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Note for consideration:

These measures are applicable to the inpatient setting and as such excludes observation patients, unless otherwise noted. For measures specific to the Medicaid population, this only applies to Medicaid primary patients and will not include dual eligible. Pediatric patients will include ages 0-18 years except where indicated.
Reducing Avoidable Hospitalization Utilization

**SW-RAH1 - 30 Day All Cause Risk Adjusted Hospital Readmission**

**Definition:**
For Medicaid patients 18 years of age and older (18-64 years), the number of acute inpatient stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days and the predicted probability of an acute readmission.

This measure is reported as the ratio of actual readmissions to expected readmissions based on risk adjustment for patient severity.

**Measure Steward:** NCQA - NQF 1768

**Data Source:** Medicaid Claims

**Data Collection Methodology:**
Count of index hospital stays\(^1\) (denominator)
Count of observed 30-day readmissions (numerator)
Calculation of expected 30-day readmissions

**Numerator:** Count of observed 30-day Medicaid readmissions.
Count of 30-day Medicaid readmissions after initial index admissions. Each Medicaid readmission becomes a new index admission and the 30-day counter starts again.

**Denominator:** Expected count of Medicaid index admissions based on risk adjustment for patient severity.

This measure will be reported out as a ratio of actual readmission count to expected readmission count. A score over 1 indicates readmissions are higher than predicted based on patient acuity, a score less than 1 indicates that readmissions are lower than predicted based on patient acuity.

**Exclusions:**

**Numerator:**
- Identify all Medicaid acute and nonacute inpatient stays (Inpatient Stay Value Set).
- Exclude Medicaid nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
- Exclude Medicaid acute inpatient hospital admissions with any of the following on the discharge claim:
  - Female members with a principal diagnosis of pregnancy (Pregnancy Value Set).
  - A principal diagnosis for a condition originating in the perinatal period (Perinatal Conditions Value Set).
  - Planned admissions using any of the following:

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\(^1\)An acute inpatient stay with a discharge during the period of April 1 through March 31 of the following year
✓ A principal diagnosis of maintenance chemotherapy (Chemotherapy Value Set).
✓ A principal diagnosis of rehabilitation (Rehabilitation Value Set).
✓ An organ transplant (Kidney Transplant Value Set, Bone Marrow Transplant Value Set, Organ Transplant Other Than Kidney Value Set, Introduction of Autologous Pancreatic Cells Value Set).
✓ A potentially planned procedure (Potentially Planned Procedures Value Set) without a principal acute diagnosis (Acute Condition Value Set).

Denominator:
- Identify all Medicaid acute and nonacute inpatient stays (Inpatient Stay Value Set).
- Exclude Medicaid nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
- Exclude Medicaid hospital stays where the index admission date is the same as the index discharge date.
- Exclude Medicaid hospital stays for the following reasons:
  - The member dies during the stay
  - Female members with a principal diagnosis of pregnancy (Pregnancy Value Set) on the discharge claim
  - A principal diagnosis of a condition originating in the perinatal period (Perinatal Condition Value Set) on the discharge claim
  - Dialysis

Do not exclude chronic conditions from all-cause readmission as per HEDIS specification.

Target Population Notes:
- Adult Medicaid (primary) patients 18 years of age and older
- Continuous enrollment 365 days prior to the Index Discharge Date through 30 days after the index discharge date (Note: reports should be generated with and without the 365 continuous enrollment requirement)

Data Elements, Code Systems, Code Lists, Value Sets:
Per HEDIS specification, except:
- Patient status codes excluded
- All discharges with one day between are counted
- Pull inpatient stays by claim type (instead of revenue code)

Risk Adjustment:
For each IHS, use the following steps to identify risk adjustment categories based on presence of surgeries, discharge condition, comorbidity, age and gender.

Surgeries
Determine if the member underwent surgery during the inpatient stay. Download the list of codes from the NCQA website (Table HCC-Surg) and use it to identify surgeries. Consider an IHS to include a surgery if at least one procedure code in Table HCC-Surg is present from any provider between the admission and discharge dates.
**Discharge Condition**
Assign a discharge Clinical Condition (CC) category code or codes to the IHS based on its primary discharge diagnosis, using Table PCR-DischCC. For acute-to-acute direct transfers, use the direct transfer’s primary discharge diagnosis.

**Comorbidities**
Refer to the Utilization Risk Adjustment Determination in the Guidelines for Risk Adjusted Utilization Measures.


**Timing and Time Intervals:**
Any Medicaid acute inpatient stay with a discharge on or between October 1 and September 30 of the measurement year.

**Calculation Algorithms:** Per HEDIS specification

**Additional Considerations:**
Hospital score will be based on index hospital stays at their institutions. Readmissions include admissions to any hospital.

**Benchmark Information:**
- The benchmark for PY3 will be the average performance of the top 75% of hospitals in the state during PY1
- The benchmark for PY4 will be 5% improvement of the PY3 benchmark
- The benchmark for PY5 will be 5% improvement of the PY4 benchmark

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**SW-RAH2 - Pediatric All-Condition Readmission Measure**

**Definition:**
This measure is a case-mix-readjusted readmission rate, defined as the percentage of admissions followed by 1 or more readmissions within 30 days, for patients less than 18 years old adjusted to reflect the readmission rate the hospital would have if it treated a patient cohort with the case mix composition of all eligible index admissions within the national hospital dataset used for analysis. Case mix adjustment is done by the Center of Excellence for Pediatric Quality Measurement using their national dataset.

**Measure Steward:** Center of Excellence for Pediatric Quality Measurement

**Data Source:** Medicaid Claims

**Data Collection Methodology:** Claims analysis
Numerator:
Hospitalizations at general acute care hospitals for patients less than 18 years old that are followed by one or more readmissions to general acute care hospitals within 30 days  

Denominator: Count of index admissions

The actual hospital rate above is adjusted by the Pediatric Center of Excellence protocol to the readmission rate a hospital would have if it treated a patient cohort with the case mix composition of all eligible index admissions within the national hospital dataset used for analysis. That case mix adjusted readmission rate will be compared to case mix adjusted rates for all hospitals in the Pediatric Center of Excellence national dataset.

Exclusions:

Numerator:
Readmissions for a planned procedure or for chemotherapy.

Denominator:
Certain hospitalizations based on clinical criteria or for issues of data completeness or quality that could prevent assessment of eligibility for the measure cohort or compromise the accuracy of readmission rates. In addition, hospitalizations are excluded from the measure entirely if they meet specified clinical or data quality criteria, including: primary diagnosis for a mental health condition, hospitalization for birth of a healthy newborn, or hospitalization for obstetric care.

Exclusion Detail:
- The patient was 18 years old or greater at the time of discharge.
- The hospitalization was for birth of a healthy newborn.
- The hospitalization was for obstetric care, including labor and delivery.
- The primary diagnosis code was for a mental health condition.
- The hospitalization was at a specialty or non-acute care hospital.
- The discharge disposition was death.
- The discharge disposition was leaving the hospital against medical advice.
- Records for the hospitalization contain incomplete data for variables needed to assess eligibility for the measure or calculate readmission rates, including hospital type, patient identifier, admission date, discharge date, disposition status, date of birth, primary diagnosis code, or gender.
- The hospital is in a State not being analyzed. (Records for these hospitalizations are still assessed as possible readmissions, but readmission rates are not calculated for the out-of-State hospitals due to their lack of complete data.)
- Thirty days of follow-up data are not available for assessing readmissions.

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2 Readmissions are risk adjusted per Center of Excellence for Pediatric Quality Measurement specification

8 | HTP Measure Specifications for Hospitals
The hospital has less than 80 percent of records with complete patient identifier, admission date, and discharge date or less than 80 percent of records with complete primary diagnosis codes. (Records for these hospitals are still assessed as possible readmissions, but readmission rates are not calculated for these hospitals due to their lack of complete data.)

Records for the hospitalization contain data of questionable quality for calculating readmission rates, including:

- Inconsistent date of birth across records for a patient.
- Discharge date prior to admission date.
- Admission or discharge date prior to date of birth.
- Admission date after a discharge status of death during a prior hospitalization.

Codes other than International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) procedure codes or International Classification of Diseases, Tenth Revision, Procedure Coding Systems (ICD-10-PCS) procedure codes are used for the primary procedure.

**Target Population Notes:** Pediatric all payor patients less than 18 years of age

**Data Elements, Code Systems, Code Lists, Value Sets:**
Per Center of Excellence for Pediatric Quality Measurement

**Risk Adjustment:**
The hospital’s actual readmission rate is adjusted to reflect the readmission rate the hospital would have if it treated a patient cohort with the case mix composition of all eligible index admissions within the national hospital dataset used for analysis.

**Timing and Time Intervals:** Annual

**Calculation Algorithms:** Case mix adjustment is performed by the Center of Excellence for Pediatric Quality Measurement

**Additional Considerations:**
- For pediatric hospitals only.
- Eligibility
  - Excluded Title XIX Aid Codes are F3 and F4 (QMB/SLMB)

**Benchmark Information:**
- The benchmark will be the national benchmark

*If the national benchmark is not available:*
- The benchmark for PY3 will be 5% improvement of the PY1 (baseline) score
- The benchmark for PY4 will be 5% improvement of the PY3 benchmark
- The benchmark for PY5 will be 5% improvement of the PY4 benchmark
RAH1 - Follow up appointment with a clinician made prior to discharge and notification to the Regional Accountable Entities (RAE) within one business day

Definition:
Percentage of Medicaid patients discharged from an inpatient admission to home with a documented follow up appointment with a clinician and notification to the RAE within one business day.

A documented follow up appointment or notification to the RAE within one business day alone is not considered adequate for this measure. The measure is reported as one overall score counting in the numerator only those patients who receive both a documented follow up appointment AND notification to their RAE within one business day.

Measure Steward: Colorado Department of Health Care Policy and Financing

Data Source: Hospital self-reported data

Data Collection Methodology: EMR or medical record review

Numerator:
Medicaid patients discharged to home from an inpatient admission with a follow up appointment documented in the medical record and notification to their RAE within one business day. Patients who do not receive both a documented follow up appointment and notification to their RAE within one business day are excluded from the numerator.

Denominator: Medicaid patients discharged to home from an inpatient admission

Exclusions:
- Patients discharged Against Medical Advice (AMA).

Target Population Notes: Adult and Pediatric Medicaid (primary) patients

Data Elements, Code Systems, Code Lists, Value Sets:
- EMR or patient record data extraction or chart review documenting follow up appointment and RAE.
- Discharge counts.

Risk Adjustment: Not applicable

Timing and Time Intervals: Annual

Calculation Algorithms: Percentage

Additional Considerations:
This will require a hospital to work collaboratively with RAE’s to identify appropriate follow up clinician and facilitate appointment access and scheduling in addition to determining appropriate protocols and standards for reporting. Clinicians includes physicians, nurse practitioners, physician assistants, nurses, and other allied health professionals.
Telehealth appointments are acceptable to meet this measure. Hospitals will submit a report listing all Medicaid patient discharges and documenting follow up appointment and RAE follow up status for each admission.

**Benchmark Information:**
- The benchmark for PY3 will be 80%
- The benchmark for PY4 will be 85%
- The benchmark for PY5 will be 90%

**RAH2 - Emergency Department (ED) Visits for which the member received follow up within 30 days of the ED visit**

**Definition:**
Percentage of level 4 and 5 Medicaid patient emergency encounters where the patient is discharged to home in which the patient has a follow up visit with a clinician within 30 days of discharge.

