

CHAPTER

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**Inpatient rehabilitation  
facility services**

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**R E C O M M E N D A T I O N**

- 9** For fiscal year 2023, the Congress should reduce the 2022 Medicare base payment rate for inpatient rehabilitation facilities by 5 percent.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

# Inpatient rehabilitation facility services

## Chapter summary

Inpatient rehabilitation facilities (IRFs) are hospitals and hospital units that provide intensive rehabilitation services to patients after illness, injury, or surgery. Rehabilitation programs are supervised by rehabilitation physicians and include services such as physical and occupational therapy, rehabilitation nursing, speech–language pathology, and prosthetic and orthotic services. In 2020, Medicare spent \$8.0 billion on IRF care provided to fee-for-service (FFS) beneficiaries in about 1,160 IRFs nationwide. About 335,000 beneficiaries had 379,000 IRF stays. On average, the FFS Medicare program accounted for about 54 percent of IRF discharges.

In this chapter, we make a recommendation on a payment rate update for 2023. Because of standard data lags, the most recent complete data we have are from 2020 for most payment adequacy indicators. We have considered the effects of the coronavirus public health emergency (PHE) and associated relief policies on our indicators and whether those effects are likely to be temporary or permanent. To the extent that the effects of the PHE are temporary changes—even across multiple years—or vary significantly across individual IRFs, they are best addressed through targeted temporary funding policies rather than a permanent change to all IRFs’ payment rates in 2023 and future years. Based on information

## In this chapter

- Are Medicare payments adequate in 2022?
- How should Medicare payments change in 2023?

available at the time of publication, we do not anticipate any long-term effects other than wage increases, which will be accounted for under the current-law annual updates to the IRF market basket. Instead, to the extent that the PHE continues, any needed additional financial support should be targeted to affected IRFs that are necessary for access.

### **Assessment of payment adequacy**

In 2020, some IRF payment adequacy indicators improved while others declined; however, indicators varied substantially across IRFs and reflect temporary changes during the PHE rather than changes in the overall adequacy of Medicare payments to IRFs. In general, our indicators of Medicare payment adequacy for IRFs are positive.

**Beneficiaries' access to care**—Despite the impact of the PHE on the daily operations of IRFs and other health care providers, our analysis of IRF supply and volume of services provided and IRFs' marginal profit under Medicare's IRF prospective payment system suggest that access remains adequate.

- **Capacity and supply of providers**—After declining for several years, the number of IRFs increased from 1,152 IRFs in 2019 to 1,159 IRFs in 2020. Over time, the number of hospital-based and nonprofit IRFs has fallen, while the number of freestanding and for-profit IRFs has increased. In 2020, the average IRF occupancy rate remained at 67 percent, indicating that capacity is more than adequate to meet demand for IRF services.
- **Volume of services**—In 2020, the number of Medicare cases per 10,000 FFS beneficiaries fell by 5.0 percent, but this decline likely reflects the decrease in elective acute care hospital services requiring subsequent IRF care, not the adequacy of Medicare payments.
- **Marginal profit**—The marginal profit, an indicator of whether IRFs with excess capacity have an incentive to treat more Medicare beneficiaries, was 19.0 percent for hospital-based IRFs and 38 percent for freestanding IRFs—a very positive indicator of patient access.

**Quality of care**—Quality of care is difficult to assess for 2020. We present average risk-adjusted rates of successful discharge to the community and all-condition hospitalizations during the IRF stay, but we do not draw conclusions about why quality has improved, worsened, or stayed the same.

**Providers' access to capital**—IRF providers have exhibited good access to capital throughout the PHE. Despite variation among provider types, in general, the parent institutions of hospital-based IRFs continued to have strong access

to capital. The major freestanding IRF chain, accounting for about 31 percent of Medicare IRF discharges in 2020, continued expanding during the PHE and returned all Provider Relief Fund revenue, suggesting good access to capital. IRFs' access to capital in large part depends on their total (all-payer) profitability, and in 2020, the total (all-payer) margin remained stable at 10.2 percent for freestanding IRFs.

**Medicare payments and providers' costs**—The aggregate Medicare margin for IRFs has remained above 13 percent since 2010, reaching over 14 percent in 2018. From 2019 to 2020, IRF cost growth outpaced payment growth, lowering the Medicare margin to 13.5 percent in 2020.

This year, because federal relief funds were intended to help cover lost revenue and payroll costs—including lost revenue from Medicare patients and the cost of staff who help treat these patients—we include a portion of these relief funds (based on FFS Medicare's share of 2019 all-payer operating revenue) in our Medicare margins. After including an estimate of Medicare's share of federal relief funds, the aggregate Medicare margin in 2020 rose to 14.9 percent. Our analysis identifying relatively efficient IRFs found that the median Medicare margin for these IRFs was about 18 percent. On average, these IRFs were larger and had higher occupancy rates, contributing to greater economies of scale and lower unit costs.

While the coronavirus PHE has made 2020 and 2021 anomalous years in many respects and it is impossible to predict with certainty the extent to which the effects of the PHE will continue into 2022 and beyond, we expect IRFs' aggregate Medicare margin in 2022 to slightly decrease relative to 2020, to 14 percent. The decline in the Medicare margin will depend in large part on the duration and severity of the coronavirus pandemic, volume changes, case-mix changes, and cost growth, as well as any additional payment or other policy changes enacted during the pandemic.

### **How should Medicare payment rates change in 2023?**

Under current law, base payment rates under the IRF prospective payment system (PPS) are projected to increase by about 2.1 percent in 2023. This amount is higher than in 2019 and prior years because of the expiration of statutory reductions in IRF updates required by the Affordable Care Act of 2010 in each year from 2010 through 2019. Given our positive payment adequacy indicators and the fact that we anticipate most of the changes caused by the public health emergency to be temporary, the Commission

recommends that for fiscal year (FY) 2023, the FY 2022 IRF base payment rate be reduced by 5 percent. The Commission anticipates that this recommendation would provide IRFs with sufficient revenues to maintain beneficiaries' access to IRF care and bring IRF PPS payment rates closer to the cost of delivering high-quality care efficiently. ■

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## Background

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After illness, injury, or surgery, some patients need intensive inpatient rehabilitative care, including physical, occupational, and speech therapy. Such services can be provided in inpatient rehabilitation facilities (IRFs).<sup>1</sup> IRFs must be focused primarily on treating conditions that typically require intensive rehabilitation, among other requirements. IRFs can be freestanding facilities or specialized units within hospitals. To qualify for a covered IRF stay, a beneficiary must be able to tolerate and benefit from intensive therapy and must have a condition that requires frequent and face-to-face supervision by a rehabilitation physician. Other patient admission criteria also apply. In 2020, Medicare spent \$8.0 billion on IRF care provided to fee-for-service (FFS) beneficiaries in about 1,160 IRFs nationwide.<sup>2</sup> About 335,000 beneficiaries had almost 379,000 IRF stays. On average, Medicare FFS beneficiaries accounted for about 54 percent of IRF discharges.

Since January 2002, Medicare has paid IRFs under a per discharge prospective payment system (PPS).<sup>3</sup> Under the IRF PPS, each Medicare patient is assigned to a rehabilitation impairment category (RIC) based on the principal diagnosis or impairment and further classified within a RIC to a case-mix group (CMG) based on the level of motor and cognitive function and, for some CMGs, the patient's age. Within each CMG, patients are further classified into one of four tiers based on the presence of certain comorbidities that have been found to increase the cost of care. The IRF PPS also has outlier payments for patients who are extraordinarily costly.

The Commission's analysis has found that FFS Medicare beneficiaries who use IRFs are more likely to be female, over the age of 80, aged or disabled without end-stage renal disease, and White, compared with the overall population of FFS Medicare beneficiaries. In 2020, the share of Medicare discharges who were dual-eligible beneficiaries (enrolled in both Medicare and Medicaid) was about 21 percent.

### Medicare facility requirements for IRFs

To qualify as an IRF for Medicare payment, a facility must meet the Medicare conditions of participation for acute care hospitals (ACHs).<sup>4</sup> It must also:

- have a preadmission screening process to determine that each prospective patient is likely to benefit significantly from an intensive inpatient rehabilitation program;
- ensure that the patient receives close medical supervision and provide—through qualified personnel—rehabilitation nursing, physical therapy, occupational therapy, and, as needed, speech-language pathology and psychological (including neuropsychological) services, social services, and orthotic and prosthetic services;
- have a medical director of rehabilitation with training or experience in rehabilitation who provides services in the facility on a full-time basis for freestanding IRFs or at least 20 hours per week for hospital-based IRF units;
- use a coordinated interdisciplinary team led by a rehabilitation physician that includes a rehabilitation nurse, a social worker or case manager, and a licensed therapist from each therapy discipline involved in the patient's treatment;
- have a plan of treatment for each patient that is established, reviewed, and revised as needed by a physician in consultation with other professional personnel who provide services to the patient; and
- meet the compliance threshold, which requires that no less than 60 percent of patients admitted to an IRF have as a primary diagnosis or comorbidity at least 1 of 13 conditions specified by CMS.<sup>5</sup> The intent of the compliance threshold is to distinguish IRFs from ACHs. If an IRF does not meet the compliance threshold, Medicare pays for all its cases based on the inpatient hospital PPS rather than the IRF PPS.

