



Inpatient Psychiatric Facility Quality Reporting Program Claims-Based Measure Specifications

This document is a resource for the Inpatient Psychiatric Facility Quality Reporting (IPFQR) Program for the Centers for Medicare & Medicaid Services (CMS).

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Section 1: Follow-Up After Hospitalization for Mental Illness (FUH) Measure Specifications – Version 2.0

Description of Measure

This measure assesses the percentage of inpatient psychiatric facility (IPF) hospitalizations for treatment of select mental health disorders that were followed by an outpatient mental health care encounter. Two rates are reported:

- The percentage of discharges for which the patient received follow-up within 7 days of discharge
- The percentage of discharges for which the patient received follow-up within 30 days of discharge

The measurement period used to identify cases in the denominator is 12 months from July 1, 2016 through June 30, 2017. Data from the start of the measurement period through 30 days after the close of the measurement period are used to identify follow-up visits in the numerator.

As this is a claims-based measure, there is no action required by facilities to collect and submit data for this measure. CMS will calculate the measure rates using Part A and Part B claims data that are received by Medicare for payment purposes. CMS will calculate this measure by linking Medicare fee-for-service (FFS) claims submitted by IPFs and subsequent outpatient providers for Medicare FFS IPF discharges. This approach requires no additional data collection or reporting by IPFs. Completion of this measure does not affect an IPF’s payment determination.

Numerator Statement

This measure estimates the number of discharges from a psychiatric facility that are followed by an outpatient mental health care encounter within 7 and 30 days. Outpatient mental health care encounters are defined as outpatient visits, intensive outpatient encounters, or partial hospitalizations provided by a mental health provider. An outpatient mental health provider is defined as any of the following types of professionals listed in Table A1. All codes used to identify providers are found in Medicare outpatient/carrier files. Either a Medicare specialty code OR taxonomy code qualifies as a numerator hit. Specialty codes and taxonomy codes are aligned where appropriate with the mental health practitioners defined in the Healthcare Effectiveness Data and Information Set® (HEDIS®) 2018 specifications.

Table A1: Codes to identify mental health practitioners in Medicare

HEDIS® Definition of Mental Health Practitioner	Specialty Code	Taxonomy (Linked to National Provider Identifier [NPI])
An MD or DO who is certified as a psychiatrist or child psychiatrist	26	2084P0800X
Neurologist (not in original HEDIS specification)	13	2084V0102X; 2084N0400X 2084N0402X; 2084A2900X
An MD or DO who successfully completed an accredited program of graduate medical or osteopathic education in psychiatry or child psychiatry and is licensed to practice patient care psychiatry or child psychiatry	86	2084A0401X; 2084P0802X 2084B0002X; 2084N0600X 2084D0003X; 2084F0202X 2084P0805X; 2084H0002X 2084P0005X; 2084N0008X 2084P2900X; 2084P0015X 2084S0012X; 2084S0010X 2084P0804X

HEDIS® Definition of Mental Health Practitioner	Specialty Code	Taxonomy (Linked to National Provider Identifier [NPI])
Licensed Psychologist	62	103T00000X; 103TA0400X 103TA0700X; 103TC0700X 103TC2200X; 103TB0200X 103TC1900X; 103TE1000X 103TE1100X; 103TF0000X 103TF0200X; 103TP2701X 103TH0004X; 103TH0100X 103TM1700X; 103TM1800X 103TP0016X; 103TP0814X 103TP2700X; 103TR0400X 103TS0200X; 103TW0100X
Certified in Clinical Social Work	80	1041C0700X
Psychiatric Nurse, Physician's Assistant, or Occupational Therapist		364SP0808X 364SP0809X 364SP0807X 364SP0810X 364SP0811X 364SP0812X 364SN0800X 364SP0813X 363LP0808X 225XM0800X 225XN1300X

Outpatient visits, intensive outpatient encounters, and partial hospitalizations are defined by the Current Procedural Terminology (CPT), Healthcare Common Procedure Coding System (HCPCS), and Uniform Billing (UB) Revenue codes listed in Table A2. A claim meeting any of the requirements in the table constitutes an outpatient visit.

Table A2. Codes to identify outpatient visits, intensive outpatient encounters, and partial hospitalizations

CPT		Place of Service	TELEHEALTH MODIFIER
90832-90834, 90836-90838, 90839-90840, 90867-90869, 98960-98962, 99078, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99383-99387, 99393-99397, 99401-99404, 99411, 99412, 99510, 99495, 99496	with or without		GT
HCPCS			
G0155, G0176, G0177, G0409-G0411, H0002, H0004, H0031, H0034-H0037, H0039, H0040, H2000, H2001, H2010-H2020, M0064, S0201, S9480, S9484, S9485	with or without		GT
CPT		Place of Service	
90791, 90792, 90845, 90847, 90849, 90853, 90863, 90870, 90875, 90876, 99324-99328, 99381-99387	with	03, 05, 07, 09, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24, 33, 49, 50, 52, 53, 71, 72	with or without GT
99221-99223, 99231-99233, 99238, 99239, 99251-99255	with	52, 53	with or without GT
CPT		Type of Service/Facility Type Classification (TYP SVC/FACTYP)	
90791, 90792, 90845, 90847, 90849, 90853, 90863, 90870, 90875, 90876, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99324-99328, 99381-99387	with	TYP SVC = 2 or 3 if FACTYP = 1-6 or 9 OR FACTYP = 7 or 8	with or without GT

UB Revenue	
0513, 0900-0905, 0907, 0911-0917, 0919 – encounter does not have to have NPI taxonomy or Medicare specialty code for a mental health provider	
0510, 0515-0517, 0519-0523, 0526-0529, 0982, 0983 – if encounter does not have NPI taxonomy or Medicare specialty code for a mental health provider, encounter must be for a principal mental illness diagnosis	

Claims with codes for emergency room visits do not count toward the numerator and should be removed. Emergency room visits are defined by the following UB revenue, Healthcare Common Procedure Coding System (HCPCS), Berenson-Eggers type of service (BETOS), and Place of Service codes in Table A3.

Table A3. Codes to identify emergency room visits

UB Revenue	0450-0459, 0981
HCPCS	99281, 99282, 99283, 99284, 99285
Place of Service	23
BETOS	M3

Denominator Statement

The denominator includes discharges paid under the IPF prospective payment system (PPS) during the measurement period for Medicare FFS patients with a principal diagnosis of mental illness. Specifically, the measure includes IPF discharges (Table A4) for which the patient was:

- Discharged with a principal diagnosis of mental illness that would necessitate follow-up care with a mental health professional.
 - Defined using the ICD-10-CM codes listed in Table A5.
- Discharged alive to ensure they are eligible for follow-up care.
 - Defined as any Discharge Status Code other than “20” (expired).
- Enrolled in Medicare Parts A and B during the month of the discharge date and at least one month after the discharge date to ensure data are available to capture the index admission and follow-up visits.
 - Defined as having continuous (no gaps) Medicare Part A and Part B coverage with no Health Maintenance Organization (HMO). Therefore, the Entitlement Buy-in Indicator must be “3” or “C” and the HMO indicator must be “0” for both the month of discharge and the month following the discharge month for the IPF stay to qualify as continuous FFS.
- Six years of age or older on the date of discharge because follow-up with a mental health professional may not always be recommended for younger children.
 - Defined using date of birth from the CMS Enrollment Data Base (EDB) beneficiary table.

