Michigan Data Collaborative

SIM PCMH & CHIR Measure Definitions

Technical Guide

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Introduction

This guide includes technical definitions for the measures and chronic conditions included in the SIM PCMH Dashboard and the CHIR Dashboard. It also includes technical definitions for the measures included in the Care Coordination Reports for SIM PCMH.

It includes the following sections:

Quality Measure Descriptions

Utilization Measure Descriptions

Chronic Condition Descriptions

Care Management and Coordination Descriptions

Overview

The SIM PCMH Initiative has made every effort to mirror the measures determined by the Physician Payer Quality Collaborative. The PPQC "Core Set" of 27 measures has significant overlap between all or most national and local quality reporting programs. These aligned measures have been broken into two focus areas:

- **Performance Monitoring:** Monitor PCMH Initiative participant quality of care, health outcome, utilization, and cost performance using a defined set of metrics to report Initiative progress/successes and enable quality and process improvement.
- **Compliance:** Ensure PCMH Initiative participants operate in accordance with the requirements of the Initiative upon selection and on a continuous basis while participating.

SIM PCMH Patient Attribution

All members/patients included in the measures are limited to the SIM PCMH population.

How the SIM PCMH Population is Calculated

The SIM PCMH population is calculated by using a three-phased data matching process utilizing information provided by the State of Michigan, the Michigan Health Information Network (MiHIN), and the healthcare provider organizations and practices participating in the SIM PCMH Initiative.

The first phase in the process is to identify the SIM PCMH eligible beneficiary population. The list of eligible beneficiaries is determined monthly by the State of Michigan based on beneficiary-level data shared by the Medicaid Health Plans. This information is captured at the beginning of the month and stored in the MDHHS Data Warehouse. The primary data elements associated with each eligible beneficiary are as follows:

- Primary Care Physician (PCP) information (National Provider Identifier (NPI), Name)
- Benefit Program Code (TANF, ABAD, or HMP)
- Medicaid Health Plan (Plan Code, Plan Name)

In the second phase, the State of Michigan transfers the monthly list of Medicaid eligible beneficiaries to MiHIN. MiHIN's Health Directory application stores which health providers are participating in the SIM PCMH Initiative. MiHIN compares the beneficiary list they receive from the State of Michigan to the Health Directory information to determine which beneficiaries are associated with a participating PCMH. The beneficiary is considered as participating in PCMH if the beneficiary's attributed PCP's NPI number is listed as a PCMH provider in the Health Directory.

In the third and final phase, MiHIN forwards the PCMH eligible beneficiary list to the State of Michigan. The list now contains both the PCHM Practice and Managing Organization associated with the beneficiary's PCP. The State of Michigan then performs a final validation to confirm that the PCMH Practice associated with the Medicaid Health Plan in the beneficiary list matches the self-reported contractual relationships for each participating PCMH Practice. This reduces the potential for beneficiaries seen outside a participating PCMH Initiative practice to be included in the eligible population.

Quality Measure Descriptions

All quality measures are calculated using claims data.

If a measure is supplemented with clinical data, separate clinical numerator and denominator definitions are provided. Clinical (EHR) data only affects the numerator or denominator counts if a member was not already identified in the claims data.

Adolescent Immunization

Because there are two distinct numerators, the following measures are reported separately on the Dashboard:

- **Adolescent Immunization**
- **Adolescent Immunization: HPV**

Source: HEDIS 2018 Immunizations for Adolescents

Definition: The percentage of adolescents who by their 13th birthday had one or both of the following immunization sets:

- Combo 1: One dose of meningococcal vaccine and one tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap).
- Combo 2: Full completion of Combo 1 plus one HPV (human papillomavirus vaccine) combination as a two-dose vaccination of HPV with dose two following dose one by between 146 and 150 days.

Numerator: There are two numerators with results reported separately on the dashboard.

The number of adolescent members in the eligible population (denominator) who had:

- Combo 1: one dose of meningococcal vaccine and one tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap)
- Combo 2: Combo1 plus one HPV combination (two-dose vaccination of HPV, dose 2 following dose 1 between 146 and 150 days)

MDC utilizes the Michigan Care Improvement Registry (MCIR) as the source for immunization information as this data is more complete than what is available in claims.

Denominator: The number of adolescents who turn 13 years old during the measurement year.

Exclusions

- Members who use hospice services any time during the measurement year.
- Adolescents with any diagnosis of anaphylactic shock in reaction to vaccine on start date of vaccine procedure.

Value Sets: Anaphylactic Reaction to Vaccine, MDC-IMA-Vaccine-Codes, Hospice

Adolescent Well-Care

Source: HEDIS 2018 Adolescent Well Care Visits

Definition: The percentage of enrolled members who are 12–21 years of age and who had at least one comprehensive well-care visit with a PCP or an OB/GYN practitioner during the measurement year.

Numerator: The number of members who are 12-21 years old with at least one comprehensive well-care visit (Well-Care Value Set) with a PCP or an OB/GYN practitioner during the measurement year.

The PCP does not have to be assigned to the member.

PCP and OB/GYN practitioners are identified by first using the provider specialty code on the claim. If the provider specialty code is not populated, then the Provider NPI on the claim is linked to the National Plan and Provider Enumeration System (NPPES) to determine the provider specialty.

Denominator: Members who are 12–21 years old during the measurement year.

Exclusions
Members who use hospice services any time during the measurement year.

Clinical Numerator: Count of members 12-21 with at least one PCP or OB/GYN well-care visit during the measurement year as identified in EHR data.

Clinical Denominator: Same as Claims Denominator.

Value Sets: Well-Care, MDC-PCP, MDC-OBGYN, Hospice

MDC uses the CMS Taxonomy crosswalk to identify PCP and OB/GYN practitioners.

Breast Cancer Screening

Source: HEDIS 2018 Breast Cancer Screening

Definition: Percentage of women aged 50-74 who were screened for breast cancer.

Numerator: The number of eligible female members who had one or more mammograms any time between two years prior to the measurement year and the end date of the measurement year.

Denominator: Women aged 52-74 at the report end date of the measurement year. (Age of 52 accommodates the 2 years prior to the measurement period).

Exclusions
Women who:

- had a bilateral or two unilateral mastectomies.
- use hospice services during the measurement year.
- are Medicare members age 65 and older and enrolled in an institutional SNP or living long-term in an institution during the measurement year.

