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President and CEO

May 31, 2022

The Honorable Chiquita Brooks-LaSure
Administrator
Centers for Medicare & Medicaid Services
Department of Health and Human Services
Hubert H. Humphrey Building
200 Independence Avenue SW
Washington, DC 20201

RE: Inpatient Rehabilitation Facility Prospective Payment System for Federal Fiscal Year 2023 and Updates to the IRF Quality Reporting Program (CMS-1767-P)

Dear Administrator Brooks-LaSure,

The Federation of American Hospitals (“FAH”) is the national representative of more than 1,000 leading tax-paying hospitals and health systems throughout the United States. FAH members provide patients and communities with access to high-quality, affordable care in both urban and rural areas across 46 states, plus Washington, DC and Puerto Rico. Our members include teaching, acute, inpatient rehabilitation, behavioral health, and long-term care hospitals and provide a wide range of inpatient, ambulatory, post-acute, emergency, children’s, and cancer services.

The FAH appreciates the opportunity to submit comments to the Centers for Medicare & Medicaid Services (CMS) regarding its proposed rule, Inpatient Rehabilitation Facility (IRF) Prospective Payment System for Federal Fiscal Year 2023 and Updates to the IRF Quality Reporting Program (“Proposed Rule”) published in the Federal Register on April 6, 2022.

MARKET BASKET UPDATE

For FY 2023, CMS proposes to update the 2016-based IRF market basket to reflect projected price increases according to the IHS Global Inc.’s (IGI) 4th quarter 2021 forecast with historical data through the 3rd quarter of 2021. Using that forecast, the proposed IRF market basket for FY 2023 is 3.2 percent. Using data from the same period, CMS estimates an offset to

the IRF market basket for total multifactor productivity of 0.4 percentage points. Consequently, CMS proposes an IRF PPS update of 2.8 percent for FY 2023 for hospitals that submit quality data.

The FAH has serious concerns that the proposed market basket forecast is neither accurately nor adequately capturing the unique factors influencing the hospital and health care market today in general, and the market in which IRFs compete specifically. The scope and scale of the COVID-19 pandemic is unprecedented in our times with the constant barrage of challenges and pressures that hospitals have and continue to face. Chronic, preexisting nurse and caregiver shortages have exploded during the pandemic fueled by increased demand and workforce burnout from, among other factors, quarantines, surges, and stress.

Hospitals have had to weather an unrelenting cascade of market pressures during the COVID public health emergency (PHE), compounded by historically high, spiraling inflation, as detailed in an April 2022 report¹ by the American Hospital Association:

- According to data from the Bureau of Labor Statistics, hospital employment is down approximately 100,000 from pre-pandemic levels. At the same time, hospital labor expenses per patient through 2021 were 19.1% higher than pre-pandemic levels in 2019.
- Driving the growth in labor expenses has been an increased reliance on contract staff, especially contract nurses, who are integral members of the clinical team. In 2019, hospitals spent a median of 4.7% of their total nurse labor expenses for contract travel nurses, which skyrocketed to a median of 38.6% in January 2022.
- Contract staff agencies have increased the rates they bill hospitals significantly. In fact, hourly billing rates that hospitals pay staffing firms for contract employees increased 213% compared to pre-pandemic levels and led to a 62% profit margin for contract staff agencies, i.e., the difference between what the firms charge hospitals and what the firms actually pay the contract employees.
- Drug expenses also increased dramatically, 36.9% on per patient bases, compared to pre-pandemic levels. As a share of non-labor expenses, drug expenses grew from approximately 8.2% in January 2019 to 10.6% in January 2022.
- Higher economy-wide costs have important effects on hospital and health system prices. In April 2021, BLS reported that the CPI-U had the largest 12-month increase since September 2008. Additionally, consumer prices rose by a historic 8.5% in March 2022. Despite persistent cost pressures, hospital prices have seen consistently modest growth in recent years. According to BLS data, hospital prices have grown an average 2.1% per year over the last decade, about half the average annual increase in health insurance premiums.

¹ [Massive Growth in Expenses and Rising Inflation Fuel Continued Financial Challenges for America's Hospitals and Health Systems](#), American Hospital Association, April 2022.² BLS, May 2022: <https://www.bls.gov/opub/ted/2022/nonfarm-business-labor-productivity-down-0-6-percent-from-first-quarter-2021-to-first-quarter-2022.htm>

These inflationary cost pressures for IRFs and all of America’s hospitals do not seem to be captured in IHS Global’s (IHG) estimate of 3.2 percent for IRF market basket inflation for FY 2023. We are concerned that the 4-quarter rolling average and methods used to estimate inflation in IRF spending are not capturing the readily-evident pandemic-initiated shocks to the health care market that are significantly driving up costs, especially labor, across the spectrum of hospital inputs. **We urge CMS to consider these pandemic triggers that do not seem to be reflected in the market basket forecast and make a PHE-related exception to further increase IRF rates to better adjust FY 2023 payments to IRFs to account for inflation.**

Secondly, it is noteworthy that CMS and IHG estimates for the FY 2021 and FY 2022 market basket inflationary increases were underestimated as well, as shown in the table below:

Inpatient Rehabilitation Facility PPS	FY 21	FY 22
Market Basket Update In Final Rule	2.4	2.6
FY21 Actual/ FY22 Most Current MB Estimate*	2.7	3.8
Difference	0.3	1.2

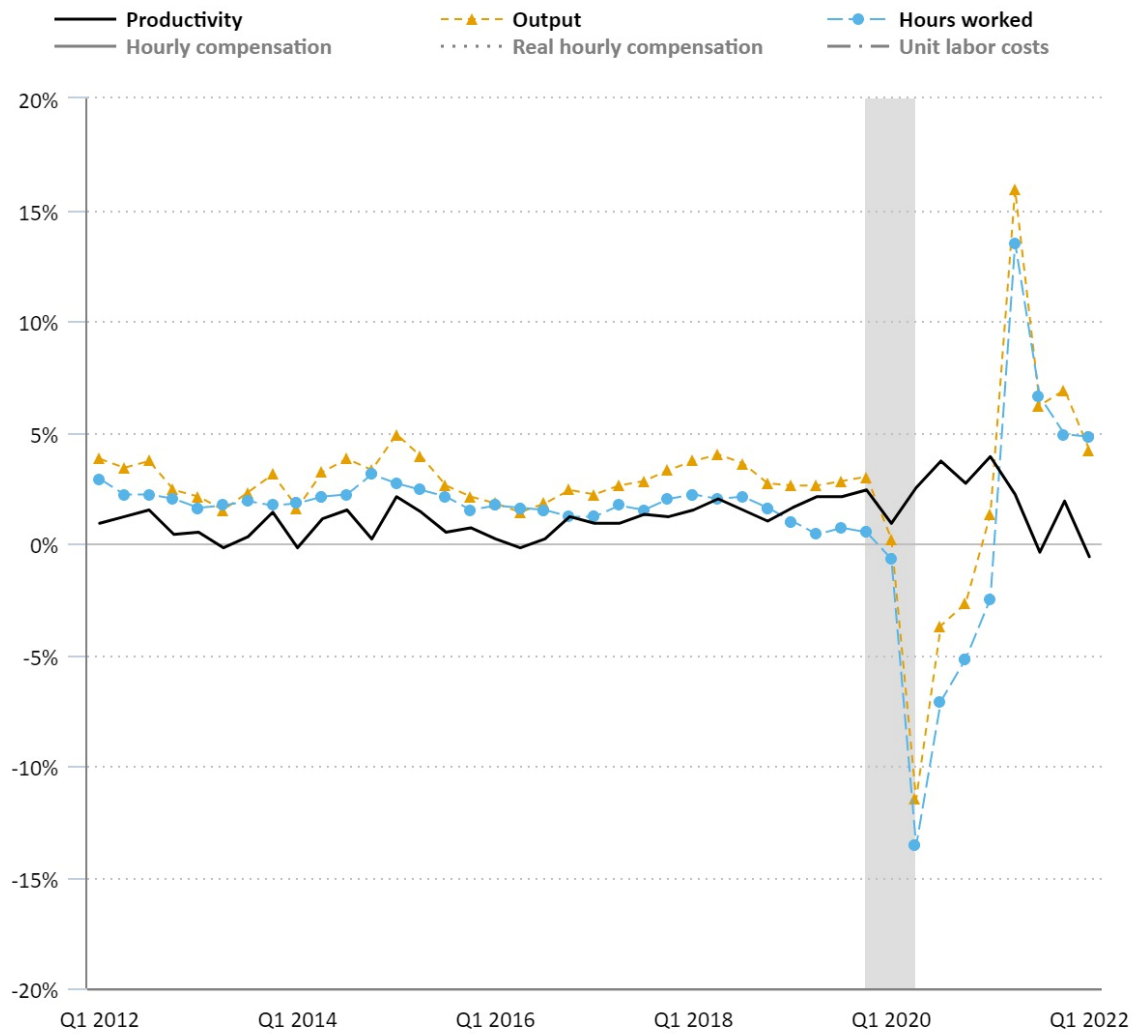
*Source: IHS Global Inc. 2021q4 Forecast
 Historical Data through 2021Q3
 Released by CMS, OACT, National Health Statistics Group, dnhs@cms.hhs.gov

As this table reflects, market basket updates to IRFs in FY 2021-FY 2022 when the COVID pandemic was fully reflected are currently estimated to underinflate the base IRF rate by 1.5 percent. This means that the base rate for FY 2023 is 1.5% too low – further compounding the inadequate FY 2023 rate increase.