Table A4. Codes to identify eligible IPF discharges

Criteria for eligible IPF discharges
Claim Type 60
CMS Certification Number (CCN) meets at least one of the following criteria: <ul style="list-style-type: none"> • Last 4 digits of the CMS Certification Number (CCN) is 4000–4499 (Psychiatric Hospital excluded from inpatient prospective payment system) • 3rd digit of CCN is ‘S’ (distinct part Psychiatric Unit in an acute care hospital) • 3rd digit of CCN is ‘M’ (Psychiatric Unit in a Critical Access Hospital [CAH])

Table A5. ICD-10-CM codes to identify principal mental illness diagnosis and inpatient acute care

ICD-10-CM Description	ICD-10-CM Diagnosis codes
Schizophrenia	F20.0, F20.1, F20.2, F20.3, F20.5, F20.81, F20.89, F20.9
Schizotypal disorder	F21
Delusional disorders	F22
Brief psychotic disorder	F23
Shared psychotic disorder	F24
Schizoaffective disorder	F25.0, F25.1, F25.8, F25.9
Other psychotic disorder not due to a substance or known physiological condition	F28
Unspecified psychosis not due to a substance or known physiological condition	F29
Manic episode	F30.10, F30.11, F30.12, F30.13, F30.2, F30.3, F30.4, F30.8, F30.9
Bipolar disorder	F31.0, F31.10, F31.11, F31.12, F31.13, F31.2, F31.30, F31.31, F31.32, F31.4, F31.5, F31.60, F31.61, F31.62, F31.63, F31.64, F31.70, F31.71, F31.72, F31.73, F31.74, F31.75, F31.76, F31.77, F31.78, F31.81, F31.89, F31.9
Major depressive disorder, single episode	F32.0, F32.1, F32.2, F32.3, F32.4, F32.5, F32.8, F32.81, F32.89, F32.9
Major depressive disorder, recurrent	F33.0, F33.1, F33.2, F33.3, F33.40, F33.41, F33.42, F33.8, F33.9
Persistent mood (affective) disorders	F34.0, F34.1, F34.8, F34.81, F34.89, F34.9
Unspecified mood affective - disorder	F39
Obsessive-compulsive disorder	F42, F42.2, F42.3, F42.4, F42.8, F42.9
Reaction to severe stress, and adjustment disorders	F43.0, F43.10, F43.11, F43.12, F43.20, F43.21, F43.22, F43.23, F43.24, F43.25, F43.29, F43.8, F43.9
Other dissociative and conversion disorders	F44.89
Puerperal psychosis	F53
Specific personality disorders	F60.0, F60.1, F60.2, F60.3, F60.4, F60.5, F60.6, F60.7, F60.81, F60.89, F60.9
Impulse disorders	F63.0, F63.1, F63.2, F63.3, F63.81, F63.89, F63.9
Other disorders of adult personality and behavior	F68.10, F68.11, F68.12, F68.13, F68.8
Pervasive developmental disorders	F84.0, F84.2, F84.3, F84.5, F84.8, F84.9
Attention-deficit hyperactivity disorder	F90.0, F90.1, F90.2, F90.8, F90.9
Conduct disorders	F91.0, F91.1, F91.2, F91.3, F91.8, F91.9
Emotional disorders with onset specific to childhood	F93.0, F93.8, F93.9
Disorders of social functioning with onset specific to childhood and adolescence	F94.0, F94.1, F94.2, F94.8, F94.9

Medicare files are used to identify all exclusions. The denominator excludes IPF discharges for patients:

- Admitted or transferred to acute and non-acute inpatient facilities within the 30-day follow-up period because admission or transfer to other institutions may prevent an outpatient follow-up visit from taking place.
 - Defined using the claim type and codes listed in Table A6. Each facility type must have both a claim type and one of the corresponding CCN, HCPCS, UB, or place of service (POS) codes if they are listed in the row for that facility type.
- Discharged or transferred to other institutions, including direct transfer to a prison, within the 30-day follow-up period because those patients may not have the opportunity for an outpatient follow-up visit.
 - Defined using the discharge codes listed in Table A7.
- Who died during the 30-day follow-up period because patients who expire may not have the opportunity for an outpatient follow-up visit.
 - Defined using the Medicare Enrollment File.
- Who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began because patients in hospice may require different follow-up services.
 - Defined using the hospice codes listed in Table A8.

Table A6. Codes to identify admission or transfer to acute and non-acute inpatient facility

Description	File	Claim Type	Codes
Acute care admissions (IPF or acute care hospitals)	Medicare Inpatient	60	<u>CCN:</u> 3rd through 6th digit= 0001-0899 or 4000-4449 or 3rd digit=S, M
SNF, Hospice, Outpatient and HHA	Medicare SNF, Hospice, Outpatient or HHA	10, 20, 30, 40, 50	<u>UB Revenue:</u> 0115, 0125, 0135, 0145, 0155, 0650, 0656, 0658, 0659, 019x, 0118, 0128, 0138, 0148, 0158, 0655, 1002, 1001
SNF, Hospice, Outpatient and HHA	Medicare SNF, Hospice, Outpatient or HHA	10, 20, 30, 40, 50	<u>UB Type of Bill:</u> 81x, 82x, 21x, 22x, 28x, 18x
Psychiatric residential treatment center	Medicare Carrier	71	<u>HCPCS:</u> T2048, H0017-H0019
SNF, Hospice, inpatient rehab, respite, intermediate care facility, residential substance abuse and psychiatric treatment facilities	Medicare Carrier	71	<u>Place of Service (POS):</u> 31, 32, 34, 54, 55, 56, 61

Table A7. Codes to identify transfer/discharge to another institution

Description	Discharge Code (Medicare inpatient file)
Discharged/transferred to other short term general hospital for inpatient care	02
Discharged/transferred to skilled nursing facility (SNF) with Medicare certification in anticipation of covered skilled care - for hospitals with an approved swing bed arrangement, use Code 61 - swing bed. For reporting discharges/transfers to a non-certified SNF, the hospital must use Code	03

Description	Discharge Code (Medicare inpatient file)
04 - ICF.	
Discharged/transferred to intermediate care facility (ICF)	04
Discharged/transferred to another type of institution for inpatient care	05
Discharged/transferred to court/law enforcement	21
Discharged/transferred to a federal hospital	43
Hospice – Home	50
Hospice - medical facility	51
Discharged/transferred within this institution to a hospital-based Medicare approved swing bed	61
Discharged/transferred to an inpatient rehabilitation facility including distinct parts units of a hospital	62
Discharged/transferred to a long-term care hospital	63
Discharged/transferred to a nursing facility certified under Medicaid but not under Medicare	64
Discharged/transferred to a psychiatric hospital or psychiatric distinct unit of a hospital	65
Discharged/transferred to a Critical Access Hospital	66
Discharged/transferred to another type of health care institution not defined elsewhere in code list	70

Table A8. Codes to identify Hospice patients

CPT
99377, 99378
HCPCS
G0182, G9473, G9474, G9475, G9476, G9477, G9478, G9479, Q5003, Q5004, Q5005, Q5006, Q5007, Q5008, Q5010, S9126, T2042, T2043, T2044, T2045, T2046
UB Revenue
0115, 0125, 0135, 0145, 0155, 0235, 0650, 0651, 0652, 0655, 0656, 0657, 0658, 0659
UB Type of Bill
0810, 0811, 0812, 0813, 0814, 0815, 0817, 0818, 0819, 0820, 0821, 0822, 0823, 0824, 0825, 0827, 0828, 0829, 081A, 081B, 081C, 081D, 081E, 081F, 081G, 081H, 081I, 081J, 081K, 081M, 081O, 081X, 081Y, 081Z, 082A, 082B, 082C, 082D, 082E, 082F, 082G, 082H, 082I, 082J, 082K, 082M, 082O, 082X, 082Y, 082Z

Section 2: 30-Day All-Cause Unplanned Readmission Following Psychiatric Hospitalization in an Inpatient Psychiatric Facility (IPF) Measure Specifications – Version 1.2

Description of Measure

This facility-level measure estimates an unplanned, 30-day, risk-standardized readmission rate for adult Medicare FFS patients with a principal discharge diagnosis of a psychiatric disorder or dementia/Alzheimer’s disease. The measurement period used to identify cases in the measure population is 24 months from July 1, 2015 through June 30, 2017. Data from the start of the measurement period through 30 days after the close of the measurement period are used to identify readmissions. Data from 12 months prior to the start of the measurement period through the measurement period are used to identify risk factors.

