2025 Measure Set Review (MSR): 00386-03-C-IPFQR Preliminary Assessment

I. Measure Overview[1]

CMIT ID	Title
Link to CMIT measure record: 00386-03-C-IPFQR	Influenza Immunization
Measure Steward	**CMS Program**
The Joint Commission	Inpatient Psychiatric Facility Quality Reporting Link: Inpatient Psychiatric Facility Quality Reporting (IPFQR) Program | CMS

CBE Endorsement Status	CBE Endorsement History
Endorsed-Reserve	Endorsed with Reserve Status,[2] Health and Well Being Project, 2015-2017 Link to endorsement measure record: Influenza Immunization

[1] The information in this PA is sourced from the CMS Measures Inventory Tool (CMIT) and the PQM Submission Tool and Repository (STAR) Measure Database. This document reflects the content available as of September 2025.
[2] Historically, the National Quality Forum (NQF) assigned "reserve" status to measures that consistently demonstrated high performance with little variation, indicating minimal room for improvement. This status allowed these measures to be retained for monitoring to ensure performance did not decline, while signaling to committee members that they no longer addressed significant gaps in care. Although not actively endorsed, these measures remained in the NQF portfolio for periodic review and potential future use, ensuring they were available for monitoring and harmonization with other measures. PQM plans to follow up with the stewards of measures in "reserve" status to plan for appropriate endorsement/maintenance review in coming cycles.

Version 1.0 | September 2025 | *The analyses upon which this publication (or document) is based were performed under Contract Number 75FCMC23C0010, entitled, "National Consensus Development and Strategic Planning for Health Care Quality Measurement," sponsored by the Department of Health and Human Services, Centers for Medicare & Medicaid Services. Restricted:* Use, duplication, or disclosure is subject to the restrictions as stated in Contract Number 75FCMC23C0010 between the Government and Battelle.

Measure Overview
Rationale for Use: An estimated 9.3 to 41 million people in the United States get influenza every season. Each year approximately 120,000 to 710,000 people in the US are hospitalized with complications from influenza and between 6,300 and 52,000 die from the disease and its complications.[3] Combined with pneumonia, influenza is in the nation's top 10 leading causes of death for ages 1 through 44.[4] About 14.1% of people of all ages hospitalized with influenza were admitted to the intensive care unit during the 2021-22 flu season, down from 22.3% during the 2013-14 flu season.[5] The Advisory Committee on Immunization Practices (ACIP) recommends seasonal influenza vaccination for all persons 6 months of age and older to highlight the importance of preventing influenza. Flu vaccines substantially reduced the risk of flu-related medical visits and hospitalizations for all age groups during the 2023-24 flu season.[6] The influenza vaccination is the most effective method for preventing influenza virus infection and its potentially severe complications. Screening and vaccination of inpatients is recommended, but hospitalization is an underutilized opportunity to provide vaccination to persons 6 months of age or older.
CMS-Provided Rationale for Use in Program: This prevention measure aims to ensure that at-risk populations receive an immunization, which could prevent future illness and/or hospitalization. Those with serious mental illness are at an increased risk of death from infectious diseases, particularly from respiratory infections such as influenza. Increasing influenza (flu) vaccination can reduce unnecessary hospitalizations and secondary complications, particularly among high-risk populations. Vaccination is the most effective method for preventing influenza virus infection and its potentially severe complications, and vaccination is associated with reductions in influenza among all age groups. Many patients hospitalized in a psychiatric hospital or unit are diagnosed with serious mental illness and have multiple comorbidities, increasing their risk of hospitalization or death from influenza, which makes this measure important to remain in the IPFQR program.
Description: This prevention measure addresses acute care hospitalized inpatients age 6 months and older who were screened for seasonal influenza immunization status and were vaccinated prior to discharge if indicated. The numerator captures two activities: screening and the intervention of vaccine administration when indicated. As a result, patients who had documented contraindications to the vaccine, patients who were offered and declined the vaccine and patients who received the vaccine during the current year's influenza season but prior to the current hospitalization are captured as numerator events. Influenza (flu) is an acute, contagious, viral infection of the nose, throat and lungs (respiratory illness) caused by influenza viruses. Outbreaks of seasonal influenza occur annually during late autumn and winter months although the timing and severity of outbreaks can vary substantially from year to year and community to community. Influenza activity most often peaks in February, but can peak rarely as early as November and as late as April. In order to protect as many people as possible before influenza activity increases, most flu vaccine is administered in September through November, but vaccine is recommended to be administered throughout the influenza season as well. Because the flu vaccine usually first becomes available in September, health systems can usually meet public and patient needs for vaccination in advance of widespread influenza circulation.