### Medicare coverage criteria for beneficiaries

Medicare applies additional criteria that govern whether IRF services are covered for an individual Medicare beneficiary. For an IRF claim to be considered reasonable and necessary, the patient must be reasonably expected to meet the following requirements at admission:<sup>6</sup>

- The patient requires active and ongoing therapy in at least two modalities, one of which must be physical or occupational therapy.
- The patient can actively participate in and benefit from intensive therapy that most typically consists of three hours of therapy a day at least five days a week.
- The patient is sufficiently stable at the time of admission to actively participate in the intensive rehabilitation program.
- The patient requires supervision by a rehabilitation physician. This requirement is satisfied by face-to-face physician visits with a patient at least three days a week. Beginning with the second week of admission to the IRF, a nonphysician practitioner who is determined by the IRF to have specialized training and experience in inpatient rehabilitation may conduct one of the three required face-to-face visits with the patient per week, provided that such duties are within the nonphysician practitioner's scope of practice under applicable state law.
- The patient requires an intensive and coordinated interdisciplinary team approach to the delivery of rehabilitative care.

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## Are Medicare payments adequate in 2022?

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In 2020, IRF payment adequacy indicators varied across IRFs, and the aggregate changes reflect changes during the public health emergency (PHE) rather than changes in the overall adequacy of Medicare payments to IRFs. (For a description of how the coronavirus pandemic has been incorporated into our payment adequacy framework, see text box.)

To assess whether payments for fiscal year 2022 are adequate to cover the costs providers incur and how much providers' costs are expected to change in the coming year (2023), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries' access to care by examining the

capacity and supply of IRFs and changes over time in the volume of services provided, quality of care, providers' access to capital, and the relationship between Medicare payments and providers' costs.

Although the impact of the coronavirus pandemic on IRFs is evolving, our indicators of IRF payment adequacy are positive. (For an overview of how our payment adequacy analysis takes the PHE into account, see Chapter 2.)

### Beneficiaries' access to care: IRF supply and service volume suggest sufficient access

We have no direct indicators of beneficiaries' access to IRF care. Although there are IRF admission criteria, it is not clear when IRF care is necessary or beneficial for a given patient or when another, potentially lower-cost post-acute care (PAC) provider (such as a skilled nursing facility (SNF)) could provide appropriate care. The absence of IRFs in some areas of the country implies that beneficiaries in these areas receive similar services in other settings. Nevertheless, our analysis of IRF supply and volume of services provided suggests that capacity remains adequate to meet demand. Moreover, the marginal profit, an indicator of whether IRFs with excess capacity have an incentive to treat more Medicare beneficiaries, was robust in 2020 for both freestanding and hospital-based IRFs, thus providing a very positive indicator of patient access.

### Number of IRFs and occupancy rates suggest adequate capacity and supply

After gradually declining from 2015 to 2019, the number of IRFs increased from 1,152 IRFs in 2019 to 1,159 facilities in 2020 (Table 9-1, p. 310). After a slight decrease in for-profit IRFs from 2018 to 2019, the number of freestanding and for-profit facilities continued to grow in 2020. Between 2015 and 2019, the number of hospital-based IRFs fell by 1.9 percent and the number of nonprofit IRFs fell by 1.8 percent, while the number of freestanding IRFs and for-profit IRFs rose by 3.4 percent and 2.8 percent, respectively.

In 2020, almost 75 percent of IRFs were hospital based; the rest were freestanding facilities (Table 9-1, p. 310). However, because hospital-based units have, on average, fewer beds and a lower share of Medicare



## The coronavirus public health emergency and the Commission's assessment of payment adequacy for inpatient rehabilitation facilities

On January 31, 2020, the Secretary of Health and Human Services first declared the coronavirus public health emergency (PHE). In late March 2020, the nation's health care system began to experience major changes in service utilization, as elective procedures were postponed to preserve clinical staff's availability and equipment for COVID-19 patients. The PHE has had tragic and disproportionate effects on Medicare beneficiaries. (For details on the pandemic's effects on beneficiaries' health and access to care, see Chapter 1.) It has also had damaging effects on the nation's health care workforce, with frontline health care workers facing burnout and risks to their health and safety from treating COVID-19 cases.

From the perspective of assessing the adequacy of Medicare payments, the PHE has also had material effects on all of the Commission's payment adequacy indicators. Because of standard data lags, the most recent complete data we have are from 2020 for most payment adequacy indicators; we also include preliminary data from 2021 where possible. As described in this chapter, the effects of the PHE on indicators of Medicare's payment adequacy to inpatient rehabilitation facilities (IRFs) included:

- dramatic drops in patient volume in spring 2020, largely rebounding by July 2020 but with a net decline nevertheless in annual discharges in 2020 relative to 2019;
- an increase in the patient acuity level, which generated a higher case-mix index relative to 2019;
- substantial federal funding that IRFs received from the Congress; and
- the suspension of the 2 percent sequestration on Medicare payments, which increased payments to IRFs.

In this chapter, we use available data and changes in payment policy to project IRF margins for 2022 and recommend payment rate updates for 2023; however, significant uncertainty remains about the extent to which the pandemic will last and whether certain changes to IRF volume and financial performance will persist past the end of the PHE. Therefore, while analyzing 2020 data is important in understanding what happened to beneficiaries' access to care, quality of care, providers' access to capital, and Medicare's payments and providers' costs, it will be more difficult to interpret these indicators than is typically the case.

As the Commission stated last year, to the extent that the effects of the coronavirus pandemic are temporary—even if over multiple years—or vary significantly across individual IRFs, they are best addressed through targeted temporary funding policies rather than a permanent change to all IRFs' payment rates in 2023 and future years. Only permanent effects of the pandemic will be factored into the Commission's recommended updates to Medicare base payment rates. ■

discharges, in 2020, they accounted for only 43 percent of Medicare discharges. In contrast, freestanding IRFs made up just over 25 percent of the IRF supply but in 2020 accounted for 53 percent of Medicare discharges (Table 9-1, p. 310). Similarly, the share of IRFs that

are for profit is about 35 percent, but in 2020 they accounted for 53 percent of Medicare discharges. For-profit IRFs are disproportionately freestanding compared with hospital-based ownership.

**TABLE  
9-1**

**The number of for-profit and freestanding IRFs continued to grow in 2020**

Type of IRF	Share of Medicare FFS discharges 2020	Number of IRFs						Average annual change	
		2015	2016	2017	2018	2019	2020	2015–2019	2019–2020
All IRFs	100%	1,182	1,188	1,178	1,170	1,152	1,159	–0.6%	0.6%
Urban	90	1,020	1,026	1,019	1,014	1,000	1,004	–0.5	0.4
Rural	6	162	162	159	156	152	155	–1.6	2.0
Freestanding	53	262	273	279	290	299	310	3.4	3.7
Hospital based	43	920	915	899	880	853	849	–1.9	–0.5
Nonprofit	37	681	676	655	642	634	623	–1.8	–1.7
For profit	53	352	370	392	400	393	414	2.8	5.3
Government	6	138	133	125	121	116	113	–4.2	–2.6

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service). The number of facilities are for the calendar year. Components may not sum to totals due to missing data.

Source: MedPAC analysis of Provider of Services data and Medicare Provider Analysis and Review data from CMS, 2020.

In 2020, the number of urban IRFs increased by 0.4 percent, after gradually declining from 2016 to 2019. Similarly, the total number of rural IRFs increased slightly to 155 IRFs, up from 152 in 2019, after more than 5 consecutive years of decline. Because the vast majority (over 90 percent) of rural IRFs are hospital-based units in ACHs, the increase in number of rural IRFs could reflect the targeted distribution of provider relief funds received by rural ACHs. Overall, fewer rural ACHs closed in 2020 than 2019, possibly due to provider relief funds allocated to small hospitals (for more details, see Chapter 3). It is likely that provider relief funds also influenced changes in the supply of rural IRFs.

In 2020, the average IRF occupancy rate was steady at 67 percent. In freestanding IRFs, the average occupancy rate was 69 percent, while the average occupancy rate for hospital-based IRFs was 64 percent. These rates suggest that capacity is more than adequate to meet demand for IRF services.

Although IRFs provide a more intense level of therapy, IRFs are not the sole provider of rehabilitation services in communities. SNFs also provide inpatient rehabilitation services, and home health agencies, comprehensive outpatient rehabilitation facilities, and independent therapy providers furnish care at home or on an outpatient basis. Therefore, despite slight changes in the supply of some IRF providers, it is unlikely that areas exist where IRFs are the only provider of rehabilitation therapy services available to Medicare beneficiaries.

**Patterns of use in IRFs suggest influence of PHE and related policies**

The most common condition treated by IRFs in 2020 was stroke—accounting for almost one-fifth of cases—followed by other neurological conditions, debility, and fracture of the lower extremity (Table 9-2).

In 2020, we observed some changes in the share of certain case types. From 2019 to 2020, the share of IRF

**TABLE  
9-2**

**Patterns of use in IRFs changed in 2020**

Condition	Share of IRF Medicare FFS cases			Meets compliance threshold <sup>a</sup>	Percentage point change	
	2010	2019	2020		2010–2019	2019–2020
Stroke	20.1%	19.8%	19.1%	yes	-0.4	-0.6
Other neurological conditions	9.8	14.4	14.0	yes	4.6	-0.4
Debility	10.0	12.3	13.5	no	2.3	1.2
Fracture of the lower extremity	14.3	10.0	11.3	yes	-4.3	1.3
Brain injury	7.3	11.0	11.2	yes	3.7	0.2
Other orthopedic conditions	6.7	8.1	7.4	no	1.3	-0.6
Cardiac conditions	4.9	6.1	5.8	no	1.2	-0.3
Spinal cord injury	4.3	4.9	4.7	yes	0.5	-0.2
Major joint replacement of lower extremity	11.4	3.7	2.9	<sup>b</sup>	-7.8	-0.8
All other conditions	11.1	10.0	10.2	<sup>c</sup>	-1.1	0.2

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service). “Other neurological conditions” includes multiple sclerosis, Parkinson’s disease, polyneuropathy, and neuromuscular disorders. “Fracture of the lower extremity” includes hip, pelvis, and femur fractures. Patients with debility have generalized deconditioning not attributable to other conditions. “Other orthopedic conditions” excludes fractures of the hip, pelvis, and femur, and hip and knee replacements. “All other” includes conditions such as amputations, arthritis, and pain syndrome. “Brain injury” and “spinal cord injury” include both traumatic and nontraumatic injuries. All FFS Medicare IRF cases with valid patient assessment information were included in this analysis. Yearly figures presented in the table are rounded, but figures in the percentage point change columns were calculated using unrounded data.