Numerator Statement

The risk-adjusted outcome measure does not have a traditional numerator and denominator. The numerator statement describes the outcome being measured. A readmission is defined as any admission, for any reason, to an IPF or a short-stay acute care hospital (including CAHs) that occurs within 30 days after the discharge date from an eligible index admission to an IPF, except those considered planned. The measure uses the CMS 30-day Hospital-Wide Readmission (HWR) Measure Planned Readmission Algorithm, Version 4.0. The planned readmission algorithm follows two principles to identify planned readmissions:

- Select procedures and diagnoses, such as transplant surgery, maintenance chemotherapy/radiotherapy/immunotherapy, rehabilitation, and forceps delivery, are considered always planned (Table B1 and Table B2).
- Some procedures, such as colorectal resection or aortic resection, are considered either planned or unplanned depending on the accompanying principal discharge diagnosis (Table B3). Specifically, a procedure is considered planned if it does not coincide with a principal discharge diagnosis of an acute illness or complication (Table B4).

Table B1. Procedure categories that are always planned

Procedure CCS	Description
64	Bone marrow transplant
105	Kidney transplant
134	Cesarean section
135	Forceps; vacuum; and breech delivery
176	Other organ transplantation

Table B2. Diagnosis categories that are always planned

Diagnosis CCS	Description
45	Maintenance chemotherapy
194	Forceps delivery
196	Normal pregnancy and/or delivery
254	Rehabilitation

Table B3. Potentially planned procedure categories

Procedure CCS	Description
1	Incision and excision of CNS
3	Excision destruction or resection of intervertebral disc
5	Insertion of catheter or spinal stimulator and injection into spinal canal
9	Other OR therapeutic nervous system procedures

Procedure CCS	Description
10	Thyroidectomy; partial or complete
12	Therapeutic endocrine procedures
33	Other OR procedures on mouth and throat
36	Lobectomy or pneumonectomy
38	Other diagnostic procedures on lung and bronchus
40	Other diagnostic procedures of respiratory tract and mediastinum
43	Heart valve procedures
44	Coronary artery bypass graft (CABG)
45	Percutaneous transluminal coronary angioplasty (PTCA) with or without stent placement
49	Other OR heart procedures
51	Endarterectomy; vessel of head and neck
52	Aortic resection; replacement or anastomosis
53	Varicose vein stripping; lower limb
55	Peripheral vascular bypass
56	Other vascular bypass and shunt; not heart
59	Other OR procedures on vessels of head and neck
66	Procedures on spleen
67	Other procedures; hemic and lymphatic system
74	Gastrectomy; partial and total
78	Colorectal resection
79	Excision (partial) of large intestine (not endoscopic)
84	Cholecystectomy and common duct exploration
85	Inguinal and femoral hernia repair
86	Other hernia repair
99	Other OR gastrointestinal therapeutic procedures
104	Nephrectomy; partial or complete
106	Genitourinary incontinence procedures
107	Extracorporeal lithotripsy; urinary
109	Procedures on the urethra
112	Other OR therapeutic procedures of urinary tract
113	Transurethral resection of prostate (TURP)
114	Open prostatectomy
119	Oophorectomy; unilateral and bilateral
120	Other operations on ovary
124	Hysterectomy; abdominal and vaginal
129	Repair of cystocele and rectocele; obliteration of vaginal vault
132	Other OR therapeutic procedures; female organs
142	Partial excision bone
152	Arthroplasty knee
153	Hip replacement; total and partial
154	Arthroplasty other than hip or knee
158	Spinal fusion
159	Other diagnostic procedures on musculoskeletal system
166	Lumpectomy; quadrantectomy of breast
167	Mastectomy
170 (ICD-9-CM only)	Excision of skin lesion
172	Skin graft
175 (ICD-10-CM only)	Other OR therapeutic procedures on skin, subcutaneous tissue, fascia and breast

ICD procedure codes	Description
ICD-9-CM: 30.1, 30.29, 30.3, 30.4, 31.74, 34.6 ICD-10-PCS: 0CBS4ZZ, 0CBS7ZZ, 0CBS8ZZ, 0B5N0ZZ, 0B5N3ZZ, 0B5N4ZZ, 0B5P0ZZ, 0B5P3ZZ, 0B5P4ZZ, 0BW10FZ, 0BW13FZ, 0BW14FZ	Laryngectomy, revision of tracheostomy, scarification of pleura
ICD-9-CM: 38.18	Endarterectomy leg vessel
ICD-9-CM: 55.03, 55.04 ICD-10-PCS: 0TC03ZZ, 0TC04ZZ, 0TC13ZZ, 0TC14ZZ, 0TC33ZZ, 0TC34ZZ, 0TC43ZZ, 0TC44ZZ	Percutaneous nephrostomy with and without fragmentation
ICD-10-PCS: 0T9030Z, 0T9130Z	Kidney procedures
ICD-9-CM: 94.26, 94.27 ICD-10-PCS: GZB0ZZZ, GZB1ZZZ, GZB2ZZZ, GZB3ZZZ, GZB4ZZZ	Electroshock therapy

Table B4. Acute principal discharge diagnosis categories

Diagnosis CCS	Description
1	Tuberculosis
2	Septicemia (except in labor)
3	Bacterial infection; unspecified site
4	Mycoses
5	HIV infection
7	Viral infection
8	Other infections; including parasitic
9	Sexually transmitted infections (not HIV or hepatitis)
54	Gout and other crystal arthropathies
55	Fluid and electrolyte disorders
60	Acute posthemorrhagic anemia
61	Sickle cell anemia
63	Diseases of white blood cells
76	Meningitis (except that caused by tuberculosis or sexually transmitted disease)
77	Encephalitis (except that caused by tuberculosis or sexually transmitted disease)
78	Other CNS infection and poliomyelitis
82	Paralysis
83	Epilepsy; convulsions
84	Headache; including migraine
85	Coma; stupor; and brain damage
87	Retinal detachments; defects; vascular occlusion; and retinopathy
89	Blindness and vision defects
90	Inflammation; infection of eye (except that caused by tuberculosis or sexually transmitted disease)
91	Other eye disorders
92	Otitis media and related conditions

Diagnosis CCS	Description
93	Conditions associated with dizziness or vertigo
99	Hypertension with complications and secondary hypertension
100 (ICD-9-CM only)	Acute myocardial infarction (with the exception of ICD-9 codes 410.x2)
102	Nonspecific chest pain
104	Other and ill-defined heart disease
107	Cardiac arrest and ventricular fibrillation
109	Acute cerebrovascular disease
112	Transient cerebral ischemia
116	Aortic and peripheral arterial embolism or thrombosis
118	Phlebitis; thrombophlebitis and thromboembolism
120	Hemorrhoids
122	Pneumonia (except that caused by tuberculosis or sexually transmitted disease)
123	Influenza
124	Acute and chronic tonsillitis
125	Acute bronchitis
126	Other upper respiratory infections
127	Chronic obstructive pulmonary disease and bronchiectasis
128	Asthma
129	Aspiration pneumonitis; food/vomitus
130	Pleurisy; pneumothorax; pulmonary collapse
131	Respiratory failure; insufficiency; arrest (adult)
135	Intestinal infection
137	Diseases of mouth; excluding dental
139	Gastroduodenal ulcer (except hemorrhage)
140	Gastritis and duodenitis
142	Appendicitis and other appendiceal conditions
145	Intestinal obstruction without hernia
146	Diverticulosis and diverticulitis
148	Peritonitis and intestinal abscess
153	Gastrointestinal hemorrhage
154	Noninfectious gastroenteritis
157	Acute and unspecified renal failure
159	Urinary tract infections
165	Inflammatory conditions of male genital organs
168	Inflammatory diseases of female pelvic organs
172	Ovarian cyst
197	Skin and subcutaneous tissue infections
198	Other inflammatory condition of skin
225	Joint disorders and dislocations; trauma-related
226	Fracture of neck of femur (hip)
227	Spinal cord injury
228	Skull and face fractures
229	Fracture of upper limb
230	Fracture of lower limb
232	Sprains and strains
233	Intracranial injury
234	Crushing injury or internal injury
235	Open wounds of head; neck; and trunk
237	Complication of device; implant or graft
238	Complications of surgical procedures or medical care
239	Superficial injury; contusion
240	Burns
241	Poisoning by psychotropic agents
242	Poisoning by other medications and drugs