[3] Centers for Disease Control and Prevention. (2023). Leading causes of death. WISQARS. https://wisqars.cdc.gov/lcd/?o=LCD&y1=2023&y2=2023&ct=10&cc=ALL&g=00&s=0&r=0&ry=2&e=0&ar=lcd1age&at=groups&ag=lcd1age&a1=0&a2=199.
[4] Centers for Disease Control and Prevention. (2024a). Frequently asked questions about estimating influenza burden. https://www.cdc.gov/flu-burden/php/about/faq.html [cdc.gov].
[5] Naquin, A., O'Halloran, A., Ujamaa, D., et al. (2024). Laboratory-confirmed influenza-associated hospitalizations among children and adults — Influenza Hospitalization Surveillance Network, United States, 2010–2023. MMWR Surveillance Summaries, 73(SS-6), 1–18. http://dx.doi.org/10.15585/mmwr.ss7706a1 [dx.doi.org].
[6] Centers for Disease Control and Prevention. (2024b). 2023-2024 flu vaccines reduce medical visits. https://www.cdc.gov/flu/whats-new/2023-2024-vaccines-reduce-medical-visits.html [cdc.gov].

Measure Overview	
Numerator: Inpatient discharges who were screened for influenza vaccine status and were vaccinated prior to discharge if indicated. **Exclusions:** None	
Denominator: Acute care hospitalized inpatients age 6 months and older discharged during the months of October, November, December, January, February or March. **Exclusions:** The following patients are excluded from the denominator: • Patients less than 6 months of age • Patients who expire prior to hospital discharge • Patients with an organ transplant during the current hospitalization • Patients for whom vaccination was indicated, but supply had not been received by the hospital due to problems with vaccine production or distribution • Patients who have a Length of Stay greater than 120 days • Patients who are transferred or discharged to another acute care hospital • Patients who leave Against Medical Advice (AMA)	
CMS Program History: In Inpatient Psychiatric Facility Quality Reporting since 2016. Also active in the Medicare Shared Savings Program.	**Cascade of Meaningful Measures Priority:** Wellness and Prevention
Measure Type: Process	**Is the Measure Digital of an Electronic Clinical Quality Measure (eCQM)?** No
Level(s) of Analysis/Measured Entity: Facility, Hospital, or Agency Level	**Care Setting(s):** Behavioral Health: Inpatient Psychiatric Facility (IPF), Hospital: Inpatient Acute Care Facility
Does the Measure Fill a Statutorily Required Category for the Program? No	**Is the Measure Included in Upcoming Rulemaking?** No

II. Measure Performance in Program

For this measure, the MSR evaluation and analysis team reviewed the publicly available datasets:

- hospitals_04_2025.zip (which contains data from January 2023-December 2023 and is referred to as PY2023 in this assessment)
- hospitals_10_2024.zip (which contains data from January 2022-December 2022 and is referred to as PY2022 in this assessment)
- hospitals_11_2023.zip (which contains data from January 2021-December 2021 and is referred to as PY2021 in this assessment)

About Figure 1: Figure 1 uses boxplots to show how scores have changed over the most recent 3 years of publicly available data. For each year, the boxplot displays a box with lines and dots to help visualize the range and distribution of scores. The dots represent the points where the lowest 5% and highest 5% of scores fall, and the line connecting them shows where 90% of the scores are located. The box itself covers the middle half of the scores, from the 25th to the 75th percentile. Inside the box, a horizontal line marks the median score, which is the

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middle value, while a "+" sign shows the average score. This type of graph makes overall trends in scores over time as well as the consistency and spread of the results easier to understand.

