CHAPTER 6

Inpatient psychiatric care in Medicare: Trends and issues

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Chapter summary

Medicare beneficiaries with serious mental illnesses or alcohol- and drug-related problems may be treated in specialty inpatient psychiatric facilities (IPFs). Beneficiaries who use IPFs are among the most vulnerable in Medicare. A majority are disabled and low income. They tend to be heavy users of health care services, in part because their mental illnesses may undermine their willingness or ability to comply with recommended care. Often, they have additional medical needs that may complicate their treatment.

The services furnished by IPFs are intended to meet the urgent needs of patients experiencing an acute mental health crisis. To qualify as an IPF for Medicare payment, a facility must meet Medicare's general requirements for acute care hospitals and must be primarily engaged in providing psychiatric services for the diagnosis and treatment of mentally ill persons. In 2008, Medicare spent $3.9 billion on IPF care. About 295,000 beneficiaries had almost 443,000 stays. Medicare discharges make up about one-quarter of IPFs' total discharges.

In January 2005, CMS changed the method of payment for IPFs from a cost-based system to a prospective payment system (PPS). The change to a PPS creates financial incentives for providers and may therefore affect patterns of care, including the types of cases admitted to IPFs, services furnished, and

In this chapter

lengths of stay. The Commission's analysis of IPF cost reports and claims data from 2008 found:

- Unlike in other settings, most Medicare beneficiaries treated in IPFs qualified for Medicare because of a disability. As a result, IPF patients tended to be younger and poorer than the typical beneficiary. A majority (56 percent) of IPF patients were dually eligible for Medicare and Medicaid.
- Almost three-quarters of IPF discharges were assigned to one Medicare severity–diagnosis related group (psychoses) and thus received the same base payment under the PPS. Some patient characteristics that may substantially increase the cost of caring for an inpatient psychiatric patient, such as deficits in activities of daily living and suicidal and assaultive tendencies, are not recognized by the IPF payment system.
- In 2008, 74 percent of IPFs were distinct-part psychiatric units in acute care hospitals, but that share is falling as the number of psychiatric units declines. We noted some distinct differences between psychiatric units and freestanding IPFs. On average, psychiatric units were much smaller than freestanding IPFs and were more likely to be nonprofit. Psychiatric units also were somewhat more likely to be located in rural areas and to be teaching institutions. Although about three-quarters of patients in both types of IPFs were diagnosed with psychoses, psychiatric units cared for a smaller share of patients with substance-abuse diagnoses and a larger share of patients with degenerative nervous system disorders than did freestanding IPFs. Average lengths of stay in non-government-owned psychiatric units and freestanding IPFs were 11.2 days and 12.4 days, respectively. A much larger share of psychiatric units' patients were admitted through the emergency department, while a smaller share of their patients were discharged to the home. Psychiatric units were three times as likely as freestanding IPFs to discharge patients to skilled nursing facilities and twice as likely to discharge patients to intermediate care facilities, which care for patients with mental retardation and related conditions.

It is not clear if differences between psychiatric units and freestanding IPFs stem from differences in practice patterns or in the mix of patients and services furnished. Given the implications for access to and quality of care, it will be important to determine whether the payment system adequately captures relevant differences in costliness across patients. If payment rates do not vary consistently with expected variation in patient costs, facilities that treat many patients with a need for high levels of nursing and staff time could be disadvantaged. In addition, access problems might develop for patients who are identified as having high nursing and staff time needs before admission. To the extent that payments do not accurately

reflect patient costs, some IPFs could receive substantial overpayments relative to the expected costs of their mix of patients, while others could be underpaid.

In the future, the Commission intends to analyze IPFs' costs to assess the adequacy of payments to IPFs and providers' financial performance under Medicare. It will be important to assess the extent to which any observed cost differences between freestanding IPFs and distinct-part psychiatric units reflect real differences in service provision and mix of patients and how much is due to methods acute care hospitals use to allocate overhead to their psychiatric units.

The development of outcomes measures to evaluate quality of care in IPFs has lagged behind that for nonpsychiatric medical care. Outcomes assessment in IPFs is complicated by the fact that IPFs may have only a short-term impact on a patient's course of illness. They can successfully stabilize a mentally ill patient in crisis, but changing the patient's course of illness following the inpatient stay often requires ongoing treatment on an ambulatory basis. However, established protocols exist for the treatment of acute episodes of mental illnesses such as major depression, bipolar disorder, and schizophrenia. Clinical process measures can therefore be used in IPFs to evaluate providers' assessment, treatment, coordination, and safety protocols.

Ultimately, improving the quality of care furnished to beneficiaries with serious mental illnesses will necessitate looking beyond the IPF stay to ensure that patients receive adequate and appropriate outpatient mental health services. Such services can reduce severity of illness and improve beneficiaries' productivity and quality of life. ■

Medicare beneficiaries with serious mental illnesses or alcohol- and drug-related problems may be treated in specialty inpatient psychiatric facilities (IPFs). The services furnished by IPFs are intended to meet the urgent needs of those experiencing an acute mental health crisis. Patients in crisis may present with behavior that poses a risk to themselves—either intentional or as the result of impaired self-care—or to others. The goal of IPF care is mood stabilization and restoration of the ability to live independently. In addition, IPFs provide supervision and behavioral management to minimize risk of harm to self or others. Most IPF patients receive drug therapy in the form of antipsychotics, mood stabilizers, antidepressants, and anticonvulsants. Patients also may receive individual and group therapy, psychosocial rehabilitation, illness management training, family therapy, electroconvulsive therapy (ECT), and other treatments. In addition, patients may receive care for medical comorbidities such as diabetes, infectious disease, wounds, and cardiac conditions.

Beneficiaries treated for psychiatric conditions in IPFs are covered for 90 days of care per spell of illness, with a 60-day lifetime reserve.[1] Beneficiaries are responsible for the Part A deductible—$1,100 in 2010—for the first admission during a spell of illness, and for a copayment—$275 per day—for the 61st through 90th days. A higher copayment ($550 per day) applies for each lifetime reserve day. Over their lifetimes, beneficiaries are limited to 190 days of treatment in freestanding psychiatric hospitals.[2] In 2008, the average length of a stay in a psychiatric facility was 13.1 days.

In 2008, almost 295,000 beneficiaries had about 443,000 discharges from IPFs (Table 6-1). Since a prospective payment system (PPS) was implemented in January 2005, the number of cases in IPFs has fallen, on average, about 2 percent per year. Controlling for the number of beneficiaries enrolled in fee-for-service (FFS) Medicare, IPF cases fell about 1 percent per year between 2004 and 2008.

Medicare spending for IPF services in 2008 was $3.9 billion. Both before and after implementation of the IPF PPS, spending per beneficiary grew at the same rate—about 3.5 percent annually. By comparison, the average Medicare payment per IPF case grew 4.5 percent per year between 2004 and 2008. This growth was due in

TABLE 6–1

The number of IPF cases has fallen under PPS

	TEFRA	PPS				Average annual change	
	2002	2004	2006	2007	2008	2002–2004	2004–2008
Cases	464,780	483,271	474,417	456,045	442,759	2.0%	–2.2%
Cases per 1,000 FFS beneficiaries	13.3	13.2	13.1	12.8	12.7	–0.2	–0.9
Spending (in billions)	$3.2	$3.5	$3.8	$3.8	$3.9	5.6	2.3
Spending per FFS beneficiary	$90.6	$97.0	$104.7	$106.7	$111.4	3.4	3.5
Payment per case	$6,822	$7,328	$7,989	$8,315	$8,742	3.6	4.5
Payment per day	$570	$627	$677	$698	$728	4.9	3.8
Length of stay (in days)	13.0	12.7	13.0	13.0	13.1	–1.2	0.7
Unique beneficiaries	299,888	311,146	312,949	301,672	294,574	1.9	–1.4

Note: IPF (inpatient psychiatric facility), PPS (prospective payment system), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), FFS (fee-for-service). Numbers of cases and patients reflect Medicare fee-for-service utilization of services furnished in inpatient psychiatric facilities. Scatter bed cases and spending are excluded, as are cases and spending for beneficiaries enrolled in Medicare Advantage plans.

Source: MedPAC analysis of MedPAR data from CMS.

part to an increase in the average length of stay. Because Medicare pays IPFs on a per diem basis, providers have some incentive under the PPS to increase lengths of stay (although Medicare mitigates this incentive by reducing per diem payments for later days of the IPF stay). But even controlling for the number of days of care, payments have risen 3.8 percent per year, on average, since 2004.

In this chapter, we provide an overview of Medicare's PPS for inpatient psychiatric services, the providers who furnish those services, and the beneficiaries who use them. We report on the Commission's analysis of claims for IPF services, including the types of diagnoses most commonly coded in IPFs and differences in coded diagnoses and patient characteristics across IPFs. Finally, we review issues related to the adequacy of Medicare's payments for IPF services and the development of quality measures.

Medicare pays for care in IPFs under the IPF PPS

When the inpatient PPS (IPPS) for general acute care was implemented in 1983, IPFs were excluded largely because the diagnosis related group (DRG) classification system used in the IPPS was thought to be a poor predictor of resource use for psychiatric patients. Research had found that DRGs generally explain less than 10 percent of the variation in inpatient psychiatric resource use based on length of stay or cost per admission (Thompson 2002).[3] Diagnosis alone does not reliably describe the reasons for hospitalization or the types of services typically received, in part because psychiatric diagnoses are less well defined than diagnoses in general medicine and surgery. In addition, treatment patterns within diagnoses may be more variable depending on the nature of the crisis that precipitated the inpatient psychiatric stay as well as on patient characteristics such as deficits in activities of daily living and a predilection for dangerous behavior.

