

	Measure 2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics (National Committee for Quality Assurance)
Description	The percentage of children and adolescents 1-17 years of age who had two or more antipsychotic prescriptions and had metabolic testing.
Numerator	Children and adolescents 1-17 years of age on antipsychotics who received blood glucose and cholesterol testing during the measurement year.
Numerator Details	Three numerators are reported using administrative data: 1. Children and adolescents 1-17 years of age on antipsychotics who received blood glucose testing during the measurement year. 2. Children and adolescents 1-17 years of age on antipsychotics who received cholesterol testing during the measurement year. 3. Children and adolescents on antipsychotics who received blood glucose and cholesterol testing during the measurement year. Blood Glucose Testing: one test for blood glucose (Glucose Lab Test Value Set; Glucose Test Result or Finding Value Set) or HbA1c (HbA1c Lab Test Value Set; HbA1c Test Result or Finding Value Set) during the measurement year. Cholesterol Testing: one test for LDL-C (LDL-C Lab Test Value Set; LDL-C Test Result or Finding Value Set) or cholesterol (Cholesterol Lab Test Value Set; Cholesterol Test Result or Finding Value Set) during the measurement year. Blood Glucose and Cholesterol Testing: both of the following during the measurement year on the same or different dates of service. • At least one test for blood glucose (Glucose Lab Test Value Set, Glucose Test Result or Finding Value Set) or HbA1c (HbA1c Lab Test Value Set, HbA1c Test Result or Finding Value Set). • At least one test for LDL-C (LDL-C Lab Test Value Set; LDL-C Test Result or Finding Value Set) or cholesterol (Cholesterol Lab Test Value Set; Cholesterol Test Result or Finding Value Set). See attachment for all value sets referenced above.
Denominator	Children and adolescents 1-17 years of age who had ongoing use of antipsychotic medications (at least two prescriptions).
Denominator Details	Children and adolescents age 1-17 years as of December 31 of the measurement year who had at least two antipsychotic medication dispensing events (Table APM-A) of the same or different medications, on different dates of service during the measurement year, with no more than one gap in enrollment of up to 45 days during the measurement year. TABLE APM-A: ANTIPSYCHOTIC MEDICATIONS DESCRIPTION / PRESCRIPTION

	Miscellaneous antipsychotic agents / Aripiprazole; Asenapine; Brexpiprazole; Cariprazine; Clozapine; Haloperidol; Iloperidone; Loxapine; Lurasidone; Molindone; Olanzapine; Paliperidone; Pimozide; Quetiapine; Quetiapine fumarate, Risperidone, Ziprasidone Phenothiazine antipsychotics / Chlorpromazine; Fluphenazine; Perphenazine; Thioridazine; Trifluoperazine Thioxanthenes / Thiothixene Long-acting injections / Aripiprazole; Fluphenazine decanoate; Haloperidol decanoate; Olanzapine; Paliperidone palmitate; Risperidone Psychotherapeutics combinations / Fluoxetine-olanzapine; Perphenazine-amitriptyline Phenothiazine antipsychotics / Prochlorperazine
Exclusions	Patients in hospice.
Exclusion details	Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Encounter Value Set or Hospice Intervention Value Set). See corresponding Excel file for value sets referenced above.
Risk Adjustment	No risk adjustment or risk stratification
Stratification	Report two age stratifications and a total rate: • Children and adolescents 1-11 years of age as of December 31 of the measurement year. • Children and adolescents 12-17 years of age as of December 31 of the measurement year. • Total (the sum of the age stratifications).
Type	Process
Type of Score	Rate/proportion
Data Source	Claims
Level	Health Plan
Setting	Emergency Department and Services, Outpatient Services

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	Measure 2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics (National Committee for Quality Assurance)
Description	Percentage of children and adolescents 1-17 years of age who had a new prescription for an antipsychotic medication, but no U.S. Food and Drug Administration primary indication for antipsychotics, and had documentation of psychosocial care as first-line treatment.
Numerator	Children and adolescents 1-17 years of age who had psychosocial care as first-line treatment prior to (or immediately following) a new prescription of an antipsychotic without a U.S. Food and Drug Administration primary indication for antipsychotic use.
Numerator Details	The numerator is reported using administrative data and includes children and adolescents who had documentation of psychosocial care (Psychosocial Care Value Set) in the 121-day period spanning 90 days prior to the IPSD through 30 days after the IPSD during the measurement year (January 1 – December 1). The IPSD is earliest prescription dispensing date for an antipsychotic medication where the date is in the Intake Period and there is a Negative Medication History 120 days (4 months) prior to the IPSD when the member had no antipsychotic medications dispensed for either new or refill prescriptions. See attachment for all value sets reference above (S.2b).
Denominator	Children and adolescents 1-17 years of age as of December 31 of the measurement year who had a new prescription of an antipsychotic medication for which they do not have a U.S. Food and Drug Administration primary indication for antipsychotics.
Denominator Details	Children and adolescents age 1-17 year as of December 31 of the measurement year who had a new prescription for an antipsychotic medication (Table APP-A) during the Intake Period. Details to identify the eligible population are below. STEP 1: Identify all patients in the specified age range who were dispensed an antipsychotic medication (Table APP-A) during the Intake Period. STEP 2: Test for Negative Medication History. For each member identified in Step 1, test each antipsychotic prescription for a Negative Medication History. The Index Period Start Date (IPSD) is the dispensing date of the earliest antipsychotic prescription in the Intake Period with a Negative Medication History. STEP 3: Calculate continuous enrollment. Members must be continuously enrolled for 120 days (4 months) prior to the IPSD through 30 days after the IPSD. TABLE APP-A: ANTIPSYCHOTIC MEDICATIONS DESCRIPTION / PRESCRIPTION Miscellaneous antipsychotic agents / Aripiprazole; Asenapine; Brexpiprazole; Cariprazine; Clozapine; Haloperidol; Iloperidone; Loxapine; Lurasidone; Molindone; Olanzapine; Paliperidone; Pimozide; Quetiapine; Quetiapine fumarate; Risperidone; Ziprasidone