The FAH is further concerned that the IRF update for FY 2023 includes a reduction for private non-farm multifactor productivity growth of 0.4 percent. The COVID-19 pandemic has had a profound impact on US productivity and most estimates of labor productivity highlight uncharacteristic reductions. In fact, from the first quarter 2021 to the first quarter 2022, nonfarm business sector labor productivity decreased 0.6 percent, reflecting a 4.2-percent increase in output that was outpaced by a 4.8-percent increase in hours worked. This is the largest over-the-year decline since the fourth quarter of 1993, when the measure also declined 0.6 percent. The chart below highlights the dramatic impact of COVID on US productivity².

² BLS, May 2022: <https://www.bls.gov/opub/ted/2022/nonfarm-business-labor-productivity-down-0-6-percent-from-first-quarter-2021-to-first-quarter-2022.htm>

Labor productivity (output per hour), and related measures, percent change from same quarter a year ago, 1st quarter 2012–1st quarter 2022



Click legend items to change data display. Hover over chart to view data.
 Shaded area represents a recession as determined by the National Bureau of Economic Research.
 Source: U.S. Bureau of Labor Statistics.



Further CMS’ own Office of the Actuary documented the disconnect between using the private non-farm multifactor productivity growth measure and a hospital-specific measure³. While this annual productivity offset is based on a provision of the Affordable Care Act of 2010 and required by law, we urge CMS to consider the appropriateness of this reduction and the further slide in payment adequacy the reduction could lead to for IRFs.

³ Spitalnic et al., *Hospital Multifactor Productivity: An Updated Presentation of Two Methodologies* (February 22, 2016) <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/ProductivityMemo2016.pdf> ⁴ *Jimmo v. Sebelius*, No. 5:11-CV17 (D. Vt., Jan. 24, 2013).

In light of this once-in-a-generation convergence of inflationary and COVID-19 pandemic forces, the FAH recommends CMS consider its update for IRF PPS payments to ensure that the FY 2023 rate reflects a more realistic measure of inflationary pressures, is applied to a base rate that more accurately incorporates actual inflation during the pandemic, and recognizes the disconnect between expectations for providers to be at least as productive as the 10-year average during a pandemic which has had a profound impact on ability for hospitals to increase productivity. **We urge CMS to consider its regulatory authority to modify this adjustment or make a PHE related exception in its application for the FY 2023 update.**

CMG RELATIVE WEIGHTS AND AVERAGE LENGTH OF STAY FOR FY 2023

CMS has proposed updates to Case-Mix Group (CMG) relative weights and average length of stay values using fiscal years (“FY”) 2021 IRF claims and 2020 IRF cost reporting data. **The FAH supports CMS’ update to the CMG relative weights and average length of stay values for FY 2023 and encourages CMS to use the latest available data to update these in the final rule.**

WAGE INDEX

For FY 2023 and future years, CMS proposes a permanent cap of 5 percent on reductions to the wage index for any reason. CMS believes providers generally experience fluctuations in the wage index annually of less than 5 percent. Thus, the proposed cap would generally affect few hospitals and minimize the required budget neutrality adjustment while also addressing concerns about instability in payments from year to year.

CMS proposes that the 5 percent cap would apply regardless of the circumstances causing the decline. Under this proposal if a wage index is calculated with the application of the 5 percent cap, the following year’s wage index would not be less than 95 percent of the IRF’s capped wage index in the prior year. CMS further proposes that a new IRF would be paid the wage index for the area where it is geographically located for its first full or partial FY with no cap applied.

The FAH appreciates CMS’ recognition of how disruptive volatile drops in the area wage index can create significant challenges for IRFs and the FAH strongly supports a 5 percent stop-loss to minimize annual reductions in the area wage index value and to help mitigate wide annual swings that are beyond a hospital’s ability to control. The FAH urges CMS to adopt the 5 percent stop-loss in a non-budget neutral manner.

CMS is not proposing to apply the stop-loss for a new IRF in an area where the stop-loss would otherwise apply. While we understand the rationale for this approach, we are concerned that this will create an unnecessary inequity in Medicare payments for IRFs in the same market and we would encourage CMS to apply the same area wage index value for new and existing IRFs under this policy.

HIGH-COST OUTLIERS

The outlier policy is an important component of the IRF PPS that helps ensure that payments for high cost patients more accurately reflect the more intensive level of services they receive, thereby supporting access to care. However, we have concerns that outlier payments

under the IRF PPS are not always targeted to patients who require more intensive services with related higher costs.

Based on an analysis of preliminary data, CMS estimates that IRF outlier payments as a percentage of total estimated payments would be approximately 3.8 percent in FY 2022. The Proposed Rule would correct this overpayment to IRFs in FY 2023 by increasing the High-Cost Outlier (“HCO”) threshold from \$9,491 in FY 2022 to \$13,038. The PHE appears to have had an impact on the case mix and length of stay for COVID-19 related patients causing an increase in outlier payments.

The FAH generally supports moderating the outlier threshold amount to maintain the current 3% outlier pool. In addition, CMS should include historical outlier reconciliation dollars in the outlier projections consistent with IPPS to ensure more accurate calibration of the outlier payment amounts.

The FAH also has concerns that outlier payments to providers have continued to be concentrated among an increasingly small number of providers. The table below shows that outlier payments are significantly concentrated with the top decile receiving over 65 percent of all IRF outlier payments. This has substantially increased from FY 2022. In addition to exploring use of a reconciliation process, CMS should further examine these high outlier IRFs, their costs and their patient acuity to determine whether reducing the overall 3% outlier pool or considering IRF-specific limits on outlier payments would be appropriate.

Data From Proposed and Final Rule Rate Setting Files (Top Decile of IRFs)									
	# of IRFs	% of Outlier Payments	Avg. Discharges	Avg. Outlier Payment per Discharge		Avg. CMI		Avg. Cost	
FY	Top Decile	Top Decile	Top Decile	Top Decile	Industry Avg.	Top Decile	Industry Avg.	Top Decile	Industry Avg.
2023	111	65.14%	409	\$ 4,100	\$ 753	1.37	1.35	\$ 37,158	\$ 21,920
2022	111	56.81%	399	\$ 3,527	\$ 720	1.35	1.32	\$ 33,337	\$ 20,456
2021	111	53.18%	413	\$ 3,219	\$ 678	1.30	1.27	\$ 30,919	\$ 19,137
2020	112	55.33%	425	\$ 3,137	\$ 655	1.29	1.25	\$ 30,496	\$ 18,972
2019	112	52.72%	392	\$ 3,072	\$ 635	1.25	1.25	\$ 29,029	\$ 18,388
2018	114	50.46%	406	\$ 2,733	\$ 620	1.24	1.23	\$ 27,365	\$ 17,753
2017	113	49.91%	452	\$ 2,368	\$ 605	1.22	1.21	\$ 25,067	\$ 17,152
2016	113	50.12%	418	\$ 2,467	\$ 592	1.21	1.20	\$ 25,428	\$ 17,260
2015	114	50.86%	408	\$ 2,459	\$ 578	1.20	1.19	\$ 25,257	\$ 16,975
2014	114	52.60%	474	\$ 2,087	\$ 560	1.18	1.18	\$ 23,960	\$ 16,704

FACILITY-LEVEL ADJUSTMENT FACTORS

The FAH appreciates CMS’ thoughtful analysis and discussion on the facility-level adjustment factors (FAFs), including the adjustments for LIP, rural and teaching factors. The field shares CMS’ concerns about the volatility of these factors and the overall impact an update

may have on distribution of reimbursement to hospitals. **While CMS' analysis may produce more stable results for the LIP and rural adjustment factors, we are concerned that any policy to update these factors could harm certain IRFs and any future change should, at a minimum, provide a meaningful transition and use of a 3-year (or possibly more than a 3-year) rolling average to minimize annual changes.**

IRFs need predictability and relative stability from year-to-year in these facility-level adjustments. The FAH recommends that CMS take steps to ensure that regardless of the underlying methodology, hospitals can be assured there will not be dramatic swings in the facility-adjustment factors (FAFs) from year-to-year.