Until 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. The target amount equaled the facility's costs per discharge in its base year, updated to the current year. Facilities with costs below their target amounts received bonus payments. This policy created opportunities for profit for new facilities and thus fueled growth in the number of IPFs. A newly established IPF could inflate its costs in its base year to establish a high target amount. The facility could then reduce its costs in subsequent years and be reimbursed its full costs, plus a bonus payment for keeping its costs below the target.

The Balanced Budget Refinement Act mandated that the Secretary of Health and Human Services develop a per diem PPS for inpatient services furnished in psychiatric hospitals and units that included an adequate patient classification system reflecting the differences in patient resource use and cost among providers. Developing an adequate patient classification system for use in an IPF PPS proved to be challenging, because the administrative data collected by CMS do not include some of the patient and clinical characteristics and functional status indicators that are predictive of resource use and costs in IPFs. In other Medicare PPSs developed for services for which diagnosis is not an adequate predictor of resource use—such as inpatient rehabilitation facility services and skilled nursing facility (SNF) services—data on relevant patient and clinical characteristics and functional status indicators are collected via assessment instruments. But time limitations and industry opposition led CMS to move forward with the IPF PPS without an assessment tool (Centers for Medicare & Medicaid Services 2004, Thompson 2002).

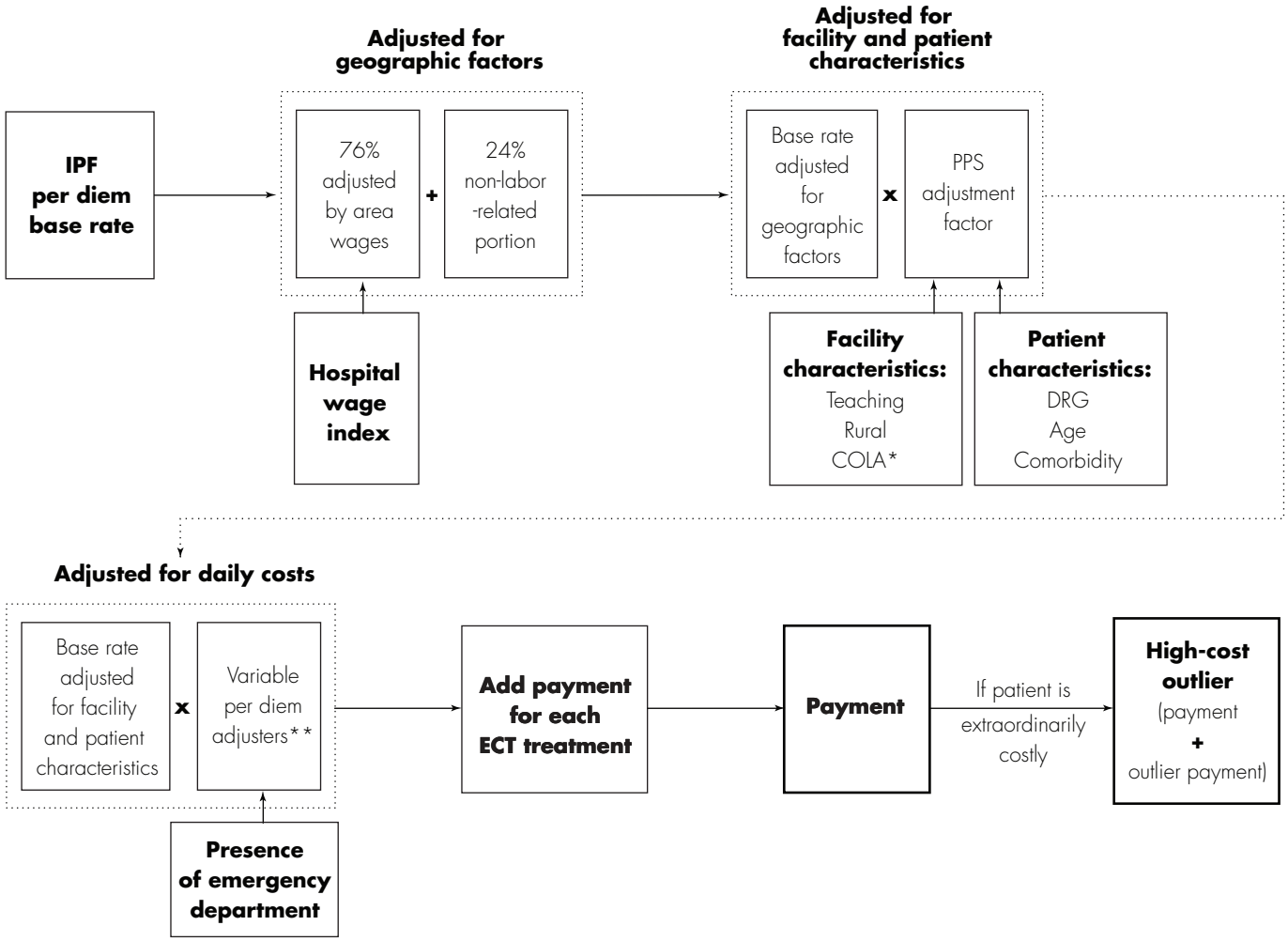
In January 2005, CMS began a three-year phase-in of the IPF PPS. Under the PPS, Medicare pays for the per diem costs associated with furnishing covered inpatient psychiatric services. The base payment rate for each patient day in an IPF is based on the national average daily routine operating, ancillary, and capital costs in IPFs in 2002.[4] For rate year (RY) 2010 (beginning July 1, 2009), the base payment rate is $652 per day.

The base rate is adjusted to account for patient and facility characteristics that can be collected from administrative data and that are associated with cost differences in IPF patients (Figure 6-1). Cases receive all applicable adjustments; generally, adjustments to the base rate are multiplicative. Patient adjustments are made for:

- ***Diagnosis***—Patients are assigned to 1 of 17 psychiatric Medicare severity–diagnosis related groups (MS–DRGs), such as psychoses, depressive neuroses, and degenerative nervous system disorders. Medicare assigns a weight to each of the MS–DRGs reflecting the average costliness of cases in that group compared with that for the most frequently

FIGURE 6–1

PPS for psychiatric services delivered by IPFs



Note: PPS (prospective payment system), IPF (inpatient psychiatric facility), COLA (cost of living adjustment), DRG (diagnosis related group), ECT (electroconvulsive therapy).
*A cost of living adjustment to the non-labor-related portion is made for facilities in Alaska and Hawaii.
**The variable per diem adjusters decline from 1.31 for the first day of stay in an IPF with an emergency department (1.19 for stays in IPFs without an emergency department) to 0.92 for day 22 and beyond. Table 6-2 shows the adjusters.

reported diagnosis in fiscal year 2002. A diagnosis of psychoses has an adjustment factor of 1.0. The adjustment factors range from 0.88 for MS–DRGs 896 and 897 (alcohol/drug abuse without rehabilitation) to 1.22 for MS–DRG 876 (operating room procedure with a principal diagnosis of mental illness). If a patient is assigned to a nonpsychiatric MS–DRG, the case does not receive a diagnosis adjustment (or, rather, the case receives the same adjustment as does a psychoses case).[5]

- ***Age***—In general, payment increases with increasing age over 45. The adjustment factors range from 1.00 for patients under 45 to 1.17 for patients age 80 or over.
- ***Comorbidities***—This adjustment recognizes the increased costs associated with 17 specific patient conditions—such as renal failure, diabetes, and cardiac conditions—that are secondary to the patient's principal diagnosis and that require treatment during the stay.[6] Adjustment factors range from 1.03 to 1.13.

TABLE 6–2 **The adjusted rate for IPFs is higher for initial days of the patient stay**

Day of patient's stay	Per diem adjustment
1 Facility:	
with a full-service emergency department	1.31
without a full-service emergency department	1.19
2	1.12
3	1.08
4	1.05
5	1.04
6	1.02
7	1.01
8	1.01
9	1.00
10	1.00
11	0.99
12	0.99
13	0.99
14	0.99
15	0.98
16	0.97
17	0.97
18	0.96
19	0.95
20	0.95
21	0.95
22 or more	0.92

Note: IPF (inpatient psychiatric facility). The per diem adjustment is applied to the base rate that is already adjusted for geographic, facility, and patient characteristics.

Source: Centers for Medicare & Medicaid Services 2009.

- ***Length of stay***—Per diem payments decrease as patient length of stay increases (Table 6-2).

Facility-based adjustments are made for:

- ***Area wage index***—The labor-related share (76 percent) of the base per diem payment is adjusted by an area wage index to reflect the expected differences in local market prices for labor.[7]
- ***Rural location***—IPFs in rural areas are paid 17 percent more than urban IPFs.
- ***Teaching***—Teaching hospitals have an adjustment based on the ratio of interns and residents to average daily census.
- ***Cost of living***—IPFs in Alaska and Hawaii are paid up to 25 percent more than IPFs in other areas, reflecting the disproportionately higher costs in those states.
- ***Presence of an emergency department***—All freestanding IPFs with qualifying emergency departments and all distinct-part psychiatric units located within acute care hospitals that maintain qualifying emergency departments are paid 12 percent more for their patients' first day of the stay.

IPFs receive an additional payment for each ECT treatment furnished to a patient. In RY 2010, the ECT payment is $281.

For cases that have extraordinarily high costs, the IPF PPS allows for outlier payments, drawn from an outlier pool of 2 percent of total payments (funded by lowering payments for all cases). Medicare makes outlier payments when an IPF's estimated total costs for a case exceed a threshold ($6,565 in RY 2010, adjusted for the facility characteristics outlined above) plus the total payment amount for the case. Medicare covers 80 percent of the costs above this amount for days 1 through 9 and 60 percent of the costs above this amount for the remaining days. The different risk-sharing rates are intended to counteract the financial incentives to keep outlier cases longer.