	Phenothiazine antipsychotics / Chlorpromazine; Fluphenazine; Perphenazine; Thioridazine; Trifluoperazine Thioxanthenes / Thiothixene Long-acting injections / Aripiprazole; Fluphenazine decanoate; Haloperidol decanoate; Olanzapine; Paliperidone palmitate; Risperidone Psychotherapeutic combinations / Fluoxetine-olanzapine; Perphenazine-amitriptyline
Exclusions	Exclude children and adolescents with a diagnosis of a condition for which antipsychotic medications have a U.S. Food and Drug Administration primary indication and are thus clinically appropriate: schizophrenia, schizoaffective disorder, bipolar disorder, other psychotic disorder, autism, or other developmental disorder. Patients in hospice.
Exclusion details	Exclude children and adolescents for whom first-line antipsychotic medications may be clinically appropriate. Any of the following during the measurement year meet criteria: - At least one acute inpatient encounter with a diagnosis of schizophrenia, schizoaffective disorder, bipolar disorder, other psychotic disorder, autism, or other developmental disorder during the measurement year. Any of the following code combinations meet criteria: -- BH Stand Alone Acute Inpatient Value Set with (Schizophrenia Value Set; Bipolar Disorder Value Set; Other Psychotic and Developmental Disorders Value Set). -- Visit Setting Unspecified Value Set with Acute Inpatient POS Value Set with (Schizophrenia Value Set; Bipolar Value Set; Other Psychotic and Developmental Disorders Value Set). - At least two visits in an outpatient, intensive outpatient or partial hospitalization setting, on different dates of service, with a diagnosis of schizophrenia, schizoaffective disorder, bipolar disorder, other psychotic disorder, autism, or other developmental disorder during the measurement year. Any of the following code combinations with (Schizophrenia Value Set; Bipolar Disorder Value Set; Other Psychotic and Developmental Disorders Value Set) meet criteria: -- An outpatient visit (Visit Setting Unspecified Value Set with Outpatient POS Value Set). -- An outpatient visit (BH Outpatient Value Set). -- An intensive outpatient encounter or partial hospitalization (Visit Setting Unspecified Value Set with Partial Hospitalization POS Value Set) -- A community mental health center visit (Visit Setting Unspecified Value Set with Community Mental Health Center POS Value Set). -- Electroconvulsive therapy (Electroconvulsive Therapy Value Set). -- An observation visit (Observation Value Set). -- A telehealth visit (Visit Setting Unspecified Value Set with Telehealth POS Value Set). Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Encounter Value Set or Hospice Intervention Value Set). See corresponding Excel file for value sets referenced above.
Risk Adjustment	No risk adjustment or risk stratification

Stratification	Report two age stratifications and a total rate: • Children and adolescents 1-11 years of age as of December 31 of the measurement year. • Children and adolescents 12-17 years of age as of December 31 of the measurement year. • Total (the sum of the age stratifications).
Type	Process
Type of Score	Rate/proportion
Data Source	Claims
Level	Health Plan
Setting	Outpatient Services