Diagnosis CCS	Description
243	Poisoning by nonmedicinal substances
244	Other injuries and conditions due to external causes
245	Syncope
246	Fever of unknown origin
247	Lymphadenitis
249	Shock
250	Nausea and vomiting
251	Abdominal pain
252	Malaise and fatigue
253	Allergic reactions
259	Residual codes; unclassified
650	Adjustment disorders
651	Anxiety disorders
652	Attention-deficit, conduct, and disruptive behavior disorders
653	Delirium, dementia, and amnesic and other cognitive disorders
656	Impulse control disorders NEC
658	Personality disorders
660	Alcohol-related disorders
661	Substance-related disorders
662	Suicide and intentional self-inflicted injury
663	Screening and history of mental health and substance abuse codes
670	Miscellaneous mental health disorders
ICD Codes	Description
ICD-9-CM: 032.82, 036.40, 036.41, 036.42, 036.43, 074.20, 074.21, 074.22, 074.23, 112.81, 115.03, 115.04, 115.13, 115.14, 115.93, 115.94, 130.3, 391.0, 391.1, 391.2, 391.8, 391.9, 392.0, 398.0, 398.90, 398.99, 420.0, 420.90, 420.91, 420.99, 421.0, 421.1, 421.9, 422.0, 422.90, 422.91, 422.92, 422.93, 422.99, 423.0, 423.1, 423.2, 423.3, 429.0 ICD-10-CM: A36.81, A39.50, A39.51, A39.52, A39.53, B33.20, B33.21, B33.22, B33.23, B37.6, B58.81, I01.0, I01.1, I01.2, I01.8, I01.9, I02.0, I09.0, I09.89, I09.9, I30.0, I30.1, I30.8, I30.9, I31.0, I31.1, I31.2, I31.4, I32, I33.0, I33.9, I39, I40.0, I40.1, I40.8, I40.9, I41, I51.4	Peri-; endo-; and myocarditis; cardiomyopathy

Diagnosis CCS	Description
ICD Codes	Description
ICD-10-CM: I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4	Acute myocardial infarction (without subsequent MI)
ICD-9-CM: 426.0, 426.10, 426.11, 426.12, 426.13, 426.2, 426.3, 426.4, 426.50, 426.51, 426.52, 426.53, 426.54, 426.6, 426.7, 426.81, 426.82, 426.9 ICD-10-CM: I44.0, I44.1, I44.2, I44.30, I44.39, I44.4, I44.5, I44.60, I44.69, I44.7, I45.0, I45.10, I45.19, I45.2, I45.3, I45.4, I45.5, I45.6, I45.81, I45.9	Conduction disorders
ICD-9-CM: 427.2, 785.0, 427.89, 427.9, 427.69 ICD-10-CM: I47.9, I49.3, I49.49, I49.8, I49.9, R00.0, R00.1	Dysrhythmia
ICD-9-CM: 398.91, 428.0, 428.1, 428.20, 428.21, 428.23, 428.30, 428.31, 428.33, 428.40, 428.41, 428.43, 428.9 ICD-10-CM: I09.81, I50.1, I50.20, I50.21, I50.23, I50.30, I50.31, I50.33, I50.40, I50.41, I50.43, I50.9	Congestive heart failure; nonhypertensive
ICD-9-CM: 574.0, 574.00, 574.01, 574.3, 574.30, 574.31, 574.6, 574.60, 574.61, 574.8, 574.80, 574.81, 575.0, 575.12, 576.1 ICD-10-CM: K80.00, K80.01, K80.12, K80.13, K80.30, K80.31, K80.32, K80.33, K80.36, K80.37, K80.42, K80.43, K80.46, K80.47, K80.62, K80.63, K80.66, K80.67, K81.0, K81.2, K83.0	Biliary tract disease
ICD-9-CM: 577.0 ICD-10-CM: K85.0, K85.1, K85.2, K85.3, K85.8, K85.9	Pancreatic disorders

Denominator Statement

The risk-adjusted outcome measure does not have a traditional numerator and denominator. The denominator statement describes the measure population. The measure population consists of eligible index admissions to IPFs. A readmission within 30-days will also be eligible as an index admission, if it meets all other eligibility criteria. Patients may have more than one index admission within the measurement period.

Index admissions are defined as admissions to IPFs for patients with the following characteristics:

- Age 18 or older at admission
- Discharged alive
- Enrolled in Medicare FFS Parts A and B during the 12 months prior to, the month of, and at least one month after the index admission
- Discharged with a psychiatric principal diagnosis included in one of the Agency for Healthcare Research and Quality (AHRQ) Clinical Classification Software (CCS) ICD groupings in Table B5. (More information on grouping ICD codes into clinically coherent groups is available at the following link: <https://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp>.)

Table B5. Principal discharge diagnosis clinical categories designating psychiatric illness for measure cohort

Diagnosis CCS	Description
650	Adjustment disorders
651	Anxiety disorders
652	Attention-deficit, conduct, and disruptive behavior disorders
653	Delirium, dementia, and amnestic and other cognitive disorders
654	Developmental disorders
655	Disorders usually diagnosed in infancy, childhood, or adolescence
656	Impulse control disorders, NEC
657	Mood disorders
658	Personality disorders
659	Schizophrenia and other psychotic disorders
660	Alcohol-related disorders
661	Substance-related disorders
662	Suicide and intentional self-inflicted injury
663	Screening and history of mental health and substance abuse codes
670	Miscellaneous disorders

The measure population excludes admissions for patients with the following characteristics:

- Discharged against medical advice (AMA) because the IPF may have limited opportunity to complete treatment and prepare for discharge
- With unreliable demographic and vital status data defined as the following:
 - Age greater than 115 years
 - Missing gender
 - Discharge status of “dead” but with subsequent admissions
 - Death date prior to admission date
 - Death date within the admission and discharge dates but the discharge status was not “dead”

- With readmissions on the day of discharge or day following discharge because those readmissions are likely transfers to another inpatient facility. The hospital that discharges the patient to home or a non-acute care setting is accountable for subsequent readmissions.
- With readmissions two days following discharge because readmissions to the same IPF within two days of discharge are combined into the same claim as the index admission and do not appear as readmissions due to the interrupted stay billing policy. Therefore, complete data on readmissions within two days of discharge are not available.

Statistical Risk Model and Variables

Hierarchical logistic regression is used to estimate a risk standardized readmission rate.