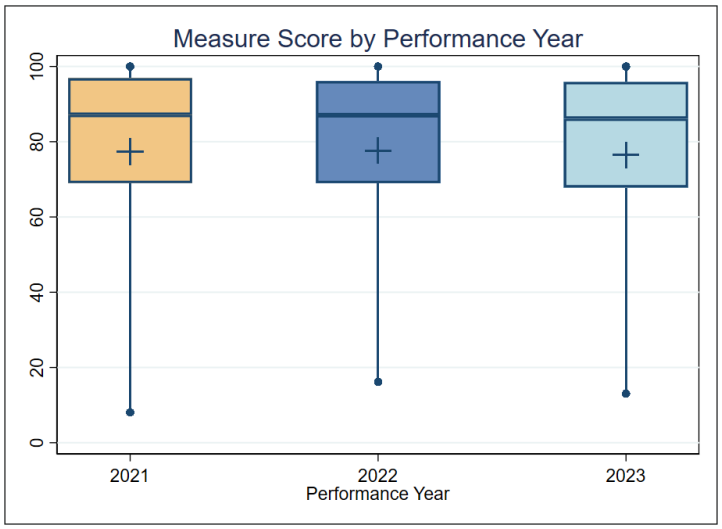

Figure 1. Boxplot of Measure Score by Year

Figure 1 Interpretation: For this measure, a higher score indicates better quality of care. In the boxplot above, the median score has a slight decreasing trend from 87.1% in PY2021, to 87% in PY2022, and to 86.1% in PY2023 showing performance decreased slightly from 2022 to 2023, but the decrease was minimal. The steady performance over the 3 years suggests there is little change or improvement in performance overall; however, there are outliers with low scores that would benefit from the continued use of this measure, along with improvement initiatives to boost performance.

About Table 1: Table 1 illustrates the distribution of scores and the number of patients represented within each group. It is important to note that the groups with the lowest or highest scores (referred to as deciles, each comprising 10% of the organizations) may contain more or fewer patients than other groups. For example, if the lowest-scoring decile includes only 5% of the total patient population, this smaller group size may be associated with lower performance scores.

For this measure, Decile 1 represents a grouping of organizations who have the lowest measure scores and Decile 10 shows those with the highest measure scores. The arrow denotes improving performance on the measure.

Table 1. Importance (Decile by Measure Score, PY2023)

Lowest performers → **Highest performers**

	Overall	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10
Average Score (Standard Deviation)	76.5 (26.22)	14.1	47.8	67.4	77.7	83.7	88.5	92.2	95.7	98.2	99.8
Organizations	1,361	137	136	136	136	136	136	136	136	136	136
Patients	377,284	38,233	36,814	41,317	37,753	38,574	36,004	34,278	36,297	40,302	37,712

Table 1 Interpretation: To estimate the number of positive outcomes (influenza immunization for eligible patients), the number of patients is multiplied by the average score for each decile. Right now, the total estimated number of positive outcomes across all deciles is about 288,000. Assuming it would be plausible for entities in deciles 1-7 to improve and reach the average score of the 8th decile (which more than 20% of the entities have already achieved), we can use that score to estimate possible improvement in outcomes. For example, if the average performance of Decile 8 (95.7%) is considered a plausible, achievable score, and the entities in Deciles 1 through 7 improved to reach that score, the estimated number of eligible patients receiving influenza immunization would go up by about 20%, which translates to a potential total of about 360,000 positive outcomes. This means that improving performance on this measure could help ensure that tens of thousands of patients receive the influenza immunization that they need, potentially leading to better health outcomes.

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About Figure 2: Figure 2 is a bar graph displaying average change in performance by performance decile on this measure. Battelle developed this graph by first assigning each entity's year 1 performance score to a decile (1-10). For each entity, the change in performance score from year 1 was then calculated for both year 2 and year 3. The resulting changes in performance for year 2 and year 3 were plotted against the year 1 decile assignments, allowing for visualization of performance trends over time by initial performance level.