Clinical Numerator:	The number of eligible female members identified in EHR data who had a mammogram any time between two years prior to the measurement year and the end date of the measurement year. Include only if a mammogram is not already identified in the claims for the same service date.
Clinical Denominator:	Same as Claims Denominator. **Exclusions** Women who had bilateral mastectomy or for whom there is an evidence of two unilateral mastectomies as identified in the EHR data.
Value Sets:	Mammography, Bilateral Mastectomy, History of Bilateral Mastectomy, Unilateral Mastectomy, Bilateral Modifier, Right Modifier, Left Modifier, Unilateral Mastectomy Left, Unilateral Mastectomy Right, Absence of Right Breast, Absence of Left Breast, Hospice

Cervical Cancer Screening

Source: HEDIS 2018 Cervical Cancer Screening

Definition: Percentage of women who were screened for cervical cancer using either of the following criteria:

- Age (21-64) -Cervical cytology performed within 3 years.
- Age (30-64) - Who had cervical cytology/human papillomavirus (HPV) co-testing within 5 years.

Numerator: The number of women aged 24–64 who had cervical cytology during the measurement year or the two years prior to the measurement year.

From the women who did not meet step 1 criteria, identify women 30–64 years of age as of the measurement year:

- Who had cervical cytology.
- And a human papillomavirus (HPV) test.
- With service dates four or less days apart during the measurement year or the four years prior to the measurement year.
- And who were 30 years or older on the date of both tests.

For example, if the service date for cervical cytology was July 1 of the measurement year, then the HPV test must include a service date on or between July 1 and July 5 of the measurement year.

Denominator: Women aged 24-64 years as of the report end date of the measurement year.

Exclusions
Women who:

- had a hysterectomy with no residual cervix, cervical agenesis, or acquired absence of cervix any time during the member's history through the measurement year.
- use hospice services any time during the measurement year.

Clinical Numerator:	The number of women aged 24–64 who had cervical cytology during the measurement year or the two years prior to the measurement year as identified in EHR data.
Clinical Denominator:	Same as Claims Denominator. **Exclusions** Women who have had a CEA (Hysterectomy with No Residual Cervix) any time during the member's history through the measurement year.
Value Sets:	Cervical Cytology, HPV Tests, and Absence of Cervix, Hospice

Childhood Immunization Status

Source:	HEDIS 2018 Childhood Immunization Status
Definition:	The number of patients who turned two years old during the measurement year and received Combination 10 on or before their second birthday, based on data from the Michigan Care Improvement Registry (MCIR).
Numerator:	The number of eligible pediatric patients two years of age who had the Combo 10 set of childhood immunizations on or before their second birthday. The Combo 10 set includes: • Four diphtheria, tetanus and acellular pertussis (DTaP) vaccines • Three polio (IPV) • One measles, mumps and rubella (MMR) vaccine • Three haemophilus influenza type B (HiB) vaccines • Three hepatitis B (HepB) vaccine • One chicken pox (VZV) vaccine • Four pneumococcal conjugate (PCV) vaccines • One hepatitis A (HepA) vaccine • Two or three rotavirus (RV) vaccines • Two influenza (flu) vaccines MDC utilizes the Michigan Care Improvement Registry (MCIR) as the source for immunization information as this data is more complete than what is available in claims.
Denominator:	Children who turn 2 years old during the measurement year. **Exclusions** Members are excluded from the denominator who use hospice services any time during the measurement year.
Value Sets	Hospice

Chlamydia Screening in Women

Source: HEDIS 2018 Chlamydia Screening.

Definition: The percentage of females ages 16–24 years who were identified as sexually active and who had at least one test for chlamydia during the measurement year.

Numerator: The number of female members ages 16-24 in the eligible population who had at least one chlamydia test during the measurement year.

Denominator: The number of currently-attributed sexually active female patients aged 16-24.

- Claims used to identify sexual activity
- Pharmacy used to identify contraceptive prescriptions

Exclusions
Members who:

- requalified for the denominator only based on pregnancy test and a prescription of isotretinoin or an x-ray within 7 days.
- use hospice services any time during the measurement year.

Clinical Numerator: Number of women with a chlamydia test during the measurement year as identified in EHR data. (Administrative Claims and EHR de-duplicated based on member and date of service.)

Clinical Denominator: Same as Claims Denominator.

Diabetes Eye Exam

Source: HEDIS 2018 Comprehensive Diabetes Care-Eye Exam

Definition: Identify the diabetic population aged 18-75 who have had a screening for diabetic retinal disease with a qualified professional (optometrist/ophthalmologist).

Numerator: An eye screening for diabetic retinal disease as identified by administrative data or clinical/ EHR data (measures will not include clinical data until a later release). This includes diabetics who had one of the following:

- A retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) in the measurement year.
- A negative retinal or dilated exam (negative for retinopathy) by an eye care professional (optometrist or ophthalmologist) in the year prior to the measurement year.
- Bilateral eye enucleation anytime during the member's history through the end of the measurement year.

Eye care professionals are identified by first using the provider specialty code on the claim. If the provider specialty code is not populated, then the Provider NPI on the claim is linked to the National Plan and Provider Enumeration System (NPPES) to determine the provider specialty.

Denominator:	Members aged 18-75 years qualify for the denominator if they meet at least one of the following requirements any time during the current or prior measurement year: • At least 2 outpatient, observation, ED, or nonacute inpatient (any combination) visits with different dates of service with any diagnosis of diabetes. • An acute Inpatient visit with any diagnosis of diabetes. • At least 1 insulin or hypoglycemic/antihyperglycemics ambulatory drug dispensed in the current or prior year. **Exclusions** • Members who use hospice services any time during the measurement year. • If identified for the denominator by pharmacy claims only, exclude patients with gestational or steroid-induced diabetes in the current or prior year who do not have a Diabetes Diagnosis in any setting.
Clinical Numerator:	Number of members screened or monitored for diabetic retinal disease during the measurement period as identified in the EHR data.
Clinical Denominator:	Same as Claims Denominator.
Value Sets:	Diabetes, Observation, ED, Nonacute Inpatient, Outpatient, Acute Inpatient, Diabetes Exclusions, Diabetic Retinal Screening, Diabetic Retinal Screening with Eye Care Professional, Diabetic Retinal Screening Negative, Diabetes Mellitus Without Complications, Unilateral Eye Enucleation, Bilateral Modifier, Unilateral Eye Enucleation Left Value Set, Unilateral Eye Enucleation Right Value Set, Hospice, MDC-EYE Diabetes Medications List (Pharmacy) MDC uses the CMS Taxonomy crosswalk to identify eye care professionals.