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	Measure 3175: Continuity of Pharmacotherapy for Opioid Use Disorder (University of Southern California)
Description	Percentage of adults of at least 18 years of age with pharmacotherapy for opioid use disorder (OUD) who have at least 180 days of continuous treatment
Numerator	Individuals in the denominator who have at least 180 days of continuous pharmacotherapy with a medication prescribed for OUD without a gap of more than seven days
Numerator Details	The measure numerator is calculated based on claims data for rolling two-year periods. The measure numerator is defined as individuals in the denominator with at least 180 days of “continuous pharmacotherapy” with an OUD medication. Continuous pharmacotherapy for OUD is identified on the basis of the days covered by the days’ supply of all prescription claims for any OUD medication (see list below) or number of days for which the drug was dispensed in a physician office or treatment center with the exceptions noted in this paragraph. The period of continuous pharmacotherapy starts on the day the first claim for an OUD medication is filled/supplied (index date) and lasts through the days’ supply of the last claim for an OUD medication. To meet the 180-day requirement and be eligible for the measure, the date on the first claim for an OUD medication must fall at least 180 days before the end of the measurement period. For claims with a days’ supply that extends beyond the end of the measurement period, count only the days for which the drug was available to the individual during the measurement period. If two or more prescription claims occur on the same day or overlap, the surplus based on the days’ supplies accumulates over all prescriptions. However, if another claim is submitted after a claim for an injectable/implantable OUD medication or an oral OUD medication that is dispensed in an office or treatment center, the surplus from the day’s supply for the injectable/implantable or office-dispensed medication is not retained. An individual is considered to have continuous pharmacotherapy with OUD medication if there is no treatment gap of more than seven days. A gap is defined as a period during which the individual does not have oral OUD medication available based on the days’ supply, or is more than 7 days overdue for having an injection of an extended-release OUD medication. OUD medications were identified using National Drug Codes (NDCs) for the following: • Buprenorphine • Naltrexone (oral) • Buprenorphine and Naloxone And HCPCS codes for the following: • Buprenorphine or Buprenorphine/naloxone, oral • Buprenorphine (extended-release injectable or implant) • Methadone administration • Naltrexone (extended-release injectable)

The National Drug Codes (NDCs) for the oral medications and the HCPCS codes for the injectable medications and office-dispensed oral medications (methadone and buprenorphine/naloxone) are contained in the sheets called “NDCs” and “HCPCS Codes”, respectively, in the Excel file called “NQF 3175 OUD Code Lists” which is attached to this form under Item S.2b. Note that the NDC code list DOES NOT include NDC codes for methadone, as it can legally only be dispensed as OUD pharmacotherapy in licensed treatment centers. Buprenorphine can be dispensed through a pharmacy or in an office and is therefore identified based on either NDC or HCPCS codes.

Justification of Measure Definition: We define treatment continuity as (1) receiving at least 180 days of treatment and (2) no gaps in medication use of more than 7 days.

Our definition of minimum duration is based on the fact that the FDA registration trials for OUD drugs studied the effect of treatment over three to six months (US FDAa, undated; US FDAb, undated), and we have no evidence for effectiveness of shorter durations. In addition, several recommendations support a minimum six-month treatment period as the risk of relapse is the highest in the first 6-12 months after start of opioid abstinence (US FDAa, undated; US FDAb, undated; US DHHS, 2015). Longer treatment duration is associated with better outcomes compared to shorter treatments and the best outcomes have been observed among patients in long-term methadone maintenance programs (“Effective medical treatment of opiate addiction”, 1998; Gruber et al., 2008; Moos et al., 1999; NIDA, 1999; Ouimette et al., 1998; Peles et al., 2013). Studies with long-term follow-up suggest that ongoing pharmacotherapy is associated with improved odds of opioid abstinence (Hser et al., 2015; Weiss et al., 2015). We did not specify a maximum duration of treatment, as no upper limit for duration of treatment has been empirically established (US DHHS, 2015).

We opted for using a treatment gap of more than seven days in our definition, given that the measure includes three active ingredients with different pharmacological profiles. There is substantial evidence for an elevated mortality risk immediately after treatment cessation (Cornish et al., 2010; Cousins et al., 2016; Davoli et al, 2007; Degenhardt et al., 2009; Gibson & Degenhardt, 2007; Pierce et al., 2016). Research suggests that methadone tolerance is lost after three days and this three-day threshold has been used in other observational methadone studies and in developing a United Kingdom treatment guideline which recommends reevaluating patients for intoxication and withdrawal after a three-day methadone treatment gap (Cousins et al., 2016; Cousins et al., 2011; “Drug Misuse and Dependence—Guidelines on Clinical Management”, 1999). Across all the medications, the mortality risk is highest in the first four weeks out of treatment, with many studies showing an increase in mortality in days 1-14 after treatment cessation.

Citations

Cornish R, Macleod J, Strang J, Vickerman P, Hickman M. Risk of death during and after opiate substitution treatment in primary care: prospective observational study in UK General Practice Research Database. *BMJ*. 2010;341:c5475.

Cousins G, Teljeur C, Motterlini N, McCowan C, Dimitrov BD, Fahey T. Risk of drug-related mortality during periods of transition in methadone maintenance treatment: a

cohort study. J Subst Abuse Treat 2011; 41: 252–60.

Cousins G, Boland F, Courtney B, Barry J, Lyons S, Fahey T. Risk of mortality on and off methadone substitution treatment in primary care: a national cohort study. Addiction. 2016;111(1):73-82.

Davoli M, Bargagli AM, Perucci CA, et al. Risk of fatal overdose during and after specialist drug treatment: the VEdeTTE study, a national multisite prospective cohort study. Addiction. 2007;102:1954-9.