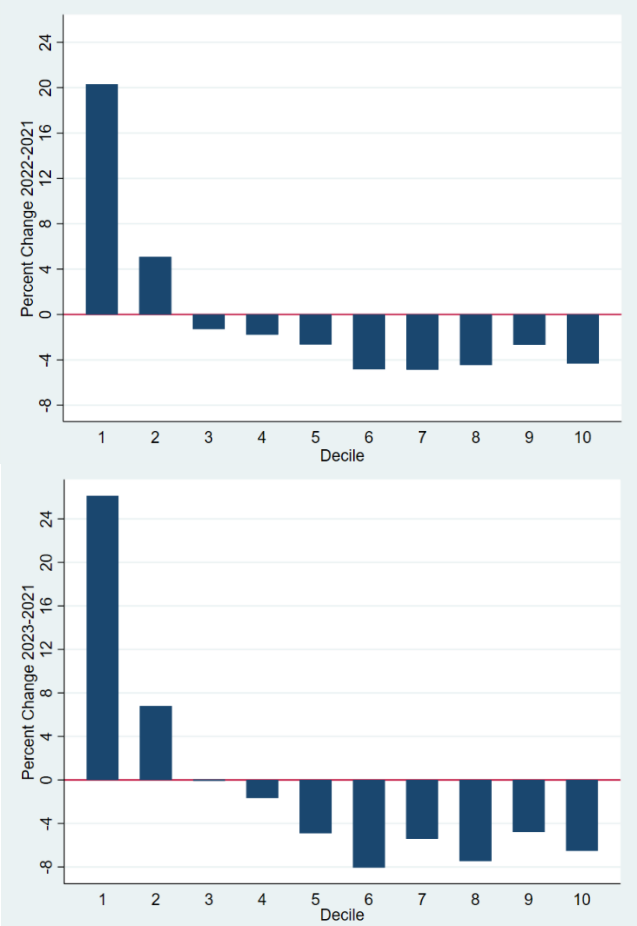

Figure 2. Mean Change in Performance by Decile

Figure 2 Interpretation: The upper graph shows substantial improvement in the average performance score for the entities in the first decile (the 10% lowest-scoring entities in PY2021) between PY2021 to PY2022. The average performance score also improved between PY2021 to PY2022 for entities in the second decile. All other deciles showed a decrease in average performance score between PY2021 to PY2022. The lower graph looks very similar; the first decile has an additional average increase in performance between PY2022 and PY2023, and Deciles 5-10 (the 50% highest-scoring entities in PY2021) have further decreased average performance. Performance is improving in those with the lowest scores, but for those in the top half of highest-scoring entities, the average performance score has decreased over time, showing this measure has only increased performance for those who initially scored very low.

III. Evaluation Criteria

Meaningfulness

Importance
Guiding Questions: Does the evidence show that the focus of the measure is linked to meaningful outcomes for patients and health care organizations? Do the data demonstrate that using this measure within the quality program results in benefits that outweigh any associated burdens or costs?
Recent data summarized above show that vaccination is associated with reduced influenza-associated hospitalizations and deaths. Performance on this measure has remained steady over the last couple of years, but further gains, especially among the lower-performing IPFs, could lead to substantial benefits for patients. **Committee Member Considerations:** Based on reviewing measure performance and professional and personal experiences, consider the balance of implementation costs or burdens with the benefit of measure use within the program. Committee members will have a chance to share these thoughts with the broader committee via Pre-Meeting Initial Evaluation (PIE) Forms and group discussion.
Staff Rating: Met

Conformance
Guiding Question: Do measure components and specifications align with the measure intent and target population?
The intent of this measure is to reduce the risk of contracting influenza by providing vaccination for influenza in the hospital setting prior to discharge. The specifications align with this intent: the numerator includes inpatient discharges who were screened for influenza vaccine status and were vaccinated prior to discharge if indicated. The denominator includes all acute care hospitalized inpatients aged 6 months and older discharged during the months of October, November, December, January, February, or March. This measure supports the IPFQR objective to improve the quality of inpatient care provided by ensuring providers are aware of a reporting on best practices for their facilities and type of care. The appendix lists all active measures reported in this program. **Committee Member Considerations:** Committee members should review the list of active measures within this CMS program in the appendix and consider this measure's alignment with the group.
Staff Rating: Met