Patients who are readmitted to the IPF within three days of discharge are considered to have an uninterrupted stay. In such cases, Medicare treats the readmission as a continuation of the original stay, with lengths of stay adjustments applied accordingly.

Inpatient psychiatric care may also be furnished in so-called "scatter beds"—that is, in acute care hospital beds not within distinct-part psychiatric units. Medicare pays for scatter bed services under the acute care hospital PPS (see text box). In 2008, there were almost 250,000 admissions to scatter beds for inpatient psychiatric care, representing 36 percent of all inpatient psychiatric admissions that year. Controlling for FFS enrollment, total admissions to scatter beds have increased 2 percent since 2004.

Different types of IPFs meet the diverse needs of seriously mentally ill patients

Inpatient psychiatric providers include freestanding psychiatric hospitals and distinct-part psychiatric units in

Scatter beds

Patients experiencing an acute mental health crisis can also be treated on an inpatient basis in acute care hospital beds that are not within distinct-part psychiatric units. These beds are called "scatter beds." Medicare pays for inpatient psychiatric services furnished in scatter beds under the per discharge inpatient prospective payment system for acute care hospitals.The patients served in scatter beds may not be directly comparable to those served in freestanding inpatient psychiatric facilities (IPFs) and psychiatric units. First, the typical diagnoses in scatter beds differ from those seen in IPFs. Although substance abuse and degenerative nervous system disorders were among the most common admissions to IPFs in 2008, most Medicare beneficiaries hospitalized for substance abuse are admitted to scatter beds, as are most beneficiaries hospitalized with degenerative nervous system disorders. Freestanding and hospital-based IPFs cared for many more patients diagnosed with psychoses, including schizophrenia, major depression, and bipolar disorder. This situation may be due in part to the inability of many acute care hospitals to provide in scatter beds the adequate security and supervision required for patients at risk of harming themselves or others.

Second, patients may be admitted to scatter beds instead of IPFs because they have underlying medical conditions that are more appropriately treated in the acute care hospital. Beneficiaries diagnosed with degenerative nervous system disorders or substance abuse, for example, are more likely to be admitted to scatter beds if they have a major comorbidity or complication. Beneficiaries age 80 or older, who may be more likely to have underlying medical conditions, are almost twice as likely to be admitted to scatter beds as their under-45 counterparts.

Beneficiaries admitted to scatter beds are more likely than those in IPFs to be admitted through the emergency department (60 percent vs. 35 percent). Average length of stay is 6.6 days, compared with 13.1 days in IPFs. Upon discharge, they are far more likely to be transferred to skilled nursing facilities (19 percent vs. 11 percent).

Some beneficiaries may be admitted to scatter beds because they have exhausted their allotment of days in freestanding IPFs or because beds in psychiatric hospitals and units are unavailable. In some cases, a patient may be admitted to a scatter bed because payment is more favorable, although the extent to which these cases occur is unknown. More research is needed to compare types of patients, payments, costs, quality of care, and outcomes across the settings in which beneficiaries can receive inpatient psychiatric care and to determine whether payments in each setting are appropriate. ■

acute care hospitals.[8] The sector has undergone dramatic changes over the last several decades, driven by a number of factors. Beginning in the 1960s, the downsizing and closure of many state- and county-owned mental hospitals resulted in a large decrease in the total number of inpatient psychiatric beds and shifted capacity to the private sector (Salinsky and Loftis 2007).[9] The introduction in 1983 of the IPPS for acute care hospital services created incentives for acute care hospitals to open psychiatric units, which continued to be paid on a cost basis under the rules established by TEFRA. (As mentioned above, the payment rules under TEFRA also encouraged the growth of psychiatric hospitals and units.) The number of nongovernment IPFs increased substantially in the 1980s and early 1990s and then began to decline. In 2008, about 400 freestanding IPFs and about 1,100 psychiatric units provided care to Medicare beneficiaries (Table 6-3, p. 170). Approximately 35 percent of the nation's acute care hospitals had distinct-part psychiatric units.

Historically, different types of facilities developed to meet the diverse needs of the seriously mentally ill (Lave 2003, RTI International 2005, Salinsky and Loftis 2007). For example, government-owned IPFs frequently function as providers of last resort, often serving patients with severe and persistent mental illness who are difficult to place in other IPFs because of insurance status, diagnosis, or need for specialized services (such as security for forensic

TABLE 6–3

Inpatient psychiatric facilities, 2002–2008

	TEFRA			PPS				Average annual change	
Type of IPF	2002	2003	2004	2005	2006	2007	2008	2002–2004	2004–2008
All	1,724	1,704	1,657	1,622	1,591	1,584	1,535	–2.0%	–1.9%
Urban	1,318	1,298	1,277	1,283	1,268	1,263	1,226	–1.6	–1.0
Rural	406	406	378	339	323	321	309	–3.5	–4.9
Freestanding	347	353	352	366	396	413	408	0.7	3.8
Hospital-based units	1,377	1,351	1,305	1,256	1,195	1,171	1,127	–2.7	–3.6
Nonprofit	993	974	949	909	877	848	818	–2.2	–3.6
For profit	363	349	327	344	344	358	346	–5.1	1.4
Government	368	381	381	369	370	378	371	1.8	–0.7

Note: IPF (inpatient psychiatric facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system). Numbers are facilities that submitted valid Medicare cost reports in the given fiscal year.

Source: MedPAC analysis of Medicare cost report files from CMS.

patients). These providers are distinguished by their longer average lengths of stay. Daily intensity of services tends to be relatively low. By comparison, nongovernment psychiatric units and freestanding IPFs generally serve patients who are expected to return to the community relatively quickly. Because lengths of stay are shorter, the daily intensity of care may be greater than that provided in government-owned IPFs. Distinct-part psychiatric units in acute care hospitals (regardless of ownership) also can offer medical and surgical capabilities that may be lacking in many freestanding IPFs. Research conducted for CMS by RTI International found that these differences in types of patients served and patterns of care across provider types were reflected in staffing levels. Freestanding IPFs generally had lower staffing levels than psychiatric units, and their patients generally used less nursing and staff time. The highest use of nursing time, by far, was seen in nongovernment psychiatric units. It is not clear if the differences in staffing levels are indicative of greater patient need for services, greater availability of nursing staff, or differences in the quality of care provided.

The Commission's analysis of IPF claims from 2008 found that, overall, Medicare discharges made up about one-quarter of IPFs' total discharges, but this rate differed across the types of facilities. About 29 percent of psychiatric units' discharges were covered by Medicare, compared with 19 percent of freestanding IPF discharges.

We found that freestanding IPFs differed from psychiatric units in a number of ways. On average, freestanding IPFs were much larger, averaging 113 beds in 2008 compared with psychiatric units' average 32 beds. In fact, 57 percent of psychiatric units had fewer than 25 beds. By comparison, 71 percent of freestanding facilities had more than 50 beds. In addition, about two-thirds of psychiatric units were nonprofit, compared with 18 percent of freestanding IPFs. Psychiatric units also were somewhat more likely to be located in rural areas (22 percent of units compared with 15 percent of freestanding) and to be teaching institutions (18 percent of units compared with 11 percent of freestanding).

Between 2002 and 2004, the number of freestanding IPFs remained fairly steady (Table 6-3). Beginning in 2005, when the IPF PPS began to be implemented, the number of freestanding IPFs grew an average of 3.8 percent per year. By comparison, the number of distinct-part psychiatric units in acute care hospitals fell at an average annual rate of 2.7 percent between 2002 and 2004, a decline that accelerated beginning in 2005. Much of the decline occurred among nonprofit and rural facilities.

Examination of the supply of IPF beds shows a similar, but more striking, pattern. Overall, the number of IPF beds remained relatively stable between 2004 and 2008 (Table 6-4). However, there was a marked shift in the location of those beds. The number of psychiatric unit beds fell

more than 12 percent over the period, while the number of freestanding IPF beds increased 11 percent. At the same time, the number of rural and nonprofit IPF beds declined almost 15 percent, while the number of for-profit beds rose 12 percent.

A growing share of Medicare IPF users have been discharged from freestanding IPFs. Between 2004 and 2008, that number increased, on average, 2 percent per year. At the same time, the number of IPF discharges from psychiatric units declined an average 4 percent per year.

The drop in the number of psychiatric unit beds likely has several causes. Psychiatric units may not be as profitable as they once were, particularly when compared with other hospital services. Other factors, such as the purported unwillingness of psychiatrists to serve inpatients or provide on-call services in emergency departments and the impact of psychiatric cases on emergency department overcrowding, may also play a role in decisions to close, maintain, or open IPFs (Salinsky and Loftis 2007). How psychiatric unit closures will affect access to care for Medicare beneficiaries remains to be seen.

TABLE 6–4 **Supply of inpatient psychiatric facility beds, 2008**

Type of IPF	Number of beds 2008	Percent change in beds 2004–2008
All	81,610	–0.6%
Urban	72,122	1.7
Rural	9,488	–14.7
Freestanding	45,982	11.0
Hospital-based units	35,628	–12.5
Nonprofit	27,063	–14.5
For profit	18,252	12.3
Government	36,295	6.1

Note: IPF (inpatient psychiatric facility),

Source: MedPAC analysis of Medicare cost report files from CMS.