Degenhardt L, Randall D, Hall W, Law M, Butler T, Burns L. Mortality among clients of a state-wide opioid pharmacotherapy program over 20 years: risk factors and lives saved. Drug and alcohol dependence. 2009;105:9-15.

“Drug Misuse and Dependence—Guidelines on Clinical Management.” Scottish Office Department of Health, Welsh Office, Social Services Northern Ireland. London: Stationery Office, 1999.

Effective medical treatment of opiate addiction. National Consensus Development Panel on Effective Medical Treatment of Opiate Addiction. JAMA.1998;280:1936-1943.

Gibson AE, Degenhardt LJ. Mortality related to pharmacotherapies for opioid dependence: a comparative analysis of coronial records. Drug Alcohol Rev. 2007; 26(4), 405-410.

Gruber VA, Delucchi KL, Kielstein A, Batki SL. A randomized trial of 6-month methadone maintenance with standard or minimal counseling versus 21-day methadone detoxification. Drug and Alcohol Dependence. 2008;94(1-3):199-206.

Hser YI, Evans E, Grella C, Ling W, Anglin D. Long-term course of opioid addiction. Harvard Review of Psychiatry. 2015;23(2):76-89.

Moos RH, Finney JW, Ouimette PC, Suchinsky RT. A comparative evaluation of substance abuse treatment: I. Treatment orientation, amount of care, and 1-year outcomes. Alcohol Clin Exp Res. 1999;23(3):529-36.

National Institute on Drug Abuse (NIDA). Principles of Drug Addiction Treatment: A Research-Based Guide. NIH Publication No. 99–4180. Rockville, MD: NIDA, 1999, reprinted 2000

Ouimette PC, Moos RH, Finney JW. Influence of outpatient treatment and 12-step group involvement on one-year substance abuse treatment outcomes. J Stud Alcohol. 1998;59:513-522

Peles E, Schreiber S, Adelson M. Opiate-dependent patients on a waiting list for methadone maintenance treatment are at high risk for mortality until treatment entry. J Addict Med. 2013;7(3):177-82..

Pierce M, Bird SM, Hickman M, Marsden J, Dunn G, Jones A, et al. Impact of treatment

	for opioid dependence on fatal drug-related poisoning: a national cohort study in England. <i>Addiction</i>. 2016;111:298-308. U.S. Department of Health and Human Services Assistant Secretary for Planning and Evaluation Office of Disability, Aging and Long-Term Care Policy. Review of Medication-Assisted Treatment Guidelines and Measures for Opioid and Alcohol Use. Washington, DC, 2015. Accessed November 9, 2016 at: https://aspe.hhs.gov/sites/default/files/pdf/205171/MATguidelines.pdf U.S. Food and Drug Administration (FDA) (a). REVIA Label. Accessed November 24, 2016 at: http://www.accessdata.fda.gov/drugsatfda_docs/label/2013/018932s017lbl.pdf U.S. Food and Drug Administration (FDA) (b). VIVITROL Label. Accessed November 24, 2016 at: http://www.accessdata.fda.gov/drugsatfda_docs/label/2006/021897lbl.pdf Weiss RD; Potter JS; Griffin ML, et al. Long-term outcomes from the National Drug Abuse Treatment Clinical Trials Network Prescription Opioid Addiction Treatment Study. <i>Drug and Alcohol Dependence</i>. 2015;150:112-119.
Denominator	Individuals at least 18 years of age who had a diagnosis of OUD and at least one claim for an OUD medication
Denominator Details	The measure denominator is calculated for rolling two-year periods. The denominator includes individuals of at least 18 years of age during their treatment period who had a diagnosis code of OUD during an inpatient, intensive outpatient, partial hospitalization, outpatient, detoxification or emergency department encounter at any time during the measurement period. To meet the 180-day requirement and be eligible for the measure, the date on the first claim for an OUD medication must fall at least 180 days before the end of the measurement period. The diagnosis codes used to identify individuals with OUD included: • ICD-9: 304.0x, 305.5x • ICD-10: F11.xxx These codes and descriptions are contained in the sheets called "ICD-9 Diagnosis Codes" and "ICD-10 Diagnosis Codes" in the Excel file called "NQF 3175 OUD Code Lists" which is attached to this form under Item S.2b. OUD medications were identified using National Drug Codes (NDCs) for the following: • Buprenorphine • Naltrexone (oral) • Buprenorphine and Naloxone And HCPCS codes for the following: • Buprenorphine or Buprenorphine/naloxone, oral • Buprenorphine (extended release injectable or implant) • Methadone administration • Naltrexone (extended-release injectable) The National Drug Codes (NDCs) for the oral medications and the HCPCS codes for the injectable medications and office-or treatment-center dispensed oral medications (methadone and buprenorphine) are contained in the sheets called "NDCs" and "HCPCS