Risk Factor Variables

Four types of risk factors are included in the risk adjustment model:

1. Demographics (Table B6)
2. Principal discharge diagnosis of the IPF index admission (Table B7)
 - Discharge diagnoses were summarized into 13 distinct principal discharge risk factors using a modified version of the AHRQ CCS groupings.
3. Comorbidity risk variables (Table B8)
 - Comorbidities were summarized into 51 distinct psychiatric and non-psychiatric risk factors using a modified version of CMS’s Hierarchical Condition Categories (CC). The comorbidity risk factors are derived from three sources:
 - Secondary diagnoses of the index admission when not considered a potential complication of care.
 - Principal or secondary diagnoses of inpatient encounters during the 12 months prior to the index admission.
 - Primary or secondary diagnoses of outpatient encounters that had evaluation and management (E&M) procedure codes indicating services were provided by physicians or qualified health professionals. To eliminate diagnoses that may have been assigned during diagnostic work up without later confirmation, a minimum of two outpatient claims with a diagnosis in the same CC are required during the 12 months prior to the index admission for inclusion as a risk variable for a given patient.
4. Other risk factor variables among psychiatric patients (Table B9)
 - Other risk factors were summarized into three distinct risk factors using Medicare FFS claims.

Table B6. Demographic risk factors

Risk Factor Name/Description
Gender: Male
Age
18–34
35–44
45–54
55–64
65–74
75–84
85+

Table B7. Modified AHRQ CCS (ICD-10-CM Version 2017.1) Groupings for Principal Discharge Diagnosis Risk Factors

Modified CCS	Modified CCS	AHRQ CCS	AHRQ CCS Description	ICD-9-CM and ICD-10-CM Codes
650	Adjustment Disorder	650	Adjustment Disorders	ICD-9-CM: All ICD-9-CM codes from CCS 650 ICD-10-CM: All ICD-10-CM codes from CCS 650
651	Anxiety	651	Anxiety Disorders	ICD-9-CM: All ICD-9-CM codes from CCS 651 ICD-10-CM: F06.4, F40.00, F40.01, F40.02, F40.10, F40.11, F40.210, F40.218, F40.220, F40.228, F40.230, F40.231, F40.232, F40.233, F40.240, F40.241, F40.242, F40.243, F40.248, F40.290, F40.291, F40.298, F40.8, F40.9, F41.0, F41.1, F41.3, F41.8, F41.9, F42, F42.2, F42.3, F42.4, F42.8, F42.9, F43.0, F43.10, F43.11, F43.12, F48.8, F48.9, R45.2, R45.7, R46.81
652/654/655	ADD/ Developmental / Childhood Disorders	652	Attention-Deficit, Conduct, and Disruptive Behavior Disorders	ICD-9-CM: All ICD-9-CM codes from CCS 652, 654, and 655 ICD-10-CM: F64.2, F70, F71, F72, F73, F78, F79, F80.0, F80.1, F80.2, F80.4, F80.81, F80.82, F80.89, F80.9, F81.0, F81.2, F81.81, F81.89, F81.9, F82, F84.0, F84.2, F84.3, F84.5, F84.8, F84.9, F88, F89, F90.0, F90.1, F90.2, F90.8, F90.9, F91.0, F91.1, F91.2, F91.3, F91.8, F91.9, F93.0, F93.8, F93.9, F94.0, F94.1, F94.2, F94.8, F94.9, F95.0, F95.1, F95.2, F95.8, F95.9, F98.0, F98.1, F98.21, F98.29, F98.3, F98.4, F98.5, F98.8, F98.9, H93.25, R41.83, R48.0
		654	Developmental Disorders	
		94	Other ear and sense organ disorders	
		655	Disorders Usually Diagnosed in Infancy, Childhood, or Adolescence	

Modified CCS	Modified CCS	AHRQ CCS	AHRQ CCS Description	ICD-9-CM and ICD-10-CM Codes
653	Dementia	653	Delirium, Dementia, and Amnesic and Other Cognitive Disorders	<p>ICD-9-CM: All ICD-9-CM codes from CCS 653</p> <p>ICD-10-CM: F01.50, F01.51, F02.80, F02.81, F03.90, F03.91, F04, F05, F07.0, F07.81, F07.89, F07.9, F09, F48.2, G30.0, G30.1, G30.8, G30.9, G31.01, G31.09, G31.1, G31.83, R41.81, R54</p>
656	Impulse Control Disorders	656	Impulse Control Disorders, NEC	<p>ICD-9-CM: All ICD-9-CM codes from CCS 656</p> <p>ICD-10-CM: All ICD-10-CM codes from CCS 656 <i>excluding</i> R45.850</p>
657.1	Bipolar Disorder	657	Mood Disorders	<p>ICD-9-CM: 296.00, 296.01, 296.02, 296.03, 296.04, 296.05, 296.06, 296.10, 296.11, 296.12, 296.13, 296.14, 296.15, 296.16, 296.40, 296.41, 296.42, 296.43, 296.44, 296.45, 296.46, 296.50, 296.51, 296.52, 296.53, 296.54, 296.55, 296.56, 296.60, 296.61, 296.62, 296.63, 296.64, 296.65, 296.66, 296.7, 296.80, 296.81, 296.82, 296.89, 296.90, 296.99</p> <p>ICD-10-CM: F06.33, F06.34, F30.10, F30.11, F30.12, F30.13, F30.2, F30.3, F30.4, F30.8, F30.9, F31.0, F31.10, F31.11, F31.12, F31.13, F31.2, F31.30, F31.31, F31.32, F31.4, F31.5, F31.60, F31.61, F31.62, F31.63, F31.64, F31.70, F31.71, F31.72, F31.73, F31.74, F31.75, F31.76, F31.77, F31.78, F31.81, F31.89, F31.9, F34.0, F34.8, F34.9, F39</p>

Modified CCS	Modified CCS	AHRQ CCS	AHRQ CCS Description	ICD-9-CM and ICD-10-CM Codes
657.2/ 662	Depressive Disorder	657	Mood Disorders	ICD-9-CM: 293.83, 296.20, 296.21, 296.22, 296.23, 296.24, 296.25, 296.26, 296.30, 296.31, 296.32, 296.33, 296.34, 296.35, 296.36, 300.4, 311, V62.84 ICD-10-CM: F06.30, F06.31, F06.32, F32.0, F32.1, F32.2, F32.3, F32.4, F32.5, F32.8, F32.81, F32.89, F32.9, F33.0, F33.1, F33.2, F33.3, F33.40, F33.41, F33.42, F33.8, F33.9, F34.1, F34.81, F34.89, All ICD-10-CM codes from CCS 662
		662	Suicide and Intentional Self-Inflicted Injury	
658	Personality Disorder	658	Personality Disorders	ICD-9-CM: All ICD-9-CM codes from CCS 658 ICD-10-CM: F21, F60.0, F60.1, F60.2, F60.3, F60.4, F60.5, F60.6, F60.7, F60.81, F60.89, F60.9, F69
		659	Schizophrenia and Other Psychotic Disorders	
659.1	Schizo-Affective	659	Schizophrenia and Other Psychotic Disorders	ICD-9-CM: 295.70, 295.71, 295.72, 295.73, 295.74, 295.75 ICD-10-CM: F250, F251, F258, F259