Like CMS, Dobson DaVanzo and Associates also found wide instability in the teaching adjustment and their analytic report on the Facility Adjustment Factors is attached. They found that the teaching adjustment levels often were well above inpatient acute PPS hospital teaching adjustments. Applying these adjustments would produce significant volatility in IRF payments. The current IRF teaching payment factor, and the increased values highlighted in CMS' analysis for 2023, would result in teaching payments in excess of what the payment amount would be if the IPPS payment formula was applied. Creating some parity between the IPPS and IRF PPS teaching adjustments may be an alternative approach to consider.

IRF units comprise 74% of teaching IRFs (76 of 103). Creating payment parity between the IRF and IPPS teaching payment amounts would make for consistent payment policy, since the cost structure would be the same in these IRFs as that of the acute care hospitals in which they operate. **The FAH recommends that CMS continue to study factors leading to teaching program costs, consider using IPPS teaching adjustments for IRFs, and ensure that any future changes are implemented using a transition to help IRFs manage the impact.**

SOLICITATION OF COMMENTS FOR IRF TRANSFER POLICY

The FAH appreciates that CMS is seeking stakeholder input on the IRF transfer policy as it considers whether changes to the policy are needed. When CMS finalized the IRF transfer policy over twenty (20) years ago, patients discharged to home health care agencies ("HHAs") with a length-of-stay less than the average length-of-stay for nontransfer cases in the case mix group ("CMG") to which the patient is classified were not included in the policy, while such patients discharged to another IRF, a general acute care hospital, a long-term care hospital, or a skilled nursing facility ("SNF"), were included in the policy. In the first Final Rule for the IRF PPS, CMS stated the following:

In the November 3, 2000 proposed rule, we stated that we were analyzing claims data to determine the extent to which we could distinguish among services that could be considered a substitution of care rather than an extension of the normal progression for inpatient rehabilitation care, and to determine the frequency and intensity of both home health and outpatient therapy services. We noted that estimating the potential substitution of home health therapy services was made more challenging because we had just developed the HHA prospective payment system, and it was difficult to anticipate

how therapy services would be delivered after implementation of that system. (emphasis added)

For the reasons discussed below, particularly when considering whether discharges to home health are a “substitution of care” versus “an extension of the normal progression for inpatient rehabilitation care,” the current IRF PPS transfer policy is working effectively. Additionally, given the elevated importance of home-based services since the beginning of the COVID-19 pandemic, CMS should consider the advisability of policy changes that may present obstacles for patients seeking care in the home. **The FAH opposes any policy to include home health care discharges.**

A. IRF Discharges to Home with Home Health Services Are Positive Outcomes

IRFs treat a mix of patients who are recovering from the debilitating effects of serious illnesses or injuries. Many of these patients also suffer from the effects of chronic conditions, such as diabetes, heart disease, or chronic obstructive pulmonary disorder. The majority of IRF patients are referred and admitted directly from general acute care hospitals where they have spent several days or longer undergoing medical treatment, depending upon the severity and scope of their illness or injury. The goal of IRF patients and their families is to get back to their homes and communities as quickly as possible. Indeed, the ideal discharge goal for IRF patients is to be safely discharged to their homes and communities.

IRFs place considerable focus on our patients avoiding acute hospital readmissions and emergency room visits after being discharged. The most fundamental core measure for IRFs should pertain to patients’ functional improvement and the ability to continue activities of daily living upon discharge back to their communities. The IRF PPS should encourage discharging patients to their homes and communities as soon as they are clinically ready to be there.

According to Chapter 7, Section 30.1 of the Medicare Benefits Policy Manual, in order for a patient to be eligible to receive covered home health services under Medicare Parts A and B, a physician or permitted practitioner must certify that the patient is confined to his/her home, i.e., the “Homebound Rule.”

Many IRF beneficiaries satisfy the requirements of the “Homebound Rule” and require the use of home healthcare services in their home following their discharge from the IRF, independent of their length of stay in the IRF. Home healthcare provides beneficiaries access to in-home therapy and skilled nursing services they would otherwise have to travel away from the home to receive; and outpatient therapy seldom will be in a position to provide the care needed for these complex patients, especially skilled nursing care. Furthermore, as established in *Jimmo v. Sebelius*⁴, beneficiaries receiving home health care are not required to satisfy an improvement standard, rather a beneficiary may qualify for home healthcare utilizing skilled maintenance services.

⁴ *Jimmo v. Sebelius*, No. 5:11-CV17 (D. Vt., Jan. 24, 2013).

The functional or cognitive levels achieved by IRF patients while in the IRF are attributable to intensive therapy, round-the-clock nursing care, medical management supervision by a rehabilitation physician and other physicians as needed, and an interdisciplinary team approach to care. Attainment of these functional or cognitive levels in the IRF enables them to be discharged safely to their homes. Home healthcare, while certainly not as intense as an IRF or other inpatient-based level of care, helps these patients maintain the cognitive or functional levels that they were able to attain during their IRF stay once they are in their homes.

B. Including Home Health Discharges May Not Save Money, Could Disrupt Patients' Care Trajectories

The OIG report cited by CMS for the comment solicitation assumes that budgetary savings for the Medicare program would be achieved if CMS were to include home health discharges in the IRF PPS transfer policy. However, these budgetary assumptions seem exaggerated and likely do not adequately account for the potential multiple impacts that such a policy could have for patients' access to care and on the overall IRF PPS itself.

Regarding the potential adverse impacts on patients' access to care by including home health in the IRF PPS transfer policy, inclusion could alter IRF discharge processes, thereby delaying some IRF patients' access to timely home health care. Regarding how such a policy would affect the IRF PPS, the effects of home health discharges are reflected in average length of stay ("ALOS") values at the CMG and tier levels within the current structure of the IRF PPS – which CMS has characterized as "not show[ing] any particular trends in IRF length of stay patterns." Including home health in the IRF PPS transfer policy would alter ALOS values, since transfer cases are not included in the calculations to determine those values. This could skew the CMG weights and ALOS values in a way that could cause payment inaccuracies until sufficient data are available reflecting the effects of changed care patterns.

Should CMS propose to alter the IRF PPS transfer policy in the future – a change that we think is unnecessary and inadvisable – it should be structured in a way that is similar to the Post-Acute Transfer Policy under the Inpatient Prospective Payment System ("IPPS"). Under the IPPS Post-Acute Transfer Rule, acute care hospitals code patients indicating whether their home healthcare services relate to the condition for which they were being treated in the hospital. The IRF PPS transfer policy should have that same structure if home health discharges are proposed to be included in the future.

C. Early Home Health Discharges Are Not "Substitution[s] of Care"

When considering whether services provided by HHAs to patients discharged directly from IRFs before the average length of stay for the CMG to which the patient is assigned are a "substitution of care," it is important to consider what is being provided in the respective settings. IRF care occurs in an inpatient hospital environment, and is defined by intensive daily therapy (i.e., at least 3 hours of therapy daily, at least 5 days per week), ongoing medical management undertaken by a physician specializing in medical rehabilitation, and round-the-clock nursing care and services. By contrast, home healthcare – unlike care provided in IRFs, SNFs, LTCHs, and general acute care hospitals, all of which provide daily care to patients on an

inpatient basis – is provided on a part-time, intermittent basis that does not, by definition, measure out to, or substitute for, what is provided in an IRF, either in amount or in intensity of care.

Data analysis by Dobson DaVanzo & Associates in the attached report evaluated IRF discharges that received home health based on the average length of stay. The analysis provided data for IRF patients discharged to home health, 1) after a 3-day IRF stay but prior to the ALOS for the CMG into which they have been classified (referred to hereafter as “partial ALOS” cases or discharges); and, 2) IRF patients discharged to home health with a length-of-stay equal to or greater than the ALOS for the CMG into which they were classified (referred to hereafter as “full ALOS” cases or discharges).

The study hypothesized that if IRFs were “substitut[ing]” their care with services provided by home health agencies when discharging “partial ALOS” cases, it seems reasonable that there would also be a consistent pattern of partial ALOS cases generally receiving at least the same or more amounts of care and services from home health agencies, similar as to full ALOS patients. However, the data indicate that this is not happening, based on the FY 2019 data and the most recent data available (FY 2021). Rather, the data support the view that the current transfer policy under the IRF PPS is working effectively and as intended.

For both FYs 2019 and 2021, the analysis did not suggest a pattern or practice whereby partial ALOS patients are being discharged prior to the full ALOS for the CMG to which they have been assigned at levels clearly demonstrating care provided in the IRF is being “substituted” with nursing and therapy care provided in the home with home healthcare. Just the opposite is the case – the data suggest that the overwhelming majority of partial ALOS patients are not receiving more nursing or therapy visits or minutes compared to full ALOS patients. Rather, partial ALOS patients are following their “normal progression for inpatient rehabilitation care,” i.e., they complete their IRF care, are ready to be discharged to their homes, and they need some care and services to help them maintain or build upon what they achieved in the IRF and are receiving it via home healthcare.