	Codes”, respectively, in the Excel file called “NQF 3175 OUD Code Lists” which is attached to this form under Item S.2b. Note that the NDC code list DOES NOT include NDC codes for methadone, as it can legally only be dispensed as OUD pharmacotherapy in licensed treatment centers. Buprenorphine can be dispensed through a pharmacy or in an office/treatment center and is therefore identified based on either NDC or HCPCS codes.
Exclusions	There are no denominator exclusions.
Exclusion details	There are no denominator exclusions.
Risk Adjustment	No risk adjustment or risk stratification
Stratification	Measure results may be stratified by: • Age • Gender • Race/ethnicity • Dual eligibility status
Type	Process
Type of Score	Rate/proportion
Data Source	Claims
Level	Clinician : Group/Practice, Clinician : Individual, Health Plan, Population : Regional and State
Setting	Outpatient Services

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	Measure 3492: Acute Care Use Due to Opioid Overdose (Centers for Medicare & Medicaid Services (CMS))
Description	This is a population measure that indicates the rate of emergency department visits for opioid overdose events in a specified geographic region using ICD-10 diagnosis codes from claims. The outcome is defined as the incidence of overdose events per 1,000 person-years among Medicare beneficiaries greater than 18 years of age residing in the specified geographic region. The measure has been tested for use at both the county and state levels.
Numerator	The numerator is comprised of incident outcome events, defined as opioid overdoses that result in emergency department use, within the population residing in a specific geography.
Numerator Details	The numerator is comprised of outcome events, i.e., emergency department (ED) visits for opioid overdose. This numerator includes all overdose events that result in treatment in the emergency department in the measured population within a one-year measurement period. The measured population is defined below in Section 5.6 and 5.7. To capture overdose events, the measure first identifies all ED visits for the measured population using a validated algorithm (Venkatesh, 2017). Details of this algorithm are included in the measure Data Dictionary. From among these ED visits, the measure then identifies visits for opioid overdose using a set of ICD-10 diagnostic codes. Opioid overdose is defined by the presence of a diagnostic code indicating opioid poisoning such as T400X4A (Poisoning by opium, undetermined, initial encounter). This code can appear as either a principal discharge diagnosis or a secondary diagnosis. The measure outcome definition excludes ICD-10 codes indicating intentional overdose or assault. Only diagnostic codes indicating an initial encounter are included. See the Data Dictionary for the full set of codes comprising the outcome definition. Opioid overdoses resulting in an ED visit are included regardless of final disposition (e.g., admission, discharge etc.) or vital status (i.e., alive or deceased) at discharge. Repeat events for individual patients are also included, as the goal of the measure is to capture all unintentional opioid overdoses in the measured population. Indeed, an overdose is a risk factor for subsequent overdose, and has been proposed as an important opportunity for intervention (Larochelle, 2018). Thus, including repeat events is important for measuring opioid overdose as a population health measure. Outcome events are attributed to a geography based on a person's residence, not based on the emergency department in which an individual seeks care. Reference (1) Venkatesh AK, Mei H, Kocher KE, et al. Identification of Emergency Department Visits in Medicare Administrative Claims: Approaches and Implications. <i>Academic Emergency Medicine</i>. 2017;24(4):422-431. (2) Larochelle MR, Bernson D, Land T, Stopka TJ, Wang N, Xuan Z, et al. Medication for Opioid Use Disorder After Nonfatal Opioid Overdose and Association With Mortality: A Cohort Study. <i>Ann Intern Med</i>. [Epub ahead of print 19 June 2018]169:137–145. doi: 10.7326/M17-3107

Denominator	The denominator consists of all enrolled Medicare Fee-For-Service (FFS) beneficiaries with Parts A or B, aged 18 and older residing in a measured geography (either a county or a state) during a one-year period.
Denominator Details	The denominator includes all Medicare beneficiaries enrolled in Medicare Part A or B who are at least 18 years of age residing in the measured geography. The denominator reflects the size of the population in which overdose events occur, measured in person-years. Person-years is calculated by summing the fraction of a year each eligible beneficiary is enrolled in Medicare over the entire measured population. For example, one person enrolled for a year would contribute one person-year to the denominator. One person enrolled for 6 months would contribute 0.5 person-years. These enrollment periods are summed over the entire eligible population to calculate the total person-years for. Periods during which beneficiaries are not enrolled are considered periods during which the outcome cannot be measured and therefore are not included in the denominator. The measure is designed to be used as a population health measure and has been tested at two different geographic levels, the county and the state. Eligible beneficiaries are assigned to geographies based on place of residence. Thus, individuals contribute to the denominator and the numerator based on residence rather than where the event took place. Identifying emergency department visits requires information from both inpatient and outpatient claims which are covered by Medicare Parts A and B respectively. In order to be maximally inclusive, the measure includes all beneficiaries with either Part A or B, rather than requiring that beneficiaries have Parts A and B. Limiting the measure to beneficiaries who have Parts A and B would exclude individuals with observable outcome events. For example, beneficiaries with Part A would have observable outcome events if they are admitted to the hospital for an opioid overdose while those with Part B would have an observable outcome event if they were seen only in the emergency department. Although this approach may miss some outcome events for beneficiaries with only Parts A or B, it allows the measure to be maximally inclusive of both the measured population and potential outcome events.
Exclusions	None
Exclusion details	None
Risk Adjustment	No risk adjustment or risk stratification
Stratification	None
Type	Outcome
Type of Score	Rate/proportion
Data Source	Claims
Level	Population : Community, County or City, Population : Regional and State
Setting	Emergency Department and Services, Inpatient/Hospital, Outpatient Services