<sup>a</sup>The compliance threshold requires that at least 60 percent of an IRF’s patients have 1 of 13 specified diagnoses or have a comorbidity that could cause significant decline in functional ability such that the patient requires intensive rehabilitation. Some FFS cases with conditions that do not meet the compliance threshold could thus be counted toward the threshold if they had certain comorbidities. In response to the coronavirus public health emergency, CMS waived the compliance threshold beginning in March 2020.

<sup>b</sup>Cases admitted for rehabilitation after major joint replacement of the lower extremity count toward the compliance threshold if joint replacement was bilateral, if the patient had a body mass index of 50 or greater, or if the patient was age 85 or older.

<sup>c</sup>Conditions in the “all other” category that meet the compliance threshold include congenital deformity, lower limb amputations, major multiple traumas, burns, and certain arthritis cases.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

discharges with stroke fell slightly from 19.8 percent to 19.1 percent and the share of IRF discharges with cardiac conditions such as heart attack fell from 6.1 percent to 5.8 percent (Table 9-2) after rising somewhat from 2018 to 2019 (data not shown). The Centers for Disease Control and Prevention estimated that 41 percent of U.S. adults, many with treatable and preventable cardiovascular conditions such as strokes and heart attacks, delayed seeking medical care in the early months of the PHE because of concerns about contracting COVID-19 (Czeisler et al. 2020). It is

possible that these circumstances align with the slight decreases we observed in these cases in 2020.

Between 2019 and 2020, the share of IRF discharges with major joint replacement of lower extremities declined from 3.7 percent to 2.9 percent, and the share of other orthopedic cases such as shoulder replacements fell from 8.1 percent to 7.4 percent (Table 9-2). The combination of ACHs temporarily suspending elective surgeries and patients themselves electing to delay surgeries likely affected IRF admissions for these case types. In contrast, after a gradual decline

## The coronavirus public health emergency's impact on fiscal year 2020 data

This year we analyzed 2020 claims and provider cost reports that reflect the impact of the pandemic, as well as the complex interactions of funding and policy changes related to the public health emergency (PHE).

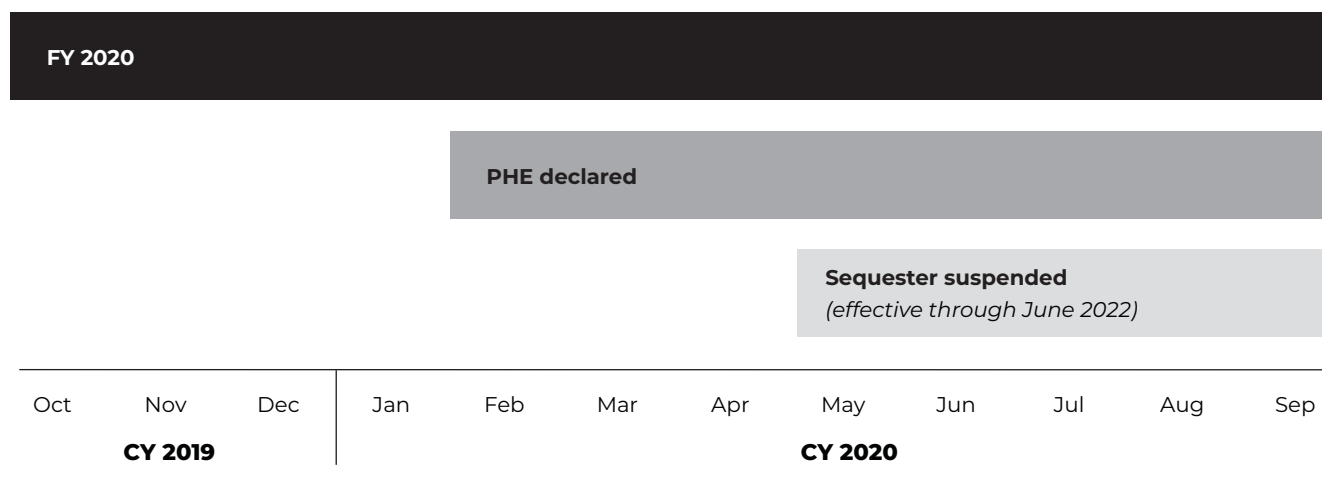
### 2020 claims data

It is instructive to understand the timing of the PHE and PHE-related policy changes that are reflected in fiscal year 2020 claims data to understand the magnitude of their impact on 2020 results

(Figure 9-1). For health care sectors, including inpatient rehabilitation facilities (IRFs), with payment years that begin with the federal fiscal year, the first four months of the payment year (October 2019 to January 2020) occurred before the PHE was declared (January 31, 2020). Therefore, PHE-related policies (which started on different dates throughout fiscal year 2020) impacted claims data at different time points in providers' payment years and will not reflect the full fiscal year of data. For example, the suspension of the sequester, which

**FIGURE 9-1**

**Fiscal year 2020 time line**



Note: FY (fiscal year), PHE (public health emergency), CY (calendar year). The 2 percent sequestration reduction to payments was suspended until March 31, 2022. The sequester will be phased back in beginning with a 1 percent reduction in payments beginning on April 1, 2022, through June 30, 2022.

*(continued next page)*

from 2010 to 2019, acute conditions that require immediate attention, such as fractures of the lower extremities, including hip, pelvis, and femur, rose in 2020 to 11.3 percent, up from 10 percent in 2019. CMS's waiver during the PHE of the "three-hour rule" (see text box on Medicare waivers, p. 315), allowing IRFs to admit patients even if they were not able to tolerate

three hours of intense therapy a day, also could have influenced the mix of case types.

Between 2019 and 2020, the share of IRF cases with diagnosis of debility increased from 12.3 percent to 13.5 percent of IRF discharges (Table 9-2, p. 311). This condition includes a mix of patients with a

## The coronavirus public health emergency's impact on fiscal year 2020 data (cont.)

is set to expire under current law at the end of June 2022, was in effect for five months of fiscal year 2020, from May 2020 through the end of the fiscal year. Therefore, fiscal year 2020 claims data will capture only five months of the suspension of the sequester.

### 2020 cost report data

For providers, including IRFs, that submit cost reports to CMS, we estimate total Medicare-allowable costs and assess the relationship between Medicare's payments and those costs, which we express as a margin. Within each sector, 2020 cost reports included in this year's analysis of Medicare margins reflect varying numbers of months that overlap with the PHE because providers' cost reports can start on different months of the year. Cost reports for 2020 are those with a midpoint falling in fiscal year 2020. To the extent that providers' cost reporting periods overlap with the PHE, Medicare payments reported on cost reports will reflect the suspension of the sequester

and other policy changes; providers' costs will reflect PHE-related costs (e.g., personal protective equipment, supplies, labor). Providers received billions of dollars in additional grants that will not be captured in claims or Medicare payments on cost reports, so they will not be reflected in Medicare margins. However, all providers must report Provider Relief Fund payments on the cost report's statement of revenues for informational purposes.

Almost 40 percent of IRFs in this year's analysis have cost reporting years that began January 1, but the remainder started throughout the year. In aggregate, providers included in the analysis of IRFs' 2020 cost reports had about 63 percent of the months in their cost reporting year in the PHE period—February 2020 through December 2020. Similarly, we estimate that providers included in the analysis of IRFs' 2020 cost reports had about 40 percent of the months in their cost reporting year in the period following the suspension of the sequester, starting in May 2020. ■

state of general weakness or discomfort that may be an outcome of one or more conditions, including COVID-19 (Czeisler et al. 2020, Encompass Health 2021a). In 2020, in addition to waiving the 3-hour rule, CMS waived the “60 percent rule,” which requires that at least 60 percent of patients admitted to an IRF have as a primary diagnosis or comorbidity at least 1 of 13 qualifying conditions. The waiver of these rules allowed IRFs to treat a broader mix of patients, including those without a qualifying condition or who were unable to tolerate intensive therapy, possibly leading IRFs to admit a greater number of cases categorized as debility.

### IRF Medicare volume grew while length of stay fell in 2020

In general, relatively few Medicare beneficiaries use IRF services because, to qualify for Medicare coverage,

IRF patients must be able to tolerate and benefit from rehabilitation therapy that is intensive, which is usually interpreted to mean at least three hours of therapy a day for at least five days a week. Although the PHE waiver of the “three-hour rule” (see text box on Medicare waivers, p. 315) made it easier to access IRF services in 2020, the combination of factors described above affected IRF volume.