Diabetes Hemoglobin A1C Testing

Source:	HEDIS 2018 Comprehensive Diabetes Care-HbA1c
Definition:	Identify the diabetic population aged 18-75 diagnosed who have had an HbA1c test during the measurement year as identified by claim/encounter.
Numerator:	An HbA1c test performed during the measurement year, as identified by claim / encounter.
Denominator:	See Diabetes Eye Exam and denominator exclusions. The denominator is identical for all Diabetes measures.
Clinical Numerator:	Number of members who had an HbA1c test as identified in EHR data. Administrative claims and EHR de-duplicated based on member and date of service.
Clinical Denominator:	Same as Claims Denominator.

Value Sets:	Diabetes, Observation, ED, Nonacute Inpatient, Outpatient, Acute Inpatient, Diabetes Exclusions, HbA1c Tests, Hospice Diabetes Medications List (Pharmacy)

Diabetes Medical Attention for Nephropathy

Source:	HEDIS 2018 Comprehensive Diabetes Care-Medical Attention for Nephropathy
Definition:	Identify the diabetic population aged 18-75 who have had a nephropathy screening test claim or evidence of nephropathy during the measurement year.
Numerator:	A nephropathy screening test or evidence of nephropathy as documented through administrative data. This includes diabetics who had **one** of the following during the measurement year: • A nephropathy screening Test (Urine Protein Test) or Evidence of nephropathy • Treatment by a Nephrologist • ACE/ARB Therapy in pharmacy claims
Denominator:	See Diabetes Eye Exam and denominator exclusions. The denominator is identical for all Diabetes measures.
Clinical Numerator:	Nephropathy screening test or evidence of nephropathy in the measurement period as identified by EHR data. Any of the following meet criteria for a nephropathy screening or monitoring test or evidence of nephropathy: • Urine test for albumin or protein. • Visit to a nephrologist. • Renal transplant. • Medical attention for any of the following: – Diabetic nephropathy. – ESRD. – Chronic renal failure (CRF). – Chronic kidney disease (CKD). – Renal insufficiency. – Proteinuria. – Albuminuria. – Renal dysfunction. – Acute renal failure (ARF). – Dialysis, hemodialysis or peritoneal dialysis • Evidence of receiving a prescription for ACE inhibitor/ARB therapy
Clinical Denominator:	Same as Claims Denominator

Value Sets:	Diabetes, Observation, ED, Nonacute Inpatient, Outpatient, Acute Inpatient, Diabetes Exclusions, Nephropathy Treatment, Urine Protein Tests, Kidney Transplant, ESRD, CKD Stage 4, Hospice. Diabetes Medications List and ACE Inhibitor/ARB Medications (Pharmacy) MDC uses the CMS Taxonomy crosswalk to identify treatment by a nephrologist.

Lead Screening in Children

Source:	HEDIS 2018 Lead Screening in Children
Definition:	Identify the percentage of children 2 years of age who had a lead blood test.
Numerator:	The number of patients 2 years of age who had at least one capillary or venous blood test on or before their second birthday, based on data from the Michigan Care Improvement Registry (MCIR).
Denominator:	The number of currently-attributed patients who turned two years old during the measurement year. **Exclusions** Members who use hospice services any time during the measurement year.
Clinical Numerator:	Count of members with one lead capillary or venous blood test on or before the child's second birthday. MCIR and EHR de-duplicated based on member and date of service.
Clinical Denominator:	Same as Claims Denominator.
Value Sets	Hospice

Well-Child Visits in the First 15 Months of Life

Source:	HEDIS 2018 Well-Child Visits in the First 15 Months of Life
Definition:	The percentage of members who had at least 6 well-child visits with a PCP in the first 15 months of life. MDC uses the CMS Taxonomy crosswalk to identify PCP and OB/GYN practitioners.
Numerator:	The number of patients who had 6 or more visits with a PCP during their first 15 months of life. The well-child visit must occur with a PCP, but the PCP does not have to be the practitioner assigned to the child. PCP practitioners are identified by first using the provider specialty code on the claim. If the provider specialty code is not populated, then the Provider NPI on the claim is linked to the National Plan and Provider Enumeration System (NPPES) to determine the provider specialty.

Denominator:	The number of members who are 15 months old during the measurement year. **Exclusions** Members who use hospice services any time during the measurement year.
Clinical Numerator:	Count of members with at least six PCP or OB/GYN well-child visits in the first 15 months of life: claim and EHR de-duplicated based on member and date of service. There is no taxonomy field in the clinical data, so match the provider NPI against the NPPES list taxonomy. This taxonomy is compared to the custom Value Set MDC-PCP to ensure that the provider is a PCP.
Clinical Denominator:	Same as Claims Denominator.
Value Sets:	Well-Care, MDC-PCP, MDC-OBGYN, Hospice

Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life

Source:	HEDIS 2018 Well Child Visits in Third, Fourth, Fifth and Sixth Years of Life
Definition:	The percentage of members 3–6 years of age who had one or more well-child visits with a PCP during the measurement year.
Numerator:	The number of patients 3-6 years of age who received one or more well-child visits with a PCP during the measurement year. The well-child visit must occur with a PCP, but the PCP does not have to be the practitioner assigned to the child. PCP practitioners are identified by first using the provider specialty code on the claim. If the provider specialty code is not populated, then the Provider NPI on the claim is linked to the National Plan and Provider Enumeration System (NPPES) to determine the provider specialty.
Denominator:	The number of members who are 3-6 years old during the measurement year. **Exclusions** Members who use hospice services any time during the measurement year.
Clinical Numerator:	Count of members with at least one PCP or OB/GYN well-child visit in the measurement year. There is no taxonomy field in the clinical data, so match the provider NPI against the NPPES list and obtain the Taxonomy. This taxonomy is compared to the custom Value Set MDC-PCP to ensure that the provider is a PCP.
Denominator:	Same as Claims Denominator.
Value Sets:	Well-Care, MDC-PCP, MDC-OBGYN, Hospice

Outcome Measure Descriptions

These measures rely on clinical data to measure the impact of a service or intervention.

Adult BMI

Source:	HEDIS 2018 Measure Adult BMI Assessment (ABA)
Definition:	The percentage of members between the ages of 18 and 74 who have had a BMI percentile measurement in the reporting period.
Numerator:	Patients who had a Body Mass Index percentile measurement during an outpatient visit.
Denominator:	Patients aged 18 through 74 who had a routine outpatient visit during the reporting period. **Exclusions** • Patients who use hospice services any time during the measurement year. • Female members who are pregnant.
Clinical Numerator:	Patients who had a BMI percentile measurement in the reporting period as defined in the EHR data.
Clinical Denominator:	Same as Claims Denominator.
Value Sets:	BMI, BMI Percentile, Outpatient, Hospice, Pregnancy

Controlling High Blood Pressure

Source:	HEDIS 2018 Controlling High Blood Pressure (CBP)
Definition:	Identify members 18-85 years old with a diagnosis of Hypertension and whose blood pressure was adequately controlled (less than 140/90) within the measurement year.
Numerator:	Patients whose most recent blood pressure reading is less than 140/90 taken during an outpatient visit, nonacute Inpatient stay, or an acute inpatient stay during the measurement year. The most recent blood pressure reading is used to identify whether the patient is in or out of control.
Denominator:	Members 18-85 years old with a diagnosis of Hypertension. Members are identified as hypertensive if there is at least one outpatient visit with a diagnosis of hypertension during the first six months of the measurement year. **Exclusions** • Patients who use hospice services any time during the measurement year.