**Measure Steward:** Colorado Department of Health Care Policy and Financing

**Data Source:** Medicaid Claims

**Data Collection Methodology:** Claims analysis

**Numerator:**
Medicaid patients with a level 4 or 5 emergency encounter discharged to home with a follow up visit with a clinician within 30 days.

**Denominator:**
Medicaid patients with a level 4 or 5 emergency encounter discharged to home.

**Exclusions:**
- Patients that are discharged AMA or discontinued care.
- Patients not continuously enrolled for 30 days after the ED visit.

**Target Population Notes:** Adult and Pediatric Medicaid (primary) patients

**Data Elements, Code Systems, Code Lists, Value Sets:**
- ED level 4 and 5 codes are 99284 and 99285
- Ambulatory visit defined by specific E&M codes or provider types

**Risk Adjustment:** Not applicable

**Timing and Time Intervals:** Annual

**Calculation Algorithms:** Percentage

**Additional Considerations:**
- This measure would require hospitals to work with RAE’s to ensure optimal patient access and follow up.
• Additional claim type definition
  ✓ Claim Type Code include Outpatient Xover Claims (C), Outpatient Claims (O) and Revenue Code include (‘0450’,’0451’,’0452’,’0456’,’0459’,’0981’) or
  ✓ Claim Type Code include Professional Xover Claims (B), Professional Claims (M) and Procedure Codes between ‘99281’ AND ‘99285’ or
  ✓ Claim Type Code include Professional Xover Claims (B), Professional Claims (M) and Place of Service Code = ‘23’ and Procedure Code between ‘10021’ AND ‘69979’ or Procedure Code = ‘69990’

• Eligibility
  ✓ Health Program Code used include ‘MEDA’, ‘MEDB’ for Medicare exclusion
  ✓ Excluded Title XIX Aid Codes are F3 and F4 (QMB/SLMB)

Benchmark Information:
Greater than 10 hospitals selected this measure:
  o The benchmark for PY3 will be the average performance of the top 75% of hospitals in the state during PY1 (baseline)
  o The benchmark for PY4 will be 5% improvement of the PY3 benchmark
  o The benchmark for PY5 will be 5% improvement of the PY4 benchmark

RAH3 - Home Management Plan of Care (HMPC) Document Given to Pediatric Asthma Patient/Caregiver

Definition:
An assessment that there is documentation in the medical record that a Home Management Plan of Care (HMPC) document was given to the pediatric asthma patient/caregiver.

Measure Steward: The Joint Commission

Data Source: Hospital self-report

Data Collection Methodology: EMR

Numerator:
Pediatric asthma inpatients with documentation that they or their caregivers were given a written Home Management Plan of Care (HMPC) document that addresses all of the following:
  • Arrangements for follow-up care
  • Environmental control and control of other triggers
  • Method and timing of rescue actions
  • Use of controllers
  • Use of relievers

Denominator:
Pediatric asthma inpatients (age 2 years through 17 years) discharged with a principal diagnosis of asthma.
Exclusions:
- Patients discharged AMA.
- Patients with an age less than 2 years or 18 years or greater
- Patients who have a Length of Stay greater than 120 days
- Patients enrolled in clinical trials

Target Population Notes: Pediatric all payor patients

Data Elements, Code Systems, Code Lists, Value Sets:
- Patient record data or chart extraction documenting HMPC
- Discharge counts

Risk Adjustment: Not applicable

Timing and Time Intervals: Annual

Calculation Algorithms: Percentage

Additional Considerations: None

Benchmark Information:
10 or less hospitals selected this measure:
- The benchmark for PY3 will be 80%
- The benchmark for PY4 will be 85%
- The benchmark for PY5 will be 90%

RAH4 - Percentage of Patients with Ischemic Stroke who are Discharged on Statin Medication (eCQM)

Definition:
This measure captures the proportion of ischemic stroke patients who are prescribed or continuing to take statin medication at hospital discharge.

Measure Steward: The Joint Commission

Data Source: Hospital self-report

Data Collection Methodology: EMR

Numerator: Inpatient hospitalizations for patients prescribed or continuing to take statin medication at hospital discharge.

Denominator: Inpatient hospitalizations for patients with a principle diagnosis of ischemic stroke.

Exclusions:
- Inpatient hospitalizations for patients admitted for elective carotid intervention. This exclusion is implicitly modeled by only including non-elective hospitalizations.
Inpatient hospitalizations for patients discharged to another hospital.
Inpatient hospitalizations for patients who left against medical advice.
Inpatient hospitalizations for patients who expired.
Inpatient hospitalizations for patients discharged to home for hospice care.
Inpatient hospitalizations for patients discharged to a health care facility for hospice care.
Inpatient hospitalizations for patients with comfort measures documented.
Less than 18 years of age
Length of Stay greater than 120 days

**Target Population Notes:** Adult all payor patients


**Risk Adjustment:** Not applicable

**Timing and Time Intervals:** Annual

**Calculation Algorithms:** Percentage

**Additional Considerations:** This measure is a part of a set of eight nationally implemented measures that address stroke care (STK-1: Venous Thromboembolism (VTE) Prophylaxis, STK-2: Discharged on Antithrombotic Therapy, STK-3: Anticoagulation Therapy for Atrial Fibrillation/Flutter, STK-4: Thrombolytic Therapy, STK-5: Antithrombotic Therapy By End of Hospital Day 2, STK-8: Stroke Education, and STK-10: Assessed for Rehabilitation) that are used in The Joint Commissions hospital accreditation and Disease-Specific Care certification programs.

**Benchmark Information:**

*Greater than 10 hospitals selected this measure:*

- The benchmark for PY3 will be the average performance of the top 75% of hospitals in the state during PY1
- The benchmark for PY4 will be 5% improvement of the PY3 benchmark
- The benchmark for PY5 will be 5% improvement of the PY4 benchmark
Core Populations

SW-CP1 - Social Needs Screening and Notification

Definition:
Measurement of the number of Medicaid patients discharged to home from an inpatient admission who have formal social needs screening done within 12 months of the admission or at the time of visit, results documented in the medical record and, if there is a positive social needs screen, referral to an appropriate entity and notification to the RAE utilizing a process that is mutually agreed upon.

A patient with a positive social needs screen must be referred to an appropriate entity and the RAE notified for the patient to be considered having met this measure and included in the numerator. Screening alone without appropriate referral and RAE notification for a patient who screens positive is not considered adequate for this measure. The measure is reported as one overall score counting all patients who are screened and screen negative, and patients with positive screens only if they are appropriately referred and the RAE is notified about them.

Social needs screening should include at a minimum, five core domains consisting of housing instability; food insecurity; transportation problems; utility help needs and interpersonal safety.

Measure Steward: Colorado Department of Health Care Policy and Financing

Data Source: Hospital self-report

Data Collection Methodology: EMR or medical record review

Numerator:
Number of Medicaid patients discharged to home from an inpatient admission who have formal social needs screening done within 12 months of the admission or at the time of visit with results and if the screen is positive referral to an appropriate entity with notification to the RAE.

The numerator consists of the total number of patients screened who do not have positive screen and patients with positive screens who have been appropriately referred and the RAE notified. Patients who screen positive but are not appropriately referred with notification to the RAE, are excluded from the numerator.

Denominator: Medicaid patients discharged to home with an inpatient admission.

Exclusions:
- Patients discharged AMA.
- Patient refusal.

Target Population Notes: Adult and Pediatric Medicaid (primary) patients
Data Elements, Code Systems, Code Lists, Value Sets:
- Patient record data extraction or chart review documenting screening and referral notification
- Discharge counts

Risk Adjustment: Not applicable

Timing and Time Intervals: Annual

Calculation Algorithms: Percentage

Additional Considerations:
This measure incents hospitals to implement screening for social needs and to work collaboratively with their community and RAE’s to increase the options for and number of referrals to community-based agencies to address social needs. The reporting measurement requires the total number of positive screens to also be reported.

Benchmark Information:
- The benchmark for PY3 will be 80%
- The benchmark for PY4 will be 85%
- The benchmark for PY5 will be 90%

CP1 - Readmission Rate for a High Frequency Chronic Condition 30 Day (Adult)

Definition:
Percentage of Medicaid patients discharged who have a high frequency chronic condition who are readmitted to the hospital within 30 days and are between 18 to 65 years of age. High frequency conditions are defined as hypertension, diabetes mellitus, heart failure, COPD, and asthma.

Measure Steward: Colorado Department of Health Care Policy and Financing

Data Source: Medicaid claims

Data Collection Methodology: Claims analysis

Numerator:
Medicaid patients discharged from the hospital who have a high frequency chronic condition as a primary or secondary diagnosis who are readmitted to the hospital within 30 days. High frequency conditions are defined as hypertension, diabetes mellitus, heart failure, COPD, and asthma.

Denominator:
Medicaid patients discharged from the hospital who have a high frequency chronic condition as a primary or secondary diagnosis. High frequency conditions are defined as hypertension, diabetes mellitus, heart failure, COPD, and asthma.
Exclusions:

**Numerator:**
- Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
- Exclude all claims without a diagnosis code of:
  - Chronic condition: Hypertension
    - ICD-10 Code: All codes beginning with I10, I11, I12, I13, I14, I15, I16
  - Chronic condition: Diabetes mellitus
    - ICD-10 Code: All codes beginning with E08, E09, E10, E11, E13
  - Chronic condition: Heart failure
    - ICD-10 Code: All codes beginning with I50
  - Chronic condition: COPD
    - ICD-10 Code: All codes beginning with J40, J41, J42, J43, J44
  - Chronic condition: Asthma
    - ICD-10 Code: All codes beginning with J45
- Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
- Exclude acute inpatient hospital admissions with any of the following on the discharge claim:
  - Female members with a principal diagnosis of pregnancy (Pregnancy Value Set).
  - A principal diagnosis for a condition originating in the perinatal period (Perinatal Conditions Value Set).
  - Planned admissions using any of the following:
    - A principal diagnosis of maintenance chemotherapy (Chemotherapy Value Set).
    - A principal diagnosis of rehabilitation (Rehabilitation Value Set).
    - An organ transplant (Kidney Transplant Value Set, Bone Marrow Transplant Value Set, Organ Transplant Other Than Kidney Value Set, Introduction of Autologous Pancreatic Cells Value Set).
    - A potentially planned procedure (Potentially Planned Procedures Value Set) without a principal acute diagnosis (Acute Condition Value Set).

**Denominator:**
- Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
- Exclude all claims without a diagnosis code of:
  - Chronic condition: Hypertension
    - ICD-10 Code: All codes beginning with I10, I11, I12, I13, I14, I15, I16
  - Chronic condition: Diabetes mellitus
    - ICD-10 Code: All codes beginning with E08, E09, E10, E11, E13
  - Chronic condition: Heart failure
    - ICD-10 Code: All codes beginning with I50
  - Chronic condition: COPD
    - ICD-10 Code: All codes beginning with J40, J41, J42, J43, J44
  - Chronic condition: Asthma
✓ ICD-10 Code: All codes beginning with J45

- Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
- Exclude hospital stays where the index admission date is the same as the index discharge date.
- Exclude hospital stays for the following reasons:
  - The member dies during the stay
  - Female members with a principal diagnosis of pregnancy (Pregnancy Value Set) on the discharge claim
  - A principal diagnosis of a condition originating in the perinatal period (Perinatal Condition Value Set) on the discharge claim
- Chronic condition codes were not included

**Target Population Notes:**
- Adult Medicaid (primary) patients between 18 and 65 years of age
- Continuous enrollment 365 days prior to the Index Discharge Date through 30 days after the index discharge date (Note: reports should be generated with and without the 365 continuous enrollment requirements).