The FAH urges CMS not to propose the inclusion of home health discharge in the transfer provision.

IRF QUALITY REPORTING PROGRAM (QRP)

X. IRF QRP Quality Measure Concepts under Consideration for Future Years: Request for Information

CMS seeks comment on the “importance, relevance, appropriateness, and applicability of measures and concepts under consideration” for future IRF QRPs, including:

Cross-Setting Function Measure:

The FAH supports the creation of a cross-setting functional measure on mobility and self-care for post-acute care (PAC), but additional details on how the measure would be specified are needed to enable a comprehensive evaluation. It is important to know that the current mobility

and self-care measures are not standard or interoperable between PAC providers, as the denominators differ in the measure calculations across providers. In addition, any items included in the measure set must be able to collect and distinguish between a wide range of patient functionality levels, such as those patients who may be more independent in the home health setting and long-term care hospital patients who are more dependent. Until these issues are resolved, using a cross-setting function measure to distinguish differences across providers across the different settings will not be meaningful nor will it likely produce results that are reliable and valid.

When defining a cross-setting functional measure, the specifications must account for the patients who are assigned either to the wheelchair or walking categories. Under the prior functional independence measure (FIM) assessment, clinicians used their judgment to determine which score was more appropriate. Under Section GG Self-Care and Mobility Items, there are four Walk items: Walk 10 feet, Walk 50 feet with 2 turns, Walk 150 feet, and Walk 10 feet on Uneven Surfaces and the tool only includes two wheelchair items. Clinicians do not have the autonomy to choose which one is the most appropriate choice for the patient at discharge. The logic rests upon whether or not the patient can walk 10 feet at either admission OR discharge. Even if a patient walks 10 feet dependently because a second helper assists with a wheelchair due to patient's poor balance and the patient will use a wheelchair full time after discharge, the patient's risk adjusted expected outcomes would be based on the patient's ability to Walk since a score was coded for Walk 10 feet on admission OR discharge.

If the patient is coded using one of the not attempted codes for Walk 10 feet at admission AND discharge, then the patient's risk-adjusted expected outcomes are calculated based on the patient's ability to use the wheelchair using the codes from the two wheelchair items. Then, per CMS, the two wheelchair scores are doubled to make the calculation equitable to a patient who has an activity occurred code for all four Walk items. There are concerns the calculation may not be equitable between a Walk patient versus a Wheelchair patient. These issues must be factored into any cross-setting function measure to ensure that reliable and valid comparisons can be made for providers across the various settings.

The FAH encourages CMS to consider these issues during the development of this measure and ensure that it is adequately tested across multiple patient populations and settings.

Health Equity Measures:

Please see our comments below on the equity-focused RFIs related to measuring health equity and disparities of care.

PAC COVID-19 Vaccination Coverage among Patients Measure:

While the FAH supports the intent of this potential measure, we urge CMS to postpone the inclusion of a measure on COVID-19 vaccination coverage until the measure specifications have been finalized and tested. The underlying evidence for measures on COVID-19 vaccination is still emerging, particularly since it remains unclear how "fully vaccinated" should be defined,

when “booster” shots may be required and for which patient populations, and full approval by the National Quality Forum (NQF) has not yet occurred. In addition, feedback from the field is needed to ensure that this measure reflects the most current knowledge and evidence and can be easily collected and reported.

Additionally, because we anticipate that this measure will undergo substantial changes within and across reporting years, the FAH does not believe that it should be used for payment decisions, nor should it be publicly reported until the underlying evidence is stable and reporting of the measure has occurred for several years. Ultimately, the FAH generally believes that measures that increase the reporting burden and leverage specifications that are not aligned with other measures should be avoided.

A. Inclusion of the National Healthcare Safety Network (NHSN) Healthcare-associated *Clostridioides Difficile* Infection Outcome Measure in the IRF-QRP – RFI

The FAH does not believe that this measure on *Clostridioides Difficile* Infection (CDI) should continue to be used in the IRF QRP as the statistics included in this proposed rule to support the measure’s continued use is from inpatient hospitals. When we review the publicly reported data for this measure for IRFs, the incidence rate is low and the performance scores do not distinguish meaningful differences among providers. Of the 1,195 IRFs currently reported on Care Compare (reflecting data from 2Q19-3Q20), 88 percent are either no different than national SIR or do not have data available (mostly due to the expected SIR being below 1.0 and the measure cannot be calculated at such a low incidence rate). Only 141 IRFs are categorized as “better” and 7 IRFs categorized as “worse.”

The FAH supports the changes to the numerator to add the clinical component of qualifying antimicrobial therapy and believes that it will improve the validity and accuracy of the measure. However, we would caution CMS that this change will further reduce the number of patients who meet the revised numerator criteria and will likely lead to even smaller numbers of IRFs identified as “better” or “worse”.

As a result, the FAH believes that CMS should review the further impact that this change to the measure will have on the distribution of performance scores across IRFs. The nominal distinctions that we see with the current publicly reported data and anticipated decrease in scores with the revisions justify retiring the measure rather than shifting to a digital quality measure (dQM).

If CMS continues to include this measure within the IRF QRP, the FAH supports moving to a dQM but urges CMS to provide sufficient time to allow facilities to invest in an electronic health record (EHR), build interfaces with laboratories, identify, and map the required data elements and clinical workflows, and any other work that may be needed to facilitate dQM reporting. We also believe that CMS must provide further information on how a Measure Calculation Tool (MCT) would lead to cost savings in the data collection and reporting efforts for this measure. Accordingly, we believe a minimum of two years will be needed for this transition.

B. Overarching Principles for Measuring Equity and Healthcare Quality Disparities Across CMS Quality Programs – Request for Information (RFI)

CMS seeks input about using quality measure development and stratified results reporting to advance its health care equity strategic plan,⁵ describing health equity as *the attainment of the highest level of health for all people, where everyone has a fair and just opportunity to attain their optimal health regardless of race, ethnicity, disability, sexual orientation, gender identity, socioeconomic status, geography, preferred language, or other factors that affect access to care and health outcomes*. The agency offers a general framework to assess disparities for use across the CMS quality program portfolio. Additionally, CMS solicits input about approaches to assess drivers of disparities and health equity measures for adoption that are potentially applicable specifically to the IRF QRP.

The FAH welcomes the opportunity to respond to the Equity Measurement RFI on behalf of our members, who include hospital-based and freestanding IRFs that vary widely in size and location. We firmly believe that ensuring health care equity promotes better quality of care for all patients. We also continue to believe that appropriately accounting for demographic and social risk factors is essential for accurately measuring provider performance under all of CMS' public reporting and accountability programs. We note, however, that health care outcome disparities can occur within a broader context of societal inequities over which health care providers have limited control. In such circumstances, the FAH believes that quality measures and any related payment adjustments must be carefully constructed so as to avoid unfairly penalizing providers that results in worsening disparities by reducing access to care for at-risk patients. Where applicable, behaviors by other health care actors should also be considered in assessing sources of outcome disparities.

Cross-Setting Framework to Assess Health Care Quality Disparities

Identification of Goals and Approaches for Measuring Healthcare Disparities and Using Measure Stratification Across CMS Quality Reporting Programs

CMS reviews its Within-Facility and Between-Facility Disparities Methods and asks for input about their use to generate reports for providers about their performances on selected IRF QRP measures. The reports would present data that are facility-specific and stratified for selected demographic or social risk factors through the application of one or both disparity methods.⁶

The FAH believes that application of the two disparities methods and stratified results reporting when properly designed and implemented could help providers identify and understand their individual facility-level disparities. We strongly recommend that CMS' first step should be a trial of confidential, stratified, disparities reporting to a representative sample of IRFs, using a well-established social risk factor, such as dual-eligibility status as applied to performance on an

⁵ Described at <https://www.cms.gov/cms-strategic-plan>.

⁶ The terms social risk factors (SRF), Social Determinants of Health or Social Drivers of Health (SDOH), Socioeconomic Status (SES), and Sociodemographic Status (SDS) are often used interchangeably health equity materials to refer to non-clinical factors known to negatively affect patient outcomes.

existing measure, and be conducted with opportunities for feedback from stakeholders. This trial would generate valuable lessons for IRFs and CMS, as well as allow issues identified to be remedied prior to large-scale reporting, conserving finite resources and mitigating burden for facilities and the agency.

Guiding Principles for Selecting and Prioritizing Measures for Disparity Reporting

CMS requests input on system-wide principles to guide prioritizing candidate measures for disparities assessment and stratified reporting. Principles discussed by CMS include the use of measures that are: existing, validated, and reliable clinical measures; outcome measures for which some evidence of disparities exists among Medicare beneficiaries; measures for which adequate sample sizes are available; measures broadly representative of providers and outcomes; and measures of appropriate access and care.