From 2015 to 2017, the number of FFS cases steadily rose, then jumped to about 409,000 cases in 2019 (Table 9-3, p. 314). In 2020, however, the total number of FFS IRF cases fell by 7.4 percent to about 379,000 cases (controlling for the number of FFS beneficiaries, FFS cases declined by 5 percent in 2020). Consistent with the impact of the PHE, the number of cases fell around April 2020 but began to rise, reaching over

**TABLE  
9-3**

**In 2020, the number of IRF users and cases fell, while length of stay and payments per case grew**

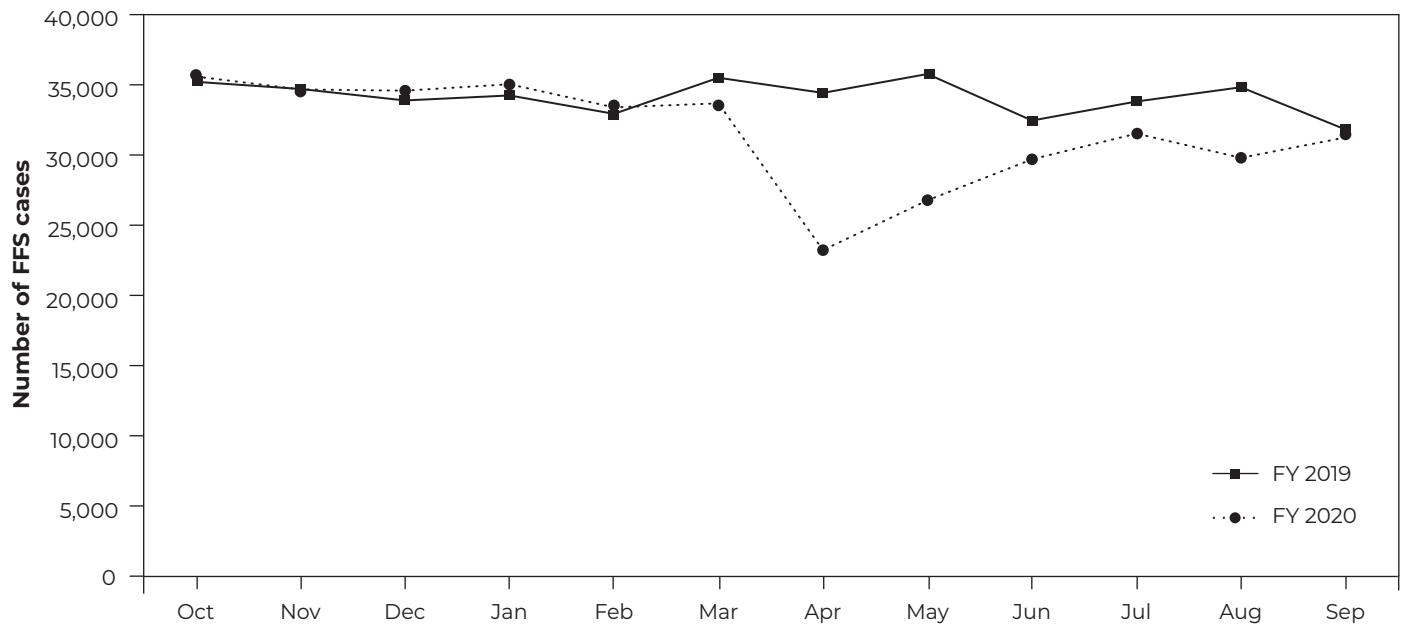
	2015	2017	2019	2020	Average annual change	
					2015-2019	2019-2020
Number of FFS cases	393,475	396,294	409,059	378,756	0.8%	-7.4%
Cases per 10,000 FFS beneficiaries	103.3	102.0	106.0	100.9	0.5	-5.0
Payment per case	\$18,527	\$19,481	\$20,417	\$21,765	2.0	6.6
ALOS (in days)	12.7	12.7	12.6	12.9	-0.2	2.0
Users	354,343	354,618	363,285	335,421	0.5	-8.0

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service), ALOS (average length of stay).

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS.

**FIGURE  
9-2**

**FFS Medicare beneficiaries' IRF cases declined markedly in spring 2020 but slowly rebounded by summer 2020**



Note: FFS (fee-for-service), IRF (inpatient rehabilitation facility), FY (fiscal year).

Source: MedPAC analysis of Medicare Provider Analysis and Review, Common Medicare Environment data.



## Medicare waivers to increase access to IRF services and ease burden during the coronavirus public health emergency

CMS enacted numerous waivers to increase Medicare beneficiaries' access to inpatient rehabilitation facility (IRF) services and ease the burden on health care providers during the coronavirus public health emergency (Centers for Medicare & Medicaid Services 2020a). These waivers included:

- **Housing acute care patients in IRFs.** CMS allows hospitals to provide acute inpatient services in areas of the hospital typically reserved for other types of inpatient care, such as rehabilitation or psychiatric care.

- **“60 percent rule” waiver.** CMS allows IRFs to admit patients and exclude them from the 60 percent rule calculation if an IRF admits a patient solely to respond to the emergency and the patient’s medical record properly identified the patient as such.
- **“Three-hour rule” waiver.** Under the “three-hour rule” waiver, IRFs are allowed to admit patients even if they are unable to tolerate three hours of therapy a day at least five days per week. ■

95 percent of prepandemic levels by the end of the fiscal year (Figure 9-2) (see the text box on the PHE’s impact on 2020 data, pp. 312–313). A large portion of IRF volume comes from patients who are transferred from the ACH setting after surgery. Although the share of ACH cases discharged to IRFs was unaffected in 2020, the drop in volume in April 2020 is consistent with a temporary suspension of elective surgeries in ACHs from March through May 2020. The rebound in volume in summer 2020 may have been the result of the pent-up demand for surgical services after many FFS beneficiaries’ surgeries had been canceled or delayed. Overall, between 2019 and 2020, the number of FFS IRF users dropped by 8 percent, from about 363,000 FFS beneficiaries to about 335,000 (Table 9-3). Controlling for the number of beneficiaries enrolled in FFS, the number of IRF cases fell 5 percent in 2020.

The increase in the acuity level (described earlier) of IRF patients is one of several factors that contributed to the rise in payments per case and average length of stay. In 2020, payments per case rose by 6.6 percent to about \$22,000 per case and the average length of stay grew by 2.0 percent to 12.9 days (Table 9-3).

### Marginal profit provides incentive to treat more Medicare beneficiaries

Another measure of access is whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, a provider with excess capacity compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume.<sup>7</sup> If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider has a financial incentive to increase its volume of Medicare patients. In contrast, if payments do not cover the marginal costs, the provider could have a disincentive to care for Medicare beneficiaries. We examined freestanding and hospital-based IRFs’ marginal profit to assess whether both types of providers have a financial incentive to increase the number of Medicare beneficiaries they serve. We found that Medicare payments in 2020 exceeded marginal costs by a substantial amount—19 percent for hospital-based IRFs and 38 percent for freestanding IRFs—suggesting that IRFs with available beds have a strong incentive to admit Medicare patients.

## Quality of care is difficult to assess

The quality of care in 2020 is difficult to assess due to the effects of the coronavirus pandemic on beneficiaries and providers. Each year, we track changes in the quality measures and assess whether they have gotten better or worse or stayed the same. While we report 2020 results for our quality measures, we have not used those results to inform our conclusions about trends in IRFs' quality of care because the results reflect temporary changes in the delivery of care and data limitations unique to the PHE rather than trends in quality. In addition, the Commission's quality metrics rely on risk-adjustment models that use performance from previous years to predict beneficiary risk. COVID-19 is a new diagnosis and is not included in the current risk-adjustment models, though many associated conditions are. As a result, our models may not adequately represent the acuity and mix of patients receiving care in 2020. Therefore, we report the changes observed in the quality measures but do not draw conclusions about whether quality has improved, worsened, or stayed the same.

We evaluate quality of care using two measures: average risk-adjusted rates of successful discharge to the community and all-condition hospitalizations during an IRF stay. Successful discharge to the community includes beneficiaries discharged to the community (including those discharged to the same nursing home where the beneficiary was before the hospitalization) who did not have an unplanned hospitalization and did not die in the succeeding 30 days. The hospitalization measure captures all unplanned hospitalizations (admissions and readmissions) and outpatient observation stays that occur during the stay (beneficiaries who died during the IRF stay are excluded from the measure). Discharges to hospice or beneficiaries with the hospice benefit are excluded from the calculation of both measures.<sup>8</sup> Both measures are uniformly defined and are risk adjusted across home health agencies, SNFs, IRFs, and long-term care hospitals—thus representing one more step toward achieving a unified payment system and evaluation of outcomes across PAC settings.

## Risk-adjusted rates of successful discharge to the community and all-condition hospitalizations within the IRF stay

Rehospitalizations expose beneficiaries to hospital-acquired infections, increase the number of transitions between settings (which are disruptive to patients), and can result in medical errors (such as medication errors). In addition, they increase Medicare spending. The all-condition hospitalizations measure captures all unplanned acute care hospitalizations and outpatient observation stays that occur during the IRF stay (a lower rate of hospitalizations is better). Because IRFs are themselves hospitals, the rate of rehospitalizations to acute care is typically low relative to that of SNFs.

In 2020, the national average rate of risk-adjusted all-condition hospitalizations for IRFs remained steady at about 7.8 percent (Table 9-4). There were not large differences by type of IRF; however, freestanding IRFs had a slightly higher rate of all-condition hospitalizations during the stay than hospital-based IRFs or both nonprofit and for-profit IRFs (8.0 percent vs. 7.8 percent for all others).

We also examined average risk-adjusted rates of successful discharge to the community. In 2020, the rate of successful discharge to the community was 67.3 percent (Table 9-4). There were not large differences by ownership, but hospital-based and nonprofit IRFs had slightly higher rates of successful discharge to the community than freestanding and for-profit IRFs did.