Most Medicare patients treated in IPFs are assigned to one MS–DRG

Medicare patients in IPFs generally are assigned to 1 of 17 psychiatric MS–DRGs. In 2008, the most frequently occurring IPF diagnosis—accounting for 73 percent of IPF discharges—was psychoses (Table 6-5, p. 172). The next most common discharge, accounting for almost 8 percent of IPF cases, was degenerative nervous system disorders.[10]

That almost three-quarters of IPF patients are grouped into one diagnosis category, with an adjustment factor of 1.0, illustrates the limitations of diagnosis as a predictor of patient resource use and cost. Diagnosis alone does not differentiate among the majority of IPF patients in any meaningful way. In fact, the psychoses diagnosis group generally comprises two psychiatric conditions—schizophrenia and mood disorders (including bipolar disorder and major depression)—that from a clinical perspective are considered quite distinct and that may require different mixes of services and therefore generate different resource costs (see text box, pp. 174–175). Under the IPF PPS, almost three-quarters of patients can be differentiated from one another only by virtue of their age, length of stay, and the presence or absence of 17 secondary medical conditions that require treatment during the IPF stay. (As mentioned above, IPF PPS payments also vary depending on the type of facility in which treatment is provided, but these are facility, not patient, descriptors.) The Commission examined claims for IPF patients diagnosed with psychoses in 2008 and found that only 17 percent had any of these secondary medical conditions.[11] Overall, then, almost 60 percent of IPF patients can be differentiated from one another only by their age and length of stay.[12]

The coded diagnoses of Medicare patients treated in IPFs have changed somewhat since the IPF PPS was implemented (Table 6-6, p. 172). Among the top diagnoses, the Commission's analysis of IPF claims data shows disproportionate growth between 2004 and 2007 in the number of degenerative nervous system disorder cases, which climbed more than 9 percent per year, on average. Between 2007 and 2008, the number of these cases fell by 1 percent. Recent growth in the number of patients with degenerative nervous system disorders may reflect increased incidence of Alzheimer's disease and other dementias among the Medicare population. But it may also reflect a growing use of inpatient psychiatric facilities by patients with these conditions. Some patient advocates report that nursing facilities increasingly are transferring difficult dementia patients to IPFs for stabilization. The Commission's analysis found that admissions to IPFs from SNFs remained small in number but increased 25 percent between 2004 and 2008, even as total IPF admissions fell

TABLE 6–5

Distribution of MS–DRGs in IPFs, 2008

MS–DRG	Description	Share of total
885	Psychoses	72.8%
057	Degenerative nervous system disorders without MCC	7.6
884	Organic disturbances & mental retardation	5.7
897	Alcohol/drug abuse or dependency, no rehabilitation, without MCC	4.3
881	Depressive neurosis	3.3
882	Neurosis except depressive	1.1
895	Alcohol/drug abuse or dependency with rehabilitation, without MCC	0.9
056	Degenerative nervous system disorders with MCC	0.8
880	Acute adjustment reaction & psychosocial dysfunction	0.7
883	Disorders of personality & impulse control	0.5
886	Behavioral and developmental disorders	0.5
894	Alcohol/drug use—left AMA	0.2
896	Alcohol/drug abuse or dependency without rehabilitation, with MCC	0.2
876	OR procedure with principal diagnosis of mental illness	0.1
887	Other mental disorders	0.1
081	Nontraumatic stupor & coma without MCC	0.1
080	Nontraumatic stupor & coma with MCC	0.0
	Nonpsychiatric MS–DRGs	1.0
	Total	100.0

Note: MS–DRG (Medicare severity–diagnosis related group), IPF (inpatient psychiatric facility), MCC (major complication or comorbidity), AMA (against medical advice), OR (operating room).

Source: MedPAC analysis of MedPAR data from CMS.

TABLE 6–6

Most common types of cases in IPFs, 2008

Description	Number of cases	Percent change 2004–2008
Psychoses	322,415	–7.7%
Degenerative nervous system disorders	37,264	28.1
Organic disturbances & mental retardation	25,383	–36.2
Alcohol/drug abuse	24,888	–3.4
Depressive neurosis	14,796	–17.3
Top five case types	424,746	–8.1
All IPF cases	442,759	–8.4

Note: IPF (inpatient psychiatric facility), MS–DRG (Medicare severity–diagnosis related group). Degenerative nervous system disorders include MS–DRGs 56 and 57. Alcohol/drug abuse includes MS–DRGs 894, 895, 896, and 897.

Source: MedPAC analysis of MedPAR data from CMS.

9 percent. These transfers may be due to a lack of nursing facility staff to provide the close observation and other care needed by some patients with dementia. It should also be noted, however, that nursing facilities may have a financial incentive to discharge patients to IPFs, because upon return to the nursing facility, patients may qualify for Medicare payment under the SNF PPS, if the IPF stay is at least 3 days.[13] In response to increased demand, many IPFs now have specialty geropsychiatric units, which provide care specifically for elderly patients with mental illnesses. These patients frequently have deficits in activities of daily living (ADLs) and often require a more intensive level of care than other psychiatric inpatients (Cromwell et al. 2004).

In 2008, 18 percent of IPF patients were admitted with one or more of the comorbidities recognized by the IPF payment system as increasing the cost of care. Younger IPF patients and, among the most common diagnoses, those with substance abuse disorders and depressive

TABLE 6–7 **Most frequent IPF discharges, by MS–DRG and type of IPF, 2008**

MS–DRG	Description	Type of IPF: Freestanding	Type of IPF: Hospital-based unit
885	Psychoses	75.6%	72.4%
897	Alcohol/drug abuse or dependence without rehabilitation without MCC	8.2	2.7
57	Degenerative nervous system disorders without MCC	3.5	8.8
884	Organic disturbances & mental retardation	3.4	6.5
881	Depressive neuroses	3.2	3.4
	Total number of discharges	128,888	305,041

Note: IPF (inpatient psychiatric facility); MS–DRG (Medicare severity–diagnosis related group), MCC (major complication or comorbidity).

Source: MedPAC analysis of MedPAR data from CMS.

neuroses were more likely to have these comorbidities, which include eating disorders, renal failure, and diabetes. Among the 17 percent of psychoses patients with comorbidities, the most common was infectious disease (7 percent of psychoses patients), followed by developmental disabilities (3 percent of psychoses patients).[14] Overall, about 2 percent of IPF patients received at least one ECT treatment during their stay. This percentage has remained the same since 2002. Most patients (94 percent) receiving ECT were diagnosed with psychoses.[15]

Other patient characteristics may increase the cost of caring for an inpatient psychiatric patient but are not recognized by the IPF payment system (RTI International 2005). These characteristics include the presence of deficits in ADL and dangerous behavior (e.g., suicidal and assaultive tendencies, likelihood of escaping). These characteristics are not submitted on provider claims for Medicare reimbursement and so cannot be used as a basis for payment under the current claims-based IPF PPS.

In 2008, the average length of stay in an IPF was 13.1 days. Among the most common IPF diagnoses, patients with degenerative nervous system disorders without complications and those with organic disturbances and mental retardation typically had somewhat longer stays (13.6 days and 14.1 days, respectively). Overall, in 2008, patients diagnosed with depressive neuroses had shorter stays, averaging 7.8 days. Patients with substance abuse disorders also tended to have shorter stays. Regardless of diagnosis, patients who receive ECT had average stays almost twice as long as patients who did not receive that treatment.

Differences in MS–DRGs across IPF providers

In 2008, the distribution of patient diagnoses differed somewhat across distinct-part psychiatric units and freestanding IPFs (Table 6-7). Psychiatric units were less likely than freestanding IPFs to care for patients with substance-abuse diagnoses. These diagnoses accounted for less than 3 percent of units' cases, compared with 8 percent in freestanding IPFs.[16] At the same time, psychiatric units were more likely to care for patients with degenerative nervous system disorders such as Alzheimer's disease. Such patients made up 9 percent of psychiatric units' patients, compared with 3.5 percent of freestanding IPFs' patients. However, in both types of facilities, about three-quarters of patients were admitted with psychoses.[17]

There was relatively little difference across provider types in the share of patients admitted with comorbidities. Nineteen percent of patients admitted to psychiatric units had one or more comorbidities, compared with 16 percent in freestanding IPFs.

The average length of stay was longer in freestanding IPFs than in psychiatric units, largely due to long lengths of stay in government-owned freestanding IPFs. When we excluded government-owned IPFs, we found that in 2008 the average stay in nongovernment freestanding IPFs was 12.4 days, compared with 11.2 days in nongovernment psychiatric units and 12.2 days in government-owned psychiatric units. Length of stay in government-owned freestanding IPFs averaged 28.7 days.

Common conditions in IPFs: Mood disorders and schizophrenia

In 1999, the Surgeon General released a comprehensive report on mental health and mental illness that synthesized available research on common mental disorders, describing diagnostic criteria and identifying treatments that have proven to be effective (Department of Health and Human Services 1999). Drawing from this report, we summarize below the two most common conditions treated in inpatient psychiatric facilities (IPFs)—mood disorders and schizophrenia.

Mood disorders

RTI estimated that approximately 40 percent of the Medicare beneficiaries receiving IPF treatment in 2002 were admitted for treatment of a mood disorder such as major depression or bipolar disorder (RTI International 2005). The causes of mood disorders are not fully known. They may be triggered in susceptible individuals by stressful life events and enduring stressful social conditions such as poverty. Mood disorders often coexist with other mental and somatic disorders such as anxiety, substance abuse, hypertension, and arthritis. Hospitalization for acute treatment of depression is necessary for about 5 percent to 10 percent of major depressive episodes and for up to 50 percent of the manic episodes of bipolar disorder. The principal reasons for hospitalization are overwhelming severity of symptoms, functional incapacity, and suicidal or other life-threatening behavior. Because treatment response to medication may take up to 8 weeks, very few severely depressed or manic patients are in remission upon discharge from the IPF. As a result, aftercare services are generally necessary.