**Data Elements, Code Systems, Code Lists, Value Sets:**

Use any diagnosis code on the claim code (including primary and secondary claim codes)
- Chronic condition: Hypertension
  ✓ ICD-10 Code: All codes beginning with I10, I11, I12, I13, I14, I15, I16
- Chronic condition: Diabetes mellitus
  ✓ ICD-10 Code: All codes beginning with E08, E09, E10, E11, E13
- Chronic condition: Heart failure
  ✓ ICD-10 Code: All codes beginning with I50
- Chronic condition: COPD
  ✓ ICD-10 Code: All codes beginning with J40, J41, J42, J43, J44
- Chronic condition: Asthma
  ✓ ICD-10 Code: All codes beginning with J45

Per HEDIS specification, **except:**
- Patient status codes excluded
- All discharges with one day between are counted
- Pull inpatient stays by claim type (instead of revenue code)

**Risk Adjustment:** Not applicable

**Timing and Time Intervals:** Annual

**Calculation Algorithms:** Percentage
Additional Considerations:
This measure would be applicable to hospitals who want to implement enhanced transitions of care support for a cohort of Medicaid patients discharged with a chronic condition. This will include addressing both medical issues and social determinants of health.

Benchmark Information:

10 or less hospitals selected this measure:
- The benchmark for PY3 will be 5% improvement of the PY1 (baseline) score
- The benchmark for PY4 will be 5% improvement of the PY3 benchmark
- The benchmark for PY5 will be 5% improvement of the PY4 benchmark

CP1 - Pediatric Readmissions Rate Chronic Condition 30 Day

Definition:
This report contains detailed measure specifications for calculating case-mix-adjusted, 30-day all-condition readmission rates for the pediatric Medicaid population 18 years old or younger. High frequency conditions are defined as hypertension, diabetes mellitus, heart failure, COPD, and asthma.

Measure Steward: Center of Excellence for Pediatric Quality Measurement - NQF 2393

Data Source: Medicaid claims

Data Collection Methodology: Claims analysis

Numerator:
Number of Medicaid index admissions for patients 18 years old or younger at the time of discharge with 1 or less readmission within 30 days with a high frequency condition. High frequency conditions are defined as hypertension, diabetes mellitus, heart failure, COPD, and asthma.

Denominator:
Total number of Medicaid index admissions for patients 18 years old or younger at the time of discharge. High frequency conditions are defined as hypertension, diabetes mellitus, heart failure, COPD, and asthma.

Exclusions:
- Exclude all claims without a diagnosis code of:
  - Chronic condition: Hypertension
    - ICD-10 Code: All codes beginning with I10, I11, I12, I13, I14, I15, I16
  - Chronic condition: Diabetes mellitus
    - ICD-10 Code: All codes beginning with E08, E09, E10, E11, E13
  - Chronic condition: Heart failure
    - ICD-10 Code: All codes beginning with I50
• Chronic condition: COPD
  ✓ ICD-10 Code: All codes beginning with J40, J41, J42, J43, J44
• Chronic condition: Asthma
  ✓ ICD-10 Code: All codes beginning with J45
• Patients discharged AMA.

Exclusions at hospital level:
• Specialty hospitals
  Non-acute care institutions, such as rehabilitation and long-term care facilities
  Admissions for obstetric conditions, mental health conditions, and birth of healthy newborns
  Readmissions for planned procedures and chemotherapy.

Exclusions at episode of care level:
• Episodes of care for patients >18 years or 0 days old at the time of discharge
• Episodes of care with a discharge disposition of death
• Episodes of care with a discharge disposition of leaving the hospital against medical advice
• Episodes of care for which 30 days of follow-up data are unavailable, either
  • because the dataset’s time range for claims does not include the full 30 days
  • because, for single-payer analyses, the patient was not enrolled with the payer for the full 30 days (i.e., the difference between ins_end and end_service_dt is less than 30 days)

Target Population Notes: Pediatric Medicaid (primary) patients 18 years of age and younger

Data Elements, Code Systems, Code Lists, Value Sets:
Use any diagnosis code on the claim code (including primary and secondary claim codes)
• Chronic condition: Hypertension
  ✓ ICD-10 Code: All codes beginning with I10, I11, I12, I13, I14, I15, I16
• Chronic condition: Diabetes mellitus
  ✓ ICD-10 Code: All codes beginning with E08, E09, E10, E11, E13
• Chronic condition: Heart failure
  ✓ ICD-10 Code: All codes beginning with I50
• Chronic condition: COPD
  ✓ ICD-10 Code: All codes beginning with J40, J41, J42, J43, J44
• Chronic condition: Asthma
  ✓ ICD-10 Code: All codes beginning with J45

Risk Adjustment: Not applicable

Timing and Time Intervals: Annual
Calculation Algorithms:
The readmissions algorithm and adjustment methodology are a SAS program that was taken directly from specs provided by the Center of Excellence for Pediatric Quality Measurement.

Additional Considerations:
Measure Specification Documentation:
Provide name and email to access the specification and the SAS code
www.childrenshospital.org/Research/Centers-Departmental-Programs/center-of-excellence-for-pediatric-quality-measurement-cepqm/cepqm-measures/pediatric-readmissions/content

Provider IDs will need to be updated in the code every year

Benchmark Information:
10 or less hospitals selected this measure:
- The benchmark for PY3 will be 5% improvement of the PY1 (baseline) score
- The benchmark for PY4 will be 5% improvement of the PY3 benchmark
- The benchmark for PY5 will be 5% improvement of the PY4 benchmark

---

CP2 - Pediatric Bronchiolitis Appropriate Use of Bronchodilators
Definition:
Percentage of patients with a primary diagnosis of bronchiolitis admitted to the inpatient setting who receive bronchodilators (Note: lower percentage is better).

Measure Steward: Children’s Hospital Association

Data Source: Hospital self-report

Data Collection Methodology: EMR or medical record review

Numerator:
Number of patients with a primary diagnosis of bronchiolitis admitted to the inpatient setting who receive bronchodilators.

Denominator:
Number of patients with a primary diagnosis of bronchiolitis admitted to the inpatient setting.

Exclusions: None

Target Population Notes: Pediatric all payor patients less than 18 years

Data Elements, Code Systems, Code Lists, Value Sets: EMR or medical record documentation

Risk Adjustment: Not applicable

Timing and Time Intervals: Measure reported December to April

Calculation Algorithms: Percentage
Additional Considerations:
Please note this measure will be under annual review as developments and evidence-based research becomes available due to COVID-19.

Benchmark Information:
- The benchmark for PY3 will be 80%
- The benchmark for PY4 will be 85%
- The benchmark for PY5 will be 90%

CP3 - Pediatric Sepsis Timely Antibiotics
Definition:
Percentage of pediatric patients with suspected sepsis who receive antibiotics in less than or equal to 3 hours after an initial diagnosis of suspected sepsis. This includes patients in the emergency department, urgent care and inpatient settings.

Measure Steward: Children’s Hospital Association

Data Source: Hospital self-report

Data Collection Methodology: EMR or medical record review

Numerator:
Number of patients in the emergency department, urgent care and inpatient settings who receive antibiotics in less than or equal to 3 hours after an initial diagnosis of suspected sepsis.

Denominator:
Number of patients in the emergency department, urgent care and inpatient settings who are diagnosed as suspected sepsis at some point during their visit or hospitalization.

Exclusions:
- Patients admitted to the NICU

Target Population Notes: Pediatric all payor patients less than 18 years

Data Elements, Code Systems, Code Lists, Value Sets: EMR or medical record documentation

Risk Adjustment: Not applicable

Timing and Time Intervals: Performance year

Calculation Algorithms: Percentage

Additional Considerations: None

Benchmark Information:
- The benchmark for PY3 will be 5% improvement of the PY1 (baseline) score
- The benchmark for PY4 will be 5% improvement of the PY3 benchmark
- The benchmark for PY5 will be 5% improvement of the PY4 benchmark
CP4 - Screening for Transitions of Care Supports in Adults with Disabilities

Definition:
The percent of admitted patients, 18 years and older, with disabilities screened for transitions of care supports. Screening shall include an assessment of functional status using the “Long-Term Care Hospital Continuity Assessment Record and Evaluation Data Set Version 4.0” available at [www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/LTCH-Quality-Reporting/LTCH-CARE-Data-Set-and-LTCH-QRP-Manual.html](http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/LTCH-Quality-Reporting/LTCH-CARE-Data-Set-and-LTCH-QRP-Manual.html) or similar comprehensive screen and if needed supports are identified, contact appropriate agencies to put in additional services.

Measure Steward: Colorado Department of Health Care Policy and Financing

Data Source: Hospital self-report

Data Collection Methodology: EMR or medical record review

Numerator:
Patients with a disability per Social Security Administration listings ([www.ssa.gov/disability/professionals/bluebook/AdultListings.htm](http://www.ssa.gov/disability/professionals/bluebook/AdultListings.htm)) admitted to the hospital who have a documented screening for transitions of care supports in the medical record; if needed supports are identified, contact appropriate agencies to put in additional services.

Denominator:
Patients with a disability per Social Security Administration listings ([www.ssa.gov/disability/professionals/bluebook/AdultListings.htm](http://www.ssa.gov/disability/professionals/bluebook/AdultListings.htm)) admitted to the hospital.

Exclusions: Patient refusal.

Target Population Notes: Adult all payor patients 18 years of age and older

Data Elements, Code Systems, Code Lists, Value Sets: EMR or medical record documentation

Risk Adjustment: Not applicable

Timing and Time Intervals: Annual

Calculation Algorithms: Percentage

Additional Considerations: None

Benchmark Information:
- The benchmark for PY3 will be 80%
- The benchmark for PY4 will be 85%
- The benchmark for PY5 will be 90%
**CP5 - Reducing Neonatal Complications**

**Definition:**
Reducing the percent of infants with unexpected newborn complications among full term newborns with no preexisting conditions.

Severe complications include neonatal death, transfer to another hospital for higher level of care, severe birth injuries such as intracranial hemorrhage or nerve injury, neurologic damage, severe respiratory and infectious complications such as sepsis.

Moderate complications include diagnoses or procedures that raise concern but at a lower level than the list for severe, e.g. use of CPAP or bone fracture. Examples include less severe respiratory complications e.g. Transient Tachypnea of the Newborn, or infections with a longer length of stay not including sepsis, infants who have a prolonged length of stay of over five days.