## Providers' access to capital: Largest chain expanded through the pandemic; freestanding IRF all-payer margin remained strong

Access to capital allows IRFs to maintain, modernize, and expand their facilities. Almost three-quarters of IRF providers are hospital-based units that would access any necessary capital through their parent institutions. Therefore, in assessing access to capital for hospital-based IRFs, we look at the availability of capital for ACHs. Overall, as detailed in the hospital chapter of this report (Chapter 3), hospitals maintained strong access to bonds and other capital markets in 2020 and 2021. Hospitals issued about \$17 billion in new financing in each of 2020 and 2021, below 2019 levels but higher than in 2018. Hospital construction spending



**TABLE  
9-4**

**Risk-adjusted quality indicators for IRFs held steady or improved slightly from 2015 to 2020**

	2015	2016	2017	2018	2019	2020
<b>All-condition hospitalizations within an IRF stay (all IRFs)</b>	<b>7.9%</b>	<b>7.7%</b>	<b>7.9%</b>	<b>7.7%</b>	<b>7.8%</b>	<b>7.8%</b>
Nonprofit	7.8	7.6	7.8	7.7	7.7	7.8
For profit	7.9	7.7	7.9	7.7	7.9	7.8
Hospital based	7.8	7.6	7.8	7.7	7.7	7.8
Freestanding	8.1	7.9	8.0	7.8	7.8	8.0
<b>Successful discharge to community (all IRFs)</b>	<b>64.6%</b>	<b>64.6%</b>	<b>64.8%</b>	<b>65.1%</b>	<b>65.5%</b>	<b>67.3%</b>
Nonprofit	64.9	64.7	64.9	65.1	65.6	67.6
For profit	64.2	64.5	64.7	65.1	65.3	66.8
Hospital based	65.0	65.1	65.2	65.5	66.0	67.9
Freestanding	63.4	63.3	63.6	64.0	64.2	66.0

Note: IRF (inpatient rehabilitation facility). Successful discharge to the community includes beneficiaries discharged to the community (including those discharged to the same nursing home) who did not have an unplanned hospitalization or die in the 30 days after discharge. The all-condition hospitalization measure captures all unplanned hospital admissions and readmissions and outpatient observation stays that occur during the stay. Both measures are uniformly defined and risk adjusted across the four post-acute care settings. Providers with least 60 stays in the year (the minimum count to meet a reliability of 0.7) were included in calculating the average facility rate. High rates of successful discharge to the community indicate better quality. High rates of hospitalizations during a stay indicate worse quality.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

also remained strong in 2020, at about \$25 billion, similar to prior years. In addition, hospitals’ temporary access to capital increased substantially in 2020 as ACHs received over \$83 billion in accelerated Medicare payments.<sup>9</sup> The coronavirus PHE affected hospitals’ access to capital in 2020 and 2021, with different effects on different groups of hospitals. However, in aggregate, the additional federal support hospitals received—as well as advance Medicare payments—increased hospitals’ access to capital in 2020. Although we cannot confirm the exact amount of federal support received by hospital-based IRFs, in conversations with associations representing these types of IRFs, we learned that many received Provider Relief Fund payments to help cover COVID-19–related losses.

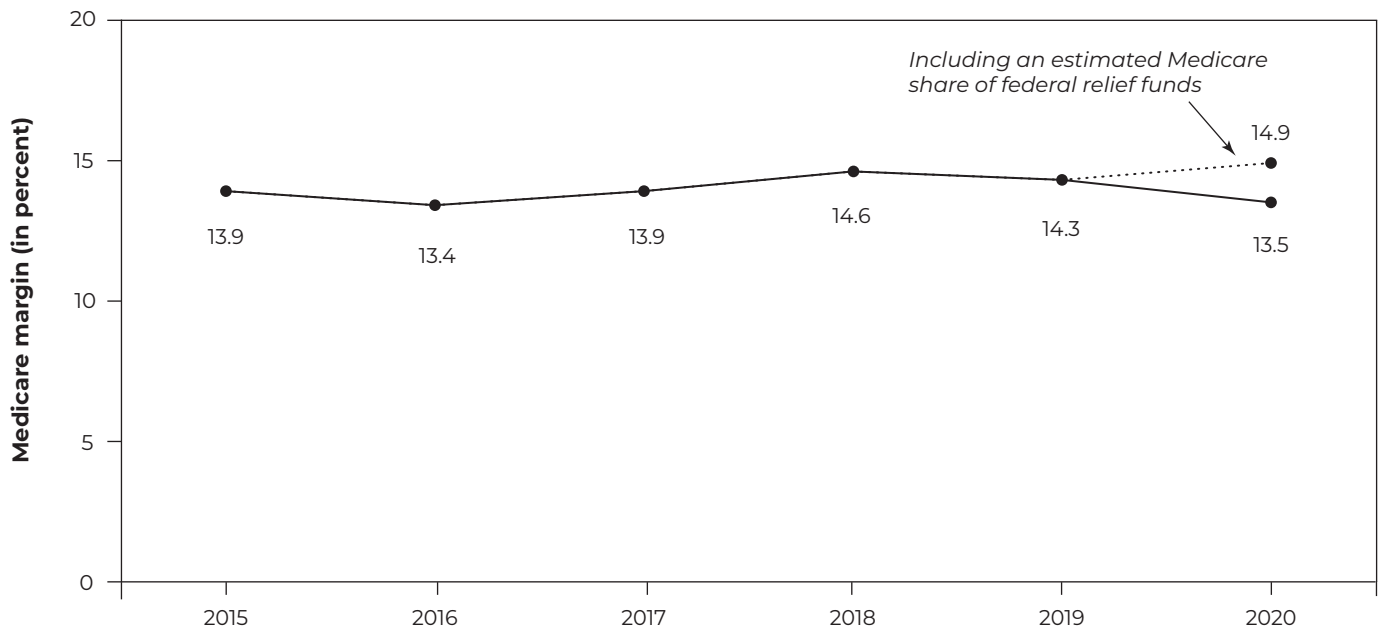
To assess freestanding IRFs’ access to capital, we look at the availability of capital for publicly traded

IRFs. Market analysts indicate that the IRF industry’s largest chain, Encompass Health—which owned over 50 percent of freestanding IRFs in 2020 and accounted for over 31 percent of all Medicare IRF discharges—has good access to capital. This assessment is reflected in the chain’s continued expansion through the pandemic. In 2020 alone, the company opened four new facilities, one of which was a joint venture with another medical center (Encompass Health 2021a). In 2021, the company planned to open 8 facilities, followed by an additional 12 new facilities in 2022. Six of these are located in Florida, following the recent partial repeal of Florida’s certificate-of-need law, effective July 2021.<sup>10</sup> The company is slated to open nine new IRFs in 2023 (Encompass Health 2021b).

As part of a vertical integration strategy, the company continues to acquire home health agencies and hospice

**FIGURE  
9-3**

**IRFs' overall Medicare margin increased in 2020 when including an estimated Medicare share of federal relief funds**



Note: IRF (inpatient rehabilitation facility). The top line indicates the overall Medicare margin after including a share of reported relief funds, allocated based on fee-for-service Medicare's share of each IRF's prior-year revenues. IRFs' Medicare margin is calculated as aggregate Medicare payments minus aggregate allowable Medicare costs, divided by aggregate payments. "Overall margin" refers to the aggregate margin across multiple types of IRFs (including freestanding, hospital based, urban, rural, nonprofit, for profit, and government).

Source: MedPAC analysis of IRF cost reports.

providers to expand its PAC business and drive more effective collaboration between its rehabilitation facilities and home health agencies. In response to the pandemic, mergers and acquisitions (M&A) activity was minimal in 2020. However, in 2021, M&A activity picked up again: The company acquired or opened 9 home health agencies and 12 hospice locations. Encompass Health reported that the suspension of sequestration in 2020 contributed to growth in revenue per discharge and continued to contribute to growth in 2021. Though Encompass Health initially received approximately \$237 million in relief funds in April 2020, it returned all funds before the end of the second quarter of 2020—further emphasizing that this company's access to capital was good.

Most other freestanding IRFs are independent or local chains with a limited number of facilities. The extent

to which these providers have access to capital is less clear. IRFs' access to capital depends in large part on their total (all-payer) profitability. In 2020, total margins for freestanding IRFs remained strong, with an aggregate margin of 10.2 percent. Profitability varied by ownership. In 2020, for-profit freestanding IRFs had an aggregate total margin of 14.0 percent compared with about 1.0 percent for nonprofit freestanding IRFs. Data were not available to calculate total margins for hospital-based IRFs. Despite comparatively low average Medicare margins in hospital-based IRFs, evidence suggests that these units make a positive financial contribution to their parent hospitals. For example, in 2020, hospitals' aggregate total margins across all lines of service were slightly higher in hospitals with IRF units compared with those without such units (6.5 percent vs. 6.2 percent).

**TABLE  
9-5**

**IRFs' costs per case grew faster than payments per case in 2020**

	Annual change 2018–2019	Annual change 2019–2020	
		Without PRF	With PRF
Payments per case	2.0%	7.5%	9.5%
Cost per case	2.4	8.5	N/A

Note: IRF (inpatient rehabilitation facility), PRF (Provider Relief Fund), N/A (not applicable). Percent changes are calculated based on consistent two-year cohorts.

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

Though Medicare FFS volume fell from 2019 to 2020, the IRF industry reported growth in revenues attributable to Medicare Advantage (MA) enrollees. For example, in the fourth quarter of 2020, Encompass Health reported that the share of their revenues represented by MA enrollees rose to 14.2 percent, up from 10.6 percent in 2019 (Encompass Health 2021a). A combination of prior-authorization waivers in part of 2020 and an increase in clinical collaboration with MA plans likely contributed to this growth (Encompass Health 2021a).

**Medicare payments and providers' costs: Medicare margins remained high without including share of federal relief funds**

Since 2015, the aggregate Medicare margin for IRFs has been above 13 percent. In 2020, the aggregate margin fell slightly from 2019 levels but remained high at 13.5 percent. Because federal relief funds were intended to help cover lost revenue and payroll costs—including lost revenue from Medicare patients and the cost of staff who help treat these patients—we also estimated the aggregate margin including reported relief funds (based on FFS Medicare's share of 2019 all-payer operating revenue). Including an estimated Medicare share of federal relief funds proportional to FFS Medicare's share of IRFs' revenue in the prior year, IRFs' FFS Medicare margin between 2019 and 2020 rose from 14.3 percent to 14.9 percent (Figure 9-3). While our 2020 Medicare margins use the best available data, payment adequacy metrics involving federal relief

funds need to be interpreted with caution, as they are still subject to change and are sensitive to IRFs' cost reporting periods (see the text box on the PHE's impact on 2020 data, pp. 312–313).