Mood disorders can be treated with a host of effective pharmacologic and psychosocial treatments. Severe depression seems to resolve more quickly with pharmacotherapy than without it and may be helped further by a combination of pharmacotherapy and psychotherapy. Overall, the effectiveness of active treatment for major depression typically ranges from 20 percent to 40 percent, after accounting for a placebo response rate of 30 percent. Success rates for treatment of active-phase mania with lithium may range from 40 percent to 50 percent, but discontinuation of therapy is common due to side effects and may accelerate the risk of relapse. A number of other medications initially developed for other indications, such as anticonvulsants and benzodiazepines, are increasingly used for manic patients.

(continued next page)

Source of admission and discharge destination

Overall, in 2008, 44 percent of Medicare beneficiaries admitted to IPFs were referred by a physician or clinic, but the share differed widely by provider type. Freestanding IPFs admitted 59 percent of their Medicare patients on referral from a physician or clinic, while only 37 percent of patients admitted to psychiatric units come from this source (Table 6-8, p. 176). Almost half (46 percent) of the beneficiaries admitted to units were admitted through the emergency department.[18]

Generally, the distribution of case types admitted did not vary by source of admission. The exception, although small at 7 percent, was among beneficiaries admitted from SNFs. They were far more likely than those admitted from other sources to be diagnosed with degenerative nervous system disorders and organic disturbances and mental retardation and far less likely to be diagnosed with psychoses.

In 2008, beneficiaries admitted from nursing homes had longer lengths of stay (14.6 days compared with 13.1 for all IPF patients). The longest lengths of stay were seen in patients admitted through the legal system; they averaged 23.7 days in 2008.[19]

Almost three-quarters (70 percent) of IPFs' Medicare patients were discharged to their homes, but differences in the share of these discharges were seen across provider types. Freestanding IPFs discharged 81 percent of their patients to the home, compared with 66 percent of the patients cared for in psychiatric units. Units were three times as likely as freestanding IPFs to discharge patients

Common conditions in IPFs: Mood disorders and schizophrenia

Schizophrenia

RTI estimated that about a third of Medicare beneficiaries treated in IPFs in 2002 were admitted for treatment of schizophrenia (RTI International 2005). Schizophrenia is characterized by profound disruption in cognition and emotion, affecting language, thought, perception, affect, and sense of self. Symptoms frequently include hallucinations and delusions. The course of illness in schizophrenia is quite variable, with most people having periods of exacerbation and remission. The course of illness may be influenced by timeliness of treatment, patient motivation, and presence or absence of family support. Most patients do not return to their prior state of mental function, but longitudinal studies have shown that a substantial number of people with schizophrenia do significantly improve over time, and some recover completely. Patients with schizophrenia also have high rates of comorbid medical illness, including hypertension, diabetes, sexually transmitted diseases, and substance abuse. Although the causes of schizophrenia are not fully known, research points to genetic factors and adverse environmental influences during early brain development.

Treatment of schizophrenia generally involves antipsychotic medication, which has been shown to be highly effective both in treating acute symptoms and in long-term maintenance and prevention of relapse. Older antipsychotics often cause a host of pervasive, uncomfortable, and sometimes disabling and dangerous side effects. Newer "atypical" antipsychotics have been introduced. These atypical drugs seemed promising at first, but recent research has questioned the assumption that they are more effective than older antipsychotics (Jones et al. 2006, Rosenheck et al. 2003, Wang et al. 2009). Most antipsychotics, whether conventional or atypical, appear to have high rates of discontinuation due to intolerable side effects (Lieberman et al. 2005).

Treatment of schizophrenia usually includes psychosocial interventions, family interventions, and vocational and psychosocial rehabilitation. Patients with schizophrenia often also need assistance with housing, transportation, and general medical care. Ideally, the treatment of patients who are high service users is coordinated by an interdisciplinary team to ensure continuity of services. Studies have found, however, that fewer than 50 percent of patients actually receive recommended treatment. ■

to SNFs and twice as likely to discharge patients to intermediate care facilities (Table 6-9, p. 176). This disparity is not unexpected given that a greater share of psychiatric units' patients are admitted for degenerative nervous system disorders and organic disturbances and mental retardation.

Beneficiaries' discharge destinations also varied depending on their IPF diagnosis. More than 77 percent of beneficiaries with psychoses, substance abuse, and depressive neuroses were discharged home, compared with fewer than 30 percent of beneficiaries with degenerative nervous system disorders and organic disturbances and mental retardation (Table 6-10, p. 177). These beneficiaries were much more likely to be discharged to SNFs or intermediate care facilities.

Source of admission and discharge destination varied somewhat by race. Medicare beneficiaries who were transferred to IPFs from SNFs and acute care hospitals were more likely to be white, while those admitted through the emergency room were more likely to be African American. Referrals from the legal system were more likely to be minorities. Upon discharge, African American beneficiaries were more likely to be sent home, while whites were more likely to be discharged to an acute care hospital, a SNF, a home health agency, or an intermediate care facility. These patterns appeared to be strongly influenced by patient age and diagnosis. Minority beneficiaries admitted to IPFs were much more likely to be under age 45 and much less likely to be over age 80. And, as discussed below, minority beneficiaries were more likely than whites to be admitted for psychoses and less likely to be admitted for degenerative nervous disorders.

TABLE 6–8

Share of IPF cases, by source of admission and type of IPF, 2008

	Type of IPF	
Source of admission	Freestanding	Hospital-based unit
Physician/clinic referral	58.6%	37.1%
Transfer from acute care hospital	11.1	6.7
Transfer from skilled nursing facility	1.6	2.1
Transfer other/unknown	11.4	6.4
Emergency room	11.4	46.2
Court/law enforcement	5.8	1.6

Note: IPF (inpatient psychiatric facility). IPF cases in critical access hospitals were excluded from this analysis. Some IPF cases admitted through the emergency room may have been directly discharged from another facility, such as a skilled nursing facility. Numbers may not sum to 100 percent due to rounding.

Source: MedPAC analysis of MedPAR data from CMS.

Beneficiaries using IPF services tend to be younger and poorer than the typical beneficiary

Unlike in other types of facilities, most Medicare beneficiaries treated in IPFs qualify for Medicare because of a disability (Table 6-11). As a result, IPF patients tend to be younger and poorer than the typical beneficiary. In 2008, 65 percent of IPF discharges were for beneficiaries under age 65; almost 29 percent were for beneficiaries under age 45. As the baby boomers have aged, the number of IPF beneficiaries between age 45 and 64 has grown, rising 18 percent between 2002 and 2009, compared with declines of 13 percent to 15 percent for other age groups (Figure 6-2, p. 178). Overall, 2.6 percent of disabled beneficiaries had at least one IPF stay in 2006, compared with only 0.4 percent of aged beneficiaries.

A majority of IPF users are dually eligible for Medicare and Medicaid. In 2008, 56 percent of Medicare beneficiaries with at least one IPF discharge were dually eligible for at least one month of the year (see text box, p. 181).[20]

In 2008, 28 percent of beneficiaries admitted to an IPF had more than one admission during that 12-month period.[21] 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 age 65 (70 percent compared with 52 percent), to be diagnosed with psychoses (78 percent compared with 66 percent), and to be admitted through the emergency department (40 percent compared with 33 percent).

The racial composition of the group of beneficiaries admitted to IPFs in a given year echoes that of Medicare's under-65 (disabled) population. In 2008, African American beneficiaries represented 17.4 percent of IPF patients. Seventy-seven percent of Medicare IPF patients were white, and 2.6 percent were of Hispanic origin (non-white, non-African American).

Diagnosis patterns differed by age and race. Younger beneficiaries tended to present with different diagnoses than older beneficiaries. Among the top IPF diagnoses in 2008, degenerative nervous system disorders and organic disturbances and mental retardation were much more common in older patients (Table 6-12, p. 179). Psychoses were far more common in younger patients. Fewer than 1 percent of IPF beneficiaries under age 65 were diagnosed with degenerative nervous system disorders. By comparison, 35 percent of IPF beneficiaries over age 80 received that diagnosis. A diagnosis of psychoses

TABLE 6–9

Share of IPF cases, by discharge destination and type of IPF, 2008

	Type of IPF	
Discharge destination	Freestanding	Hospital-based unit
Home	81.2%	65.8%
Transfer to acute care hospital	3.4	4.5
Transfer to skilled nursing facility	4.2	13.0
Transfer to intermediate care facility	2.8	5.7
Discharged to home health agency care	0.6	3.7
Left against medical advice	1.5	1.3
Died	0.1	0.1
Transfer to long-term care facility	0.1	0.6
Transfer to nursing facility (Medicaid)	0.6	0.6
Transfer other	5.5	4.7

Note: IPF (inpatient psychiatric facility).

Source: MedPAC analysis of MedPAR data from CMS.

TABLE 6–10 **Discharge destination by IPF diagnosis, selected MS–DRGs, 2008**

Discharge destination	Psychoses	Degenerative nervous system disorders	Organic disturbances and mental retardation	Substance abuse	Depressive neurosis
Home	77.0%	27.4%	29.4%	84.6%	77.5%
Transfer to acute care hospital	3.4	7.9	8.9	2.9	4.5
Transfer to skilled nursing facility	6.4	42.7	34.9	1.8	6.5
Transfer to intermediate care facility	3.6	16.6	11.9	1.0	2.3
Discharged to home health agency care	2.4	5.8	6.3	0.8	2.7
Left against medical advice	1.3	0.3	0.5	4.1	2.3
Died	0.1	0.5	0.5	0.0	0.1
Transfer other	5.8	9.1	7.7	4.8	4.1

Note: IPF (inpatient psychiatric facility), MS–DRGs (Medicare severity–diagnosis related group).

Source: MedPAC analysis of MedPAR data from CMS.

was also strongly age related. Eighty-five percent of IPF beneficiaries under age 45 were diagnosed with psychoses, compared with 35 percent of IPF beneficiaries age 80 or older.

