronic care model: This model would access community resources to help patients, creating an organizational culture that promotes safe effective care, encouraging patients to express their preferences, and supporting clinical care that is consistent with the guidelines.
  - ii. Medical home: These are medical practices that deliver patient-centered care, coordinate care across providers and settings, and have robust information technology to facilitate information transfer.
- b. **Embedded care manager models:** These models place a care manager, usually an advanced practice nurse, in a physician's office, versus hiring a care manager (as in the practice transformation models). The care manager identifies high-risk and potentially high-risk patients and helps with care planning and transitions, provides in-home assessments, and facilitates access to care and social supports for seriously ill patients. There are two types of embedded care manager models- the Aetna<sup>SM</sup> case manager model and the Guided Care<sup>®</sup> model
- c. **Transitions models:** These use care managers to facilitate transitions across settings.
  - i. Care Transition Intervention<sup>®</sup>: Coaches are used to train patients to manage their care by communicating information across providers, fulfilling medication instructions,

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<sup>44</sup> Metzger, Jane. Preventing hospital readmissions: The first test case for continuity of care. *CSC's Global Institute for Emerging Healthcare Practices*. ([http://assets1.csc.com/health\\_services/downloads/CSC\\_Preventing\\_Hospital\\_Readmission.pdf](http://assets1.csc.com/health_services/downloads/CSC_Preventing_Hospital_Readmission.pdf)) Accessed August 8, 2012.

<sup>45</sup> Medicare Payment Advisory Commission (2012). *Report to the Congress: Medicare and the Health Care Delivery System*. Chapter 2: Care coordination in fee-for-service Medicare. Washington, DC: MedPAC.

following up with providers, and identifying what to do when their condition worsens. Application of this model resulted in reduced rehospitalization rates,<sup>46</sup> and currently CMS is evaluating the effectiveness of this type of intervention in the Medicare program.

- ii. **Transitional Care Model<sup>®</sup>**: This model institutes comprehensive peri-discharge and post-discharge care management for patients with chronic conditions. In this model, advanced practice nurses identify hospitalized patients who are likely to need assistance transitioning back home or to another setting. The nurses develop comprehensive discharge planning, make home visits after discharge, and communicate by telephone. Randomized controlled trials have already shown these models to reduce costs and rehospitalizations.<sup>47,48</sup>

**d. External care manager models:** These models use an external entity to perform care coordination activities.

- i. **Community health teams:** These teams consists of medical and social service staff that work with the offices of physicians and other health professionals to coordinate care, activate patients in managing their health, and facilitate access to community resources.
- ii. **Disease management:** These interventions entail a commercial disease management organization communicating with patients and their physicians about patient self-management, adherence to recommended guidelines, and coordination of care across providers.

### **Organized care management**

In addition to focusing on care coordination and transitions in care for controlling readmission rates, the role of organized care management through accountable care organizations (ACOs) is also gaining some attention. The results of a recent study suggest that policy initiatives such as creating a shared savings program with an ACO might be effective in lowering readmission rates.<sup>49</sup>

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<sup>46</sup> Coleman, E.A., The care transitions intervention: results of a randomized controlled trial. *Archives of Internal Medicine* 166, no. 17 (2006): 1822-8.

<sup>47</sup> Naylor, M.D., et al. Comprehensive discharge planning and home follow-up of hospitalized elders: a randomized clinical trial. *Journal of the American Medical Association* 281, no. 7 (1999): 613-20.

<sup>48</sup> Naylor, M.D., et al. Transitional care of older adults hospitalized with heart failure: a randomized, controlled trial. *Journal of the American Geriatrics Society* 52, no. 5 (2004): 675-84.

<sup>49</sup> Epstein, A.M., et al. The relationship between hospital admission rates and rehospitalizations. *The New England Journal of Medicine* 365, no. 24 (2011): 2287-95.