**Growth in IRFs' payments per case was faster in 2020 than in prior years, but costs per case grew even faster**

Both IRF PPS payments per case and costs per case grew faster in 2020 than in prior years, but in 2020 costs per case grew faster than payments per case (Table 9-5).

From 2019 to 2020, IRFs' payments per case grew 7.5 percent compared with 2.0 percent from 2018 to 2019 (Table 9-5). When including an estimated Medicare share of federal relief funds, payments per case grew 9.5 percent. The faster growth in 2020 relative to prior years resulted from several factors that affected IRF payments in 2020:

- **Higher annual update to payment rates:** In 2020, the annual update to IRF PPS base rates was 2.5 percent, higher than in prior years primarily because the budgetary reductions mandated through 2019 expired.<sup>11</sup>
- **Suspension of the sequester during the PHE:** Along with the annual payment update, during the PHE, the Congress increased Medicare IRF payments by suspending the 2 percent sequestration on the Medicare program's share of all FFS payments

beginning May 1, 2020, currently through March 2022. From April 2022 through June 2022, a 1 percent sequester cut will be in effect, with the full 2 percent cut resuming thereafter.

- **Faster growth in case mix:** Between 2019 and 2020, IRFs' overall case-mix index (CMI) increased 11 percent, from 1.24 to 1.38, substantially faster than the 3 percent average decrease in CMI between 2018 and 2019, from 1.28 to 1.24. Some growth in CMI in 2020 likely reflects increased coding intensity (as opposed to real change in IRF patients' average condition), but unless the growth in coding intensity dramatically increased in 2020 relative to prior years, most of the faster growth in reported case mix likely reflects an increase in the average resource needs of IRF patients. In 2020, there were no major changes in the distribution of condition types treated in IRFs (see Table 9-2, p. 311), so the change in CMI reflects:
  - *Increase in patient comorbidities:* Between 2019 and 2020, more IRF cases were coded with comorbidities that increase payment under the IRF PPS. For example, the share of claims for neurological conditions other than stroke that were coded with comorbidities rose from 67.2 percent to 72.4 percent (data not shown). Likewise, the share of claims for orthopedic conditions other than lower extremity joint replacements and fractures that were coded with comorbidities increased from 47.9 percent to 52.3 percent.
  - *Temporary flexibility in IRF criteria:* The waiver of the "three-hour rule" during the PHE, which allowed IRFs to admit patients even if they were not able to tolerate three hours of intense therapy a day, likely allowed IRFs to admit a broader mix of cases, including patients with greater functional impairment, as well as patients with more comorbidities.

IRFs themselves have reported that the patients admitted from acute care settings during the PHE have been sicker. For example, the largest publicly traded IRF company reported that their patient acuity increased in the second quarter of 2020 because the deferral of elective procedures and patient anxiety

resulted in only the most acute patients seeking care, pushing their CMI up to 1.44 compared with 1.38 in the same quarter of 2019 (Encompass Health 2020).

From 2019 to 2020, IRFs' costs per case grew 8.5 percent, compared with 2.4 percent growth from 2018 to 2019 (Table 9-5, p. 319). The faster growth in 2020 relative to prior years resulted from several factors that affected IRF costs in 2020:

- **Faster growth in case mix:** As noted above, while some growth in case mix in 2020 likely reflects increases in coding intensity, most of the faster growth in reported case mix likely reflects an increase in the average resource needs of IRF patients.
- **Spreading fixed costs over fewer IRF cases:** Between 2019 and 2020, the 7.4 percent drop in FFS Medicare IRF cases meant that fixed costs were spread over fewer cases, escalating cost growth per IRF case.
- **Increase in labor costs:** The largest publicly traded IRF company reported higher labor costs during the PHE as a result of paying for additional staff, overtime, and paid time off (Encompass Health 2021a). While the IRF market basket accounts for projected changes in wage rates, it does not account for unexpected labor cost increases such as additional staff or hours.
- **Increase in supplies:** During the PHE, IRFs purchased additional supplies to protect patients and staff from contracting COVID-19, including personal protective equipment and COVID-19 tests.
- **Increase in IRF length of stay:** Patients who have longer stays generally incur greater costs than patients with shorter stays. Between 2019 and 2020, IRFs' average length of stay increased 2.0 percent, from 12.6 days to 12.9 days.

### **Medicare margins were in line with historical trends after including Medicare's share of federal relief funds**

In 2020, the aggregate margin was 13.5 percent, down from 14.3 percent in 2019. Historically, facilities' Medicare margins vary across facility types. In assessing this variation in 2020, we examined Medicare margins by facility affiliation, ownership, size,

FFS Medicare share, and low-income patient share. Table 9-6 (p. 323) shows IRF Medicare margins in 2020, both with and without the share of federal relief funds.

**Affiliation** Freestanding IRFs have historically had stronger financial performance than hospital-based IRFs. In 2020, the Medicare margin for freestanding IRFs (which accounted for 53 percent of Medicare discharges from IRFs) was 23.5 percent. When we include an estimated Medicare share of federal relief funds, the Medicare margin for freestanding IRFs increased by 0.7 percentage point (Table 9-6, p. 323). In contrast, hospital-based IRFs' Medicare margin was 1.6 percent in 2020. When we include an estimated Medicare share of federal relief funds, the Medicare margin for hospital-based IRFs increased by 2.4 percentage points.

Several factors account for the disparity in margins between hospital-based and freestanding IRFs. First, hospital-based IRFs are more likely to be nonprofit; they also tend to have fewer beds and therefore fewer opportunities to take advantage of economies of scale. These factors may explain why hospital-based IRFs appear to be less stringent in their control of costs. Between 2010 and 2019, costs per case for hospital-based IRFs grew 21.8 percent, compared with 12.2 percent for freestanding IRFs (data not shown). However, in 2020, both types of providers faced costs unique to the PHE spread across fewer cases, resulting in cost growth of around 8 percent for both facility types.

Second, cases with extraordinarily high costs, called outlier cases, contributed to differences in margins. In general, hospital-based IRFs are much more likely than freestanding IRFs to have high-cost outlier cases (13.0 percent of cases compared with 3.1 percent). Indeed, 77 percent of Medicare's IRF outlier payments were made to hospital-based facilities. Although these payments diminish losses per outlier case, by design they do not completely cover their costs. It is not clear whether the large number of outlier cases in hospital-based IRFs stems from differences in unit cost, unmeasured clinical complexity that is not fully captured by the case-mix system, or both. Even controlling for differences in wages, case mix, and outliers, freestanding IRFs had a median standardized cost per case in 2020 that was 25 percent lower than that of hospital-based IRFs (\$12,687 vs. \$16,869).<sup>12</sup> Nevertheless, one-quarter of hospital-based IRFs had Medicare

margins greater than 14 percent, indicating that many hospitals can manage their IRF units profitably.

**Ownership** Similar to freestanding and hospital-based IRFs, for-profit IRFs historically average a substantially higher Medicare margin than nonprofit IRFs. In 2020, the Medicare margin for for-profit IRFs (which accounted for 53 percent of Medicare IRF discharges) was 23.7 percent (Table 9-6, p. 323), which rose by 0.3 percentage point when Medicare's estimated share of federal relief funds was included. In contrast, nonprofit IRFs' Medicare margin in 2020 was -0.7 percent, which rose by 3.3 percentage points when Medicare's estimated share of federal relief funds was included.

Nonprofit IRFs are far more likely than for-profit IRFs to be hospital based, which likely contributes to the disparity in margins. In 2020, among hospital-based IRFs, the Medicare margin for nonprofit units (which accounted for 28.6 percent of Medicare IRF discharges) was 1.6 percent, which rose by 3.5 percentage points when Medicare's estimated share of federal relief funds was included (data not shown for subcategories of for-profit and nonprofit IRFs). In comparison, the Medicare margin for for-profit units (which accounted for 9.9 percent of Medicare IRF discharges) was 12.0 percent, which decreased by 0.7 percent when Medicare's estimated share of federal relief dollars was included. Among freestanding IRFs, nonprofit facilities (which accounted for 5.0 percent of Medicare IRF discharges) had an average Medicare margin of 4.1 percent, which rose by 2.1 percentage points when Medicare's estimated share of federal relief dollars was included. Freestanding for-profit IRFs (which accounted for 50 percent of Medicare IRF discharges) had a Medicare margin of 21 percent, which rose by 1.1 percentage points when Medicare's estimated share of federal relief funds was included.

**Facility size** In 2020, the aggregate Medicare margin for IRFs with 10 or fewer beds was -6.5 percent, which rose by 3.3 percentage points when Medicare's estimated share of federal relief dollars was included (Table 9-6, p. 323). In comparison, the Medicare margin for IRFs with 65 or more beds was 19.3 percent, which rose by 0.7 percentage point when Medicare's estimated share of federal relief dollars was included. These differences are in large measure due to economies of scale; that is, smaller facilities have higher unit costs. In 2020, the median standardized cost for IRFs with



fewer than 10 beds was 43 percent higher than for IRFs with 65 or more beds (\$18,406 compared with \$12,913; data not shown). Smaller facilities also tend to have lower occupancy rates than large facilities (in 2020, 56 percent compared with 72 percent), also contributing to differences in costs.