Feasibility
Guiding Question: Are the tools, processes, and people necessary to implement and report on the measure reasonably available for measured entities in the CMS program?
The measure relies on data elements that are not fully captured electronically and require manual chart abstraction. While feasible for many entities participating in the CMS program, this measure may pose feasibility challenges for facilities with staffing or resource constraints. This process increases staff workload and may have an impact on reporting timeliness.

Feasibility
Committee Member Considerations: Committee members with experience implementing this or similar measures in inpatient psychiatric facilities should reflect on potential challenges to feasibility of data collection and reporting.
Staff Rating: Met

Validity
Guiding Question: Do the data and/or logic support the idea that the measured entity can improve their performance on the measure?
Performance on this measure may be influenced by factors outside the entity's control, such as patient demographics or resource availability, which could limit the measure's validity as a tool for quality improvement. **Committee Member Considerations:** Committee members with experience implementing this or similar measures in inpatient psychiatric facilities should reflect on potential methods to improve vaccination rates prior to discharge for the target population.
Staff Rating: Met

Reliability

The two tables below summarize reliability. Tables 2 and 3 sort entities by the number of patients, and the tables report average reliability along with the number of entities and average number and total patients for each decile. These tables can be used to assess the impact of population size on the reliability of an entity's measure score. Population size can impact reliability estimates because larger populations generally provide more stable and consistent measure scores, while smaller populations can lead to greater variation. In cases where reliability has a strong relationship to population size, reliability will be the lowest at Decile 1 and progressively increase up to Decile 10.

Table 3 sorts entities by reliability and reports the average reliability by decile. The table also includes the mean, standard deviation,[7] minimum and maximum reliability, and interquartile range (IQR).[8] This table can be used to see the distribution of the reliability of the entities. A measure is generally considered reliable when the reliability for at least 70% of the individual entities is above 60%.

Table 2. Reliability (Decile by Denominator – Target Population Size)

	Overall	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10
Mean Target Population Size	277	43	100	152	220	280	301	314	335	386	643
Mean Reliability	98.9	95.4	98.4	98.9	99.3	99.4	99.5	99.5	99.5	99.6	99.7
Entities	1,361	137	136	136	136	136	136	136	136	136	136
Total Patients	377,284	5,856	13,587	20,607	29,987	38,024	41,000	42,657	45,591	52,545	87,430

[7] Standard deviation is a number that shows how spread out the values in a group of numbers are. If the standard deviation is small, most values are close to the average; if it's large, the values are more spread out and indicate greater variation in performance.
[8] IQR, or interquartile range, is a number that shows how spread out the middle half of a group of numbers is. It measures the range between the value at the 25th percentile and the value at the 75th percentile, indicating how tightly or loosely the middle values are grouped.

Table 3. Mean Reliability (By Reliability Decile)

Mean	SD	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	IQR
98.9	1.49	95.4	98.4	98.9	99.3	99.4	99.5	99.5	99.5	99.6	99.7	0.6

Tables 2 and 3 Interpretation: Reliability was estimated using a modification of the Adams[9] signal-to-noise method where the reliability for each entity *i* is estimated by[10] $100 * \frac{n_i}{\hat{\alpha}+\hat{\beta}+n_i}$ where n_i is the total number of patients for entity for entity *i*, and $\hat{\sigma}$ and $\hat{\beta}$ are estimates of the beta binomial parameters. This method helps show how much the difference in scores between groups is due to real differences in quality rather than just random chance. In this case, the mean reliability is 98.9 and all entities had a reliability score higher than 60%. This means that the measure can reliably tell the difference between those who are performing better or worse, making it a useful tool for comparing quality of care.