Modified CCS	Modified CCS	AHRQ CCS	AHRQ CCS Description	ICD-9-CM and ICD-10-CM Codes
659.2	Psychosis	659	Schizophrenia and Other Psychotic Disorders	<p>ICD-9-CM: 293.81, 293.82, 295.00, 295.01, 295.02, 295.03, 295.04, 295.05, 295.10, 295.11, 295.12, 295.13, 295.14, 295.15, 295.20, 295.21, 295.22, 295.23, 295.24, 295.25, 295.30, 295.31, 295.32, 295.33, 295.34, 295.35, 295.40, 295.41, 295.42, 295.43, 295.44, 295.45, 295.50, 295.51, 295.52, 295.53, 295.54, 295.55, 295.60, 295.61, 295.62, 295.63, 295.64, 295.65, 295.80, 295.81, 295.82, 295.83, 295.84, 295.85, 295.90, 295.91, 295.92, 295.93, 295.94, 295.95, 297.0, 297.1, 297.2, 297.3, 297.8, 297.9, 298.0, 298.1, 298.2, 298.3, 298.4, 298.8, 298.9</p> <p>ICD-10-CM: F06.0, F06.2, F20.0, F20.1, F20.2, F20.3, F20.5, F20.81, F20.89, F20.9, F22, F23, F24, F28, F29</p>
660	Alcohol Disorders	243	Poisoning by Nonmedicinal Substances	<p>ICD-9-CM: All ICD-9-CM codes from CCS 660</p> <p>ICD-10-CM: All ICD-10-CM codes from CCS 660 and T51.0X1A, T51.0X3A, T51.0X4A</p>
		660	Alcohol-Related Disorders	
661	Drug Disorders	242	Poisoning by Other Medications and Drugs	<p>ICD-9-CM: All ICD-9-CM codes from CCS 661</p> <p>ICD-10-CM: All ICD-10-CM codes from CCS 661 and T40.3X1A, T40.3X3A, T40.3X4A, T40.2X1A, T40.2X3A, T40.2X4A, T40.4X1A, T40.4X3A, T40.4X4A, T40.601A, T40.603A, T40.604A, T40.691A, T40.693A, T40.694A, Z71.41, Z71.42, Z71.51, Z71.52, Z71.6</p>
		255	Administrative/Social Admission	
		661	Substance-Related Disorders	

Modified CCS	Modified CCS	AHRQ CCS	AHRQ CCS Description	ICD-9-CM and ICD-10-CM Codes
670/663	Other Mental Disorders	95	Other nervous system disorders	ICD-9-CM: All ICD-9-CM codes from CCS 663, 670, and 302.0 ICD-10-CM: All ICD-10-CM codes from CCS 663, 670, and G21.0, O99.340, O99.341, O99.342, O99.343, O99.344, O99.345, R45.0, R45.1, R45.3, R45.4, R45.5, R45.6, R45.81, R45.82, R45.83, R45.84, R45.850, R45.86, R46.0, R46.1, R46.2, R46.3, R46.4, R46.5, R46.6, R46.7, R46.89, R78.0, R78.1, R78.2, R78.3, R78.4, R78.5, R78.6
		181	Other complications of pregnancy	
		195	Other complications of birth; puerperium affecting management of mother	
		259	Residual codes; unclassified	
		651	Anxiety disorders	
		652	Attention-deficit conduct and disruptive behavior disorders	
		653	Delirium dementia and amnesic and other cognitive disorders	
		656	Impulse control disorders NEC	
		657	Mood disorders	
		658	Personality disorders	
		670	Miscellaneous Disorders	
663	Screening and History of Mental Health and Substance Abuse Codes			

Table B8. Modified CMS CC Version 22 Groupings for Comorbidity Risk Factors

Modified CC	Modified CC Description	CMS CC	CMS CC Description	Complication	ICD-9-CM and ICD-10-CM Codes
Psychiatric					
50.1	Hallucinations	50	Delirium and Encephalopathy	Complication if not POA	ICD-9-CM: 780.1 ICD-10-CM: R44.0, R44.1, R44.2, R44.3
54	Drug/Alcohol Psychosis	54	Drug/Alcohol Psychosis	Complication if not POA	ICD-9-CM: All ICD-9-CM codes in CC 54 ICD-10-CM: All ICD-10-CM codes in CC 54
55-56	Drug/Alcohol dependence/abuse	55	Drug/Alcohol Dependence	---	ICD-9-CM: All ICD-9-CM codes in CC 55 and CC 56 <i>excluding</i> 305.1 ICD-10-CM: All ICD-10-CM codes in CC 55 and CC 56 <i>excluding</i> F17.200, F17.201, F17.203, F17.208, F17.209, F17.210, F17.211, F17.213, F17.218, F17.219, F17.220, F17.221, F17.223, F17.228, F17.229, F17.290, F17.291, F17.293, F17.298, F17.299
		56	Drug/Alcohol Abuse, Without Dependence	---	

Modified CC	Modified CC Description	CMS CC	CMS CC Description	Complication	ICD-9-CM and ICD-10- CM Codes
56.1	Nicotine dependence disorder	56	Drug/Alcohol Abuse, Without Dependence	---	ICD-9-CM: 305.1 ICD-10-CM: F17.200, F17.201, F17.203, F17.208, F17.209, F17.210, F17.211, F17.213, F17.218, F17.219, F17.220, F17.221, F17.223, F17.228, F17.229, F17.290, F17.291, F17.293, F17.298, F17.299
57/58.3/59	Schizophrenia/psychosis	57	Schizophrenia	---	ICD-9-CM: All ICD-9-CM codes in CC 57 and CC 59 and 297, 297.0, 297.1, 297.2, 297.3, 297.8, 297.9 ICD-10-CM: All ICD-10-CM codes in CC 57 and CC 59 and F22, F24
		58	Major Depressive, Bipolar, and Paranoid Disorders	---	
		59	Reactive and Unspecified Psychosis	---	

Modified CC	Modified CC Description	CMS CC	CMS CC Description	Complication	ICD-9-CM and ICD-10- CM Codes
58.1	Bipolar	58	Major Depressive, Bipolar, and Paranoid Disorders	---	ICD-9-CM: 296, 296.0, 296.1, 296.4, 296.5, 296.6, 296.7, 296.8, 296.9, 296.00, 296.01, 296.02, 296.03, 296.04, 296.05, 296.06, 296.10, 296.11, 296.12, 296.13, 296.14, 296.15, 296.16, 296.40, 296.41, 296.42, 296.43, 296.44, 296.45, 296.46, 296.50, 296.51, 296.52, 296.53, 296.54, 296.55, 296.56, 296.60, 296.61, 296.62, 296.63, 296.64, 296.65, 296.66, 296.80, 296.81, 296.82, 296.89, 296.90, 296.99 ICD-10-CM: F30.10, F30.11, F30.12, F30.13, F30.2, F30.3, F30.4, F30.8, F30.9, F31.0, F31.10, F31.11, F31.12, F31.13, F31.2, F31.30, F31.31, F31.32, F31.4, F31.5, F31.60, F31.61, F31.62, F31.63, F31.64, F31.70, F31.71, F31.72, F31.73, F31.74, F31.75, F31.76, F31.77, F31.78, F31.81, F31.89, F31.9, F33.8, F34.8, F34.81, F34.89, F34.9, F39

Modified CC	Modified CC Description	CMS CC	CMS CC Description	Complication	ICD-9-CM and ICD-10- CM Codes
58.2/61	Depressive Disorders	58	Major Depressive, Bipolar, and Paranoid Disorders	---	ICD-9-CM: All ICD-9-CM codes in CC 61 and 296.2, 296.20, 296.21, 296.22, 296.23, 296.24, 296.25, 296.26, 296.3, 296.30, 296.31, 296.32, 296.33, 296.34, 296.35, 296.36, E95, E95.0, E95.00, E95.01, E95.02, E95.03, E95.04, E95.05, E95.06, E95.07, E95.08, E95.09, E95.1, E95.10, E95.11, E95.18, E95.2, E95.20, E95.21, E95.28, E95.29, E95.3, E95.30, E95.31, E95.38, E95.39, E95.4, E95.5, E95.50, E95.51, E95.52, E95.53, E95.54, E95.55, E95.56, E95.57, E95.59, E95.6, E95.7, E95.70, E95.71, E95.72, E95.79, E95.8, E95.80, E95.81, E95.82, E95.83, E95.84, E95.85, E95.86, E95.87, E95.88, E95.89, E95.9 ICD-10-CM: F32.0, F32.1, F32.2, F32.3, F32.4, F32.5, F32.8, F32.81, F32.89, F32.9, F33.0, F33.1, F33.2, F33.3, F33.40, F33.41, F33.42, F33.9, F34.0, F34.1, X71.x- X83.x
		61	Depression	---	
60.1	Antisocial Disorders	60	Antisocial Disorders	---	ICD-9-CM: 301.7 ICD-10-CM: F60.2