Patients who tend to get rehospitalized are those that are consuming 80% of the healthcare resources.<sup>50</sup> Some of these high-risk patients are already receiving ongoing support through care management programs of commercial health plans and Medicaid Advantage. Some Medicare patients will receive the additional support of these programs as pilot ACOs become operational. Furthermore, several states are set to launch new programs for patients eligible for both Medicaid and Medicare and these programs will also include intensive care management.<sup>51</sup>

## ***Conclusion***

The purpose of this study was to understand the discrete issues raised by the admission and readmission patterns for IPFs, both freestanding IPFs and psychiatric units. Specifically, this study examined the characteristics and readmission rates of beneficiaries treated in these settings. We found that eighty percent of beneficiaries with psychiatric discharges in CY 2010 had a primary diagnosis of either schizophrenia or episodic mood disorders (including depression), both of which are considered to be chronic psychiatric conditions. Of all beneficiaries with psychiatric discharges, 71% were not readmitted during CY 2010. Beneficiaries that were readmitted tended to be younger and male and the majority of them were disabled and dually-eligible for Medicare and Medicaid. Chronic psychiatric diagnoses, disability and low income have all been identified as risk factors for readmissions. Thus it appears that readmissions in IPFs, both freestanding IPFs and psychiatric units may be due in large part to the characteristics of patients that these providers are treating and not due to lack of quality care.

Payment incentives to ensure the quality of care furnished in IPFs are either already being implemented or are soon to be implemented by CMS. These initiatives include the mandatory reporting of quality measures such as post-discharge continuing care plans, which are an important part of improving the overall care coordination in Medicare beneficiaries. These HBIPS quality measures for IPFs have a potential to ensure care coordination in Medicare inpatient psychiatric beneficiaries.

Furthermore, it is possible that the combined use of external programs of organized care management with efforts from the IPFs will help to maintain quality of care and facilitate transitions of care for their patients. Since the effectiveness of these interventions have mainly been evaluated in patients with general medical conditions or in patients with cardiovascular conditions like heart failure, future studies could focus on the effectiveness of these interventions in IPFs. Before implementing a readmission penalty for IPF PPS, as has been done for IPPS

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<sup>50</sup> Metzger, Jane. Preventing hospital readmissions: The first test case for continuity of care. *CSC's Global Institute for Emerging Healthcare Practices*. ([http://assets1.csc.com/health\\_services/downloads/CSC\\_Preventing\\_Hospital\\_Readmission.pdf](http://assets1.csc.com/health_services/downloads/CSC_Preventing_Hospital_Readmission.pdf)) Accessed August 8, 2012.

<sup>51</sup> Ibid.

hospitals, it may be worthwhile to evaluate the effectiveness of the various payment initiatives outlined in this report towards controlling readmissions in IPFs.

## ***Appendix I – Background on the IPF PPS and IPPS***

### ***Inpatient Psychiatric Facilities Prospective Payment System (IPF PPS)***

The Medicare, Medicaid, and SCHIP (State Children’s Health Insurance Program) Balanced Budget Refinement Act of 1999 required creation of the IPF PPS.<sup>52</sup> Specifically, section 124 of the BBRA mandated that the Secretary develop a per diem PPS for inpatient hospital services furnished in psychiatric hospitals and psychiatric units that includes a patient classification system that reflects the differences in patient resource use and costs in those settings. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 extended the IPF PPS to distinct part psychiatric units of critical access hospitals (CAHs).<sup>53</sup>

The November 2004 IPF PPS final rule set forth the per diem Federal rates and CMS began a three-year phase in of the IPF PPS in January 2005. Prior to 2005 IPFs were paid based on their Medicare-allowable costs per discharge, subject to limits established in the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). Medicare paid each IPF either its average cost per discharge or its target amount, whichever was less.<sup>54</sup>

Under the IPF PPS, Medicare pays for the per diem costs associated with furnishing covered inpatient psychiatric services. Covered psychiatric services include services for which benefits are provided under the fee-for-service Part A (Hospital Insurance Program) Medicare program. Medicare payments to IPF are estimated to be \$4.2 billion in 2010.<sup>55</sup>

### ***Differences between the IPF PPS and IPPS***

Most hospitals have been paid under the Inpatient Prospective Payment System (IPPS) since October 1, 1983, with the exception of psychiatric hospitals, specialty hospitals such as rehabilitation, children’s, cancer, and long term care hospitals.<sup>56</sup> Hospitals that were exempt from the IPPS were referred to as TEFRA facilities and were paid on the basis of Medicare reasonable costs per case, limited by a hospital specific target amount per discharge.