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	Measure 3538: All-Cause Emergency Department Utilization Rate for Medicaid Beneficiaries Who May Benefit from Integrated Physical and Behavioral Health Care (Centers for Medicare & Medicaid Services, Centers for Medicaid & CHIP Services)
Description	The measure focuses on emergency department (ED) utilization for four populations of Medicaid beneficiaries who may benefit from integrated physical and behavioral health care. The rates in this measure are intended to be reported at the state level. This is an inverse measure; lower scores indicate better quality of care. The measure is defined as the all-cause ED utilization rate for Medicaid beneficiaries age 18 and older who meet the eligibility criteria for any of the four denominator groups: 1. Beneficiaries with co-occurring physical health and mental health conditions (PH+MH) 2. Beneficiaries with a co-occurring physical health condition and a substance use disorder (PH+SUD) 3. Beneficiaries with a co-occurring mental health condition and a SUD (MH+SUD) 4. Beneficiaries with serious mental illness (SMI) The measure is calculated over the period of one calendar year as the number of ED visits that do not result in an inpatient admission or observation stay per 1,000 member-months. It is reported as four separate rates, one for each denominator group. Each of the four denominator groups includes only beneficiaries who were not dually eligible, were enrolled in Medicaid for at least 10 months of the measurement year, and had a diagnosis within the measurement year or year prior (depending upon the condition) that placed them into one or more of the denominator groups.
Numerator	The numerator is the number of ED visits during the measurement year that did not result in an inpatient or observation stay among non-dual eligible Medicaid beneficiaries age 18 and older with at least 10 months of enrollment who met the eligibility criteria for any of the four denominator groups during the look-back year.
Numerator Details	ED visits are defined by using the codes in the ED Visit Value Set file. Specifically, ED visits are identified by using any of the following claim type, revenue code, and procedure code combinations in the HEDIS value sets: 1. Outpatient claims with revenue codes in the ED Value Set 2. Professional claims with CPT codes in the ED Value Set 3. Professional claims with Place of Service (POS) code in the ED POS Value Set and CPT codes in the ED Procedure Code Value Set Inpatient admissions are identified by using institutional claims for inpatient hospital services. Observation stays are identified by using codes from two sources: 1. Procedure codes in the HEDIS Observation Value Set in the ED Visit Value Set file. 2. Revenue and procedure codes created by the Centers for Medicare & Medicaid Services (CMS) to identify observation stays. We identify observation stays of any length. ED visits are included only if they do not result in an inpatient admission or observation stay (of any length). If an ED visit's dates of service overlap with or are within one calendar day of an inpatient admission date, it is not included in the numerator count. Claims are de-duplicated to ensure no more than one ED visit per beneficiary per day. ED visits are only counted as observed ED visits if they occur during months in which a beneficiary is enrolled in Medicaid FFS or managed care during the measurement year.
Denominator	The number of Medicaid-enrolled months ("beneficiary-months") among Medicaid beneficiaries who meet eligibility criteria for any of the four denominator groups:

	1. Beneficiaries with co-occurring physical health and mental health conditions (PH+MH) 2. Beneficiaries with a co-occurring physical health condition and a SUD (PH+SUD) 3. Beneficiaries with a co-occurring mental health condition and a SUD (MH+SUD) 4. Beneficiaries with serious mental illness (SMI)
Denominator Details	The denominator is calculated as the number of Medicaid-enrolled months during the measurement year among non-dual eligible Medicaid beneficiaries age 18 and older who meet the eligibility criteria for any of the four denominator groups during the measurement year. Medicaid beneficiaries must have at least 10 months of Medicaid eligibility during the measurement year to ensure sufficient utilization data. The measurement period is 12 months. An additional 12 months of look-back data is needed to identify beneficiaries' eligibility for the denominator groups during the measurement year, for a total of 24 months of data. Eligibility criteria for each denominator group is as follows: 1. PH+MH: Medicaid beneficiaries with (a) at least one physical health condition, as defined in the physical health value set, and (b) at least one mental health condition, as defined in the mental health value set (see attached CCW Value Set file). 2. PH+SUD: Medicaid beneficiaries with (a) at least one physical health condition, as defined in the physical health value set, and (b) at least one SUD, as defined in the substance use value set (see attached CCW Value Set file). 3. MH+SUD: Medicaid beneficiaries with (a) at least one mental health condition, as defined in the mental health value set, and (b) at least one SUD, as defined in the substance use value set (see attached CCW Value Set file). 4. SMI: Medicaid beneficiaries who meet at least one of the following criteria during the measurement year or the year prior: I. At least one acute inpatient claim/encounter with any diagnosis of schizophrenia, bipolar I disorder, or major depression by using any of the following code combinations from the HEDIS value sets (see attached SMI Value Set file): • BH Stand Alone Acute Inpatient Value Set with one of the following diagnoses: - o Schizophrenia Value Set - o Bipolar Disorder Value Set - o Major Depression Value Set • BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and one of the following diagnoses: - o Schizophrenia Value Set - o Bipolar Disorder Value Set - o Major Depression Value Set II. At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED, or non-acute inpatient setting on different dates of service with any diagnosis of schizophrenia or bipolar I disorder. Any two of the following code combinations from the HEDIS value sets meet the criteria: • BH Stand Alone Outpatient/PH/IOP Value Set with one of the following diagnoses (see attached SMI Value Set file): - o Schizophrenia Value Set - o Bipolar Disorder Value Set • BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and one of the following diagnoses (see attached SMI Value Set file):