Modified CC	Modified CC Description	CMS CC	CMS CC Description	Complication	ICD-9-CM and ICD-10- CM Codes
60.2	Other Personality Disorders	60	Other personality disorders	---	ICD-9-CM: All ICD-9-CM codes in CC 60 <i>excluding</i> 301.7 ICD-10-CM: All ICD-10-CM codes in CC 60 <i>excluding</i> F60.2
62.1	Anxiety	50	Delirium and Encephalopathy	---	ICD-9-CM: 293.84, 300.1, 300.2, 300.3, 300.5, 300.7, 300.00, 300.01, 300.02, 300.09, 300.10, 300.11, 300.16, 300.19, 300.20, 300.21, 300.22, 300.23, 300.29, 300.81, 300.82, 300.89, 307.1, 307.51, 313.0, 313.21, 313.22 ICD-10-CM: F06.4, F40.00, F40.01, F40.02, F40.10, F40.11, F40.210, F40.218, F40.220, F40.228, F40.230, F40.231, F40.232, F40.233, F40.240, F40.241, F40.242, F40.243, F40.248, F40.290, F40.291, F40.298, F40.8, F40.9, F41.0, F41.1, F41.3, F41.8, F41.9, F42, F42.2, F42.3, F42.4, F42.8, F42.9, F44.2, F44.4, F44.5, F44.6, F44.7, F44.89, F44.9, F45.0, F45.1, F45.20, F45.21, F45.22, F45.29, F45.8, F45.9, F48.8, F50.00, F50.01, F50.02, F50.2, F68.10, F68.11, F68.12, F68.13
		62	Anxiety Disorders	---	
		63	Other Psychiatric Disorders	---	
		68	Other Developmental Disability	---	
62.2	PTSD	62	Anxiety Disorders	---	ICD-9-CM: 309.81 ICD-10-CM: F43.10, F43.11, F43.12

Modified CC	Modified CC Description	CMS CC	CMS CC Description	Complication	ICD-9-CM and ICD-10-CM Codes
63	Other Psychiatric Disorders	63	Other Psychiatric Disorders	---	ICD-9-CM: All ICD-9-CM codes in CC 63 <i>excluding</i> 300.00, 300.09, 300.5 ICD-10-CM: All ICD-10-CM codes in CC 63 <i>excluding</i> F41.3, F41.8, F41.9, F48.8
64-67	Intellectual Disability	64	Profound Mental Retardation/ Developmental Disability	---	ICD-9-CM: All ICD-9-CM codes in CC 64, CC 65, CC 66, and CC 67 ICD-10-CM: All ICD-10-CM codes in CC 64, CC 65, CC 66, and CC 67
		65	Severe Mental Retardation/ Developmental Disability	---	
		66	Moderate Mental Retardation/ Developmental Disability	---	
		67	Mild/Unspecified Mental Retardation/ Developmental Disability	---	
68-69	Developmental Disorders	68	Other Developmental Disability	---	ICD-9-CM: All ICD-9-CM codes in CC 68 and CC 69 <i>excluding</i> 313.0, 313.21, 313.22 ICD-10-CM: All ICD-10-CM codes in CC 68 and CC 69
		69	Attention Deficit Disorder	---	
Non-Psychiatric					
1	Other Infection	7	Other Infectious Diseases	X	ICD-9-CM: All ICD-9-CM codes from the corresponding CMS CCs ICD-10-CM: All ICD-10-CM codes from the corresponding CMS CCs
4.1	Diabetes Acute Complications	17	Diabetes with Acute Complications	X	
4.2	Diabetes Chronic Complications	18	Diabetes with Chronic Complications	---	
5	Diabetes	19	Diabetes without complication	---	
		122	Proliferative Diabetic Retinopathy and Vitreous Hemorrhage	---	
		123	Diabetic and Other Vascular Retinopathies	---	
7	Hematological Disorder	46	Severe Hematological Disorders	---	
9	Seizures	79	Seizure Disorders and Convulsions	---	
10	Heart Failure	85	Congestive Heart Failure	X	

Modified CC	Modified CC Description	CMS CC	CMS CC Description	Complication	ICD-9-CM and ICD-10-CM Codes
11	Arrhythmia	96	Specified Heart Arrhythmias	X	ICD-9-CM: All ICD-9-CM codes from the corresponding CMS CCs ICD-10-CM: All ICD-10-CM codes from the corresponding CMS CCs
		97	Other Heart Rhythm and Conduction Disorders	X	
12	Asthma	113	Asthma	---	
13	Dialysis	134	Dialysis Status	X	
15	Endocrine Disease	23	Other Significant Endocrine and Metabolic Disorders	---	
		24	Disorders of Fluid/Electrolyte/Acid-Base Balance	X	
16	Anemia	49	Iron Deficiency and Other/Unspecified Anemias and Blood Disease	---	
20	Pancreatic Disease	34	Chronic Pancreatitis	---	
21	Urinary Tract Disorder	145	Other Urinary Tract Disorders	---	
22	Coagulation Defects	48	Coagulation Defects and Other Specified Hematological Disorders	X	
23	Peptic Ulcer	36	Peptic Ulcer, Hemorrhage, Other Specified Gastrointestinal Disorders	X	
24	Infection	1	HIV/AIDS	---	
		3	Bacterial, Fungal, and Parasitic Central Nervous System Infections	---	
		4	Viral and Late Effects Central Nervous System Infections	---	
		5	Tuberculosis	---	
		6	Opportunistic Infections	---	
		39	Bone/Joint/Muscle Infections/Necrosis	---	
		164	Cellulitis, Local Skin Infection	X	
25	Liver Disease	27	End-Stage Liver Disease	---	
		28	Cirrhosis of Liver	---	
		29	Chronic Hepatitis	---	
		30	Acute Liver Failure/Disease	X	
		31	Other Hepatitis and Liver Disease	---	

Modified CC	Modified CC Description	CMS CC	CMS CC Description	Complication	ICD-9-CM and ICD-10- CM Codes
26	Heart Disease	89	Coronary Atherosclerosis/Other Chronic Ischemic Heart Disease	---	ICD-9-CM: All ICD-9-CM codes from the corresponding CMS CCs ICD-10-CM: All ICD-10-CM codes from the corresponding CMS CCs
		88	Angina Pectoris	---	
		94	Hypertensive Heart Disease	---	
		107	Vascular Disease with Complications	X	
		108	Vascular Disease	X	
		109	Other Circulatory Disease	X	
28	COPD/Fibrosis	111	Chronic Obstructive Pulmonary Disease	---	
		112	Fibrosis of Lung and Other Chronic Lung Disorders	---	
34	Injury	162	Severe Skin Burn or Condition	---	
		163	Moderate Skin Burn or Condition	---	
		167	Major Head Injury	X	
		168	Concussion or Unspecified Head Injury	X	
		172	Internal Injuries	---	
		174	Other Injuries	X	
		175	Poisonings and Allergic and Inflammatory Reactions	X	

Table B9. Other risk factors

Risk Factor Name/Description	
Suicide attempt/self-harm	<ul style="list-style-type: none"> At least 1 claim with a diagnosis in the 12 months prior to the index admission Secondary diagnosis during the index admission
Aggression	<ul style="list-style-type: none"> Diagnosis during inpatient admission in the 12 months prior to the index admission At least 2 outpatient claims in the 12 months prior to the index admission Secondary diagnosis during the index admission
Discharge disposition	<ul style="list-style-type: none"> Discharged AMA in prior 12 months Not discharged AMA in prior 12 months No admissions to determine AMA discharge