	• Patients with evidence of end-stage renal disease (ESRD) or kidney transplant on or prior to the end of the measurement year. • Female patients with a current pregnancy diagnosis (if the pregnancy diagnosis occurs after the start date of the measurement year).
Clinical Numerator:	Patients whose most recent blood pressure reading is less than 140/90 during the measurement year as identified in the EHR data. If there is more than one reading for a day, the lowest SP and DP values are used, even if they are from different readings.
Clinical Denominator:	Same as Claims Denominator.
Value Sets:	Outpatient, Inpatient Stay, Nonacute Inpatient Stay, Systolic Less Than 140, Diastolic Less Than 80, Diastolic 80-89, Essential Hypertension, Outpatient Without UBREV, Hospice, Kidney Transplant, ESRD, Pregnancy

Diabetes Blood Pressure Control

Source:	HEDIS 2018 Comprehensive Diabetes Care BP Control (<140/90 mm Hg)
Definition:	Identify the percentage of patients diagnosed with diabetes who have a blood pressure reading less than 140/90 mm Hg
Numerator:	Patients whose most recent Blood Pressure reading is less than 140/90 taken during an Outpatient Visit or Nonacute Inpatient encounter during the measurement year. The most recent blood pressure reading us used to identify whether the patient is in or out of control.
Denominator:	See Diabetes Eye Exam and denominator exclusions. The denominator is identical for all Diabetes measures.
Clinical Numerator:	Patients whose most recent Blood Pressure reading is less than 140/90 during the measurement year as identified in the EHR data. If there is more than one reading for a day, the lowest SP and DP values are used, even if they are from different readings.
Clinical Denominator:	Same as Claims Denominator.
Value Sets:	Observation, ED , Nonacute Inpatient, Outpatient, Diabetes, Acute Inpatient, Diabetes Medications, Diabetes Exclusions, Hospice, Systolic Less Than 140, Diastolic Less Than 80, Diastolic 80-89

Diabetes HbA1c Poor Control

Source:	HEDIS 2018 Comprehensive Diabetes Care-HbA1c Poor Control (>9%)
Definition:	Identify the percentage of patients diagnosed with diabetes who do not have their HbA1c under control (greater than 9%). **NOTE:** A lower score indicates a better outcome.
Numerator:	A patient is included in the numerator if one of the following is true: • Most recent HbA1c level is greater than 9.0% • Missing a result • An HbA1c test was not done during the measurement year
Denominator:	See Diabetes Eye Exam and denominator exclusions. The denominator is identical for all Diabetes measures.
Clinical Numerator:	Identify patients identified in the EHR data during the measurement year whose most recent HbA1c test results were >9.
Clinical Denominator:	Same as Claims Denominator.
Value Sets:	Observation, ED OR Nonacute Inpatient, Outpatient, Diabetes, Acute Inpatient, Diabetes Medications, Diabetes Exclusions, Hospice, HbA1c Level Greater Than 9.0

Screening for Depression and Follow-Up

Because there are two distinct numerators, the following measures are reported separately on the Dashboard:

- **Depression Screen**
- **Depression Follow Up**

Source:	HEDIS 2018 Depression Screening and Follow-Up for Adolescents and Adults
Definition:	Measures the following: **Depression Screen** The percentage of members 12 years or older who were screened for clinical depression using a standardized tool. **Depression Follow Up** The percentage of members who are 12 or older who tested positive for clinical depression and received follow-up care.
Numerator:	**Depression Screen** Members who were screened for clinical depression during the measurement year using an age-appropriate standardized tool.

Depression Follow Up

Members with at least one of the following on or 30 days after the date of their first positive screen (31 days total):

- Behavioral Health Encounter
- ECDS Follow-Up Visit with Depression or Mental Illness
- Telephone Visits with Depression or Mental Illness
- Depression Case Management Encounter
- Antidepressant medications

OR

Members who received an assessment on the same day as their first positive screen indicating no depression or no symptoms requiring follow-up.

Denominator:

Depression Screen

The number of currently-attributed members who are 12 years or older by the end of the measurement year.

Exclusions

- Members who use hospice services any time during the measurement year.
- Members with a diagnosis history of any of the following:
  - Bipolar disorder during the measurement year or year prior
  - Depression during the year prior to the measurement year

Depression Follow Up

All members in the initial population who screened positive for depression

Clinical Numerator:

Depression Screen

Members who were screened for clinical depression during the measurement year using an age-appropriate standardized tool as identified in the EHR data.

Depression Follow Up

Follow-Up visits are identified with claims.

Clinical Denominator:

Depression Screen

Same as Claims Denominator for Depression Screen

Exclusions

Exclude members with a diagnosis or history of Bipolar Disorder or Depression. The exclusion has to occur in the (1) previous year or (2) in the current year, but prior to the Depression Screen.

Depression Follow Up

Follow-Up visits are identified with claims.

Value Sets: Depression Screen, Positive Depression Screen, Behavioral Health Encounter, ECDS Follow-Up Visit, Depression, Mental Illness, Telephone Visits, Depression Case Management Encounter, Antidepressant Medications, Negative Depression Screen, Hospice

Tobacco Use Screening and Cessation

Source: PQRS 2018 Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention

Definition: Identify the percentage of patients aged 18 and older who were screened for tobacco use one or more times within the past 24 months AND who received cessation counseling intervention if identified as a tobacco user.

Numerator: Patients who were screened for tobacco use at least once within the past 24 months.

AND

If identified as a tobacco user, received tobacco cessation counseling intervention (counseling, pharmacotherapy, or both).

Note: If a patient has multiple tobacco use screenings during the 24-month period, only the most recent screening, which has a documented status of tobacco user or tobacco non-user, will be used to satisfy the measure requirements.