	- o Schizophrenia Value Set - o Bipolar Disorder Value Set • ED Value Set with one of the following diagnoses (see attached ED Visits Value Set and SMI Value Set files): - o Schizophrenia Value Set - o Bipolar Disorder Value Set • BH ED Value Set with BH ED POS Value Set and one of the following diagnoses (see attached SMI Value Set file): - o Schizophrenia Value Set - o Bipolar Disorder Value Set • BH Stand Alone Nonacute Inpatient Value Set with one of the following diagnoses (see attached SMI Value Set file): - o Schizophrenia Value Set - o Bipolar Disorder Value Set • BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set and one of the following diagnoses (see attached SMI Value Set file): - o Schizophrenia Value Set - o Bipolar Disorder Value Set See the CCW Value Set, ED Visits Value Set, and SMI Value Set Excel files for the full value sets. The physical health conditions, mental health conditions, and substance use disorder value sets are defined in the CCW Value Set file by using Chronic Condition Warehouse algorithms. Serious mental illness is defined by using HEDIS value sets in the SMI Value Set file.
Exclusions	None.
Exclusion details	None.
Risk Adjustment	Statistical risk model
Stratification	None.
Type	Outcome
Type of Score	Rate/proportion
Data Source	Claims
Level	Population : Regional and State
Setting	Emergency Department and Services

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	Measure 3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting (Centers for Medicare & Medicare Services)
Description	Proportion of inpatient hospitalizations for patients 65 years of age and older who receive an order for antipsychotic medication therapy.
Numerator	Inpatient hospitalizations for patients who received an order for an antipsychotic medication during the inpatient encounter.
Numerator Details	The time period for data collection is the measurement year (12-month period). Numerator: Inpatient hospitalizations for patients who received an order for an antipsychotic medication during the inpatient encounter. Antipsychotic orders are represented with the QDM datatype and value set of Medication, Order: Antipsychotic Medications (OID:2.16.840.1.113883.3.464.1003.196.12.1255). Numerator exclusions: Inpatient hospitalizations for patients with documented indication that they are threatening harm to self or others. Threat to self or others is represented with the QDM datatype and value set of Symptom: Threat to themselves or others (OID:2.16.840.1.113883.3.464.1003.195.12.1020). To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.
Denominator	Non-psychiatric inpatient hospitalizations for patients who are 65 and older.
Denominator Details	The time period for data collection is the measurement year (12-month period). Denominator: Non-psychiatric inpatient hospitalizations for patients who are 65 and older. Inpatient hospitalizations are represented with the QDM datatype and value set of Encounter, Performed: Encounter Inpatient (OID:2.16.840.1.113883.3.666.5.3001). To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.
Exclusions	Inpatient hospitalizations for patients with a diagnosis of schizophrenia, Tourette's syndrome, bipolar disorder, Huntington's disease during the encounter. Inpatient hospitalizations for patients who were taking antipsychotics prior to admission.
Exclusion details	The following data elements are used to define the measure exclusions:

	Denominator Exclusions: Inpatient hospitalizations for patients with a diagnosis of schizophrenia, Tourette's syndrome, bipolar disorder, Huntington's disease during the encounter. These exclusions are represented with the QDM datatype of Diagnosis. Schizophrenia or Psychotic Disorder (OID: 2.16.840.1.113883.3.464.1003.105.12.1104) Tourette's Syndrome (OID: 2.16.840.1.113883.3.464.1003.105.12.1030) Bipolar Disorder (OID: 2.16.840.1.113883.3.67.1.101.1.128) Huntington's Disease (OID: 2.16.840.1.113883.3.464.1003.105.12.1032) Denominator Exclusions: Inpatient hospitalizations for patients who were taking antipsychotics prior to admission. Antipsychotic Medications (OID: 2.16.840.1.113883.3.464.1003.196.12.1255) This exclusion is represented with the QDM datatype of Medication, Active: Antipsychotic Medications (OID: 2.16.840.1.113883.3.464.1003.196.12.1255) To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.
Risk Adjustment	Stratification by risk category/subgroup
Stratification	Results include a total score and the following strata: Stratum 1 - Patients who were admitted or transferred to the ICU during the inpatient encounter Stratum 2 - Patients who were not admitted or transferred to the ICU during the inpatient encounter These strata are identified using the QDM datatype of Encounter, Performed. ICU Admission or Transfer (OID: 2.16.840.1.113883.17.4077.3.2040) To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.
Type	Process
Type of Score	Rate/proportion
Data Source	Electronic Health Records
Level	Facility
Setting	Inpatient/Hospital