**FFS Medicare share** Medicare margins tended to rise as the share of Medicare patients increased. In 2020, the aggregate Medicare margin was 6.1 percent for IRFs in which less than half of discharges were covered by FFS Medicare (Table 9-6). This margin rose 2.1 percentage points when Medicare's estimated share of federal relief dollars was included. In comparison, the Medicare margin for IRFs in which more than three-quarters of discharges were covered by FFS Medicare was 19.5 percent, which rose by 0.4 percentage point when Medicare's estimated share of federal relief dollars was included. The high aggregate Medicare margin in IRFs with high Medicare shares indicates that Medicare payments substantially exceed the costs of caring for beneficiaries.

**Low-income share** FFS Medicare margins also vary by the IRF's share of low-income patients. Similar to the disproportionate share hospital adjustment for ACHs, IRFs receive low-income percentage (LIP) payments that are intended to offset costs incurred by treating a large or disproportionate number of low-income patients. Unlike ACHs, IRFs are not required to reach a threshold share of low-income patients before becoming eligible for the LIP adjustment. In 2020, the Medicare margin for IRFs with a large share of low-income patients (constituting more than 25 percent of the facility's discharges) was 4.8 percent, which rose 3 percentage points when Medicare's estimated share of federal relief dollars was included (Table 9-6). In comparison, the Medicare margin for IRFs with low shares of low-income patients (less than 5 percent of a facility's discharges) was 15.5 percent, which rose by 0.5 percentage point when Medicare's estimated share of federal relief dollars was included.

### **Efficient provider analysis**

Table 9-7 (p. 324) details the characteristics of relatively efficient providers by quality measures; cost and payment measures; and facility differences in case mix, length of stay, occupancy rates, number of beds, and discharges for stroke and other neurological conditions. (For a more detailed discussion of the

Commission's methodology for identifying relatively efficient IRFs, see text box, p. 325.<sup>13</sup>)

Our analysis included the 932 IRFs that met the data requirements and minimum case count (60). In total, 230 IRFs were identified as relatively efficient providers. Hospital-based nonprofit IRFs represented about 41 percent of the relatively efficient group, compared with 34 percent of freestanding for-profit IRFs.

Our analysis finds that, compared with other IRFs, relatively efficient IRFs had lower (better) rates of hospitalization but slightly lower (worse) rates of successful discharge to the community.

Between 2019 and 2020, the median overall Medicare margin among relatively efficient IRFs rose from 15.8 percent to 17.9 percent, compared with a drop from 4.6 percent to 3.9 percent for other IRFs (Table 9-7, p. 324; 2019 data not shown). While payment rates to all IRFs were similar, standardized costs per discharge for the relatively efficient group were 16 percent lower, leading to a large difference (17.9 percent vs. 3.9 percent) in the median Medicare margin.

Relatively efficient IRFs were, on average, larger and had higher occupancy rates compared with other IRFs (Table 9-7, p. 324), leading to greater economies of scale. The mix of cases also differed somewhat between the relatively efficient and other IRFs. Compared with other IRFs, relatively efficient IRFs had a slightly higher average case-mix index and more cases with other neurological conditions but somewhat smaller shares of stroke cases.

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## **How should Medicare payments change in 2023?**

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The coronavirus PHE has made 2020 and 2021 anomalous years in many respects, and it is impossible to predict with certainty the extent to which these effects will continue into 2022. Our best estimate is that IRFs' Medicare margin in 2022 will only slightly increase relative to 2020, driven by higher cost growth in 2021 and 2022 than in prepandemic years.

To estimate 2022 payments, costs, and margins with 2020 data, the Commission considers policy changes effective in 2021 and 2022. These changes include:

**TABLE  
9-6**

**Aggregate IRF Medicare margins remained high, with or without including share of federal relief funds**

Type of IRF	Margins						
	2015	2016	2017	2018	2019	2020	
						Without PRF	With PRF
All IRFs	13.9%	13.3%	13.9%	14.7%	14.3%	13.5%	14.9%
Hospital based	2.1	0.9	1.4	2.5	2.1	1.6	4.0
Freestanding	26.6	25.9	25.6	25.4	24.7	23.5	24.2
Nonprofit	3.5	1.8	2.0	2.5	1.5	-0.7	2.6
For profit	25.0	24.5	24.3	24.6	24.2	23.7	24.0
Government	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Urban	14.3	13.7	14.2	15.0	14.7	13.8	15.0
Rural	8.4	9.1	8.3	9.9	8.6	8.9	12.5
Number of beds							
1 to 10	-7.7	-10.1	-10.5	-5.7	-4.2	-6.5	-3.2
11 to 24	-0.4	-0.3	0.6	2.1	2.0	2.5	4.8
25 to 64	16.0	15.0	15.7	16.9	16.0	15.0	16.5
65 or more	22.9	22.5	22.0	21.2	20.9	19.3	20.0
FFS Medicare share							
<50%	7.0	6.3	6.2	7.1	7.0	6.1	8.2
50% to 75%	17.6	16.9	17.3	18.1	17.6	16.7	17.9
>75%	17.8	19.1	20.9	21.5	20.9	19.5	19.9
Low-income patient share							
0% to 5%	16.9	16.2	17.5	16.8	16.4	15.5	16.0
5% to 10%	16.2	16.5	17.0	17.8	17.9	16.9	18.1
10% to 15%	18.3	14.6	13.9	16.8	15.4	13.9	15.6
15% to 20%	7.9	11.7	15.4	14.2	14.5	15.1	16.4
20% to 25%	4.0	5.8	2.6	5.8	2.6	8.2	10.1
>25%	9.1	7.2	7.1	6.5	6.4	4.8	7.8

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service), N/A (not applicable). Government-owned facilities operate in a different financial context from other facilities, so their margins are not necessarily comparable. Their margins are not presented separately here, although they are included in the margins for other groups (e.g., "all IRFs"), where applicable.

Source: MedPAC analysis of cost report data from CMS.

- an update of 2.4 percent in 2021 based on an IRF market basket increase of 2.4 percent and an offsetting multifactor productivity adjustment of 0 percent;
- the suspension of the 2 percent Medicare sequestration from May 2020 through the end of March 2022 and 1 percent relief from April 2022 through the end of June 2022 due to the coronavirus PHE;

**TABLE  
9-7**

**Characteristics of relatively efficient providers, 2020**

Performance in 2020	Type of IRF		Ratio of relatively efficient to other IRFs
	Relatively efficient IRFs	Other IRFs	
<b>Quality measures:</b>			
All-condition hospitalization rate	7.4%	7.6%	0.97
Successful discharge to community rate	66.3%	68.3%	0.97
<b>Cost and payment measures:</b>			
Payment per discharge	\$22,228	\$23,128	0.96
Standardized cost per discharge	\$13,840	\$16,554	0.84
Medicare margin	17.9%	3.9%	N/A
<b>Facility characteristics:</b>			
Facility case-mix index	1.40	1.37	1.02
Length of stay (in days)	12.6	12.8	0.98
Occupancy rate	68.8%	65.8%	1.05
Number of beds	32	25	1.28
<b>Share of discharges for:</b>			
Stroke	17.1%	21.1%	0.81
Other neurological conditions	10.0%	7.5%	1.34
<b>Share of facilities:</b>			
Freestanding for profit	34.3%	18.5%	N/A
Hospital-based nonprofit	40.8%	51.7%	N/A

Note: IRF (inpatient rehabilitation facility), N/A (not applicable). All data are medians unless otherwise indicated. The analysis included 932 IRFs that met the data requirements and minimum case counts (60). IRFs were identified as "relatively efficient" based on a cost measure (costs per discharge) and two quality measures (rates of hospitalizations during the stay and successful discharge to community) between 2017 and 2019. Relatively efficient IRFs were those in the best third of the distribution for one measure and not in the worst third for any measure in each of the three years. Costs per discharge were standardized for differences in area wages; mix of cases; and prevalence of high-cost outliers, short-stay outliers, and transfer cases. Quality measures were calculated for all facilities with 60 or more fee-for-service stays. Successful discharge to the community includes beneficiaries discharged to the community (including those discharged to the same nursing home) who did not have an unplanned hospitalization or die in the 30 days after discharge. The all-condition hospitalization measure captures all unplanned hospital admissions and readmissions and outpatient observation stays that occur during the stay. High rates of hospitalization during the stay indicate worse quality, and high rates of successful discharge to community indicate better quality. "Other neurological conditions" includes multiple sclerosis, Parkinson's disease, polyneuropathy, and neuromuscular disorders.

Source: MedPAC analysis of Medicare cost report data, Medicare Provider Analysis and Review data, and Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS for 2017 to 2020.

- an estimated case-mix growth of 1 percent in 2021 because of an observed higher acuity case mix in IRFs;
- an update of 1.9 percent in 2022 based on an IRF market basket increase of 2.6 percent and an offsetting multifactor productivity adjustment of 0.7 percent; and



## Identifying relatively efficient inpatient rehabilitation facilities

The Commission is required by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 to consider the costs associated with an efficient provider. To make this assessment, we examined the financial performance of inpatient rehabilitation facilities (IRFs) that had consistently low costs per discharge and high quality using our new cross-sector quality measures. We calculated the cost per discharge using cost report and claims data and adjusted for differences in area wages; mix of cases; and prevalence of high-cost outliers, short-stay outliers, and transfer cases. For quality measures, we used risk-adjusted rates of successful discharge to the community and all-condition hospitalizations during a stay. To be included in the group of IRFs that furnished relatively low-cost, high-quality care, an IRF had to be (1) in the best performing third of the distribution of adjusted cost per discharge or of one of the quality measures for three consecutive years (2017 through 2019) and (2) not in the worst performing third of the distribution of adjusted cost per discharge or either of the quality measures for three consecutive years. Only IRFs with at least 60

Medicare fee-for-service discharges were included in the analysis.