Denominator:	Patients aged 18 years and older who were seen for at least two visits or at least one preventive visit AND If identified as a tobacco user, screened for tobacco use during the measurement period. **Exclusions** • Members for whom tobacco screening or cessation intervention was not performed due to medical reasons (e.g., limited life expectancy, other medical reasons) or not otherwise specified. • Members who use hospice services any time during the measurement year.
Clinical Numerator:	Add to the numerator if not already identified from claims as a Tobacco User AND counseling was provided.
Clinical Denominator:	Claims are used to define the denominator. **Exclusion** Exclude if not already excluded based on claims and have determined the patient is not a tobacco user (Never Used or Past User) during the same service date as the encounter that identified them in claims.
Value Sets:	MDC - Tobacco Encounter Visits, MDC - Tobacco Preventive Visits, MDC - Tobacco Use Screening: User, MDC-Telehealth Modifiers, MDC-Tobacco Use: Medical Reason Exclusion, MDC-Tobacco Use Cessation Intervention: User, MDC-Tobacco Use Screening: Non-User, Hospice Value sets starting with “MDC –“ are PQRS code lists.

Weight Assessment and Counseling and Counseling for Nutrition and Physical Activity for Children/Adolescents (WCC)

Source: HEDIS 2018 Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents

Definition: Percentage of members aged 3-17 years with an outpatient visit to a PCP or OB/GYN and who had evidence of:

- BMI percentile documentation (Because BMI norms for youth vary with age and gender, this measure evaluates whether BMI percentile is assessed rather than an absolute BMI value)
- Counseling for nutrition
- Counseling for physical activity

NOTES:

- The BMI Percentile definition is based on the CDC's BMI-for-age growth charts, which indicates the relative position of the patient's BMI number among others of the same gender and age.
- MDC uses the CMS Taxonomy crosswalk to identify PCP and OB/GYN practitioners.

Numerator: Patients aged 3-17 who have had their BMI percentile measured AND have also had counseling for both nutrition and physical activity during the measurement year.

Denominator: Patients aged 3-17 who had an outpatient visit with a PCP or an OB/GYN during the reporting period.

Exclusions

- Members who use hospice services any time during the measurement year.
- Female members who have a diagnosis of pregnancy

Clinical Numerator: Add to the numerator if not already identified from claims as a patient who had a BMI assessment and counseling for both nutrition and physical activity.

There is no taxonomy field in the clinical data, so match the provider NPI against the NPPES list taxonomy. This taxonomy is compared to the custom Value Set MDC-PCP to ensure that the provider is a PCP or OB/GYN.

Clinical Denominator: Same as claims denominator.

Value Sets: Outpatient, MDC-PCP, MDC-OBGYN, Pregnancy, BMI Percentile, Nutrition Counseling, Physical Activity Counseling, Hospice

Utilization Measure Descriptions

Acute Hospital Admissions

Source: HEDIS 2018 Inpatient Utilization – General Hospital/Acute Care.

Definition: The number of acute hospital admissions per 1,000 attributed members.

Numerator: Count of acute admissions that have occurred during the 12-month measurement year for the current attributed members.

Admissions are created by evaluating claims:

1. Select records in the Inpatient Stay value set.
2. **Exclude** records in the following value sets:
   - Nonacute Inpatient Stay
   - Mental and Behavioral Disorders
   - Maternity
   - IPU Exclusions
   - Deliveries Infant
   - Newborn/Neonates
   - Discharge status of death
3. Establish the time window for the admission based on earliest and latest service dates.
4. Determine if a transfer occurred based on discharge status and extend the time window if a transfer occurred.

Denominator: All members of the population with continuous enrollment for the current and previous reporting period.

Exclusions

Members who use hospice services any time during the measurement year.

Value Sets: Hospice, Inpatient Stay, Nonacute Inpatient Stay, Mental and Behavioral Disorders, IPU Exclusions MS-DRG, Maternity, Maternity Diagnosis, Maternity MS-DRG, Deliveries Infant Record, Newborn/Neonates MS-DRG

All Cause Readmissions

Source: HEDIS 2018 Plan All-Cause Readmissions

Definition: Count of acute inpatient hospital stays that were followed by a readmission for any diagnosis within 30 days for patients aged 18 and older during the measurement year.

Acute Hospital Admissions are the basis for the denominator for this measure.

Numerator: Number of stays with at least one acute readmission for any diagnosis within 30 days after the Index Discharge Date.

- Identify all acute inpatient stays with a discharge date in the reporting year.
- For transfers keep the original admission date, but use the transfer's discharge date.

Exclusions

Inpatient hospital admissions for female members with a principal diagnosis of pregnancy or perinatal conditions.

Denominator: The number of admission (discharges), rather than members.

1. Identify inpatient admissions with a discharge date in the measurement year.
2. For transfers keep the original admission date, but use the discharge date of the transfer.
3. Exclude:
   - Members who use hospice services any time during the measurement year.
   - Hospital stays where the Admission Date is the same as the Discharge Date.
   - Inpatient hospital admissions for females with a principal diagnosis of pregnancy or perinatal period.
   - Inpatient stays with discharge for death.
   - Planned admissions (chemotherapy, rehabilitation, organ transplant, potentially planned procedures with a principal diagnosis, or Introduction of autologous pancreatic cells).

Value Sets: Pregnancy, Perinatal Conditions, Hospice, Chemotherapy, Rehabilitation, Bone Marrow Transplant, Kidney Transplant, Organ Transplant other than Kidney, Potentially Planned Procedures, Acute Condition, Introduction of Autologous Pancreatic Cells

Emergency Department Visits

Source: HEDIS 2018 Emergency Department Utilization

Definition: ED visits are outpatient ED events determined by facility claims and not part of an admission. ED Events are defined as each service date visit to an ED that does not result in an inpatient encounter. Events are counted once per service date; regardless of the intensity or duration of the visit. The resulting measure is the number of ED Visits per 1,000 attributed members.

Numerator: ED Events within the measurement period for eligible population. Multiple service dates occurring on the same date are counted as one event. ED visits are identified by:

- Facility claim in the ED Value Set

OR

- Facility claim with procedure code in ED Procedure Code Value Set with an ED Place of Service

Exclusions

- ED visits that result in a hospital admission
- ED visits for mental health or chemical dependency, psychiatry or electroconvulsive therapy

Denominator: All members of the population with continuous enrollment for the current and previous reporting period.

Exclusions

Members who use hospice services any time during the measurement year.

Value Sets: ED, ED Procedure Code, ED POS, Hospice, Mental and Behavioral Disorders, Psychiatry, Electroconvulsive Therapy, Inpatient Stay

Preventable ED Visits

Source: New York University (NYU) ED Algorithm and HEDIS 2018 Emergency Department Utilization

Definition: The rate of Preventable ED Visits per thousand members.