Minorities were more likely than whites to be admitted for psychoses and less likely to be admitted for degenerative nervous disorders. Among Hispanic and African American beneficiaries who were admitted to IPFs in 2008, 86 percent and 81 percent, respectively, were diagnosed with psychoses, compared with 70 percent of white Medicare IPF patients. Five percent of African American and 3 percent of Hispanic IPF beneficiaries were diagnosed with degenerative nervous system disorders, compared with 10 percent of whites.

IPF users as a group consume more health care services and are more costly than other beneficiaries (Table 6-13, p. 179). In 2007, Medicare spending for all hospital inpatient services was more than five times higher for IPF users than for all FFS beneficiaries, due in part to the IPF stay. But Medicare spending for SNF services was also five times higher for IPF users than for all FFS beneficiaries. At the same time, Medicare spending for hospital outpatient, physician and supplier, and Part D-covered drugs was more than twice as high for beneficiaries who had IPF stays than for all FFS beneficiaries. Closer analysis of Part D claims from 2007 found that IPF users filled an average of 64 prescriptions per year at a cost of about $6,100, compared with 44 prescriptions at almost $2,400 for all Part D enrollees and 51 prescriptions at almost $3,300 for Part D enrollees who receive low-income subsidies (Table 6-14, p. 180). In addition, the drugs used by beneficiaries with IPF stays tended to be more costly than those used by other beneficiaries. Average spending per prescription was $92 for IPF users, compared with $54 for all Part D enrollees and $65 for Part D low-income subsidy enrollees.

TABLE 6–11 **IPF discharges by beneficiary characteristics, 2008**

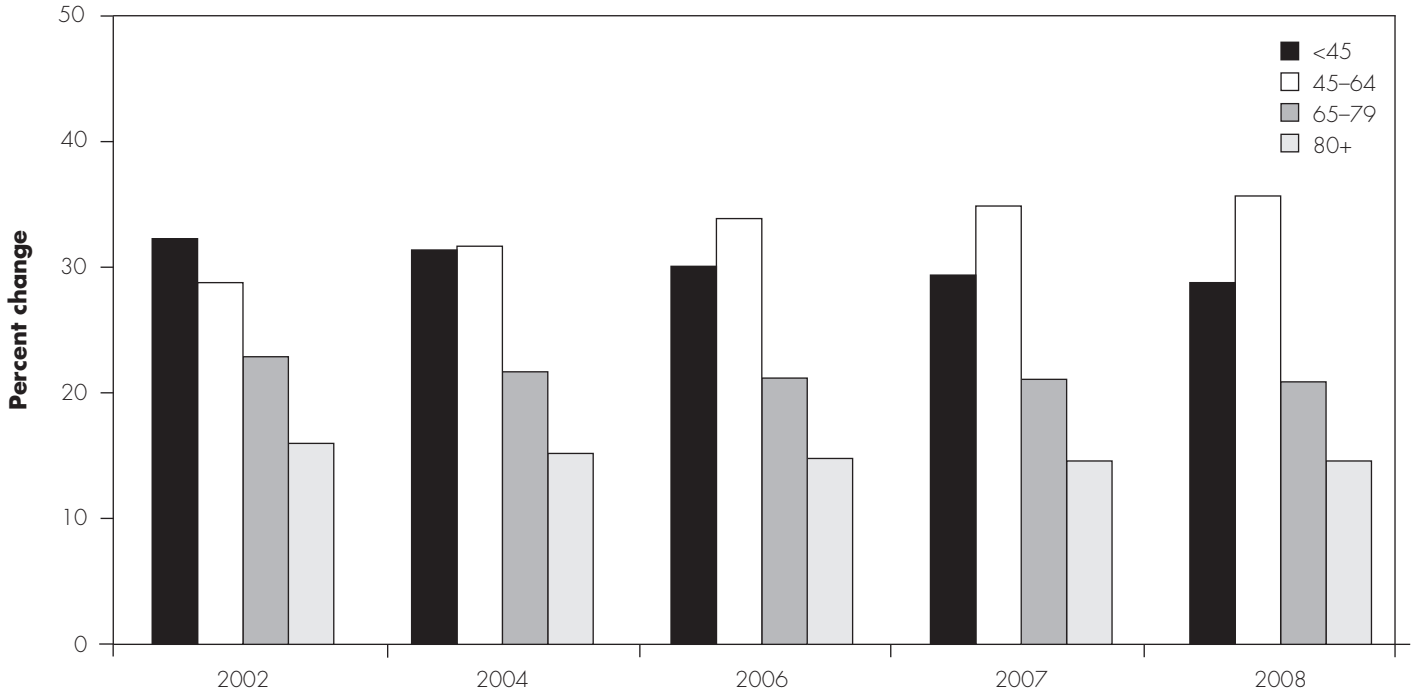
Characteristic	Share of total
Current eligibility status*	
Aged	35.1%
Disabled	64.8
ESRD only	0.1
Age	
<45	28.8
45–64	35.6
65–79	20.9
80+	14.6
Race	
White	77.0
African American	17.4
Hispanic	2.6
Other	3.0

Note: IPF (inpatient psychiatric facility), ESRD (end-stage renal disease).
*Some aged beneficiaries are also disabled.

Source: MedPAC analysis of MedPAR data from CMS.

FIGURE 6–2

The share of IPF users age 45–64 has grown under PPS



Note: IPF (inpatient psychiatric facility), PPS (prospective payment system).

Source: MedPAC analysis of MedPAR data from CMS.

Assessing the adequacy of Medicare's payments to IPFs

The Commission's assessment of payment adequacy generally includes analysis of Medicare payments and providers' costs to determine the extent to which providers are able to continue furnishing high-quality inpatient psychiatric care to beneficiaries who need it. In the future, the Commission intends to analyze IPFs' claims and Medicare cost reports to calculate margins for the industry as a whole and for IPFs by type of facility, ownership, and location.

Since a large share of IPFs are located in acute care hospitals as distinct-part psychiatric units, an important part of this analysis will be an assessment of whether any observed cost differences between freestanding IPFs and psychiatric units are due to methods hospitals use to allocate hospital overhead to the unit or whether they reflect real differences in the mix of services or patients.

The Commission's assessment of payment adequacy also considers the accuracy of payments under the IPF PPS. Medicare's payments for IPF services need to be well calibrated to patient costliness to avoid favoring certain types of providers and creating incentives for providers to admit certain types of patients. However, there is reason to believe that Medicare's payments do not track closely to patient costs because the claims data used to develop the IPF PPS case-mix weights do not describe differences in routine nursing and staff time across patients. The costs associated with tasks and services such as patient assessment, counseling, drug management, nursing care, and behavioral monitoring represent more than 80 percent of the direct costs of furnishing inpatient psychiatric care (Garrett et al. 2009, RTI International 2005, Thompson 2002). But without the necessary data, CMS based its estimates of routine costs in the IPF PPS on an average daily cost across all patients in a facility, thereby understating, or compressing, patient-specific cost differences for some patients and overstating them for others. Medicare's payments for patients requiring high levels of nursing and staff time may be too low, while payments for patients requiring relatively little nursing and staff time may be too high. This situation could disadvantage facilities that treat many patients with the

TABLE 6–12 **Patient characteristics by IPF diagnosis, selected MS–DRGs, 2008**

Characteristic	Psychoses	Degenerative nervous system disorders	Organic disturbances and mental retardation	Substance abuse	Depressive neurosis
Age					
<45	85	0%	1%	6%	3%
45–64	84	1	1	8	4
65–79	63	14	10	5	3
80+	35	35	21	2	3
Race					
White	70	10	6	6	4
African American	81	5	4	5	3
Hispanic	86	3	2	4	2
Other	80	5	4	5	3

Note: IPF (inpatient psychiatric facility), MS–DRG (Medicare severity–diagnosis related group). Sums may not total to 100 due to rounding.

Source: MedPAC analysis of MedPAR data from CMS.

need for high levels of nursing and staff time and could create access problems for patients who are identified as having high nursing and staff time needs before admission.

A related issue concerns variation within MS–DRGs. As we have shown, almost three-quarters of patients are assigned to MS–DRG 885 (psychoses). In its analysis of IPF patients and the costs of treating them in different types of IPFs, RTI found that patients assigned to the psychoses group generally had schizophrenia or a mood disorder, such as major depression or bipolar disorder. However, the costs associated with treating these disorders may differ significantly. If so, providers may have an incentive to avoid admitting psychoses patients with certain types of mental illnesses or those who are perceived to have a greater need for nursing and staff time. It is important to note that, depending on their site of service and mission, as well as on available mental health care alternatives in the market area, IPF providers may differ in their ability to act on this payment incentive.

Outlier payments may reduce but not eliminate the incentive to avoid admitting certain types of patients. Payment relief is not available in cases where costs systematically exceed payment but not by enough for the case to qualify for outlier patients (Garrett et al. 2009). In addition, outlier payments do not address the problem of systematic overpayments for low-cost cases.

Facility characteristics, day of stay, age, degree of social support, need for assistance with ADLs, illness severity, legal status and referral source, and dangerous behavior (suicidal and assaultive tendencies) are stronger predictors of costs in IPFs than diagnosis. Some of these variables—for example, the presence of an emergency department

TABLE 6–13 **Beneficiaries who use IPF services have higher spending for other health services, 2007**

	Inpatient hospital	Outpatient hospital	Physician and suppliers	Skilled nursing facility	Part D drugs
All IPF users	$16,935	$2,308	$4,350	$3,003	$6,103
All FFS beneficiaries	$3,065	$988	$2,023	$581	$2,383

Note: IPF (inpatient psychiatric facility), FFS (fee-for-service).

Source: MedPAC analysis of Medicare Part D PDE data, denominator file, and MedPAR claims data from CMS.