The FAH believes that all of the principles being considered by CMS have merit. We note that applicability of these principles will vary with the demographic or social risk variable being examined and will be impacted by the structure and context of the quality program in which the measure is to be used for disparities assessment and stratified reporting. For example, we have concerns about prioritizing access measures for stratified reporting under the IRF QRP. Our members' facilities predominately receive patients through referrals from acute care hospitals; therefore, disparate access reflects referring provider practice patterns rather than IRF behaviors.

The FAH recommends that CMS also consider as guiding principles the following: 1) measures for which CMS already has data sources containing potentially relevant demographic or social risk factors (e.g., zip code or dual-eligibility status); 2) the distribution of demographic and risk factor variables within a quality program; 3) measures for which self-reporting of data are inherent in the measure, such as experience-of-care surveys and patient-reported outcome performance measures (PRO-PM); 4) measures for which CMS can calculate performance results timely and provide feedback promptly to providers, as aging data quickly become irrelevant; 5) expansion beyond clinical measures to resource use measures (e.g., MSPB-IRF), as providing appropriate and equitable care to at-risk patients may necessitate increased resource use that could cause what otherwise appears to be poor resource use performance; and 6) measures that are likely to align with collection and reporting requirements of states and other third-party payers as a means of minimizing provider burden that will also strengthen the validity and reliability of measure results. Finally, we note that the IRF QRP currently lacks a patient's experience-of-care measure, a significant gap when attempting to assess disparities in the IRF setting, and we strongly encourage CMS to develop such a measure.

Principles for Social Risk Factor and Demographic Data Selection and Use

CMS notes the challenges of selecting among the many factors for which associations with disparities have been suggested and the limited availability of high-quality (i.e., self-reported) data sources for certain variables. Practical barriers to the number of variables to be studied also must be considered, including reporting burden created for providers and optimal

allocation of finite provider and CMS resources. CMS describes proxy variables (e.g., neighborhood indices) and tools (imputation for missing data) for possible use when self-reported data are scarce.

The FAH strongly recommends that CMS begin disparity analyses and stratified reporting with demographic and social risk variables for which CMS already has large data sets (e.g., Medicare enrollment and claims data) containing potentially relevant information (e.g., diagnoses, dual-eligibility status). We also strongly recommend that all variables to be analyzed for disparities should be required to have clear, standardized definitions that are used consistently across CMS quality programs, since downstream providers such as IRFs often rely on previously obtained patient data (e.g., from referring hospitals). We further recommend that CMS establish a needs assessment process through which variables with high face validity for potential disparities – but lacking standardized definitions, credible self-reported sources within CMS data sets, and/or suitable proxy variables – could be identified, explored, and refined for future use in a transparent manner (e.g., sexual orientation/gender identity). We acknowledge that CMS social risk factor data sources are expanding: beginning October 1, 2022, IRFs will be required to collect patient information about race and ethnicity, preferred language, need for interpreter services, health literacy, transportation, and social isolation. These items are included in the SDOH Category of standardized patient data assessment elements (SPADEs) to be entered into the IRF Patient Assessment Instrument (PAI).⁷

Given the barriers to disparity assessment created by the paucity of certain self-reported patient data, the FAH supports the judicious use of some of the substitute variables being considered by CMS. We suggest that a neighborhood-based variable (e.g., Area Deprivation Index, Census Bureau’s Community Resilience Estimates) might serve as a suitable proxy in carefully selected IRF disparity analyses. We do not support the use of imputed data techniques to replace missing demographic data, at least until considerably more data are available about data imputation efficacy and accuracy when used in CMS quality programs, since the assumptions of the imputation technique may introduce unanticipated biases into the original data set. We also suggest CMS carefully consider the translation of such indexes into composite measures. Composite scores can be useful, but they must be carefully considered, as underlying variables may or may not be predictive of performance for a given quality program. The FAH believes that resources are better invested into enhanced efforts for collection of self-reported data than into expanding techniques for data imputation. We urge CMS to explore alternative sources of social risk factor data in other HHS initiatives and other federal programs.

Identification of Meaningful Performance Differences

CMS intends to balance standardizing its analytic approaches wherever possible with retaining flexibility to adjust as appropriate for contextual variations between its individual quality programs (e.g., between the IRF QRP and the hospital outpatient QRP). The agency describes a wide range of techniques being considered for use to identify meaningful performance differences from stratified measure results.

⁷ Also starting at this time, SPADEs for hearing and vision status must be recorded under the IRF-PAI Impairment Category.

The FAH recommends that the actionability of specific data comparisons for IRFs be routinely considered during data analyses regardless of statistical method chosen. When multiple comparisons are performed some statistically significant associations inevitably will emerge, but not all will be worthy of time and resource investment by IRFs to explore. Cut points, defined thresholds, ranked ordering, and benchmarking should be approached with particular care until disparity analysis and reporting has matured considerably and a substantial amount of experience with its use has accrued for CMS and providers. Whether or not intentional, categorizations of individual IRFs as discriminatory when based on poorly chosen statistical methods and/or inappropriate application of stratified reporting results could cause long-term and nearly irreparable harm to beneficiaries, providers, and the Medicare program.

Guiding Principles for Reporting Disparity Measures

CMS notes that the statute requires public reporting of results from many of its quality programs, but stratified reporting is seldom mandated. Outside of mandatory reporting, CMS believes that both overall and stratified results routinely should be reported together. The agency suggests that confidential reporting to providers is especially beneficial when new programs and measures are being introduced. CMS observes that public results reporting allows market forces to incent improvement by providers to remain competitive.

The FAH strongly believes that confidential reporting to providers is wholly appropriate for measures and initiatives involving stratification for demographic and social risk factors. Results reporting should be accompanied by a review and correction process and be subject to data validation. Properly structured provider-only reporting should create an environment that facilitates the detection of unintended consequences or confusing results before any public reporting of these extremely sensitive data occurs.

Transition to public reporting should be planned and implemented in a deliberate and unhurried manner, and only after the data collected have demonstrated a high degree of reproducibility. We believe it to be essential for CMS to structure public reporting of disparities comparison results in a way that avoids the risk of further disadvantaging providers who serve populations and areas with limited resources (e.g., IRFs located in low-income and rural communities). Also, prior to public reporting, the FAH urges CMS to undertake focus groups to test messaging and understanding of disparities data, so that the results reported are clear and actionable for patients, families, and caregivers.

Finally, CMS notes earlier in the RFI that the within-facility method is suitable for use with most measures that include patient-level data. The FAH recommends that stratified disparity reports to IRFs concerning their performances on claims-based measures contain patient-level data. All of the data necessary to do so would appear to reside within CMS data systems, at least for stratification based on several demographic variables and social risk factors. Results reporting at a less granular level will not allow IRFs to derive the full potential value from their reports.

1. Approaches to Assessing Drivers of Health Care Quality Disparities in the IRF QRP Performance Disparity Decomposition

CMS discusses a statistical technique, regression decomposition, used to attribute the relative contributions of several factors to an outcome that is different (disparate) across two or more groups. An illustrative example is presented using this technique to analyze IRF spending differences between patients who are or are not dually eligible. A portion of the differential spending remains unexplained, which CMS states could be due to social risk factors beyond those included for analysis or to a “distinctive pattern of care decisions” made by providers (i.e., discrimination) when caring for dually eligible and non-dual patients. CMS suggests that regression decomposition could be applied to disparate measure results throughout its quality programs for which potential contributing factors are available in the agency’s databases and references a journal article about the Blinder-Oaxaca methodology for decomposition.⁸

The FAH acknowledges the intrinsic appeal of a statistical technique that could quantify the relative contributions of multiple specified social risk factors to a health care outcome disparity. We are deeply concerned, however, about the potential application of the Blinder-Oaxaca methodology by CMS for Medicare disparity analyses anytime in the near future for multiple reasons.

The simplified example presented in the RFI bears no similarity to the complex examples discussed in the reference article by Rahimi and Nazari, creating doubt about the actual transferability of the method from mathematical theory to credible, real-world health equity analyses. The reference article has not been peer-reviewed. Its bibliography contains very few reports from healthcare delivery settings, with most citations linking to mathematical or nonmedical papers. Even more disturbing, Rahimi and Nazari repetitively characterize the unexplained component of the decomposition as attributable to discrimination, though do mention that it may instead represent as yet unidentified social risk factors. The potential for decomposition method results to be misunderstood and be substantively misrepresented (e.g., categorizing individual providers as discriminatory) is large and disquieting, particularly if confidential results inadvertently were to become public.

The FAH cannot support regression decomposition for any use other than experimental by CMS in disparity analyses at this time. Should the agency wish to revisit adoption of this analytic tool for use across its quality enterprise as something other than a research tool for internal use only, CMS should return to stakeholders with a body of evidence that credibly and transparently addresses the adaptation of Blinder-Oaxaca decomposition to Medicare disparities data. The evidence must include readily understood – but not oversimplified -- simulation and modeling examples and results using actual de-identified Medicare data from several quality programs. A plan that details how results would be used internally and perhaps shared publicly must also be presented with special attention to how misrepresentation of providers as discriminatory would be avoided.