**Measure Steward:** The Joint Commission JC-06 (Version 2019A)

**Data Source:** Hospital chart abstraction

**Data Collection Methodology:**
Chart abstraction which can include vital records, delivery logs and clinical information systems

**Numerator:** Newborns with severe complications and moderate complications

*Severe Complications:*
- Death
- Transfer to another acute care facility for higher level of care

*Principal Diagnosis Code, Other Diagnosis Codes, Principal Procedure Code or Other Procedure Codes for Severe Morbidities:*
- Severe Birth Trauma
- Severe Hypoxia/Asphyxia
- Severe Shock and Resuscitation
- Neonatal Severe Respiratory Complications
- Neonatal Severe Infection
- Neonatal Severe Neurological Complications
- Severe Shock and Resuscitation Procedures
- Neonatal Severe Respiratory Procedures
- Neonatal Severe Neurological Procedures

Patients with Length of Stay greater than 4 days AND a *Principal Diagnosis Code or Other Diagnosis Codes for Sepsis*
**Moderate Complications:**
- Principal Diagnosis Code, Other Diagnosis Codes, Principal Procedure Code or Other Procedure Codes for moderate complications:
  - Moderate Birth Trauma
  - Moderate Respiratory Complications
  - Moderate Respiratory Complications Procedures

Principal Diagnosis Code for Single Liveborn Newborn-Vaginal AND Length of Stay greater than 2 days
OR
Principal Diagnosis Code for Single Liveborn Newborn-Cesarean AND Length of Stay greater than 4 days
AND ANY
Principal Diagnosis Code, Other Diagnosis Codes, Principal Procedure Code or Other Procedure Codes for moderate complications:
  - Moderate Birth Trauma with LOS
  - Moderate Respiratory Complications with LOS
  - Moderate Neurological Complications with LOS Procedures
  - Moderate Respiratory Complications with LOS Procedures
  - Moderate Infection with LOS

Patients with Length of Stay greater than 5 days and NO Principal Diagnosis Code, Other Diagnosis Codes, Principal Procedure Code or Other Procedure Codes for jaundice or social indications:
  - Neonatal Jaundice
  - Phototherapy
  - Social Indications

**Denominator:** Liveborn single term newborns 2500 gm or over in birth weight.

**Exclusions:**
- Numerator: None

**Denominator:**
- Patients who are not born in the hospital or are part of multiple gestation pregnancies
- Birth Weight less than 2500g
- Patients who are not term or with less than 37 weeks gestation completed
- Patients whose term status or gestational age is missing and birthweight less than 3000 gm
- Congenital malformations and genetic diseases
- Pre-existing fetal conditions
- Maternal drug use exposure in-utero

**Target Population Notes:** All payor

**Data Elements, Code Systems, Code Lists, Value Sets:**
- Numerator:
• Admission Date
• Discharge Date
• Discharge Disposition
• Other Diagnosis Codes
• Principal Diagnosis Code
• Other Procedure Codes
• Principal Procedure Code

Denominator:
• Birth Weight
• Birthdate
• Other Diagnosis Codes
• Principal Diagnosis Code
• Other Procedure Codes
• Principal Procedure Code
• Term Newborn

Risk Adjustment: Not applicable

Timing and Time Intervals: Annual

Calculation Algorithms: The result is expressed as a rate per 1000 live births.

Additional Considerations:
Hospitals with over 300 deliveries a year are mandated to report this to The Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

Benchmark Information:
10 or less hospitals selected this measure:
  o The benchmark for PY3 will be 5% improvement of the PY1 (baseline year) score
  o The benchmark for PY4 will be 5% improvement of the PY3 benchmark
  o The benchmark for PY5 will be 5% improvement of the PY4 benchmark

CP6 - Screening and Referral for Perinatal and Post-Partum Depression and Anxiety and Notification of Positive Screens to the RAE

Definition:
Percentage of pregnant Medicaid patients screened at any hospital encounter identified through an IP or OP hospital claim for perinatal and post-partum anxiety and depression during pregnancy or the postpartum period (60 days) with the RAE notified within one business day if the screen is positive.

The RAE must be notified within one business day if a patient has a positive screen for that patient to be considered having met this measure and included in the numerator. Screening alone without RAE notification for a Medicaid patient who screens positive is not considered adequate for this measure. The measure is reported as one overall score counting all patients
who are screened and screen negative, and patients with positive screens only if the RAE is notified about them within one business day.

**Measure Steward:** Colorado Department of Health Care Policy and Financing

**Data Source:** Hospital self-report

**Data Collection Methodology:** EMR or medical record review

**Numerator:**
The number of Medicaid hospital encounters identified through an IP or OP hospital claim for women who are pregnant or in the post-partum period (60 days) at which a screening for anxiety and depression was done and RAE notified within one business day if the screen was positive.

The numerator consists of the number of patients screened who do not have positive screen and the number of patients with positive screens for whom the RAE notified within one business day. Patients who are screened, and screen positive, for whom the RAE is not notified within one business are excluded from the numerator.

**Denominator:**
The number of Medicaid hospital encounters identified through an IP or OP hospital claim of women who are pregnant or in the post-partum period (60 days).

**Exclusions:**
- Patients discharged AMA.
- Patient refusal.

**Target Population Notes:** Medicaid (primary) patients

**Data Elements, Code Systems, Code Lists, Value Sets:** EMR or medical record documentation

**Risk Adjustment:** Not applicable

**Timing and Time Intervals:** Annual

**Calculation Algorithms:** Percentage

**Additional Considerations:**
This measure would require hospitals to work with RAE’s to ensure optimal patient access and follow up. Notification to the RAE should not take the place of or delay appropriate referral when mental health referral resources are known and available. If a screening took place in the last 7 days and was positive, that screening is valid and re-screening is not required.

**Benchmark Information:**
- The benchmark for PY3 will be 80%
- The benchmark for PY4 will be 85%
- The benchmark for PY5 will be 90%
**CP7 - Increase Access to Specialty Care**

**Definition:**
The annual number of Medicaid visits with specialist physicians contracted through or employed by a hospital.

**Measure Steward:** Colorado Department of Health Care Policy and Financing

**Data Source:** Hospital self-report

**Data Collection Methodology:** Hospital system

**Numerator:**
This is a simple count of the number of Medicaid visits with specialty physicians contracted through or employed by a hospital as described above.

**Denominator:** None

**Exclusions:** None

**Target Population Notes:** Medicaid (primary) patients

**Data Elements, Code Systems, Code Lists, Value Sets:**
Visit counts from hospital systems or records

**Risk Adjustment:** Not applicable

**Timing and Time Intervals:** Annual

**Calculation Algorithms:** Visit count

**Additional Considerations:**
This measure is appropriate for hospitals who provide significant ambulatory specialty care through employed physicians and are committed to improving specialty access for Medicaid patients through increased appointment availability and patient support for completing the visit.

**Benchmark Information:**
- The benchmark for PY3 will be 5% improvement of PY1 (baseline) score
- The benchmark for PY4 will be 5% improvement of PY3 benchmark
- The benchmark for PY5 will be 5% improvement of PY4 benchmark
Behavioral Health/Substance Use Disorder

**SW-BH1 - Collaboratively develop and implement a mutually agreed upon discharge planning and notification process with the appropriate RAE’s for eligible patients with a diagnosis of mental illness or substance use disorder (SUD) discharged from the hospital or ED**

**Definition:**
Percentage of eligible Medicaid patients 18 years or older discharged from the hospital or emergency department to home with a principal or secondary diagnosis of mental illness or SUD with a collaboratively mutually agreed upon discharge planning and notification process with or to the RAE within one business day.

The Substance Abuse and Mental Health Services Administration defines SUD as alcoholism and drug dependence and addiction or the use of alcohol or drugs that is compulsive or dangerous.³

**Measure Steward:** Colorado Department of Health Care Policy and Financing

**Data Source:** Hospital self-report

**Data Collection Methodology:** Hospital self-reported data

**Numerator:**
Number of eligible Medicaid patients discharged from the hospital or emergency department to home with a principal or secondary diagnosis of mental illness or SUD with a collaboratively mutually agreed upon discharge planning and notification process with or to the RAE within one business day.

**Denominator:**
Number of eligible Medicaid patients discharged to home from the hospital or emergency department with a principal or secondary diagnosis of mental illness or SUD.

**Exclusions:**
- Patients discharged AMA or discontinued care.

**Target Population Notes:** Adult Medicaid (primary) patients 18 years of age and older

**Data Elements, Code Systems, Code Lists, Value Sets:**

*Covered Mental Health Diagnosis:*

<table>
<thead>
<tr>
<th>ICD-10-CM Code Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Value</td>
</tr>
<tr>
<td>F20.0</td>
</tr>
<tr>
<td>F42.8</td>
</tr>
<tr>
<td>F48.9</td>
</tr>
</tbody>
</table>


29 | HTP Measure Specifications for Hospitals
Start Value | End Value
---|---
F51.09 | F51.12
F51.19 | F51.9
F53.0 | F53.1
F60.0 | F63.9
F68.10 | F69
F90.0 | F98.4
F98.8 | F99
R45.1 | R45.2
R45.5 | R45.82

**Covered Substance Use Disorder Diagnosis:**

ICD-10-CM Code Ranges

Start Value | End Value
---|---
F10.10 | F10.26
F10.28 | F10.96
F10.98 | F13.26
F13.28 | F13.96
F13.98 | F18.159
F18.18 | F18.259
F18.28 | F18.959
F18.980 | F19.16
F19.18 | F19.26
F19.28 | F19.99

**Risk Adjustment:** Not applicable

**Timing and Time Intervals:** Annual

**Calculation Algorithms:** Percentage

**Additional Considerations:**
Eligible patients are those who give consent or for whom state and federal statutes allow notification without consent. Implementation plans for this measure must include a robust process for seeking patient consent.

**Benchmark Information:**
- The benchmark for PY3 will be 80%
- The benchmark for PY4 will be 85%
- The benchmark for PY5 will be 90%
SW-BH2 - Pediatric Screening for Depression in Inpatient and ED Including Suicide Risk

Definition:
Percent of pediatric patients 12 years or older who were screened for depression including suicide risk during an inpatient or emergency department encounter.

Measure Steward: Colorado Department of Health Care Policy and Financing

Data Source: Hospital self-report

Data Collection Methodology: EMR or medical record review

Numerator:
Number of pediatric patients (12 years or older) with an inpatient or emergency department encounter who were screened for depression including suicide risk.

Denominator:
Number of pediatric patients with an inpatient or emergency department encounter.

Exclusions:
- Patients discharged AMA.

Target Population Notes: Pediatric all payor patients 12 years of age and older

Data Elements, Code Systems, Code Lists, Value Sets: EMR or medical record documentation

Risk Adjustment: Not applicable

Timing and Time Intervals: Annual

Calculation Algorithms: Percentage

Additional Considerations: None

Benchmark Information:
- The benchmark for PY3 will be 80%
- The benchmark for PY4 will be 85%
- The benchmark for PY5 will be 90%

SW-BH3 - Using Alternatives to Opioids (ALTO) in Hospital Emergency Departments (ED): 1) Decrease use of Opioids 2) Increase use of ALTO

Definition: This is a two-part measure: decrease use of opioids = 60%, increase use of ALTO = 40%

1. Decrease use of Opioids - Total morphine milligram equivalent (MME) of medications administered listed in Opioids of Interest per 1,000 Emergency Department (ED) visits for
patients ages 18 years and older, among cases meeting the inclusion and exclusion criteria below.

2. Increase use of ALTO - Total number of ALTO medications administered listed in ALTO of Interest per 1,000 Emergency Department (ED) visits for patients ages 18 years and older, among cases meeting the inclusion and exclusion criteria below.

Measure Steward: Colorado Hospital Association (CHA); American College of Emergency Physicians (ACEP)

Data Source: Hospital self-report

Data Collection Methodology:

- **Numerator**: Electronic Health Record (EHR), Medication Administration Record (MAR)
- **Denominator**: Electronic Health Record (EHR), billing systems or other tracking systems

Part 1 - Decrease use of opioids

- **Numerator**: Total MME of medications administered listed in Opioids of Interest among cases meeting the inclusion and exclusion criteria below.
- **Denominator**: Total number of ED visits for diagnoses meeting the inclusion and exclusion criteria below.

Part 2 - Increase use of ALTO

- **Numerator**: Total number of ALTO medications administered listed in ALTO of Interest among cases meeting the inclusion and exclusion criteria below. For example, if a patient was given two ALTOs with the same medication name both administrations would count in the Numerator of this metric.
- **Denominator**: Total number of ED visits for diagnoses meeting the inclusion and exclusion criteria below.