For the calculation, three preventable categories and one non-preventable category are used:

Preventable

Preventable ED visits are defined as the primary diagnosis combined probability of the NYU categories below was greater than the probability of Emergent – ED Care Needed.

- **Non-Emergent**: immediate medical care was not required within 12 hours, based on the patient's initial complaint, presenting symptoms, vital signs, medical history and age.
- **Emergent – Primary Care Treatable**: Treatment required within 12 hours, but care could have been provided effectively and safely in a primary care setting, based on information in the record. The complaint did not require continuous observation and no procedures were performed or resources used that are not available in a primary care setting (e.g., CAT scan or certain lab tests).
- **Emergent – ED Care Needed – Preventable/Avoidable**: ED care was required based on the complaint or procedures performed/resources used, but the emergent nature of the condition was potentially preventable/avoidable if timely and effective ambulatory care had been received during the episode of illness (e.g., the flare-ups of asthma, diabetes, congestive heart failure etc.)

  NOTE: Multiple events occurring on the same date are counted as one visit.

Not Preventable

- **Emergent – ED Care Needed – Not Preventable/Avoidable**: ED care was required and ambulatory care treatment could not have prevented the condition (e.g., trauma, appendicitis, myocardial infarction, etc.)

For information about how ED events are identified, see Emergency Department Visits.

Numerator: ED visits that were preventable/Avoidable using the NYU Algorithm.

Step 1: Identify ED events based on the Emergency Department Visits definition

Step 2: Apply NYU probabilities using ED visit primary diagnosis to these categories:

1. Non-Emergent
2. Emergent-Primary Care Treatable

3. Emergent – ED Care Needed – Preventable/Avoidable
4. Emergent – ED Care Needed – Not Preventable/Avoidable.

Calculate Preventable/Avoidable score:
Non-Emergent + Emergent Primary Care Treatable + Emergent ED Care Needed, Preventable/Avoidable

Calculate Non-Preventable Score:
Emergent – ED Care Needed – Not Preventable/Avoidable.

Step 3: Group multiple member events occurring on the same date as one visit. Where members have multiple claims for an ED event, select the primary diagnosis code with the highest Not Preventable/Avoidable score (or lowest Preventable/Avoidable Score).

Step 4: Identify member visits for inclusion in the numerator where the Preventable/Avoidable score is greater than the Not Preventable/Avoidable score.

Denominator: All members of the population with continuous enrollment for the current and previous reporting period.

Exclusions
Exclude members from the denominator who use hospice services any time during the measurement year.

Value Sets: Hospice (Also see ED Visits for value sets used to generate ED Visits.)

NYU Categories: Non-Emergent; Emergent, Primary Care Treatable; Emergent, ED Care Needed, Preventable/Avoidable; Emergent, ED Care Needed, Not Preventable/Avoidable

Ambulatory Care Sensitive Measure Descriptions

About the Ambulatory Care Sensitive (ACSC) Measures

These measures were added to the Dashboard in Enhancement 6.01.

The Agency for Healthcare Research and Quality (AHRQ) publishes prevention quality indicators (PQIs), a set of measures that can be used with hospital inpatient claims to identify quality of care for ambulatory care sensitive conditions. These are conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease. A lower rate indicates better performance.

There are separate measures for adult and pediatric patients. MDC is providing the following ACSC Composite Measures, which each are comprised of a subset of the ACSC measures:

- Adult Overall Composite
- Adult Acute Composite
- Adult Chronic Composite
- Adult Diabetes Composite
- Pediatric Overall Composite
- Pediatric Acute Composite
- Pediatric Chronic Composite

Inpatient Stays

Inpatient stays are defined generally in the AHRQ technical specifications. The exclusions that apply to every measure are defined here once. If a particular measure includes additional exclusions, they are noted in that section.

MDC uses the Inpatient Stay HEDIS value sets and AHRQ code lists to identify inpatient stays and the following exclusions:

- Any inpatient stay with a transfer from a hospital (different facility), skilled nursing facility (SNF), Intermediate Care Facility (ICF), or any other health care facility.
- AHRQ uses the major diagnostic category of Pregnancy, Childbirth and Puerperium. This is not available on the claims, so MDC uses the HEDIS value sets to identify the same types of hospital stays.

Value Sets: Inpatient Stay, MDC-Admit-Source, MDC-Discharge-Status, Maternity Diagnosis, Maternity, Maternity MS-DRG, Deliveries Infant Record, and Newborn/Neonates MS-DRG.

Value sets starting with “MDC – “ contain AHRQ code lists.

Adult Overall Composite

Source: AHRQ Prevention Quality Indicators (PQIs) version 7. AHRQ published the **Prevention Quality Overall Composite**, composed of both the acute and chronic PQIs.

Definition: The percentage of patients age 18 years or older with unique hospital admissions in the following adult PQIs:

- PQI#1: Diabetes Short-Term Complications Admission Rate
- PQI#3: Diabetes Long-Term Complications Admission Rate
- PQI#5: COPD or Asthma in Older Adults Admission Rate
- PQI#7: Hypertension Admission Rate
- PQI#8: Heart Failure Admission Rate
- PQI#10: Dehydration Admission Rate
- PQI#11: Community Acquired Pneumonia Admission Rate
- PQI#12: Urinary Tract Infection Admission Rate
- PQI#14: Uncontrolled Diabetes Admission Rate
- PQI#15: Asthma in Younger Adults Admission Rate
- PQI#16: Lower-Extremity Amputation among Patients with Diabetes Admission Rate

Numerator: Unique sum of Inpatient Stays for patients ages 18 years and older in any of the PQIs listed above. If a patient qualifies for multiple PQIs, only one of them is counted toward the numerator.

Exclusions

- Standard exclusions for all Inpatient Stays
- See the additional exclusions for each individual PQI definition

Denominator: All members of the adult SIM population (aged 18 or older).

Value Sets: See the value sets for each individual PQI.

Adult Acute Composite

Source: AHRQ Prevention Quality Indicators (PQIs) version 7. AHRQ published the **Prevention Quality Acute Composite**, composed of dehydration, community acquired pneumonia, or urinary tract infection.

Definition: The percentage of patients age 18 years or older with unique hospital admissions in the following adult PQIs:

- PQI#10: Dehydration Admission Rate
- PQI#11: Community Acquired Pneumonia Admission Rate
- PQI#12: Urinary Tract Infection Admission Rate

Numerator: Unique sum of Inpatient Stays for patients ages 18 years and older in any of the PQIs listed above. If a patient qualifies for multiple PQIs, only one of them is counted toward the numerator.