TABLE 6–14 **Part D spending and use for beneficiaries with an IPF stay, 2007**

	Part D enrollees		
	IPF users	All	LIS
Average spending per prescription	$92	$54	$65
Per beneficiary per year			
Total spending	$6,103	$2,383	$3,288
Number of prescriptions*	64	44	51

Note: IPF (inpatient psychiatric facility), LIS (low-income subsidy). Spending and use statistics are for beneficiaries who were enrolled in Part D at any time during 2007 and were not adjusted to account for differences in the number of part-year enrollees.
*Number of prescriptions standardized to a 30-day supply.

Source: MedPAC analysis of Medicare Part D PDE data, denominator file, and MedPAR claims data from CMS.

and differential payments depending on the day of stay and age—were included in the IPF PPS. Including other elements that significantly affect routine nursing and staff time likely would improve the accuracy of Medicare's payments to IPFs. But doing so would require IPFs to submit additional information about their patients. IPF claims currently allow IPFs to specify so-called "social" codes describing patient characteristics that affect care delivery and management, such as problems with sight or hearing. CMS reported that too few claims included these codes in 2002, preventing analysis of the association of these codes with higher per diem costs. The agency has encouraged IPFs to code all relevant diagnoses that affect resources associated with their patient population for future analysis. The Commission's analysis of claims data found that the number of claims with social codes more than doubled between 2002 and 2008 but remains very small—just 2.1 percent of discharges in 2008.

When the Congress mandated implementation of a per diem PPS for IPFs in 1999, CMS began to pursue the development of an assessment instrument that would yield a richer source of data. However, time limitations and industry opposition led CMS to move forward with the PPS without an assessment tool (Centers for Medicare & Medicaid Services 2004, Thompson 2002). The lack of this tool in IPFs undermines payment accuracy. Improving the payment system may require collecting additional information about patient characteristics.

Measuring the quality of care in IPFs

The development of quality measures for IPFs has lagged behind that for medical care. Quality of mental health care can be difficult to measure because there are few meaningful, frequent, and easily collected clinical outcome measures—such as mortality—that have been assessed for validity and reliability. Unlike in medical care, objective laboratory tests generally cannot be used to measure severity of mental illness or the effectiveness of treatment (Hermann et al. 2004, Hermann et al. 2007).

Developing outcomes measures for IPFs is complicated by the length of treatment required during the acute phase of mental illnesses. For example, successful treatment of an acute episode of major depression typically requires six to eight weeks, but patients typically require inpatient care for only a fraction of that period (Department of Health and Human Services 1999). Most beneficiaries discharged from IPFs will need ongoing treatment after their inpatient stay. Further, the nature of mental illness makes it particularly difficult to determine whether providers have furnished treatment of the appropriate duration and intensity. Many mentally ill patients are nonadherent. Some do not perceive a need for care or, if they do, have difficulty navigating the health care system and maintaining a treatment regimen. These difficulties may be exacerbated in depressed patients, who may feel worthless, have excessive guilt, and lack motivation—feelings that are common to the disease (Department of Health and Human Services 1999). Patients with severe mental illness have no-show rates for scheduled appointments as high as 50 percent. A high rate of comorbid illness and substance abuse in seriously mentally ill patients may inhibit compliance (Hermann and Palmer 2002).[22] At the same time, some people with mental illnesses opt not to pursue or continue treatment because of intolerable or undesirable side effects of medication. The stigma associated with psychiatric diagnosis and treatment also prevents many people with mental health disorders from pursuing care.[23] Unlike in the acute care hospital, a readmission to IPF care within a short period of time after the initial discharge may not indicate anything meaningful about the quality and extent of care provided during the initial stay.

Nevertheless, established protocols exist for the treatment of acute episodes of several mental illnesses, including major depression, bipolar disorder, and schizophrenia (Department of Health and Human Services 1999). Clinical process measures can therefore be used in IPFs to

Dual-eligible inpatient psychiatric facility users, 2008

- Represented 56 percent of all Medicare inpatient psychiatric facility (IPF) users.
- Were somewhat more likely to have more than one IPF stay during the year (1.6 stays per year compared with 1.3 stays per year for non-dual-eligible users).
- In aggregate, were much younger than non-dual-eligible IPF users. Seventy-nine percent of dual-eligible IPF users are under age 65, compared with 43 percent of non-dual-eligible users. Almost 40 percent of dual-eligible IPF users are under 45, compared with 13 percent of non-dual-eligible users.
- Were more likely to be non-white. Whites represented 85 percent of non-dual-eligible IPF users compared with 72 percent of dual-eligible users.
- Were far more likely to be eligible for Medicare due to a disability (79 percent compared with 43 percent of non-dual-eligible users).
- Were more likely to be diagnosed with psychoses (79 percent compared with 64 percent) and less likely to be diagnosed with degenerative nervous system disorders (5 percent vs. 14 percent) and organic disturbances and mental retardation (4 percent compared with 9 percent).
- Were generally more likely to be admitted with comorbidities (such as developmental disabilities and infectious disease) that increased payment (5 percent compared with 1 percent).[24]
- Were somewhat more likely to be admitted through the emergency department (37 percent compared with 33 percent)
- Were somewhat more likely to be discharged to home (73 percent compared with 66 percent)
- Were somewhat more likely to be admitted to freestanding IPFs (31 percent compared with 27 percent) ■

evaluate providers' assessment, treatment, coordination, and safety protocols. For example, IPFs might be required to report:

- admission screening for violence risk, substance use, and psychological trauma history;
- proper handoff procedures between emergency room and IPF unit;
- prescribed medications;
- medication errors;
- adverse reactions to medications;
- daily assessment of suicide risk;
- hours of physical restraint use;
- hours of seclusion;
- patients discharged on multiple antipsychotic medications;
- patients discharged on multiple antipsychotic medications with appropriate justification;
- postdischarge continuing care plan; and
- postdischarge continuing care plan transmitted to next level of care provider upon discharge.

The Joint Commission uses some of these IPF process measures in its Hospital-Based Inpatient Psychiatric Services (HBIPS) Core Measure Initiative. Freestanding IPFs can satisfy the Joint Commission's accreditation requirements for performance measurement by adopting the HBIPS measures.[25] The Joint Commission encourages acute care hospitals with distinct-part psychiatric units to use them as well.

The Patient Protection and Affordable Care Act of 2010 mandates the development of a quality reporting program for IPFs by 2014. A similar program is already being used for acute care hospitals, which are required to participate in Medicare's Reporting Hospital Quality Data for

Medicare's coverage of outpatient mental health care services

Most Medicare beneficiaries with mental health problems never use inpatient psychiatric services. Mental health professionals generally agree that patients are better served by quality outpatient care that prevents, to the extent possible, acute mental health crises requiring hospitalization. Beneficiaries may receive outpatient mental health services, including partial hospitalization services and psychotropic drugs. But the extent to which mentally ill Medicare beneficiaries have access to quality psychiatric care on an outpatient basis is unknown—and difficult to measure.

Outpatient mental health services

Medicare covers outpatient mental health services such as psychiatric evaluation, diagnostic testing, psychotherapy, and medication management furnished by physicians or certain other licensed mental health professionals. Until recently, Medicare required cost sharing of 50 percent for outpatient mental health therapy services. The Medicare Improvement for Patients and Providers Act of 2008 requires that cost sharing for Medicare beneficiaries using mental-health-related treatments be reduced to 20 percent by 2014 (the same level set for physician services).[26] This reduction in out-of-pocket spending requirements may allow more beneficiaries to seek mental health services.[27]

Partial hospitalization

Partial hospitalization refers to intensive psychiatric outpatient treatment designed for patients with serious mental health conditions requiring care that is not typically available in an ambulatory setting. Partial hospitalization may provide a "step-down" alternative for patients following an inpatient psychiatric facility (IPF) discharge or may be used as an alternative to inpatient care for patients who need more services than can be provided on a typical outpatient basis but who are not so ill that they need 24-hour care and supervision. Medicare covers partial hospitalization services connected with the treatment of mental illnesses under Part B. Partial hospitalization programs must be hospital based, hospital affiliated, or administered by a community mental health center (CMHC). Services may include diagnostic services, individual and group therapy, occupational therapy, family counseling, and drugs and biologicals furnished for therapeutic purposes that cannot be self-administered. A physician must certify that the

(continued next page)

Annual Payment Update program. Under this program, originally mandated by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, CMS pays a higher annual payment update rate to acute care hospitals that report designated quality measures. In addition to giving hospitals a financial incentive to report the quality of their services, the program provides CMS and Medicare beneficiaries with data to assess the quality of care in acute care hospitals.

Ultimately, improving the quality of care furnished to beneficiaries with serious mental illnesses requires looking beyond the IPF stay. Adequate and appropriate outpatient mental health care services can reduce severity of illness, improve patient productivity and quality of life, and limit the need for higher intensity, more costly services (see text box). In addition, because adults with severe mental illness have higher rates of chronic general medical conditions (including hypertension, HIV/AIDS, and diabetes), a higher frequency of multiple general medical conditions, and a higher rate of premature mortality, improving the quality of mental health care could have positive consequences for medical care and general health (Horvitz-Lennon et al. 2006). ■

Medicare's coverage of outpatient mental health care services

beneficiary would otherwise need inpatient treatment or has been recently discharged from inpatient care and needs partial hospitalization to avoid a relapse and that less intensive treatment options would be inadequate. Medicare pays for a specified bundle of services under a partial hospitalization prospective payment system.[28] The Commission's analysis of partial hospitalization claims from 2008 found that Medicare payments to CMHCs for partial hospitalization services totaled about $360 million. An additional $68 million was paid to hospital outpatient departments for these services.