⁸ Rahimi E, Hashemi Nazari S. A detailed explanation and graphical representation of the Blinder-Oaxaca decomposition method with its application in health inequalities. *Emerg Themes Epidemiol.* 2021;18:12. <https://doi.org/10.1186/s12982-021-00100-9>.

Measures Related to Health Equity

Health Equity Summary Score (HESS)⁹

CMS offers the HESS as an equity measure already in development for use in other programs that is potentially transferable to the IRF QRP. This composite measure was conceived for scoring Medicare Advantage (MA) plans on care delivered to their racial/ethnic and dually eligible patient subgroups that aggregates facility performance on selected HEDIS clinical measures (e.g., breast cancer screening) with experience-of-care survey results (MA CAHPS). The HESS was designed for reporting to plans and the public as a star rating (1-5 stars scale).

As we have previously commented,¹⁰ the FAH recognizes the intrinsic appeal of a single metric for facility equity performance and its potential utility for evaluating progress towards closing the equity gaps in CMS programs. We stand willing to work with CMS in development of a realistic and fair summary score. However, we strongly believe that anything beyond a conceptual discussion of IRF QRP applicability is premature at this time.

We note challenges described by measure developers in the reference article cited by CMS in this RFI. For example, when nearly 400 Medicare Advantage (MA) health plans were evaluated by the HESS developers, scores for both HEDIS and CAHPS performances were calculable for only 44 percent of health plans. Smaller health plans and those with less typical demographic distribution patterns were seldom evaluable. No trial reporting HESS results to beneficiaries (i.e., plan members) was performed so the perceived value of this score to them remains speculative. We note that CMS does not describe or provide any more references to reports of additional experience with applying the HESS to MA health plans. We also note that during recent MA rulemaking, CMS solicited feedback about the development of a Health Equity Index which appears to be a successor to the HESS.¹¹ Finally, we note the agency's statement in this RFI that "a version of the HESS is in development for the Hospital Inpatient Quality Reporting (HIQR) program.

We are concerned that the HESS is moving forward towards implementation in at least two CMS quality programs even though it does not appear to currently meet the criterion of adhering to high scientific acceptability standards as described in this RFI by CMS for its equity measures. We do support continued exploration of "HESS-type" measure concepts but strongly urge that modeling, simulation, and beneficiary comprehensibility and usability trials occur and testing results be shared fully and transparently with stakeholders before any such measures move further forward through rulemaking for the IRF QRP or other Medicare programs.

⁹ Agniel D., Martino S.C., Burkhart Q, et al. Incentivizing excellent care to at-risk groups with a health equity summary score. *J Gen Intern Med*, 2021; 36(7):1847-1857. <https://link.springer.com/content/pdf/10.1007/s11606-019-05473-x.pdf>.

¹⁰ The Federation of American Hospitals. FY 2022 IPPS Comment Letter to CMS. June 28, 2021. Retrieved from <https://www.fah.org/wp-content/uploads/2021/06/FY-2022-IPPS-Proposed-Rule.FAH-comment.062821.pdf>

¹¹ Calendar Year 2023 Advance Notice of Methodological Changes for Medicare Advantage Capitation Rates and Part D and Part D Payment Policies. Displayed February 2, 2022. Available for download at <https://www.cms.gov/medicarehealth-plansmedicareadvtspeccratestatsannouncements-and-documents/2023-advance-notice>.

Degree of Hospital Leadership Engagement in Health Equity Performance Data

A structural measure for health equity, Hospital Commitment to Health Equity (HCHE) measure, was recently taken through the pre-rulemaking process by CMS in anticipation of the measure being proposed for adoption into the Hospital Inpatient Quality Reporting Program inclusion during FY 2023 inpatient hospital rulemaking. CMS describes the measure and asks whether it could be adapted for the IRF QRP. Designed as an attestation-only measure, the HCHE measure requires a hospital to attest to each of five domains of organizational commitment to health equity: strategic plan, SDOH data collection; disparities analysis; quality improvement activities; and leadership involvement. The hospital must attest affirmatively for all domains, and all of their contained queries, to receive credit for satisfying the measure.

The FAH has several concerns about this measure. We note that during pre-rulemaking, the Measures Application Partnership's (MAP) Hospital Workgroup observed that evidence for a linkage between the measure and improved health outcomes had not been established. Similarly, the MAP also noted that a performance gap among hospitals for the measure's five structural elements (i.e., to which attestation would be required) had not been demonstrated. The FAH believes that considerations of adapting the HCHE measure to the IRF QRP are premature when the measure has yet to be formally proposed for HIQR Program addition and, therefore, CMS has not yet had the opportunity to review and reflect on stakeholder comments about the measure.

We believe that many of the priorities included in this structural measure are currently addressed by hospitals and health systems. Many already have in place language and communication access plans woven into their frameworks for ongoing provision of culturally competent care to patients with limited English proficiency and hearing or vision disabilities. These plans typically form part of the curricula for onboarding and refresher training of patient-facing staff. Hospitals also maintain certified electronic health record technology (CEHRT) capabilities as required under the Centers for Medicare and Medicaid Services (CMS) Promoting Interoperability Program for hospitals.

These activities also overlap with accreditation requirements of hospitals, in general. Discharge processes are already set up to evaluate a patient's access to their medication, transportation needs to downstream physicians and services and IRFs' interventions help patients return to the community in the most successful way they can. Health care providers already work to mitigate risk factors, such as certain social determinants which could negatively affect our patients' outcomes. A measure that assesses IRFs' commitment to equity could disadvantage certain providers, as every community differs in their available resources. Providers should not be penalized for resources, or lack thereof, outside the scope of their care.

We recommend that CMS also accrue experience with the measure, if finalized for acute care hospital reporting, prior to importing it into the IRF QRP or other programs. The FAH also urges CMS to first catalogue what hospitals in the PAC setting are already doing before establishing new measures or requirements to preclude burden caused by overlap and redundancy. A complete environmental scan, listening sessions, focus groups, and/or a Technical Expert Panel would be helpful. We also believe that the measure development process will also ensure that the measure is closely linked to clinical outcomes and that there is a clear gap in

hospital performance on these specific structural elements. CMS should not pursue measures which increase burden on health care providers and do not have a direct, peer-reviewed link to the quality of care they provide.

In addition, the FAH believes that CMS has the opportunity to address inequities in care through existing measurement efforts. For example, the collection of race/ethnicity, payer, and gender have always been included in the electronic clinical quality measure (eCQM) specifications as supplemental data elements. CMS could choose to make the collection and reporting of these data required. This change would allow hospitals to collect the data, use it for improvement purposes, and receive automatic credit through reporting of these data rather than require them to attest to it through a structural measure. Further specificity regarding what would specifically satisfy each of the statements is also needed to ensure that every hospital interprets and attests to them consistently. For example, what constitutes a majority of patients under question 2b and what are the minimum requirements for participation in a local, regional, or national quality improvement activity under question 4a?

Requiring the reporting of a potentially flawed measure to which revisions may soon be needed creates unnecessary burden for CMS and for providers and squanders finite resources that could be invested by CMS and providers into more effective equity initiatives. While we do not support this measure at this time, we are prepared to partner with CMS to refine this measure or develop alternative measure concepts.

Health Equity Conclusion

The FAH remains supportive of the essential work being done by CMS related to healthcare disparities and inequities as represented by this Equity Measurement RFI. Application of methods for identifying and reporting disparities within CMS programs remains a worthy goal to which we recommend a deliberative, consistent, coordinated approach by the agency. Some of the tools and methods described in this RFI appear promising for use in CMS programs including the IRF QRP. The FAH remains fully committed to working with CMS, HHS, and others on additional principles, tools, and methods that seem likely to be feasible, practicable, and lead to improved health outcomes.

* * *

The FAH appreciates the opportunity to offer comments on the FY 2023 IRF PPS proposed rule. If you have any questions or would like to discuss further, please do not hesitate to contact me or a member of my staff at (202) 624-1534.

Sincerely,



Memorandum

Date: May 24, 2022

To: Justin Hunter and Robert Wisner
Encompass Health Corporation

From: Al Dobson, Joan DaVanzo, Seung Ouk Kim, Randy Haught, Kimberly Rhodes, and Sarah Rappazzo

Subject: Estimation of Updated IRF PPS Facility-Level Adjusters and Simulation Summary

The Centers for Medicare and Medicaid Services (CMS) adjusts payments for Inpatient Rehabilitation Facilities (IRFs) based on patient and facility characteristics to account for variations in treatment costs. CMS uses three-year averages for three facility adjustments: 1) Low-Income Percentage (LIP), 2) Rural Status, and 3) Teaching Status. Since FY2014, each of these adjustments has been frozen at the FY2014 factor levels to maintain payment stability and reduce volatility that may have occurred had CMS updated the facility adjusters annually. In the FY2023 IRF PPS proposed rule, CMS presented results from its calculations of the three facility level adjustment factors by year from the current law (FY2014) factors through FY2023. In its commentary of the results, CMS indicated concern for the volatility and significant increases observed in the teaching adjustment factor, which rose from 1.0163 in FY2014 to 3.7910 in FY2023 and solicited input regarding the observed changes and possible methodology refinements.