<sup>52</sup> Section 124 of the Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999 (BBRA) (Public Law 106-113).

<sup>53</sup> Section 1820 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (Public Law 108-173). Enacted on December 8, 2003.

<sup>54</sup> Medicare Payment Advisory Commission (2010). *Report to the Congress: Aligning Incentives in Medicare*. Chapter 6: Inpatient psychiatric care in Medicare: Trends and issues. Washington, DC: MedPAC.

<sup>55</sup> Medicare Payment Advisory Commission. *Medicare payment basics: Psychiatric hospital services payment system*. ([http://www.medpac.gov/documents/MedPAC\\_Payment\\_Basics\\_11\\_psych.pdf](http://www.medpac.gov/documents/MedPAC_Payment_Basics_11_psych.pdf)) Accessed August 1, 2012.\

<sup>56</sup> Federal Register: Department of Health and Human Services. Centers for Medicare & Medicaid Services. *Medicare Program: Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and Fiscal Year 2013 Rates; Final Rule*. [CMS-1588-F]

Both the IPPS and IPF PPS use the Medicare severity diagnosis related groups (MS-DRGs). This system groups patients with similar clinical problems that are expected to require similar amounts of hospital resources. The relative costliness of inpatient treatment for each group is reflected by assigning a relative weight to each MS-DRG.<sup>57</sup> The MS-DRGs were adopted by CMS in FY 2008 IPPS final rule. MS-DRGs replaced CMS-DRGs, but the new system had little effect. The MS-DRG system has 335 base DRGs, most of which are split into 2 or 3 MS-DRGs based on the presence of either a comorbidity or complication (CC) or major CC (MCC). Under the IPF PPS, mapping the CMS-DRGs to the MS-DRGs resulted in the current 17 psychiatric MS-DRGs, instead of the original 15 CMS-DRGs.<sup>58</sup> Medicare patients in IPFs are assigned to 1 of these 17 psychiatric MS-DRGs.

However, the main difference between the IPPS and IPF PPS lies in the way Medicare sets payments rates for these systems. Under the IPPS, Medicare sets per-discharge payment rates for MS-DRGs.<sup>59</sup> In 2010 (the reference year for our analysis), Medicare set per-discharge payments rates for 746 MS-DRGs.<sup>60</sup> Psychiatric hospitals and psychiatric units were excluded from the IPPS because the MS-DRG classification system used in the IPPS was believed to be a poor predictor of resource use for psychiatric patients. Since psychiatric diagnoses are believed to be less well defined than diagnoses in general medicine and surgery, diagnosis alone may not completely describe the reasons for hospitalization or types of services received. In addition, each patient may have a unique treatment pattern which may lead to differences in cost of care.<sup>61</sup>

Thus, under the IPF PPS, Medicare pays for the per diem routine, ancillary, and capital costs associated with furnishing covered inpatient psychiatric services. This Federal per diem payment is comprised of the Federal per diem base rate and certain patient- and facility-level payment adjustments that are significantly associated with per diem cost differences. Patient-level adjustments include age, DRG assignment, comorbidities, and variable per diem adjustments to reflect higher per diem costs in the early days of an IPF stay. Facility-level adjustments includes adjustments for IPFs' wage index, rural location, teaching status, a cost of living adjustment for IPFs located in Alaska and Hawaii, and presence of a qualified emergency department (ED).<sup>62</sup>

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<sup>57</sup> Medicare Payment Advisory Commission. *Medicare payment basics: Hospital acute inpatient services payment system*. ([http://www.medpac.gov/documents/MedPAC\\_Payment\\_Basics\\_11\\_hospital.pdf](http://www.medpac.gov/documents/MedPAC_Payment_Basics_11_hospital.pdf)) Accessed August 1, 2012.