Psychotropic drugs

Psychotropic drugs—those capable of affecting psychological function, including antidepressants, antipsychotics, and anti-anxiety agents—are the predominant form of treatment for many mental health and substance abuse disorders. Use of prescribed psychotropic drugs has grown rapidly. In recent years, total national spending on psychotropic drugs rose from $5.9 billion in 1996 to $14.7 billion in 2001 (Zuvekas 2005). This growth was driven both by more people using the drugs and by increases in spending per user. About 80 percent of the growth in psychotropic drug spending during the 1996–2001 period was driven by increased use of newer antidepressants (52 percent) and so-called atypical antipsychotics (28 percent).[29] For children and adults under age 65 with a mental health diagnosis, the rate of growth in prescription drug use slowed between 2001 and 2006 (Glied and Frank 2009). Among the elderly, however, prescriptions for psychotropic drugs continued to rise so that, by 2006, 15 percent of seniors reported having such a prescription—twice the share as in 1996 (Glied and Frank 2009). Preliminary analysis by the Commission has found that Medicare Part D spending on these drugs reached $12 billion in 2007.

Dramatic growth in the use of psychotropic drugs to treat mental illnesses could indicate improved access to care. But severely mentally ill patients using psychotropic drugs—especially those with coexisting medical or mental health conditions—often require close supervision. Treatment may require considerable trial and error before an effective medication or medication combination can be identified. Changes or disruptions in medications can be dangerous, resulting in rapid deterioration, impaired functioning, and increased use of mental health services, including inpatient hospital care (Loftis and Salinsky 2006). ■

Endnotes

1 The number of covered inpatient days in the first benefit period is reduced for individuals who are in a Medicare participating IPF on their first day of entitlement to Medicare Part A.

2 This restriction, which was intended to limit the federal government's role in paying for long-term custodial support of beneficiaries with mental illnesses, applies only to services furnished in a freestanding psychiatric hospital. The limitation does not apply to inpatient psychiatric services furnished in a distinct-part psychiatric unit of an acute care hospital, nor does it apply to psychiatric stays paid for under the acute care hospital prospective payment system (i.e., in scatter beds). It is not clear how much the 190-day limit restricts access to inpatient psychiatric care, as few beneficiaries reach the lifetime limit. To the extent that access problems do exist, they could be exacerbated by the ongoing closures of hospital-based distinct-part units.

3 By comparison, DRGs were found to account for 30 percent to 50 percent of the variation in length of stay for nonpsychiatric cases.

4 The Congress required that the IPF PPS be budget neutral. CMS expected that once the IPF PPS was implemented, IPFs might experience utilization patterns that differed significantly from those experienced under TEFRA. For example, since the IPF PPS is a per diem system, IPFs would have an incentive to keep patients in the facility longer to maximize their use of beds or their payments (although decreasing per diem base payments may reduce these incentives). In addition, the former TEFRA payment system did not depend on coding a principal diagnosis; under PPS, payment depends on properly coding the principal diagnosis and associated comorbidities. To offset expected payment increases due to longer stays and improved coding and documentation, CMS reduced the standardized federal per diem base rate by 2.66 percent.

5 A Commission analysis of Medicare claims data found that in 2008 about 1 percent of patients are assigned to a nonpsychiatric MS–DRG.

6 The comorbidity categories are: developmental disabilities, coagulation factor deficits, tracheotomy, eating and conduct disorders, infectious diseases, acute renal failure, chronic renal failure, need for oncology treatment, uncontrolled diabetes, severe protein malnutrition, drug- and/or alcohol-induced mental disorders, cardiac conditions, gangrene, chronic obstructive pulmonary disease, digestive and urinary artificial openings, severe musculoskeletal and connective tissue diseases, and poisoning.

7 CMS uses the prefloor, prereclassification hospital wage index to adjust the base per diem payment.

8 A small number of psychiatric units are located in critical access hospitals (CAHs), which are small hospitals primarily located in rural areas. Beginning in 2004, the number of psychiatric units in CAHs has grown dramatically, following a provision in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 that allowed CAHs to establish distinct-part psychiatric units of up to 10 beds. (Before this time, CAHs were prohibited from having distinct-part units.) In 2007, 70 CAHs (about 5 percent of all CAHs) had psychiatric units. These units may allow some rural beneficiaries to receive inpatient care closer to home and may help retain mental health professionals in rural areas, but little research exists regarding how well the services furnished in these units match rural communities' needs (Medicare Payment Advisory Commission 2005). Covered services provided to Medicare beneficiaries in CAH-affiliated psychiatric units are paid under the IPF PPS.

9 The "deinstitutionalization" movement of the 1960s and 1970s was partly in response to growing public concern about the inhumane treatment of long-term patients in government-owned psychiatric institutions and was aided by the emergence of new pharmacologic agents for the treatment of mental illnesses (Salinsky and Loftis 2007). But the driving force behind deinstitutionalization was states' efforts to shift the financial burden of care for the seriously mentally ill to the federal government (Sharfstein and Dickerson 2009).

10 Degenerative nervous system disorders include Alzheimer's disease, Huntington's disease, amyotrophic lateral sclerosis, and Parkinson's disease.

11 In 2008, the most frequently coded comorbidity secondary to psychoses diagnosis was infectious disease.

12 The use of ECT distinguishes a small number of patients diagnosed with psychoses. The Commission found that 2.8 percent of patients with psychoses had ECT in 2008.

13 The number of nursing facility patients with degenerative nervous system disorders who are discharged to hospice has also been growing in recent years.

14 Patients may have more than one comorbidity.

15 Most patients who receive ECT do so as part of treatment for major depression.

16 Some freestanding IPFs specialize in treating substance abuse.

17 The patient population cared for in psychiatric units in critical access hospitals differs markedly from that seen in other IPFs. Slightly fewer than half the patients in CAH IPFs are diagnosed with psychoses, while more than a quarter are diagnosed with degenerative nervous system disorders. CAHs also care for a disproportionately large share of patients with organic disturbances and mental retardation.

18 Some patients admitted through the emergency department may have been transferred from other providers, such as nursing facilities, intermediate care facilities, and home health agencies.

19 Patients admitted through the legal system are those admitted on the direction of a court of law or on request of a law enforcement agency's representative.

20 We found that 76 percent of the IPF claims for dual-eligible beneficiaries were for patients who had 12 months of dual eligibility.

21 This proportion includes only those beneficiaries who had more than one admission to an IPF in 2008 and does not include patients who had psychiatric admissions to both an IPF and a scatter bed.

22 Compared with people without mental disorders, adults with severe mental illness have higher rates of chronic general medical conditions, including hypertension, HIV/AIDS, and diabetes; a higher frequency of multiple general medical conditions; and a higher rate of premature mortality resulting from these conditions (Horvitz-Lennon et al. 2006).

23 The extent to which such stigma is perceived may vary across ethnic, racial, and cultural groups. Ethnicity, race, culture, and language can also play a role in patients' ability to access care. These factors may affect behavior and description of symptoms as well as reporting of symptoms and the interpretation of those symptoms by others. These factors, in turn, can affect diagnosis and treatment decisions. Differences in ethnicity, race, and culture often frustrate attempts to measure racial and ethnic disparities in mental health care. For example, several recent studies have found that African Americans and other minorities reported overall lower rates of lifetime mental disorders than whites (Breslau et al. 2006, Heeringa et al. 2004, McGuire and Miranda 2008). At the same time, African Americans appear to have higher rates of schizophrenia, while American Indians are at heightened risk for posttraumatic stress disorder and alcohol dependence (Beals et al. 2005, Kendler et al. 1996, Kessler et al. 2005)). And some researchers have found that African Americans who do have mental health disorders tend to have more persistent illness, compared with their white counterparts (Breslau et al. 2006, Williams et al. 2007). It is not clear if these findings reveal differences across racial and ethnic groups in the type or quality of treatments furnished in the reporting and interpretation of symptoms, the ability to access care, the willingness to seek care, real incidence of disease, or some combination of these factors.

24 Non-dual-eligible beneficiaries who were admitted to IPFs in 2008 were about 50 percent more likely to have chronic renal failure than were their dual-eligible counterparts.

25 If the National Quality Forum endorses the measures, HBIPS will become mandatory for freestanding IPFs. Acute care hospitals will not be required to use HBIPS in their IPF units.

26 The Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008, which requires that group health plans must treat mental health and substance abuse benefits (if offered) the same as standard medical and surgical coverage for purposes of copayments, benefit limits, and prior authorization and utilization review, does not apply to the Medicare program.

27 However, in addition to psychotherapy and medication, people with severe mental illnesses often require psychosocial and supportive services such as employment and housing support. These services can be difficult to obtain because they are often not covered by insurance and because there is limited availability of evidence-based psychosocial programs.

28 Payments for partial hospitalization services skyrocketed almost 500 percent between 1993 and 1997, climbing from $60 million to $349 million. In an analysis of payments for partial hospitalization services made to community mental health centers in five states, the Office of Inspector General found that 91 percent of payments in fiscal year 1997 had been made for unallowable or highly questionable claims (Office of Inspector General 1998). In response to these findings, CMS intensified scrutiny and decertified many providers nationwide (Loftis and Salinsky 2006). Implementation of prospective payment for partial hospitalization in 2000 has helped to control spending growth.

29 Atypical antipsychotics include olanzapine and aripiprazole, which are used to treat mental disorders such as schizophrenia. Beginning in the 1990s, these drugs have been introduced as replacements for drugs like clozapine, which can have undesirable side effects, including involuntary muscle movements, muscle spasms, weight gain, and Parkinsonian-like symptoms such as muscular rigidity and resting tremor. However, recent research has questioned the assumption that atypical antipsychotics are more effective or have fewer side effects than conventional antipsychotics (Jones et al. 2006, Lieberman et al. 2005, Rosenheck et al. 2003, Wang et al. 2009).

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