Opioids of Interest (all routes): Every medication has an approved name, which is a generic name. If a generic medication is made by several different pharmaceutical companies, it is given a brand or trade name. If your hospital policy does not require generic names be used throughout the facility, unless a brand name is required (e.g., those where the bioavailability may be different, such as Lithium), ensure these are captured but not counted twice.

- Carfentanil
- Codeine
- Codeine-Acetaminophen
- Codeine Poli-Chlorphenir Poli
- Fentanyl
- Meperidine
- Morphine
- Morphine Sulfate
- Oxycodone
- Oxycodone-Acetaminophen
- Fentanyl Citrate
- Hydrocodone bitartrate
- Hydrocodone-Acetaminophen
- Hydrocodone-Chlorpheniramine
- Hydrocodone-Cpm-Pseudoephed
- Hydrocodone-Homatropin
- Hydromorphone
- Hydromorphone

*IMPORTANT Note: for combination Opioid ALTOs (i.e., Hydrocodone-Acetaminophen etc.), the data should reflect only the opioid dosage which is then converted to MME. For example, Hydrocodone-Acetaminophen 5mg/325 mg, should be calculated as 5 mg hydrocodone, which is then converted to MME.

**ALTO of Interest (all routes):**
Every medication has an approved name, which is a generic name. If a generic medication is made by several different pharmaceutical companies, it is given a brand or trade name. If your hospital policy does not require generic names be used throughout the facility, unless a brand name is required (e.g., those where the bioavailability may be different, such as Lithium), ensure these are captured but not counted twice.

- Aspirin
- Acetaminophen
- Amitriptyline
- Baclofen
- Camphor
- Capsaicin
- Celecoxib
- Cyclobenzaprine
- Desmopressin
- Diclofenac
- Dicyclomine
- Duloxetine
- Excedrin
- Famotidine
- Gabapentin
- Haloperidol
- Ibuprofen
- Ketorolac
- Lidocaine
- Meloxicam
- Menthol
- Methocarbamol
- Methyl salicylate
- Metoclopramide
- Naproxen
- Nortriptyline
- Ondansetron
- Pregabalin
- Prochlorperazine
- Simethicone
- Sucralfate
- Tamsulosin
- Tizanidine
- Venlafaxine

- Oxycodone-Hydrochloride
- Oxymorphone-Hydrochloride
- Pseudoephedrine-Hydrocodone
- Tramadol
- Indomethacin
- Ketamine

**Inclusions:**
- Include patients 18 years of age and older
- Include any ED visit where the patient was treated at some point in the ED, including patients admitted to inpatient, kept in observation, or discharged home
- Include the primary or secondary ICD-10-CM diagnosis codes listed in Table 1, Inclusion column

**Exclusions:**
- Exclude any ED visit with the following hospice and intensive care exclusion revenue codes - see Table 2
- Exclude the primary or secondary ICD-10-CM diagnosis codes listed in Table 1, Exclusion column
- Additional Exclusions: cases with age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)

**Target Population Notes:** Adult ALL payor patients 18 years of age and older

**Risk Adjustment:** Not applicable

**Timing and Time Intervals:** Annual

**Calculation Algorithms:**
- RATE: For Opioid Administrations - Total Morphine Milligram Equivalent (MME) per 1,000 ED visits among cases meeting the inclusion and exclusion criteria. See Table 3: MME Conversion
- RATE: For ALTO - ALTO count of administrations per 1,000 ED visits among cases meeting the inclusion and exclusion criteria

**Data Elements, Code Systems, Code Lists, Value Sets:** See Table 1 - 3.
- For hospitals partnering with CHA to submit data, please reach out to ODHIN.Admin@cha.com.
- Hospital partnering with CHA to submit data will use the CHA Data Manual for HTP SW-BH3.
<table>
<thead>
<tr>
<th>Condition</th>
<th>Include</th>
<th>Exclude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migraines and Headaches</td>
<td>Headache (R51), Migraine (G44), Other Headache Syndromes (G43), Benign Intracranial Hypertension (G93.2), Post Concussional Syndrome (F07.81)</td>
<td>Malignant neoplasms of eye, brain and other parts of central nervous system (C69-72), Benign neoplasm of eye and adnexa, meninges, brain and other parts of central nervous system (D31-33), Transient cerebral ischemic attacks and related syndromes and Vascular syndromes of brain in cerebrovascular diseases (G45-46), Cerebrovascular diseases (I60-69), Intracranial injury, Crushing injury of head, Avulsion and traumatic amputation of part of head, Other and unspecified injuries of head (S06-09)</td>
</tr>
<tr>
<td>Abdominal Pain</td>
<td>Abdominal and pelvic pain (R10), Abdominal rigidity (R19.3), Other chronic pain, not specified elsewhere (G89.29)</td>
<td>Malignant neoplasms of digestive organs (C15-26), Malignant neoplasm of retroperitoneum and peritoneum (C48), Carcinoma in situ of oral cavity, esophagus and stomach, other unspecified digestive organs (D00-01), Neoplasm of uncertain behavior of oral cavity and digestive organs (D37)</td>
</tr>
<tr>
<td>Back Pain</td>
<td>Other inflammatory spondylopathies (M46), Other spondylopathies (M48.00-08 and M48.30-38), Cervical disc disorders (M50), Thoracic, thoracolumbar, and lumbosacral intervertebral disc disorders (M51), Dorsalgia (M54), Biomechanical lesions, not elsewhere classified (M99), Muscle spasm of back (M62.830), Age-related osteoporosis with current pathological fracture, vertebral(e) (M80.08), Other osteoporosis with current pathological fracture, vertebral(e) (M80.88)</td>
<td>Disorder of continuity of bone (M84), Malignant neoplasm of peripheral nerves and autonomic nervous system (C47)</td>
</tr>
<tr>
<td>Chest Pain</td>
<td>Chest pain on breathing (R07.1), Precordial pain (R07.2), Other chest pain (R07.8), Chest pain unspecified, chest pain not cardiac related (R07.9), Pleurisy (R09.1)</td>
<td>Malignant neoplasm of bronchus and lung (C34), Malignant neoplasm of thymus (C37), Malignant neoplasm of heart, mediastinum and pleura (C38), Malignant neoplasm of other and ill-defined sites in the respiratory system and intrathoracic organs (C39), Mesotheiloma (C45), Kaposi's sarcoma (C46), Malignant neoplasm of breast (C50), Ischemic heart diseases (I20-25)</td>
</tr>
<tr>
<td>Dental Pain</td>
<td>Dentofacial anomalies [including malocclusion] and other disorders of jaw (M26-27), Jaw pain (R68.84), Necrotizing ulcerative stomatitis (A69.0), Herpes viral gingivostomatitis and pharyngotonsillitis (B00.2), Candidal stomatitis (B37.0), Candidal cheilitis (B37.83)</td>
<td>Codes beginning with C00-14, D00, Benign Neoplasm of mouth and pharynx (D10), Neoplasm of uncertain behavior of oral cavity and digestive organs (D37), Other disorders of teeth and supporting structures (K08), Benign neoplasm of lower jawbone (D16.5)</td>
</tr>
<tr>
<td>Extremity Pain</td>
<td>Infectious arthropathies (M00-02), Inflammatory polyarthropathies (M05-14), Osteoarthritis (M15-19), Other joint disorders (M20-25), Disorders of muscles (M60-M63), Disorders of synovium and tendon (M65-67), Other soft tissue disorders (M70-79)</td>
<td>Malignant neoplasms of bone and articular cartilage (C40-41), Malignant neoplasm of other connective and soft tissue (C49)</td>
</tr>
<tr>
<td>Fracture Injuries</td>
<td>Codes beginning with Fracture of skull and facial bones (S02), Fracture of lumbar spine and pelvis(S32), Fracture of shoulder and upper arm (S42), Other and unspecified injuries of shoulder and upper arm (S49), Fracture of forearm (S52), Other and unspecified injuries of elbow and forearm (S59), Fracture at wrist and hand level (S62), Fracture of femur (S72), Other and unspecified injuries of hip and thigh (S79), Fracture of lower leg, including ankle (S82), Other and unspecified injuries of lower leg (S89), Fracture of foot and toe, except ankle (S92), Osteoporosis with and without current pathological fracture (M80-81)</td>
<td>Malignant neoplasms of bone and articular cartilage (C40-41), Malignant neoplasm of other connective and soft tissue (C49)</td>
</tr>
<tr>
<td>Non-fracture Injuries</td>
<td>Dislocation and sprain of joints and ligaments of head (S03), Other and unspecified injuries of thorax (S29), Dislocation and sprain of joints and ligaments of lumbar spine and pelvis (S33), Other and unspecified injuries of abdomen, lower back, pelvis and external genitals (S39), Dislocation and sprain of joints and ligaments of shoulder (S43), Injury of muscle, fascia and tendon at shoulder and upper arm level (S46), Dislocation and sprain of joints and ligaments of elbow (S53), Injury of muscle, fascia and tendon at forearm level (S56), Dislocation and sprain of joints and ligaments at wrist and hand level (S63), Other and unspecified injuries of wrist, hand and finger(s) (S69), Injury of muscle, fascia and tendon at hip and thigh level (S76), Dislocation and sprain of joints and ligaments of head (S03), Other and unspecified injuries of thorax (S29), Dislocation and sprain of joints and ligaments of lumbar spine and pelvis (S33), Other and unspecified injuries of abdomen, lower back, pelvis and external genitals (S39), Dislocation and sprain of joints and ligaments of shoulder (S43), Injury of muscle, fascia and tendon at shoulder and upper arm level (S46), Dislocation and sprain of joints and ligaments of elbow (S53), Injury of muscle, fascia and tendon at forearm level (S56), Dislocation and sprain of joints and ligaments at wrist and hand level (S63), Other and unspecified injuries of wrist, hand and finger(s) (S69), Injury of muscle, fascia and tendon at hip and thigh level (S76), Dislocation and sprain of joints and ligaments of head (S03), Other and unspecified injuries of thorax (S29), Dislocation and sprain of joints and ligaments of lumbar spine and pelvis (S33), Other and unspecified injuries of abdomen, lower back, pelvis and external genitals (S39), Dislocation and sprain of joints and ligaments of shoulder (S43), Injury of muscle, fascia and tendon at shoulder and upper arm level (S46), Dislocation and sprain of joints and ligaments of elbow (S53), Injury of muscle, fascia and tendon at forearm level (S56), Dislocation and sprain of joints and ligaments at wrist and hand level (S63), Other and unspecified injuries of wrist, hand and finger(s) (S69), Injury of muscle, fascia and tendon at hip and thigh level (S76), Dislocation and sprain of joints and ligaments of head (S03), Other and unspecified injuries of thorax (S29), Dislocation and sprain of joints and ligaments of lumbar spine and pelvis (S33), Other and unspecified injuries of abdomen, lower back, pelvis and external genitals (S39), Dislocation and sprain of joints and ligaments of shoulder (S43), Injury of muscle, fascia and tendon at shoulder and upper arm level (S46), Dislocation and sprain of joints and ligaments of elbow (S53), Injury of muscle, fascia and tendon at forearm level (S56), Dislocation and sprain of joints and ligaments at wrist and hand level (S63), Other and unspecified injuries of wrist, hand and finger(s) (S69), Injury of muscle, fascia and tendon at hip and thigh level (S76), Dislocation and sprain of joints and ligaments of head (S03), Other and unspecified injuries of thorax (S29), Dislocation and sprain of joints and ligaments of lumbar spine and pelvis (S33), Other and unspecified injuries of abdomen, lower back, pelvis and external genitals (S39), Dislocation and sprain of joints and ligaments of shoulder (S43), Injury of muscle, fascia and tendon at shoulder and upper arm level (S46), Dislocation and sprain of joints and ligaments of elbow (S53), Injury of muscle, fascia and tendon at forearm level (S56), Dislocation and sprain of joints and ligaments at wrist and hand level (S63), Other and unspecified injuries of wrist, hand and finger(s) (S69), Injury of muscle, fascia and tendon at hip and thigh level (S76), Dislocation and sprain of joints and ligaments of head (S03), Other and unspecified injuries of thorax (S29), Dislocation and sprain of joints and ligaments of lumbar spine and pelvis (S33), Other and unspecified injuries of abdomen, lower back, pelvis and external genitals (S39), Dislocation and sprain of joints and ligaments of shoulder (S43), Injury of muscle, fascia and tendon at shoulder and upper arm level (S46), Dislocation and sprain of joints and ligaments of elbow (S53), Injury of muscle, fascia and tendon at forearm level (S56), Dislocation and sprain of joints and ligaments at wrist and hand level (S63), Other and unspecified injuries of wrist, hand and finger(s) (S69), Injury of muscle, fascia and tendon at hip and thigh level (S76), Dislocation and sprain of joints and ligaments of head (S03), Other and unspecified injuries of thorax (S29), Dislocation and sprain of joints and ligaments of lumbar spine and pelvis (S33), Other and unspecified injuries of abdomen, lower back, pelvis and external genitals (S39), Dislocation and sprain of joints and ligaments of shoulder (S43), Injury of muscle, fascia and tendon at shoulder and upper arm level (S46), Dislocation and sprain of joints and ligaments of elbow (S53), Injury of muscle, fascia and tendon at forearm level (S56), Dislocation and sprain of joints and ligaments at wrist and hand level (S63), Other and unspecified injuries of wrist, hand and finger(s) (S69), Injury of muscle, fascia and tendon at hip and thigh level (S76), Dislocation and sprain of joint...</td>
<td></td>
</tr>
</tbody>
</table>
ligaments of knee (S83), Injury of muscle, fascia and tendon at lower leg level (S86), Dislocation and sprain of joints and ligaments at ankle, foot and toe level (S93), Injury of muscle and tendon at ankle and foot level (S96); Temporomandibular joint disorder (M26.601-659)