<sup>58</sup> Federal Register: Department of Health and Human Services. Centers for Medicare & Medicaid Services. *Medicare Program: Inpatient Psychiatric Facilities Prospective Payment System - Update for Fiscal Year Beginning October 1, 2012 (FY 2013)*; Notice. [CMS-1440-N]

<sup>59</sup> Medicare Payment Advisory Commission. *Medicare payment basics: Hospital acute inpatient services payment system*. ([http://www.medpac.gov/documents/MedPAC\\_Payment\\_Basics\\_11\\_hospital.pdf](http://www.medpac.gov/documents/MedPAC_Payment_Basics_11_hospital.pdf)) Accessed August 1, 2012.

<sup>60</sup> Medicare Payment Advisory Commission (2010). *Report to the Congress: Aligning Incentives in Medicare*. Chapter 6: Inpatient psychiatric care in Medicare: Trends and issues. Washington, DC: MedPAC.

<sup>61</sup> Ibid.

<sup>62</sup> Federal Register: Department of Health and Human Services. Centers for Medicare & Medicaid Services. *Medicare Program: Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and Fiscal Year 2013 Rates; Final Rule*. [CMS-1588-F]

Providers may have some incentives to increase the lengths of stay; however, Medicare mitigates this incentive by reducing the per diem payments for later days of the IPF stay.

Inpatient psychiatric care may also be provided in acute care hospital beds, sometimes referred to as “scatter beds”. However, Medicare pays for scatter bed services in acute care hospitals under the IPPS. Due to the differences in payment methodology and differences in patient characteristics of beneficiaries treated in scatter beds with those treated in IPFs and psychiatric units, the analysis plan, results and policy implications discussed in this report only focus on beneficiaries treated in IPFs, both freestanding IPFs and psychiatric units.

## *Appendix II - Methodology*

### **Data source**

We used data from Medicare Inpatient and Outpatient Fee-For-Service claims for calendar year 2010. This includes the 100% Standard Analytical File (SAF) from CMS which contains 100% of the final action claims submitted to Medicare from a 100% sample of beneficiaries. The SAF includes claims from Maryland even though the state is under a Medicare Waiver but does not include claims from beneficiaries participating in the Medicare Advantage program.

### **Study population**

Medicare beneficiaries with a psychiatric discharge during CY 2010 were included in the study population. Using the 100% inpatient SAF, psychiatric discharges were defined as follows: a discharge from a freestanding psychiatric hospital or a discharge from a distinct-part psychiatric unit of a short-term acute hospital (both IPPS and Critical Access Hospitals). The Medicare provider number on the 100% inpatient SAF was used to categorize discharges as occurring either from a freestanding IPF or a psychiatric unit. Claims for partial hospitalization were obtained from the 100% outpatient SAF using procedure codes 'G0176' or 'G0177'.

### **Data notes**

Administrative data may have some limitations. For example, since we have used one calendar year of data, there could be some "right censoring". This means that we would be unable to determine readmissions that occurred in the following year. However, since we are not dealing with very long periods of time (65% of readmission occurred within 60 days), this should not be a large issue. We did not describe the beneficiaries' source of admission, such as physician referral, transfer from a skilled nursing facility, emergency room or hospital, etc, since this data is often unreliable. However, we did describe the type of provider for a pair of discharges.

Some advantages of the data source include the ability to define psychiatric discharges from 100% fee for service claims in CY 2010. Availability of exact dates of admission and discharge enabled us to calculate various statistics on readmission patterns, such as time to readmission, length of stay for single and multiple discharges, etc. Dates of admission and discharges are tied to the hospital billing systems, and errors may trigger audit or payments reviews; thus these dates are considered very reliable.

Due to possible data entry errors in the claims data, a small number of claims with overlapping time periods between admissions and discharges were removed while calculating time between readmissions. If the discharge date from the first of a pair is the same as the admit date of the second pair, we have assumed it is a transfer, and not a readmission.