Appendix: Summary of Measure Updates

Appendix A. Follow-Up After Hospitalization for Mental Illness (FUH) Measure Updates

Version 2.0 – Fiscal Year 2019 Public Reporting

1. Removed all inpatient claims that meet the following conditions prior to applying measure inclusion or exclusion criteria:
 - i. Bill Type Code = ‘110’: Hospital Inpatient Part A Nonpayment/Zero Claims – facilities determine an inpatient admission is not medically necessary after discharge
 - ii. Condition Code = ‘44’: Inpatient Admission Changed to Outpatient – entire hospital stay becomes an outpatient encounter
 - iii. Condition Code = ‘W2’: Rebilling and no appeal is in process – allows hospitals to self-deny an inappropriate admission and then rebill all eligible service under Part B
 - Rationale: Alignment with other CMS claims-based measures to remove claims in which an inpatient stay is changed to outpatient status
2. Removed ICD-9-CM diagnosis codes
 - Rationale: ICD-9-CM codes are only available through September 30, 2015.
3. Added four new ICD-10-CM codes (F32.81, F32.89, F34.81, F34.89) to identify principal mental illness diagnosis
 - Rationale: These codes were added to value sets in HEDIS 2018
4. Clarified codes to include under F42 (F42.2, F42.3, F42.4, F42.8, F42.9)
 - Rationale: These codes were clarified in the value set in HEDIS 2018
5. Removed discharges with lengths of stay longer than 180 days
 - Rationale: Aligns with the approach used for the other claims-based measure in the IPFQR program
6. Increased the measurement period to a full 12 months to identify cases in the denominator
 - Rationale: Allows for more facilities to publicly report a rate and aligns with approach for other facility-level claims-based measures
7. Excluded patients in hospice from the eligible population
 - Rationale: This exclusion aligns with HEDIS 2018 specifications
8. Excluded transfers and admissions to acute and non-acute inpatient facilities within the 30-day follow-up period for any diagnosis
 - Rationale: Version 1.0 of the FUH measure did not exclude transfers or admissions to acute care with a primary mental health diagnosis, however, an intervening inpatient encounter during the follow-up period could impact the patient’s ability to receive outpatient care regardless of the diagnosis
9. Removed the revenue code for vaccine administration (077x) from the numerator definition
 - Rationale: Vaccine administration does not meet the intent of the measure as a follow-up visit for mental health care
10. Added two transitional care management codes (99495, 99496) to the numerator definition
 - Rationale: Transitional care management services represent follow-up care with a health care provider to transition the patient to a community setting. Therefore, these services meet the intent of the measure
11. Clarified the numerator exclusion for emergency room visits to exclude the entire claim rather than the emergency room line item
 - Rationale: Emergency room visits do not meet the intent of the measure for follow-

up care for mental health

12. Added two new taxonomy codes to identify mental health providers (2084A2900X- Allopathic & Osteopathic Physicians/Psychiatry & Neurology/Neurocritical Care; 225XN1300X- Respiratory, Developmental, Rehabilitative & Restorative Service Providers/Occupational Therapist, Neurorehabilitation)
 - Rationale: These codes meet the definition of mental health practitioners in NQF 0576
13. Added four new place of service codes (16-Temporary Lodging, 17-Walk-in Retail Health Clinic, 18-Place of Employment Work-site, and 19-Off-Campus-Outpatient Hospital)
 - Rationale: The codes indicate appropriate place of service for the accompanying CPT codes and the addition of these codes would align with NQF 0576
14. Added telehealth modifier (GT)
 - Rationale: Telehealth visits for mental health meet the intent of the measure and the addition of these codes would align with NQF 0576

Appendix B. 30-Day All-Cause Unplanned Readmission Following Psychiatric Hospitalization in an IPF Measure Updates

Version 1.2 – Fiscal Year 2019 Public Reporting

1. Removed all inpatient claims that meet the following conditions prior to applying measure inclusion or exclusion criteria:
 - i. Bill Type Code = ‘110’: Hospital Inpatient Part A Nonpayment/Zero Claims – facilities determine an inpatient admission is not medically necessary after discharge
 - ii. Condition Code = ‘44’: Inpatient Admission Changed to Outpatient – entire hospital stay becomes an outpatient encounter
 - iii. Condition Code = ‘W2’: Rebilling and no appeal is in process – allows hospitals to self-deny an inappropriate admission and then rebill all eligible service under Part B
 - o Rationale: Alignment with other CMS claims-based measures to remove claims in which an inpatient stay is changed to outpatient status
2. Removed index admissions with lengths of stay longer than 180 days
 - o Rationale: Limiting the length of stay ensures that full historical data are available to identify risk factors on all index admissions
3. Re-specified the risk factors:
 - i. Moved ICD-10-CM F34.8, F34.9, and F39 from modified CCS 657.2/662 – Depressive disorder to modified CCS 657.1 – Bipolar disorder
 - ii. Added non-psychiatric risk factor modified CC 4.2 – Diabetes chronic complications
 - iii. Removed non-psychiatric risk factors modified CC 2 – Metastasis and modified CC 8 – Paraplegia/amputation
 - iv. Added risk factor for history of aggression in the 12 months prior to the index admission
 - o Rationale: Re-specification of the risk factors based on the mix of ICD-9-CM and ICD-10-CM codes in Version 1.2 of the measure improves the performance of the risk adjustment model
4. Added codes introduced in the FY2017 ICD-10-CM update:
 - i. Added ICD-10-CM codes F42, F42.2, F42.3, F42.4, F42.8, F42.9 to modified CCS 651 – Anxiety
 - ii. Added ICD-10-CM F80.82 to modified CCS 652/654/655 – ADD/Developmental/Childhood Disorders
 - iii. Added ICD-10-CM codes F32.81, F32.89, F34.81, F34.89 to modified CCS 657.2/662 – Depressive disorder
 - iv. Added F34.81 and F34.89 to modified CC 58.1 – Bipolar
 - v. Added F32.81 and F32.89 to modified CC 58.2/61 – Depressive disorders
 - vi. Added F42.2, F42.3, F42.4, F42.8, F42.9 to modified CC 62.1 – Anxiety
5. Corrections to documentation since Version 1.1:
 - i. Corrected decimal in ICD-10-CM code Z71.6 in modified CCS 661 – Drug Disorders
 - ii. Corrected decimal in ICD-10-CM codes F33.40, F33.41, F33.42 in modified CC 58.2/61 – Depressive disorders
 - iii. Removed duplicate ICD-9-CM codes 296.00, 296.01, 296.02, 296.03, 296.04, 296.05, 296.06, 296.10, 296.11, 296.12, 296.13, 296.14, 296.15, 296.16, 296.40,

296.41, 296.42, 296.43, 296.44, 296.45, 296.46, 296.50, 296.51, 296.52, 296.53, 296.54, 296.55, 296.56, 296.60, 296.61, 296.62, 296.63, 296.64, 296.65, 296.66, 296.7, 296.80, 296.81, 296.82, 296.89, 296.90, 296.99 from modified CCS 657.2/662 – Depressive disorder

- iv. Added V62.84 to modified CCS 657.2/662 – Depressive disorder
- v. Removed psychiatric risk factors modified CC 50.2 – Other delirium disorders and modified CC 51-53 – Dementia
- vi. Removed non-psychiatric risk factors modified CC 3 – Other cancer, modified CC 6 – Malnutrition, modified CC 14 – Sepsis, modified CC 17 – Cardio-respiratory failure, modified CC 18 – AMI, modified CC 19 – Renal failure, modified CC 27 – Cerebral disease, modified CC 29 – Skin ulcer, modified CC 30 – Lung problems, modified CC 31 – Cancer, modified CC 32 – Organ transplant, and modified CC 33 – Uncompleted pregnancy