<table>
<thead>
<tr>
<th>Urolithiasis (stone in the kidney, bladder, or urinary tract)</th>
<th>Urolithiasis (N20-N23), Hydronephrosis with renal and ureteral calculous obstruction (N13.2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sickle Cell Anemia</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Sickle-cell disorders, and other sickle-cell disorders (D57)</td>
</tr>
</tbody>
</table>

Table 2. Hospice and Intensive Care Exclusion Codes (REVENUE codes)

<table>
<thead>
<tr>
<th>Code Type</th>
<th>Code</th>
<th>Description</th>
<th>Exclusion reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue codes</td>
<td>020x*</td>
<td>ICU Revenue code</td>
<td>Identify those that were seen in the ED and then admitted to the ICU</td>
</tr>
<tr>
<td>Revenue codes</td>
<td>065x*</td>
<td>Hospice Revenue code</td>
<td>Identify those that were seen in the ED and then admitted to internal hospice</td>
</tr>
<tr>
<td>Revenue codes</td>
<td>0125</td>
<td>Routine Charges-Hospice</td>
<td>Identify those that were seen in the ED and then admitted to internal hospice</td>
</tr>
<tr>
<td>Revenue codes</td>
<td>0135</td>
<td>Routine Charges-Hospice</td>
<td>Identify those that were seen in the ED and then admitted to internal hospice</td>
</tr>
<tr>
<td>Revenue codes</td>
<td>0145</td>
<td>Routine Charges-Hospice</td>
<td>Identify those that were seen in the ED and then admitted to internal hospice</td>
</tr>
<tr>
<td>Revenue codes</td>
<td>0155</td>
<td>Routine Charges-Hospice</td>
<td>Identify those that were seen in the ED and then admitted to internal hospice</td>
</tr>
<tr>
<td>Revenue codes</td>
<td>0235</td>
<td>Routine Charges-Hospice</td>
<td>Identify those that were seen in the ED and then admitted to internal hospice</td>
</tr>
<tr>
<td>Revenue codes</td>
<td>0115</td>
<td>Routine Charges-Hospice</td>
<td>Identify those that were seen in the ED and then admitted to internal hospice</td>
</tr>
<tr>
<td>Revenue codes</td>
<td>0233</td>
<td>Routine Charges-ICU</td>
<td>Identify those that were seen in the ED and then admitted to the ICU</td>
</tr>
<tr>
<td>Patient Status/Discharge Disposition</td>
<td>50</td>
<td>Hospice - Home</td>
<td>Identify those that were admitted and then discharged to an external hospice facility</td>
</tr>
<tr>
<td>Patient Status/Discharge Disposition</td>
<td>51</td>
<td>Hospice - Medical facility (certified) providing hospice-level care</td>
<td>Identify those that were admitted and then discharged to an external hospice facility</td>
</tr>
<tr>
<td>CPT codes</td>
<td>99291</td>
<td>Critical Care CPT codes</td>
<td>Identify those that had received intensive/critical care in the ED</td>
</tr>
<tr>
<td>CPT codes</td>
<td>99292</td>
<td>Critical Care CPT codes</td>
<td>Identify those that had received intensive/critical care in the ED</td>
</tr>
</tbody>
</table>

* These fields represent parent codes for any revenue code beginning with the first three digits
Table 3. Morphine Milligram Equivalent Conversion Table for Opioid Medications

* Note that current conversion factors for Fentanyl are for doses in micrograms (mcg), if converting to milligrams, conversions factors need to be adjusted.


<table>
<thead>
<tr>
<th>Opioid</th>
<th>Units</th>
<th>MME Conversion factor</th>
<th>Route</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codeine</td>
<td>mg</td>
<td>0.15</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Codeine-Acetaminophen</td>
<td>mg</td>
<td>0.15</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Codeine Poli-Chlorphenir Poli</td>
<td>mg</td>
<td>0.15</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Hydrocodone Bitartrate</td>
<td>mg</td>
<td>1</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Hydrocodone-Acetaminophen</td>
<td>mg</td>
<td>1</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Hydrocodone-Clorpheniramine</td>
<td>mg</td>
<td>1</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Hydrocodone-Cpm-Pseudoephed</td>
<td>mg</td>
<td>1</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Hydrocodone-Homatropine</td>
<td>mg</td>
<td>1</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>mg</td>
<td>4</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>mg</td>
<td>1</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Meperidine</td>
<td>mg</td>
<td>0.1</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Morphine</td>
<td>mg</td>
<td>1</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Morphine Sulfate</td>
<td>mg</td>
<td>1</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Oxycodone</td>
<td>mg</td>
<td>1.5</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Oxycodone-Acetaminophen</td>
<td>mg</td>
<td>1.5</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Oxycodone-Hydrochloride</td>
<td>mg</td>
<td>1.5</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Oxymorphone-Hydrochloride</td>
<td>mg</td>
<td>3</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Pseudoephedrine-Hydrocodone</td>
<td>mg</td>
<td>1</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Tramadol</td>
<td>mg</td>
<td>0.1</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Fentanyl*</td>
<td>mcg</td>
<td>0.13</td>
<td>BC</td>
<td>Fentanyl buccal</td>
</tr>
<tr>
<td>Fentanyl*</td>
<td>mcg</td>
<td>0.13</td>
<td>SL</td>
<td>SL tablets, or lozenge/troche</td>
</tr>
<tr>
<td>Fentanyl*</td>
<td>mcg</td>
<td>0.18</td>
<td>Oral Spray</td>
<td>Fentanyl film or oral spray</td>
</tr>
<tr>
<td>Fentanyl*</td>
<td>mcg</td>
<td>0.16</td>
<td>NS</td>
<td>Fentanyl nasal spray</td>
</tr>
<tr>
<td>Fentanyl*</td>
<td>mcg</td>
<td>2.4</td>
<td>TD</td>
<td>Equals one day patch (24 hours x 0.1 parenteral conversion)</td>
</tr>
<tr>
<td>Fentanyl*</td>
<td>mcg</td>
<td>0.1</td>
<td>IM</td>
<td></td>
</tr>
<tr>
<td>Fentanyl*</td>
<td>mcg</td>
<td>0.1</td>
<td>IV</td>
<td></td>
</tr>
<tr>
<td>Fentanyl Citrate*</td>
<td>mcg</td>
<td>0.1</td>
<td>IM</td>
<td></td>
</tr>
<tr>
<td>Fentanyl Citrate*</td>
<td>mcg</td>
<td>0.1</td>
<td>IV</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Considerations:** None.

**Benchmark Information:**
- The benchmark for PY3 will be the average performance of the top 75% of hospitals in the state during PY1
- The benchmark for PY4 will be 5% improvement of the PY3 benchmark
- The benchmark for PY5 will be 5% improvement of the PY4 benchmark
BH1 - Screening, Brief Intervention, and Referral to Treatment (SBIRT) in the ED

Definition:
The percent of Medicaid ED patients age 12 years and older who are screened for alcohol or other substance use at the time of an ED visit and those who score positive have also received a brief intervention during the ED visit.

Screening alone without a brief intervention for patients who score positive is not considered adequate for this measure. The measure is reported as one overall score counting in the numerator all patients who are screened and screen negative, and patients with positive screens only if there is a brief intervention.

Measure Steward: Oregon Health Authority

Data Source: Hospital self-report

Data Collection Methodology: EMR or chart review

Numerator:
The numerator consists of the number of Medicaid patients screened at the time of an ED visit who do not have positive screen and the number of patients with positive screens only if they receive a brief intervention during the ED visit. Patients who are screened, and screen positive, but do not receive a brief intervention in the ED are excluded from the numerator.

Denominator: Number of ED visits for Medicaid patients age 12 years and older.

Exclusions:
  Screening Rate: Any of the following criteria removes individuals from the denominator:
  - Individual refuses to participate
  - Situations where the individual’s functional capacity or ability to communicate may impact the accuracy of results of standardized alcohol or drug use screening tools
  - Medical stabilization is the primary function of the ED and treatment must be delivered to obtain that outcome. Therefore, the denominator should exclude individuals where time is of the essence and to delay treatment would jeopardize the individual’s health status.

Target Population Notes: Adult and Pediatric Medicaid (primary) patients

Data Elements, Code Systems, Code Lists, Value Sets: EMR or medical record documentation

Risk Adjustment: Not applicable

Timing and Time Intervals: Annual

Calculation Algorithms: Percentage

Additional Considerations:
Screening instrument and scoring methodology used by individual hospitals must be consistent with CMS guidance and approved by the state. Please reference: 

https://hcpf.colorado.gov/sbirt-manual

**Benchmark Information:**
- The benchmark for PY3 will be 80%
- The benchmark for PY4 will be 85%
- The benchmark for PY5 will be 90%

---

**BH2 - Initiation of Medication Assisted Treatment (MAT) in ED or Hospital Owned Certified Provider Based Rural Health Center**

**Definition:**
The percentage of ED visits where the patient diagnosed with an opioid use disorder (OUD) and who is in at least acute mild active opioid withdrawal for whom MAT with Buprenorphine is initiated during an emergency department visit or hospital-owned certified provider-based rural health center or through the provision/prescription of a home induction.

**Measure Steward:** Colorado Department of Health Care Policy and Financing, ACEP, SAMHSA

**Data Source:** Hospital self-report

**Data Collection Methodology:** Treatment recorded in ED visit note or claim

**Numerator:**
The number of ED visits where the patient diagnosed with an opioid use disorder (OUD) and who is in at least acute mild active opioid withdrawal for whom MAT with Buprenorphine is initiated during an emergency department visit of hospital-owned certified provider-based rural health center through an on-site induction of through the provision/prescription of a home induction.