Dobson DaVanzo replicated CMS' facility adjustments based on publicly available information and found similar directionality as reported by CMS, but differences in magnitude, particularly for the teaching adjustment. We explored several alternative simulations to understand any redistributive impacts of possible refinements to the facility adjustment calculation.

DOBSON DAVANZO REPLICATION OF CMS IRF PPS FACILITY ADJUSTMENT COEFFICIENTS

Data and Methods

We used data from IRF rate setting files for FY2012-2023 to model facility-level adjustment factors under the IRF PPS. Rate setting files include estimates of average cost per case, payment per case (with and without outliers), facility case-mix index, rural status, low-income portion, and teaching portion.

Our approach is an approximation of CMS' methodology and our variable creation is restricted relative to the actual CMS approach. For instance, CMS uses MAC-determined low-income portions and teaching status for payment purposes (not the Provider Specific File data). However, the rate setting file contains only the publicly available form of this information. Similarly, the method for calculating IRF cost per case in the rate setting file differs from the method used by RAND¹ to determine the facility-level adjustment factors. The rate setting file applies a facility-wide ratio of costs-to-charges (RCC) to claim charges whereas RAND uses department-level RCCs applied to revenue center charges on the claim; the facility-level RCC is applicable as a proxy for facility-level regressions, but results may differ subtly in case-level modeling. Finally, the RAND model uses number of 'equivalent' Medicare discharges that account for short-stay outlier cases, whereas the number of discharges in the rate setting file does not account for short-stay outliers. However, the rate setting file adjusts the IRF case mix index to account for short-stay outliers.

We followed CMS rulemaking and technical reporting documents² to specify our regression approach for deriving updated payment factors for rural, LIP and teaching adjusters, as well as the approach to constructing budget neutrality factors. This involved constructing a case-weighted logarithmic regression model to predict average facility cost per case (standardized for case mix and wage index) based on facility-level factors (i.e., rural, LIP, teaching, and freestanding/unit status). This analysis was performed for each rate setting file year from 2012 to 2023. To replicate the CMS methodology, we computed a three-year moving average of the regression results. For example, for FY2014 we used results from the FY2012-2014 files and for FY2023 we used the results from FY2021-2023 files. Note that the data in the Rate Setting files typically lag the rate setting period by 2 years, so this three-year moving average would be consistent with the CMS approach.

¹ RAND is the CMS contractor for IRF PPS analytic support.

² IRF Rules and Related Files: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/InpatientRehabFacPPS/IRF-Rules-and-Related-Files>; IRF PPS Facility-Level Payment Adjustments Methodology (PDF): <https://www.cms.gov/files/document/irf-pps-facility-level-payment-adjustments-methodology.pdf>

Findings

In Dobson DaVanzo’s modeling results (shown below in Exhibit 1), we note directional consistency with CMS’ results for all three coefficients over time. Dobson DaVanzo’s results for DSH (LIP) and rural coefficients are generally similar in magnitude to CMS’ results; however, Dobson DaVanzo’s teaching coefficients, while directionally consistent with CMS, are of a much smaller magnitude.

Exhibit 1: Dobson DaVanzo (DD) Estimated IRF PPS Facility Coefficients as Compared to CMS-Reported Estimates

DD (All IRFs)				CMS (All IRFs)			
Fiscal Year	log (dsh)	log (teaching)	rural	Fiscal Year	log (dsh)	log (teaching)	rural
FY 2014	0.3890	1.2224	0.1092	FY 2014	0.3177	1.0163	0.149
FY 2015	0.3490	1.3596	0.1244	FY 2015	0.3809	1.9791	0.141
FY 2016	0.3449	1.4558	0.1202	FY 2016	0.4363	3.1820	0.130
FY 2017	0.3347	1.4483	0.1177	FY 2017	0.3880	3.0946	0.124
FY 2018	0.3736	1.2308	0.1005	FY 2018	0.4377	2.2472	0.107
FY 2019	0.3885	1.2028	0.0938	FY 2019	0.4572	2.1450	0.099
FY 2020	0.3960	1.2928	0.0860	FY 2020	0.4367	2.4413	0.090
FY 2021	0.4025	1.4518	0.0941	FY 2021	0.4382	3.0467	0.096
FY 2022	0.3934	1.5147	0.1065	FY 2022	0.4165	3.3506	0.107
FY 2023	0.4386	1.6036	0.0999	FY 2023	0.5092	3.7910	0.100

Discussion of FY2014 – FY2023 Results

The Rural Coefficient Decreased

Like CMS’ analysis, the Dobson DaVanzo analysis shows a decreasing rural coefficient from FY2014 to FY2023. The Dobson DaVanzo and CMS analyses show remarkable consistency in the FY2022 and FY2023 rural coefficients, where after rounding the Dobson DaVanzo values to the same number of decimal points as reported by CMS, the values exactly match. We note stability in the rural coefficient in both the CMS and Dobson DaVanzo models; since FY2018, the coefficient has been in the 0.09 to 0.10 range.

The LIP Coefficient Increased

CMS and Dobson DaVanzo analyses indicate a rising LIP coefficient from FY2014 to FY2023. The magnitude of the coefficients across the two analyses is generally similar and shows analogous trends. For instance, both analyses show a slight decrease in the LIP coefficient from FY2016 to FY2017, a general rising trend from FY2017 through FY2021, a slight decrease from FY2021 to FY2022, followed by a rise from FY2022 to FY2023. As with the rural coefficient, we see much more stability in the LIP coefficient over time relative to the teaching coefficient.

The Teaching Coefficient Increased and Showed Volatility

Similar to CMS’ findings, we see variability and increases in the teaching coefficient from FY2014. Initial hypotheses of the observed volatility in the teaching coefficient are below:

- CMS’ transition to the use of section GG functional status data in place of the former FIM® Instrument and related updates to the CMG groups and values in FY2020 may have influenced case-mix index values which are used to standardize the regression models.
- Covid-19 PHE waivers may have fundamentally changed patient mix (dropping volume, different case mix, changing costs per case).
- Volatility observed (such as the decrease in the teaching coefficient between FY2017 and FY2018) may be attributed to changes in the case-mix adjustment effect. For instance, if case mix for teaching facilities rises faster than for other non-teaching facilities, then because the dependent variable is standardized by case mix, the teaching coefficient would fall.
- We examined the annual change in 3-year moving average of case-mix and wage-index standardized costs per case and see that the costs for teaching IRFs rose at a faster rate as compared to non-teaching IRFs beginning in FY2017, as shown below in Exhibit 2. Given the small overall number of teaching IRFs, any change in case volume among the pool of teaching IRFs would likely impact the magnitude of the teaching coefficient.

Exhibit 2: Annual Growth Rate of 3-year Moving Average in Adjusted Cost per Case³

Fiscal Year	Non-Teaching IRFs	Teaching IRFs
FY14 ---> FY15	1.0%	-0.6%
FY15 ---> FY16	0.3%	0.5%
FY16 ---> FY17	0.5%	-0.4%
FY17 ---> FY18	0.5%	1.6%
FY18 ---> FY19	1.0%	2.1%
FY19 ---> FY20	1.5%	1.9%
FY20 ---> FY21	0.3%	0.9%
FY21 ---> FY22	0.8%	1.4%
FY22 ---> FY23	2.2%	7.4%

- Correlation between the 3 independent variables (teaching, LIP and Rural factors) may also play a role – significant changes observed in one may impact another.

³ Adjusted cost per case is defined as: cost per case/ (case mix index*(wage index*labor share + non-labor share)).

- A few extreme outliers may be impacting the findings. (Even after taking the log of the outcome variable, a few extreme outliers may distort the magnitude of the effect size.)
- Dobson DaVanzo's analytic approach approximates CMS' methodology and is restricted to publicly available data. As such, methodological and data source differences may be influencing the teaching results.

Summary of FY2014-2023 Findings

Ultimately, we notice similar issues and volatility in both the Dobson DaVanzo and CMS' analysis of the facility adjustment coefficients over time. The teaching adjustment results appear to be problematic in their instability and in the magnitude of increase over time, particularly in CMS' analysis. Given this, and as indicated in the proposed rule, using the FY2023 updated factors does not appear to be a reasonable option.