Reliability
Guiding Question: Does the evidence show that changes in measure performance are due to improvements in quality of care? In other words, do the data demonstrate that variation in measure performance is linked to changes made to processes or behaviors to improve care?
All entities have reliability scores above the accepted threshold, indicating that the measure consistently reflects true differences in care quality and can be used confidently for quality improvement. **Committee Member Considerations:** Committee members should reflect on implications of the measure's reliability score on program use and what the reliability may mean for individual measured entities.
Staff Rating: Met

Usability
Guiding Questions: Are there any known barriers or facilitators that determine whether the person or entity could improve on the measure focus? Are these barriers addressable?
Variation in resource availability and staffing may limit some organizations' ability to improve on the measure. However, due to limited data, the extent and significance of these barriers are unclear. **Committee Member Considerations:** Based on professional/personal experiences, committee members should consider any barriers to using this measure for certain measured entities as well as any potential facilitators that might promote usability within the program.
Staff Rating: Met

Data Stream Parsimony

Data Stream Parsimony
Guiding Question: Does the data flow required for the measure promote non-burdensome data collection and reporting?
Some required data elements are not routinely captured electronically and must be collected manually. This increases staff workload and may introduce inefficiencies in the reporting process. **Committee Member Considerations:** Based on professional/personal experiences, committee members should reflect on any additional barriers to the clinical data flow that collection may add as

[9] Adams, John L., *The Reliability of Provider Profiling: A Tutorial.* Santa Monica, CA: RAND Corporation, 2009.
[10] Nieser, K.J. and Harris, H.S. Comparing methods for assessing the reliability of health care quality measures. Statistics in Medicine: 43(23), 2024.

Data Stream Parsimony
well as potential mitigation strategies.

Patient Journey

Patient Health Journey
Guiding Question: Does the measure address the appropriate aspects of care to align with the patient health care journey?
By focusing on ensuring vaccination at discharge, the measure targets a key transition in the patient's care journey to deliver an evidence-based public health intervention. This helps ensure patients receive preventative intervention for influenza as they move from hospital to home, supporting safer and more effective long-term outcomes. **Committee Member Considerations:** Based on professional/personal experiences, committee members should consider if the measure identifies an appropriate and critical time to assess vaccination for influenza. Reflect on if this timepoint is meaningful to patients and any potential barriers or burdens associated with this timepoint in the care journey.

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Appendix: Active Measures in the Inpatient Psychiatric Facility Quality Reporting Program

Measures Included in the Inpatient Psychiatric Facility Quality Reporting Program	
CMIT ID	**Measure Title**
01799-01-C-IPFQR	30-Day Risk-Standardized All-Cause Emergency Department Visit Following an Inpatient Psychiatric Facility Discharge Measure
00002-01-C-IPFQR	Alcohol and Other Drug Use Disorder Treatment Provided or Offered at Discharge and SUB-3a Alcohol and Other Drug Disorder Treatment at Discharge
00003-01-C-IPFQR	Thirty-Day All-Cause Unplanned Readmission Following Psychiatric Hospitalization in an Inpatient Psychiatric Facility
00269-01-C-IPFQR	Follow-Up After Psychiatric Hospitalization
00042-01-C-IPFQR	Alcohol Use Brief Intervention Provided or Offered and SUB-2a Alcohol Use Brief Intervention
00673-01-C-IPFQR	Screening for Metabolic Disorders
00358-01-C-IPFQR	Hours of Seclusion Use
00357-01-C-IPFQR	Hours of Physical Restraint Use
00438-02-C-IPFQR	Medication Continuation Following Inpatient Psychiatric Discharge
00721-02-C-IPFQR	Tobacco Use Treatment Provided or Offered at Discharge and TOB-3a Tobacco Use Treatment at Discharge
00727-02-C-IPFQR	Transition Record with Specified Elements Received by Discharged Patients (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)
00386-03-C-IPFQR	*Influenza Immunization*
01660-01-C-IPFQR	Facility Commitment to Health Equity
00180-02-C-IPFQR	Modified COVID-19 Vaccination Coverage Among Healthcare Personnel (HCP)