The method we used to assess performance attempts to limit drawing incorrect conclusions about performance based on poor data. Using three years (rather than just one year) of data to categorize IRFs as efficient avoids categorizing providers based on random variation or on one “unusual” year. After determining whether an IRF was relatively efficient based on having relatively low costs and good quality care for three years in a row, we calculated performance on several quality and cost measures in 2020. By first assigning an IRF to a group (relatively efficient or other) and then examining the group’s performance in the next year, we avoid having a facility’s poor data affect both its own categorization and the assessment of the group’s performance. Thus, an IRF’s erroneous data in 2017, 2018, or 2019 could result in its inaccurate assignment to a group, but because the group’s performance is assessed with data from 2020, these “bad” data would not directly affect the assessment of the group’s performance. ■

- changes to the high-cost outlier amount in 2021 and 2022, which raised payments by 0.4 percentage point in 2021 and will lower payments by 0.4 percentage point in 2022.

The annual update to the base payment rate is also substantially higher than in prior years because of the expiration of statutory reductions in IRF updates required by the Affordable Care Act of 2010 in each year from 2010 through 2019.

In terms of cost, in 2020, cost growth increased by 8.5 percent, compared with 2.4 percent in 2019. Many factors related to the PHE drove cost growth in 2020,

including faster growth in case mix, spreading fixed costs over fewer IRF cases, labor cost increases, increase in supplies, and longer average length of stay. While the historical cost growth in the IRF sector is low and past experience of IRFs would suggest this high rate of cost growth will not continue, some effects of the PHE, such as higher costs of labor, could persist through 2022. For that reason, the Commission’s margin projection for 2022 assumes that for the 2021 and 2022 IRF market baskets, costs will increase an average of 2.5 percent a year. Considering these assumptions, we project an aggregate Medicare margin of 14 percent for IRFs in 2022.

For fiscal year 2009 through fiscal year 2017, the Commission recommended a 0 percent update to the IRF payment rate. For fiscal years 2018 through 2021, however, as the payment adequacy indicators remained positive and the aggregate Medicare margin neared historic highs, the Commission recommended that the Congress reduce IRF payment rates by 5 percent. Because our recommendations were not enacted and because, in the absence of legislative action, CMS is required by statute to apply an adjusted market basket increase, payments have continued to rise. Despite the changes to payments and costs related to the PHE, aggregate Medicare margins for IRFs have remained above 13 percent since 2015, with or without the inclusion of the estimated Medicare share of federal relief funds. Absent congressional action, payments to IRFs will increase in fiscal year 2023 by an estimated 2.1 percent. Reducing the payment rate for IRFs would better align Medicare payments with the costs of IRF care.

#### RECOMMENDATION 9

**For fiscal year 2023, the Congress should reduce the 2022 Medicare base payment rate for inpatient rehabilitation facilities by 5 percent.**

#### RATIONALE 9

The combination of low historical cost growth and increasing average payments has resulted in overpayments to IRFs. A high aggregate margin in 2020 of 13.5 percent (14.9 percent with estimated Medicare share of federal relief funds) and our projected margin for 2022 (14 percent) indicate that Medicare payments substantially exceed the costs of caring for beneficiaries. This excess contributes to Medicare's long-run sustainability challenges. For every fiscal year since 2009, the Commission has recommended that the update to the IRF payment rate be eliminated or that the payment rate be reduced. However, CMS has been required by statute to apply an adjusted market basket increase each year. Reducing the payment rate for IRFs by 5 percent for fiscal year 2022 would better align Medicare payments with the costs of IRF care.

We do recognize that the coronavirus PHE will affect all payment adequacy indicators in 2021. However, despite recent PHE-related changes that increased cost growth in IRFs in 2020, we expect these costs to

normalize in subsequent years. We do not anticipate any long-term changes that will persist past the end of the PHE and therefore warrant inclusion in the annual update to IRF payments in 2023. Instead, to the extent that the coronavirus PHE continues into 2023, any needed additional financial support should be targeted to affected IRFs that are necessary for access.

Furthermore, in 2022, we expect currently positive IRF payment adequacy indicators to remain strong, driven by substantially higher annual updates to IRF payment rates in 2021 and 2022 with the expiration of statutory reductions in IRF updates required by the Affordable Care Act in each year from 2010 through 2019.

#### IMPLICATIONS 9

##### Spending

- Under current law, the base payment rate under the IRF PPS is projected to increase by about 2.1 percent in 2023. Relative to current law, this recommendation would decrease Medicare spending by between \$750 million and \$2 billion in 2023 and by between \$5 billion and \$10 billion over five years.

##### Beneficiary and provider

- We do not expect this recommendation to have an adverse effect on Medicare beneficiaries' access to care or out-of-pocket spending. This recommendation could increase financial pressure on some providers. We expect that relatively efficient providers will continue to be willing and able to care for Medicare beneficiaries. ■

## Endnotes

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- 1 More frequently, Medicare beneficiaries receive inpatient rehabilitation services in skilled nursing facilities (SNFs), in part because there are many more SNFs than IRFs nationwide.
- 2 Throughout this chapter, we use the term “FFS Medicare” or “traditional Medicare” as equivalents to the CMS term “Original Medicare.” Collectively, we distinguish the payment model represented by these terms from other models such as Medicare Advantage or advanced alternative payment models that may use FFS mechanisms but which are designed to create different financial incentives.
- 3 More information about the prospective payment system for IRFs is available at [https://www.medpac.gov/wp-content/uploads/2021/11/medpac\\_payment\\_basics\\_21\\_irf\\_final\\_sec.pdf](https://www.medpac.gov/wp-content/uploads/2021/11/medpac_payment_basics_21_irf_final_sec.pdf).
- 4 During the public health emergency (PHE), some exceptions have been made to Medicare’s facility requirements for IRFs to help health care providers in affected communities manage patient flow. For example, during the PHE, an IRF that agrees to admit a patient to help a nearby hospital free up an acute care bed may exclude that patient from its compliance threshold calculation, as long as the patient’s medical record properly indicates that the patient was admitted solely to respond to the PHE (Centers for Medicare & Medicaid Services 2020b). The compliance threshold (commonly referred to as the “60 percent rule”) requires that no less than 60 percent of patients admitted to an IRF have as a primary diagnosis or comorbidity at least 1 of 13 conditions specified by CMS.
- 5 The 13 conditions are stroke; spinal cord injury; congenital deformity; amputation of a lower limb; major multiple trauma; hip fracture; brain injury; certain other neurological conditions (multiple sclerosis, Parkinson’s disease, cerebral palsy, and neuromuscular disorders); burns; three arthritis conditions for which appropriate, aggressive, and sustained outpatient therapy has failed; and hip or knee replacement when it is bilateral, the patient’s body mass index is greater than or equal to 50, or the patient is age 85 or older.
- 6 During the PHE, some exceptions were made to IRF Medicare coverage criteria for beneficiaries to help health care providers contain the spread of COVID-19. For example, the Secretary waived Section 412.622(a)(3)(ii), commonly referred to as the “3-hour rule,” the criterion that patients treated in IRFs generally receive at least 15 hours of therapy per week. IRFs should strive to provide typical IRF levels of care for beneficiaries admitted during the coronavirus public health emergency who require and can benefit from such care (Centers for Medicare & Medicaid Services 2020b).
- 7 If we approximate marginal cost as total Medicare cost minus fixed building and equipment cost, then:  
  
$$\text{Marginal profit} = (\text{payments for Medicare services} - (\text{total Medicare costs} - \text{fixed building and equipment costs})) / \text{Medicare payments}.$$
- 8 The risk adjustment for the successful discharge to the community measure includes age and sex of the beneficiary, end-stage renal disease (ESRD) and disability status for entitlement, principal diagnosis, comorbidities, the length of stay of the preceding hospital stay (if there was one), and a count of the hospitalizations during the preceding year. Risk adjusters for the hospitalization measure include primary diagnosis, comorbidities and severity of illness, special conditions (severe wounds, difficulty swallowing, and bowel incontinence), age and sex, disability and ESRD status, hospitalization in the previous month, days in the intensive care unit during a preceding hospitalization (if there was one), a count of the hospitalizations during the preceding year, and the provision of ventilator care during the PAC stay. Providers with least 60 stays in the year, the minimum count to meet a reliability of 0.7, were included in calculating the average facility rate.
- 9 For more details on the COVID-19 Accelerated and Advance Medicare Payments Program, see <https://www.cms.gov/files/document/covid-medicare-accelerated-and-advance-payments-program-covid-19-public-health-emergency-repayment.pdf>.
- 10 Effective July 1, 2021, certain specialty hospitals, including inpatient rehabilitation facilities, are exempt from the certificate-of-need (CON) review in Florida. A CON requires the state to determine whether there is enough demand for the services before construction of a new health care facility.
- 11 The Affordable Care Act of 2010 required a budgetary reduction to IRF PPS payments in each year from 2010 to 2019.
- 12 Additionally, evidence suggests that assessments of patients’ motor and cognitive function are not reliably consistent across IRFs. Some in the industry have postulated that hospital-based IRFs devote less time to training assessment staff and verifying the accuracy of assessments, resulting

in less reliable measures of patients' motor and cognitive function in these facilities. Others assert that some freestanding IRFs aggressively assess their patients in a way that maximizes payment. To the extent that hospital-based IRFs consistently assess their patients as less disabled than do their freestanding counterparts, for whatever reason, their payments—and margins—will be systematically lower.

- 13 Previous Commission analyses suggest that assessment and scoring practices contribute to greater profitability in some IRFs (Medicare Payment Advisory Commission 2016); therefore, the results of this year's efficient provider analysis must be interpreted with caution.

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