DOBSON DAVANZO SIMULATIONS OF CMS IRF PPS FACILITY ADJUSTMENT COEFFICIENTS

We explored alternative scenarios CMS may wish to consider to reduce the volatility seen in both CMS and Dobson DaVanzo's analyses of the teaching adjustment coefficients over time. We simulated facility level payment impacts for each of these scenarios:

1. Cap teaching adjustment at the current IPPS teaching formula; use CMS' FY2014 LIP and Rural coefficients
 - 1a. Cap teaching adjustment at the current IPPS teaching formula; use CMS' FY2023 LIP and Rural coefficients
2. Update the LIP and Rural coefficients to CMS FY2023 values, but continue to freeze teaching at CMS FY2014 coefficient
3. Include only freestanding IRFs in the calculation of FY2014 teaching facility coefficients
4. Use CMS' FY2023 facility adjustment coefficients
5. Use DD-calculated FY2023 facility adjustment coefficients

Detailed Discussion of Dobson DaVanzo Simulation 1a (Cap teaching adjustment at the current IPPS teaching formula; use CMS' FY2023 LIP and Rural coefficients)

Given the regulatory stability of the Inpatient Prospective Payment System's teaching adjustment formula, the questionable findings we and CMS observed in the recent IRF PPS teaching coefficient results, we explored scenario 1a.

In this simulation, we used the current IPPS IME operating adjustment formula^{4,5} to calculate the IRF teaching adjustment coefficient, and the CMS FY2023 LIP and Rural coefficients (0.5092 and 0.100, respectively). We then compared estimated total FY2023 payments from this simulation to the CMS reported FY2023 numbers to estimate the payment impacts (as shown in Exhibit 3).

Rural IRFs are significantly impacted by this approach, largely driven by the use of the FY23 rural coefficient. As mentioned above, the decrease observed in the rural coefficient over time in both the CMS and Dobson DaVanzo models suggests that a decrease in the rural adjustment may be justified given the stable and decreased rural coefficient seen in analyses of recent fiscal years. Additionally, a large decrease in payments is observed for IRFs with a Resident to ADC ratio above 19 percent. Given these redistributive effects compared to current law, if CMS chooses to modify or update the facility coefficients, a transition (phase-in or stop-loss) policy would help to ease providers into the changes.⁶

Exhibit 3: Estimated Impacts of Simulation 1a

Facility Classification	Number of IRFs	FY 23 Estimated PPS Payment	Simulated PPS	Difference	% Change
Urban unit	653	\$3,568,228,964	\$3,578,281,587	\$10,052,623	0.3%
Rural unit	133	\$404,498,710	\$389,882,137	-\$14,616,573	-3.6%
Urban hospital	317	\$5,144,036,291	\$5,153,838,071	\$9,801,780	0.2%
Rural hospital	12	\$123,664,549	\$118,426,720	-\$5,237,829	-4.2%
Urban For-profit	396	\$4,903,049,111	\$4,917,139,373	\$14,090,262	0.3%
Rural For-profit	35	\$189,140,902	\$181,667,056	-\$7,473,846	-4.0%
Urban Non-Profit	489	\$3,318,397,242	\$3,324,831,008	\$6,433,766	0.2%
Rural Non-Profit	88	\$281,080,501	\$270,657,434	-\$10,423,067	-3.7%
Urban Government	85	\$490,818,902	\$490,149,276	-\$669,626	-0.1%
Rural Government	22	\$57,941,856	\$55,984,367	-\$1,957,489	-3.4%
Urban	970	\$8,712,265,255	\$8,732,119,658	\$19,854,403	0.2%
Rural	145	\$528,163,259	\$508,308,856	-\$19,854,403	-3.8%

⁴ $1.35 \times [(1 + \text{resident to bed ratio})^{.405} - 1]$. IRF resident to bed ratio was derived from 2019 and 2020 cost report data (Worksheet E-3 Part II)

⁵ The IPPS Teaching (IME operating adjustment) formula $(1.35 \times [(1 + \text{resident to bed ratio})^{.405} - 1])$ has been static since FY2003. In the IPPS FY2023 NPRM, CMS is proposing to modify the methodology for calculating direct GME payments to teaching hospitals. Specifically, the proposed change would impact how the GME FTE cap is applied when the hospital’s weighted FTE count is greater than its FTE cap. This would not impact our analysis, where we are using the IME operating adjustment formula, for which there have been no proposed changes.

<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Indirect-Medical-Education-IME>
<https://www.cms.gov/newsroom/fact-sheets/fy-2023-hospital-inpatient-prospective-payment-system-ipp-and-long-term-care-hospitals-ltch-pps>

⁶ Permutations of this simulation could also be options for CMS to consider:

- Use the IPPS teaching formula for the IRF teaching coefficient; continue to freeze the rural and LIP coefficients until the teaching coefficient is stabilized, or
- Use the IPPS teaching formula for the IRF teaching coefficient; update the rural coefficient based on the latest data but continue to freeze the LIP coefficient until the teaching coefficient is stabilized.

Urban by region	Number of IRFs	FY 23 Estimated PPS Payment	Simulated PPS	Difference	% Change
Urban New England	29	\$351,703,709	\$352,146,192	\$442,483	0.1%
Urban Middle Atlantic	121	\$1,105,304,474	\$1,096,789,588	-\$8,514,886	-0.8%
Urban South Atlantic	158	\$1,754,034,378	\$1,757,609,007	\$3,574,629	0.2%
Urban East North Central	158	\$1,076,081,314	\$1,077,062,467	\$981,153	0.1%
Urban East South Central	55	\$541,370,971	\$542,170,782	\$799,811	0.1%
Urban West North Central	76	\$486,832,796	\$487,880,381	\$1,047,585	0.2%
Urban West South Central	197	\$1,916,199,259	\$1,914,875,257	-\$1,324,002	-0.1%
Urban Mountain	79	\$689,633,059	\$695,611,983	\$5,978,924	0.9%
Urban Pacific	97	\$791,105,295	\$807,974,000	\$16,868,705	2.1%

Rural by region	Number of IRFs	FY 23 Estimated PPS Payment	Simulated PPS	Difference	% Change
Rural New England	5	\$31,597,054	\$30,388,623	-\$1,208,431	-3.8%
Rural Middle Atlantic	10	\$20,450,608	\$19,580,712	-\$869,896	-4.3%
Rural South Atlantic	16	\$94,124,004	\$90,102,852	-\$4,021,152	-4.3%
Rural East North Central	23	\$83,014,794	\$79,866,105	-\$3,148,689	-3.8%
Rural East South Central	20	\$78,369,180	\$76,036,657	-\$2,332,523	-3.0%
Rural West North Central	20	\$56,249,053	\$53,954,998	-\$2,294,055	-4.1%
Rural West South Central	42	\$144,923,352	\$139,494,598	-\$5,428,754	-3.7%
Rural Mountain	6	\$9,019,488	\$8,664,521	-\$354,967	-3.9%
Rural Pacific	3	\$10,415,726	\$10,219,791	-\$195,935	-1.9%

Teaching Status	Number of IRFs	FY 23 Estimated PPS Payment	Simulated PPS	Difference	% Change
Non-teaching	1012	\$7,969,532,093	\$7,997,118,319	\$27,586,226	0.3%
Resident to ADC less than 10%	59	\$889,697,087	\$881,968,725	-\$7,728,362	-0.9%
Resident to ADC 10%-19%	34	\$339,056,464	\$324,837,311	-\$14,219,153	-4.2%
Resident to ADC greater than 19%	10	\$42,142,870	\$36,504,160	-\$5,638,710	-13.4%

DSH Patient Percentage	Number of IRFs	FY 23 Estimated PPS Payment	Simulated PPS	Difference	% Change
DSH PP = 0%	64	\$252,364,430	\$248,092,692	-\$4,271,738	-1.7%
DSH PP < 5%	127	\$1,093,064,193	\$1,077,291,994	-\$15,772,199	-1.4%
DSH PP 5%-10%	260	\$2,481,178,193	\$2,467,472,834	-\$13,705,359	-0.6%
DSH PP 10%-20%	388	\$3,427,638,684	\$3,428,529,135	\$890,451	0.0%
DSH PP > 20%	276	\$1,986,183,014	\$2,019,041,859	\$32,858,845	1.7%

Conclusion

In summary, we see similar variability as found by CMS in the teaching coefficient over time, albeit at a lesser magnitude. Given this, Dobson DaVanzo explored several alternatives and found that the use of the current IPPS teaching payment formula (which would lend stability to the IRF teaching adjustment over time) may be one viable option for CMS to consider. While we note that IRF teaching costs appear to be increasing relative to non-teaching IRF costs, until we understand why that is the case, it would seem premature to allow the teaching coefficient to increase to the FY2023 level. Given the general stability of the rural and LIP coefficients, CMS could consider moving forward with an update to these two factors. If CMS decides to do this, it could consider phasing in these factor changes over a 2 or 3-year period to provide for a smoother transition.