**Denominator:** The number of ED visits where the patient is diagnosed with an opioid use disorder (OUD) and who is in at least acute mild active opioid withdrawal.

**Target Population Notes:** All payor patients with an opioid use disorder diagnosis

**Exclusions:** Patients who are critically ill, unable to communicate due to dementia or psychosis, suicidal, unconscious, refused MAT, or left against medical advice (AMA). Patients where the induction of Buprenorphine is contraindicated.

**Data Elements, Code Systems, Code Lists, Value Sets:**
Hospital self-report from visit note or claim

**Risk Adjustment:** Not applicable
**Timing and Time Intervals:** Yearly

**Calculation Algorithms:** Rate

**Additional Considerations:**
This measure is designed for hospitals who want to implement a program to train and certify providers and develop protocols to initiate MAT in the emergency department for appropriate patients. Patients will then be referred to outpatient providers for ongoing treatment. The measure will reflect the rate of OUD patients initiated with treatment annually post implementation. This metric definition is not intended to represent a practice guideline or to limit a hospital program’s ability to initiate MAT to patients not identified within this measure specification. Providers are encouraged to consult with national best practices and national professional organization recommendations.


**Benchmark Information:**
- The benchmark for PY3 will be 70%
- The benchmark for PY4 will be 75%
- The benchmark for PY5 will be 80%
Clinical and Operational Efficiencies

SW-COE1 - Hospital Index

Definition:
A measure of avoidable care across procedural episodes. A hospital’s index score will be compared to a baseline index score.

Measure Steward:
Colorado Department of Health Care Policy and Financing utilizing the Prometheus tool

Data Source: Medicaid claims and Hospital Index Dashboards

Data Collection Methodology: Claims analysis

Numerator: Not applicable

Denominator: Not applicable

Exclusions:
- Per proprietary algorithm

Target Population Notes: Medicaid (primary) patients

Data Elements, Code Systems, Code Lists, Value Sets: Claims

The following procedure are used to calculate performance in the Hospital Index measure.

<table>
<thead>
<tr>
<th>Episode Description</th>
<th>Episode Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bariatric Surgery</td>
<td>Procedural</td>
</tr>
<tr>
<td>Breast Biopsy</td>
<td>Procedural</td>
</tr>
<tr>
<td>C-Section</td>
<td>Procedural</td>
</tr>
<tr>
<td>CABG &amp;/or Valve Procedures</td>
<td>Procedural</td>
</tr>
<tr>
<td>Cataract Surgery</td>
<td>Procedural</td>
</tr>
<tr>
<td>Colonoscopy</td>
<td>Procedural</td>
</tr>
<tr>
<td>Colorectal Resection</td>
<td>Procedural</td>
</tr>
<tr>
<td>Coronary Angioplasty</td>
<td>Procedural</td>
</tr>
<tr>
<td>Gall Bladder Surgery</td>
<td>Procedural</td>
</tr>
<tr>
<td>Hip Replacement / Revision</td>
<td>Procedural</td>
</tr>
<tr>
<td>Hysterectomy</td>
<td>Procedural</td>
</tr>
<tr>
<td>Knee Arthroscopy</td>
<td>Procedural</td>
</tr>
<tr>
<td>Knee Replacement / Revision</td>
<td>Procedural</td>
</tr>
<tr>
<td>Lumbar Laminectomy</td>
<td>Procedural</td>
</tr>
<tr>
<td>Lumbar Spine Fusion</td>
<td>Procedural</td>
</tr>
<tr>
<td>Lung Resection</td>
<td>Procedural</td>
</tr>
<tr>
<td>Mastectomy</td>
<td>Procedural</td>
</tr>
<tr>
<td>Pacemaker / Defibrillator</td>
<td>Procedural</td>
</tr>
<tr>
<td>Prostatectomy</td>
<td>Procedural</td>
</tr>
<tr>
<td>Shoulder Replacement</td>
<td>Procedural</td>
</tr>
<tr>
<td>Episode Description</td>
<td>Episode Type</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Tonsillectomy</td>
<td>Procedural</td>
</tr>
<tr>
<td>Transurethral Resection Prostate</td>
<td>Procedural</td>
</tr>
<tr>
<td>Upper GI Endoscopy</td>
<td>Procedural</td>
</tr>
<tr>
<td>Vaginal Delivery</td>
<td>Procedural</td>
</tr>
</tbody>
</table>

**Risk Adjustment:** No, but the index calculation is normalized

**Timing and Time Intervals:** Annual

**Calculation Algorithms:** Index score

**Additional Considerations:** Proprietary algorithm

[citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.867.7869&rep=rep1&type=pdf](citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.867.7869&rep=rep1&type=pdf)

**Benchmark Information:**

- The benchmark for PY3 - PY5 will be a Hospital Index score of 100.

---

**COE1 - Increase the successful transmission of a summary of care record to a patient’s primary care physician (PCP) or other healthcare professional within one business day of discharge from an inpatient facility to home**

**Definition:**
Successful transmission of a summary of care record, as described in the intervention, to a Medicaid patient’s PCP or other healthcare professional within one business day of discharge from an inpatient facility to home.

**Measure Steward:** Colorado Department of Health Care Policy and Financing

**Data Source:** Hospital self-report

**Data Collection Methodology:** EMR or medical record documentation

**Numerator:**
The number of successful transmissions of a summary of care record via direct messaging or fax to a Medicaid patient’s PCP or other healthcare professional within one business day of discharge from an inpatient facility to home.

**Denominator:** The number of Medicaid inpatient discharges to home.

**Exclusions:** Patients who choose to opt-out for the summary of care record transmission.

**Target Population Notes:** Adult and Pediatric Medicaid (primary) patients

**Data Elements, Code Systems, Code Lists, Value Sets:** EMR or patient record documentation
Summary of Care Record is defined in the “Medicaid Promoting Interoperability Program” by CMS and has to include:

- Patient name
- Demographic information (preferred language, sex, race, ethnicity, date of birth)
- Smoking status
- Current problem list (providers may also include historical problems at their discretion)  
- Current medication list  
- Laboratory test(s) 
- Laboratory value(s)/result(s) 
- Vital signs (height, weight, blood pressure, Body Mass Index (BMI)) 
- Procedures 
- Care team member(s) including the primary care provider of record and any additional known care team members beyond the referring or transitioning provider and the receiving provider  
- Immunizations 
- Unique device identifier(s) for a patient’s implantable device(s) 
- Care plan, including goals, health concerns, and assessment and plan of treatment 
- Encounter diagnosis 
- Functional status, including activities of daily living, cognitive and disability status

Risk Adjustment: Not applicable

Timing and Time Intervals: Annual

Calculation Algorithms: Percentage

Additional Considerations:
If the patient cannot identify a PCP, the hospital should contact the RAE to determine the PCP assigned to the patient.

In cases where the hospital shares access to its EHR with the PCP, a transition may still count toward the measure if the hospital creates the summary of care document using the EHR and sends the summary of care document electronically.

Hospitals should define the best method for documenting receipt based on transmission type and their system capabilities.

Benchmark Information:
- The benchmark for PY3 will be 80%
- The benchmark for PY4 will be 85%


5 An eligible professional (EP) must verify that the fields for current problem list, current medication list, and current medication allergy list are not blank and include the most recent information known by the EP as of the time of generating the summary of care document or include a notation of no current problem, medication and/or medication allergies
COE2 - Implementation/expansion of Telemedicine Visits

Definition: The annual number of telemedicine visits supported through the hospital.

A telemedicine visit is an interactive telephone or video encounter between a clinician and a patient that meets the same standard or care as an in-person visit. This measure is intended for telehealth visits utilized to replace in-person inpatient or outpatient hospital visits between a patient and a clinician. This measure is not intended for remote patient monitoring.

Measure Steward: Colorado Department of Health Care Policy and Financing

Data Source: Hospital self-report

Data Collection Methodology: Hospital system

Numerator: This is a simple count of the number of telemedicine visits as described above.

Denominator: None

Exclusions: Patients receiving remote patient monitoring shall not be included in the count of telehealth visits.

Target Population Notes: Adult and Pediatric all payor patients

Data Elements, Code Systems, Code Lists, Value Sets:
Visit counts from hospital systems or records

Risk Adjustment: Not applicable

Timing and Time Intervals: Annual

Calculation Algorithms: Visit count

Additional Considerations:
This measure is appropriate for hospitals who want to implement or expand telemedicine programs on their own or in collaboration with a vendor or clinician group.

Only completed visits, not just scheduled, should be counted.

Hospital has to be the primary implementer of the telehealth visit process and system or have participated in significant collaborative planning and implementation with another hospital to enable these visits to occur. Hospital has to attest that the hospital facilitated the initiation of the visit as demonstrated through the intervention.

If system-level implementation, options for attributing the visits - all to one, nearest hospital to originating site, distribution of patients/adjusted charges.
Benchmark Information:
- The benchmark for PY3 will be 5% improvement of PY1 (baseline) score
- The benchmark for PY4 will be 5% improvement of the PY3 benchmark
- The benchmark for PY5 will be 5% improvement of the PY4 benchmark

**COE3 - Implementation/expansion of e-Consults**

**Definition:** The annual number of e-Consults supported through the hospital.

*e-Consults are a communication about a specific patient between a primary care clinician and a specialist documented in the patient’s medical record and conducted through a “web-based system that allows for an asynchronous exchange between primary care providers and specialists to securely share health information and discuss patient care.”*

**Measure Steward:** Colorado Department of Health Care Policy and Financing

**Data Source:** Hospital self-report

**Data Collection Methodology:** Hospital system

**Numerator:** This is a simple count of the number of e-Consults as described above.

**Denominator:** None

**Exclusions:** None

**Target Population Notes:** Adult and Pediatric all payor patients

**Data Elements, Code Systems, Code Lists, Value Sets:**
Visit counts from hospital systems or records

**Risk Adjustment:** Not applicable

**Timing and Time Intervals:** Annual

**Calculation Algorithms:** Visit count

**Additional Considerations:**
This measure is appropriate for hospitals who want to implement or expand e-Consults on their own or in collaboration with a vendor or clinician group.

**Benchmark Information:**
- The benchmark for PY3 will be 5% improvement of PY1 (baseline) score
- The benchmark for PY4 will be 5% improvement of the PY3 benchmark
- The benchmark for PY5 will be 5% improvement of the PY4 benchmark
COE4 - Energy Star Certification Achievement and Score Improvement for Hospitals

Definition:
The ENERGY STAR Score for Hospitals applies to general medical and surgical hospitals, including critical access hospitals and children’s hospitals. The objective of the ENERGY STAR score is to provide a fair assessment of the energy performance of a property relative to its peers, taking into account the climate, weather, and business activities at the property. To identify the aspects of building activity that are significant drivers of energy use and then normalize for those factors, a statistical analysis of the peer building population is performed. The result of this analysis is an equation that will predict the energy use of a property, based on its experienced business activities. The energy use prediction for a building is compared to its actual energy use to yield a 1 to 100 percentile ranking of performance, relative to the national population.

To be eligible for ENERGY STAR certification and any credit for this measure, a hospital must earn an ENERGY STAR score of 75 or higher, indicating that it performs better than at least 75 percent of similar buildings nationally. Hospitals will also be expected to demonstrate improvement in the score during the program.