	Measure 3541: Annual Monitoring for Persons on Long-Term Opioid Therapy (AMO) (Pharmacy Quality Alliance)
Description	The percentage of individuals 18 years of age and older who are on long-term opioid therapy and have not received a drug test at least once during the measurement year.
Numerator	Individuals in the denominator population who have not received a drug test during the measurement year.
Numerator Details	Individuals in the denominator who do not have at least one claim for a drug test during the measurement year will be counted in the numerator. The entire measurement year in which a member is continuously enrolled is used to calculate the measure. A drug test is identified either through HCPCS drug test codes or through specified CPT or LOINC codes for presumptive or definitive drug screens/tests for at least one of the following targeted drug classes: amphetamines, barbiturates, benzodiazepines, cannabinoids, cocaine, and opiates/opioids. Qualifying CPT and HCPCS drug test codes, and suggested LOINC codes, are in the attached Excel file "AMO_CompleteCoding_UPDATED" in the following sheets: "Codes-2016 Data," "Codes-2017 Data," "Codes-2018 Data," and "DrugScreen_LOINC_15,16,17."
Denominator	The target population for this measure is individuals 18 years of age and older and prescribed long-term opioid therapy during the measurement year. Individuals are excluded if they have had any claims indicating a cancer diagnosis or hospice care at any time during the measurement year.
Denominator Details	The measurement year is defined as 12 consecutive months. Continuous enrollment is defined as 11 out of 12 months enrollment in a health plan in the measurement year or enrolled with no gaps in enrollment until the month of death in the measurement year. Long-term opioid therapy is defined as at least 90 days of cumulative days' supply of any combination of opioid medications indicated for pain during the measurement period identified using prescription claims. Medications prescribed or provided as part of medication-assisted treatment for opioid use disorder are excluded from the calculation. The target population is adults enrolled in a Qualified Health Plan (QHP) and on long-term opioid therapy. Eligible members for this measure are those members who: 1) Are 18 years of age and older as of the first day of the measurement year. 2) Are continuously enrolled in a QHP which is defined as at least 11 out of 12 months during the measurement year or enrolled with no gaps until the date of death. 3) Have pharmacy claims indicating at least 90 days of cumulative supply of any combination of opioid medications indicated for pain during the measurement year. Opioid medications are specified in the attached Excel file

	“AMO_CompleteCoding_UPDATED” in the following sheets “2016_OPIOIDFORPAINMEDICATION,” “2017_OPIOIDFORPAINMEDICATION,” and “2018_OPIOIDFORPAINMEDICATION.” Days’ supply is calculated by summing the days’ supply for every prescription during the measurement year for opioid medications indicated for pain from the above lists. Individuals qualify for the measure denominator if this sum is at least 90 days. Note: The active ingredient of the opioid medications is limited to formulations indicated for pain and delivered through any route except intravenous (IV) or epidural (EP). These two routes are not included in this measure because they are not commonly prescribed as chronic pain medications. Medications prescribed or provided as part of medication-assisted treatment for opioid use disorder are excluded from the calculation.
Exclusions	The measure excludes individuals with: 1) a diagnosis of cancer at any time during the measurement year; or 2) hospice care at any time during the year.
Exclusion details	Members with a diagnosis of cancer are identified with the diagnosis codes listed below. Cancer exclusion ICD-9 codes (for testing only): Include 140 through 239 Omit 173.XX series Cancer exclusion ICD-10 codes: Include C00 through D49 Omit C44.XX series Members with hospice care are identified with the codes listed below. Hospice Codes 2015-2016: Revenue Codes – 0115, 0125, 0135, 0145, 0155, 0235, 0650, 0651, 0652, 0655, 0656, 0657, 0658, 0659 CPT Codes – 99377, 99378 HCPCS Codes – G0182, G9473, G9474, G9475, G9476, G9477, G9478, G9479, Q5003, Q5004, Q50005, Q5006, Q5007, Q5008, Q5010, S9126, T2042, T043, T2044, T2045, T2046 Type of Bill (TOB) Codes – 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, 082X, 082Y, 082Z Note: A full list of codes is provided in the attached Excel file “AMO_CompleteCoding” in the sheet “Codes-2016 Data,” “Codes-2017 Data,” and “Codes-2018 Data.”
Risk Adjustment	No risk adjustment or risk stratification
Stratification	Not applicable.
Type	Process
Type of Score	Rate/proportion

Data Source	Claims, Enrollment Data
Level	Health Plan
Setting	Outpatient Services

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