Exclusions

- Standard exclusions for all Inpatient Stays
- See the additional exclusions for each individual PQI definition

Denominator: All members of the adult SIM population (aged 18 or older).

Value Sets: See the value sets for each individual PQI.

Adult Chronic Composite

Source: AHRQ Prevention Quality Indicators (PQIs) version 7. AHRQ published the **Prevention Quality Chronic Composite**, composed of diabetes with short-term complications, diabetes with long-term complications, uncontrolled diabetes without complications, diabetes with lower-extremity amputation, chronic obstructive pulmonary disease, asthma, hypertension, or heart failure without a cardiac procedure.

Definition: The percentage of patients age 18 years or older with unique hospital admissions in the following adult PQIs:

- PQI#1: Diabetes Short-Term Complications Admission Rate
- PQI#3: Diabetes Long-Term Complications Admission Rate
- PQI#5: Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate
- PQI#7: Hypertension Admission Rate
- PQI#8: Heart Failure Admission Rate
- PQI#14: Uncontrolled Diabetes Admission Rate
- PQI#15: Asthma in Younger Adults Admission Rate
- PQI#16: Lower-Extremity Amputation among Patients with Diabetes Admission Rate

Numerator: Unique sum of Inpatient Stays for patients ages 18 years and older in any of the PQIs listed above. If a patient qualifies for multiple PQIs, only one of them is counted toward the numerator.

Exclusions
- Standard exclusions for all Inpatient Stays
- See the additional exclusions for each individual PQI definition

Denominator: All members of the adult SIM population (aged 18 or older).

Value Sets: See the value sets listed for each individual PQI.

Adult Diabetes Composite

Source: AHRQ Prevention Quality Indicators (PQIs) version 7. AHRQ published the **Prevention Quality Diabetes Composite**, composed of diabetes with short-term complications, diabetes with long-term complications, uncontrolled diabetes without complications, and diabetes with lower-extremity amputation.

Definition: The percentage of patients age 18 years or older with unique hospital admissions in the following adult PQIs:

- PQI#1: Diabetes Short-Term Complications Admission Rate
- PQI#3: Diabetes Long-Term Complications Admission Rate
- PQI#14: Uncontrolled Diabetes Admission Rate
- PQI#15: Asthma in Younger Adults Admission Rate
- PQI#16: Lower-Extremity Amputation among Patients with Diabetes Admission Rate

Numerator: Unique sum of Inpatient Stays for patients ages 18 years and older in any of the PQIs listed above. If a patient qualifies for multiple PQIs, only one of them is counted toward the numerator.

Exclusions
- Standard exclusions for all Inpatient Stays
- See the additional exclusions for each individual PQI definition

Denominator: All members of the adult SIM population (aged 18 or older).

Value Sets: See the value sets listed for each individual PQI.

Pediatric Overall Composite

Source: AHRQ Pediatric Quality Indicators (PDIs) version 7. AHRQ published the **Pediatric Overall Composite**, composed of both the acute and chronic PDIs.

Definition: The percentage of patients ages 6 to 17 years with unique hospital admissions in the following PDIs:

- PDI#14: Asthma Admission Rate
- PDI#15: Diabetes Short-Term Complications Admission Rate
- PQI#16: Gastroenteritis Admission Rate
- PDI#18: Urinary Tract Infection Admission Rate

Numerator: Unique sum of Inpatient Stays for patients 6 to 17 years in any of the PDIs listed above. If a patient qualifies for multiple PDIs, only one of them is counted toward the numerator.

NOTE: Because the separate PDIs have varying age constraints, patients will sometimes be included in a PDI but not in the composite. For example, Asthma includes patients aged 2 through 17, but the composite includes patients aged 6 to 17.

Exclusions

- Standard exclusions for all Inpatient Stays
- See the additional exclusions for each individual PQI definition

Denominator: All members of the pediatric SIM population (ages 6 -17).

Value Sets: See the value sets listed for each individual PQI.

Pediatric Acute Composite

Source: AHRQ Pediatric Quality Indicators (PDIs) version 7. AHRQ published the Pediatric **Overall Composite**, composed of both the acute and chronic PDIs.

Definition: The percentage of patients ages 6 to 17 years with unique hospital admissions in the following PDIs:

- PQI#16: Gastroenteritis Admission Rate
- PDI#18: Urinary Tract Infection Admission Rate

Numerator: Unique sum of Inpatient Stays for patients 6 to 17 years in any of the PDIs listed above. If a patient qualifies for multiple PDIs, only one of them is counted toward the numerator.

NOTE: Because the separate PDIs have varying age constraints, patients will sometimes be included in a PDI but not in the composite. For example, Gastroenteritis includes patients aged 3 months through 17, but the composite includes ages patients aged 6 to 17.

Exclusions

- Standard exclusions for all Inpatient Stays
- See the additional exclusions for each individual PQI definition

Denominator: All members of the pediatric SIM population (ages 6 -17).

Value Sets: See the value sets listed for each individual PQI.

Pediatric Chronic Composite

Source: AHRQ Pediatric Quality Indicators (PDIs) version 7. AHRQ published the **Pediatric Quality Chronic Composite**, composed of Asthma and Diabetes Short-Term Complications.

Definition: The percentage of patients ages 6 to 17 years with unique hospital admissions in the following PDIs:

- PDI#14: Asthma Admission Rate
- PDI#15: Diabetes Short-Term Complications Admission Rate

Numerator: Unique sum of Inpatient Stays for patients 6 to 17 years in any of the PDIs listed above. If a patient qualifies for multiple PDIs, only one of them is counted toward the numerator.

NOTE: Because the separate PDIs have varying age constraints, patients will sometimes be included in a PDI but not in the composite. For example, Asthma includes patients aged 2 through 17, but the composite includes patients aged 6 to 17.

Exclusions

Standard exclusions for all Inpatient Stays and also see each separate PDI definition for additional exclusions

Denominator: All members of the pediatric SIM population (ages 6 -17).

Value Sets: See the value sets listed for each individual PQI.

Adult Prevention Quality Indicators

The individual PQIs that comprise the composite measures are defined in this section.