Measure Steward:
U.S. Department of Environmental Protection and U.S. Department of Energy

Data Source: Hospital systems data

Data Collection Methodology:
Annual Energy Star for Hospitals survey submission verified by a licensed Professional Engineer (PE) or Registered Architect (RA)

Numerator:
Score at 75th percentile or above relative to national performance based on data from an industry survey conducted by the America Society for Healthcare Engineering (ASHE), a personal membership society of the American Hospital Association (AHA).

Denominator: None

Exclusions: None

Target Population Notes: All payor patients

Data Elements, Code Systems, Code Lists, Value Sets: Per Energy Star program

Risk Adjustment: Yes, the analysis includes adjustments for the following
- Building size
- Number of Full-Time Equivalent Workers
- Number of Staffed Beds
- Number of MRI Machines
Weather and Climate (using Cooling Degree Days, retrieved based on Zip code)

Timing and Time Intervals: Annual

Calculation Algorithms: Description available at:
www.energystar.gov/sites/default/files/tools/Hospital_August_2018_EN_508.pdf

Additional Considerations:
Scoring will be based on achievement of energy star certification and improvement in the score year to year.

Benchmark Information:
10 or less hospitals selected this measure:
  o The benchmark for PY3 will be 80%
  o The benchmark for PY4 will be 85%
  o The benchmark for PY5 will be 90%
Population Health/Total Cost of Care

SW-PH1 - Severity Adjusted Length of Stay (LOS)
Definition: Severity Adjusted LOS compared to statewide average.

This measure is reported as the ratio of actual average length of stay to expected average length of stay based on statewide average and risk adjustment for patient severity.

Days LOS Admit Acute is the average length of stay for acute admissions, defined as:

\[
\text{Days LOS Admit Acute} = \frac{\text{Days Admit Acute}}{\text{Admits Acute}}
\]

Acute Admissions identifies Medicaid admissions that took place in an acute inpatient setting. Acute inpatient settings include inpatient hospitals, birthing centers, inpatient psychiatric facilities, and residential substance abuse treatment facilities. The setting value is derived from the Admission record, Medstat Place Group Code value. The value is filtered to Group Code=1.

Measure Steward: IBM-Watson Truven Advantage Suite

Data Source: Medicaid claims

Data Collection Methodology: Claims analysis

Numerator: Hospitals actual average length of stay for Medicaid patients.

Denominator:
Hospitals expected average length of stay for Medicaid patients as calculated by the Truven Advantage (IBM) Reporting Suite. The expected length of stay for each hospital is the statewide average length of stay adjusted for the patient condition severity mix at each hospital.

This measure will be reported out as a ratio of actual average length of stay to expected severity adjusted average length of stay. A score over 1 indicates LOS are higher than predicted based on patient severity; a score less than 1 indicates that LOS are lower than predicted based on patient condition severity.

Exclusions:
- Transfers to or from a hospital
- Other exclusions per IBM-Watson specification

Target Population Notes: Adult and Pediatric Medicaid (primary) patients

Data Elements, Code Systems, Code Lists, Value Sets:
21 Inpatient Hospital (Place Group = 1)
Risk Adjustment:
DRG mix and severity of the admissions within each DRG. Truven Advantage Suite uses *Medstat Disease Staging Software® predictive scale values* in combination with *DRG specific adjustment factors*.

Timing and Time Intervals: Annual
Calculation Algorithms: Day count
Additional Considerations: Proprietary algorithm

Benchmark Information:
- The benchmark for PY3 will be the average performance of the top 75% of hospitals in the state during PY1
- The benchmark for PY4 will be 5% improvement of the PY3 benchmark
- The benchmark for PY5 will be 5% improvement of the PY4 benchmark

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**PH1 - Increase the Percentage of Patients who had a Well Visit within a Rolling 12-month period**

Definition:
The percentage of Medicaid patients who had a well visit within a rolling 12-month period.

Measure Steward: Colorado Department of Health Care Policy and Financing

Data Source: Medicaid claims

Data Collection Methodology: Claims analysis

Numerator:
Those that received a well visit within a rolling 12-month period.

Denominator:
All patients with an in-patient or out-patient claim.

Exclusions:
- Patients not continuously enrolled throughout the performance year.

Target Population Notes:
- Adult and Pediatric Medicaid (primary)
- Enrolled 365 days with no more than a 45-day gap in medical coverage

Data Elements, Code Systems, Code Lists, Value Sets: E and M codes

Risk Adjustment: Not applicable

Timing and Time Intervals: Annual
Calculation Algorithms: Percentage
Additional Considerations:

- Appropriate only for hospitals that are sole community providers and/or provide ambulatory care. Hospitals could work with their local RAE on this measure through referral and appointments made for patients seen in ED and/or inpatient.
- Claims with the listed diagnosis codes and billing provider types 32, 45, and 61 were included to capture FQHC, RHC, and IHS visits
- Additional claim type definition
  - Claim Type Code used include Inpatient Xover Claims (A), Inpatient Claims (I), Outpatient Xover Claims (C), Outpatient Claims (O) to retrieve all inpatient and outpatient claims
  - To retrieve well visit using procedure codes, the Claim Type Code used include: Professional Xover Claims (B), Professional Claims (M), Outpatient Xover Claims (C), Outpatient Claims (O), along with the following procedure codes: '99381', '99382', '99383', '99384', '99386', '99387', '99391', '99392', '99393', '99394', '9395', '99396', '99397', '99460', '99461', '99463'.
  - To retrieve well visit using diagnostic code, the following diagnostics codes were used: 'Z762', 'Z0000', 'Z0001', 'Z00110', 'Z00111', 'Z00121', 'Z00129', 'Z005', 'Z006', 'Z0070', 'Z0071', 'Z008', 'Z020', 'Z021', 'Z022', 'Z023', 'Z024', 'Z025', 'Z026', 'Z0281', 'Z0282', 'Z0283', 'Z0289'
- Criteria require one of the diagnosis codes AND one of the procedure codes to be present on the claim
- Additional procedure codes that were used to match the ACC KPI definition:
  - Procedure code between '99201' and '99205' or procedure code between '99211' and '99215' or procedure code in ('99304', '99305', '99306', '99307', '99308', '99309', '99310', '99311', '99312', '99313', '99315', '99316', '99318', '99341', '99342', '99343', '99344', '99345', '99347', '99348', '99349', '99350', '99406', '99407', '99408', '99409', '99415', '99416', '99420', '99429', '99401', '99402', '99403', '99404', '99411', '99412')
- Eligibility
  - Health Program Code used include ‘MEDA’, ‘MEDB’ for Medicare exclusion
  - Excluded Title XIX Aid Codes are F3 and F4 (QMB/SLMB)
  - Excluded Aid Codes include 'N1', 'N2', 'N4', 'K2', 'K7', 'F3', 'F4'

Benchmark Information:

10 or less hospitals select this measure:
- The benchmark for PY3 will be 5% improvement of the PY1(baseline) score
- The benchmark for PY4 will be 5% improvement of the PY3 benchmark
- The benchmark for PY5 will be 5% improvement of the PY4 benchmark
PH2 - Increase the Number of Patients Seen by Co-Responder Hospital Staff

**Definition:**
Increase the number of patients seen by Co-Responder hospital staff. Program description at: [www.colorado.gov/pacific/cdhs/co-responder-programs](http://www.colorado.gov/pacific/cdhs/co-responder-programs)

**Measure Steward:** Colorado Department of Health Care Policy and Financing

**Data Source:** Hospital self-report

**Data Collection Methodology:** Hospital self-reported data

**Numerator:**
Simple count of number of patient contacts by hospital supported Co-Responder staff.

**Denominator:** None

**Exclusions:** None

**Target Population Notes:** Adult all payor

**Data Elements, Code Systems, Code Lists, Value Sets:** Patient count

**Risk Adjustment:** Not applicable

**Timing and Time Intervals:** Annual

**Calculation Algorithms:** Patient count

**Additional Considerations:** Hospital diversion rate should be tracked and reported.

**Benchmark Information:**
- The benchmark for PY3 will be 5% improvement of the PY1(baseline) score
- The benchmark for PY4 will be 5% improvement of the PY3 benchmark
- The benchmark for PY5 will be 5% improvement of the PY4 benchmark

PH3 - Improve Leadership Diversity

**Definition:** Increase the percentage of management staff from underrepresented groups.

Management staff are defined as hospital employees who manage a department or have a title of director or above.

**Measure Steward:** Colorado Department of Health Care Policy and Financing

**Data Source:** Hospital self-report

**Data Collection Methodology:** Hospital human resource system

**Numerator:**
Number of hospital employed staff who manage a department or have a title of director or above and who are from underrepresented groups.

**Denominator:**
Number of hospital employed staff who manage a department or have a title of director or above.

**Exclusions:** None

**Target Population Notes:**
Hospitals will submit titles, position descriptions and numbers of management staff for consideration for inclusion in this metric.

**Data Elements, Code Systems, Code Lists, Value Sets:** Employee types

**Risk Adjustment:** Not applicable

**Timing and Time Intervals:** Annual

**Calculation Algorithms:** Percentage

**Additional Considerations:** This will be a year over year improvement over hospital baseline.

**Benchmark Information:**
10 or less hospitals selected this measure:
- The benchmark for PY3 will be 5% improvement of the PY1 (baseline) score
- The benchmark for PY4 will be 5% improvement of the PY3 benchmark
- The benchmark for PY5 will be 5% improvement of the PY4 benchmark
Statewide Priorities - Optional Choices Below

**SP-PH1 - Conversion of Freestanding EDs to Address Community Needs**

Conditions to Qualify for Freestanding ED (FSED) conversion credit:

- Identify Hospital affiliated FSEDs
  - Which hospital billing IDs were the FSEDs using?
  - Mid-point report review
- Efforts beginning October 2018 and after will be eligible
- Priorities are that FSEDs are:
  - Converted to primary care with after hours
  - Converted to BH or SUD treatment
  - Closed
- For each FSED identify:
  - Is it being converted or closed? Yes/No
  - If converted, to what?
  - If closing, why closing instead of converting?

If not converting or closing all the affiliated FSEDs, why are the remaining ones staying in place?

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**SP-PH2 - Creation of Dual Track ED**

A separate process for lower acuity patients presenting to the emergency room department with less serious conditions who can be treated more quickly and then released consisting of the following:

- Dedicated space part of or adjacent to the emergency room
- Dedicated staffing
- Explicit triage criteria
- Open a minimum of 8 hours a day
- Average wait time less than regular emergency department
- Protocols for most common conditions expected to be treated
  - Minimum of 12 protocols
**Version Control Inventory:**

**8.24.2021**
- SW3-ED ALTO Measure updated.
- BH2 - Initiation of MAT updated.
- COE1 - Summary of Care updated.
- COE2 - Implementation/expansion of Telemedicine Visits updated.
- RAH4 - Statin Medication updated to match eCQM documentation and added link.
- SW-CP1 - Added patient refusal to the exclusion list.
- CP4 - Added patient refusal to the exclusion list.
- CP6 - Added patient refusal to the exclusion list.
- Removed Attachment A Colorado Hospital Specification Detail.
- Added Benchmarks to all measures based on measure selection.

**8.30.2021**
- RAH1 - Numerator exclusion updated.

**9.23.2021**
- BH1 - Added SBIRT link.
- COE1 - Added opt-out for the summary of care record transmission to exclusion list.
- SW-BH3 - Added note about combination Opioid-ALTOs. Edited codes in Table 1 under inclusions. Edited Table 1 under exclusions. Added Table 2 under exclusions. Clarified Table 3. Added CHA contact email.
- Clarified Benchmarks.