PQI #1: ADULT DIABETES SHORT-TERM COMPLICATIONS

Source:	AHRQ Prevention Quality Indicators (PQIs) version 7
Definition:	Prevention Quality Diabetes Short-Term Complications (PQI 1).
Numerator:	Inpatient Stays for patients age 18 years or older with a principal diagnosis for diabetes short-term complications (ketoacidosis, hyperosmolarity or coma). **Exclusions** Standard exclusions for all Inpatient Stays (no additional exclusions)
Denominator:	All members of the adult SIM population (aged 18 or older).
Value Sets:	In addition to those defined in the Inpatient Stays section: MDC-Diabetes-Short-Term-Complications (AHRQ code set)

PQI #3: ADULT DIABETES LONG-TERM COMPLICATIONS

Source:	AHRQ Prevention Quality Indicators (PQIs) version 7
Definition:	Prevention Quality Diabetes Long-Term Complications (PQI 3).
Numerator:	Inpatient Stays for patients age 18 years or older with a principal diagnosis for diabetes long-term complications (renal, eye, neurological, circulatory, or complications not otherwise specified). **Exclusions** Standard exclusions for all Inpatient Stays (no additional exclusions)
Denominator:	All members of the adult SIM population (aged 18 or older).
Value Sets:	In addition to those defined in the Inpatient Stays section: MDC-Diabetes-Long-Term-Complications (AHRQ code set)

PQI #5: ADULT COPD OR ASTHMA IN OLDER ADULTS

Source:	AHRQ Prevention Quality Indicators (PQIs) version 7
Definition:	Prevention Quality Chronic Obstructive Pulmonary Disease or Asthma in Older Adults (PQI 5).
Numerator:	Inpatient Stays for patients age **40** years or older with a principal diagnosis for COPD or Asthma. **Exclusions** • Standard exclusions for all Inpatient Stays • Inpatient Stay with any diagnosis for Cystic Fibrosis and Respiratory System Anomalies

Denominator:	All members of the older adult SIM population (aged 40 or older).
Value Sets:	In addition to those defined in the Inpatient Stays section: MDC-COPD, MDC-Asthma, MDC-Cystic-Fibrosis-and-Respiratory-System-Anomalies (AHRQ code sets)

PQI #7: ADULT HYPERTENSION

Source:	AHRQ Prevention Quality Indicators (PQIs) version 7
Definition:	Prevention Quality Hypertension (PQI 7).
Numerator:	Inpatient Stays for patients age 18 years or older with a principal diagnosis for Hypertension. **Exclusions** • Standard exclusions for all Inpatient Stays • Inpatient Stay with cardiac procedures • Inpatient Stay with any diagnosis for Stage I-IV kidney disease, only if accompanied by any-listed ICD-10 procedure codes for dialysis access
Denominator:	All members of the adult SIM population (aged 18 or older).
Value Sets:	In addition to those defined in the Inpatient Stays section: MDC-Hypertension, MDC-Cardiac-Procedure, MDC-Kidney Disease, MDC-Dialysis (AHRQ code sets)

PQI #8: ADULT HEART FAILURE

Source:	AHRQ Prevention Quality Indicators (PQIs) version 7
Definition:	Prevention Quality Heart Failure (PQI 8).
Numerator:	Inpatient Stays for patients age 18 years or older with a principal diagnosis for Heart Failure. **Exclusions** • Standard exclusions for all Inpatient Stays • Inpatient Stay with cardiac procedures
Denominator:	All members of the adult SIM population (aged 18 or older).
Value Sets:	In addition to those defined in the Inpatient Stays section: MDC-Heart Failure, MDC-Cardiac-Procedure (AHRQ code sets)

PQI #10: ADULT DEHYDRATION

Source: AHRQ Prevention Quality Indicators (PQIs) version 7

Definition: Prevention Quality Dehydration (PQI 10).

Numerator: Inpatient Stays for patients age 18 years or older with either:

1. Principal diagnosis for dehydration

OR

2. Principal diagnosis of hyperosmolality and/or hypernatremia with a secondary diagnosis of dehydration

   OR

   Principal diagnosis for gastroenteritis

   OR

   A principal diagnosis for acute kidney injury

Exclusions

- Standard exclusions for all Inpatient Stays
- Inpatient stay with any diagnosis for chronic renal failure

Denominator: All members of the adult SIM population (aged 18 or older).

Value Sets: In addition to those defined in the Inpatient Stays section: MDC-Dehydration, MDC-Hyperosmolality, MDC-Gastro, MDC-Acute Kidney Failure, MDC-Chronic Renal Failure (AHRQ code sets).

PQI #11: COMMUNITY ACQUIRED PNEUMONIA ADMISSION

Source: AHRQ Prevention Quality Indicators (PQIs) version 7

Definition: Prevention Quality Community-Acquired Pneumonia Admission (PQI 11).

Numerator: Inpatient Stays for patients age 18 years or older with principal diagnosis for bacterial pneumonia.

Exclusions

- Standard exclusions for all Inpatient Stays
- Inpatient stay with any diagnosis for sickle cell anemia or HB-S disease
- Inpatient stay with any diagnosis or ICD procedure for immunocompromised state

Denominator: All members of the adult SIM population (aged 18 or older).

Value Sets: In addition to those defined in the Inpatient Stays section: Bacterial Pneumonia, Sickle Cell Anemia and HB-S Disease (HEDIS value sets since they are identical to AHRQ), MDC-Immunocompromised-Diagnoses (AHRQ code set).

PQI #12: URINARY TRACT INFECTION

Source:	AHRQ Prevention Quality Indicators (PQIs) version 7
Definition:	Prevention Quality Community-Urinary Tract Infection (PQI 12).
Numerator:	Inpatient Stays for patients age 18 years or older with principal diagnosis for urinary tract infection. **Exclusions** • Standard exclusions for all Inpatient Stays • Inpatient stay with any diagnosis for kidney/urinary tract disorder • Inpatient stay with any diagnosis or ICD procedure for immunocompromised state
Denominator:	All members of the adult SIM population (aged 18 or older).
Value Sets:	In addition to those defined in the Inpatient Stays section: Urinary Tract Infection (HEDIS value set since it is identical to AHRQ), MDC-Kidney-and-Urinary-Tract-Disorders, MDC-Immunocompromised-Diagnoses (AHRQ code sets).

PQI #14: ADULT UNCONTROLLED DIABETES

Source:	AHRQ Prevention Quality Indicators (PQIs) version 7
Definition:	Prevention Quality Uncontrolled Diabetes (PQI 14).
Numerator:	Inpatient Stays for patients age 18 years or older with a principal diagnosis for diabetes without mention of short-term (hyperosmolarity, or coma) or long-term. **Exclusions** Standard exclusions for all Inpatient Stays (no additional exclusions)
Denominator:	All members of the adult SIM population (aged 18 or older).
Value Sets:	In addition to those defined in the Inpatient Stays section: MDC-Uncontrolled-Diabetes (AHRQ code set)

PQI #15: ADULT ASTHMA IN YOUNGER ADULTS

Source:	AHRQ Prevention Quality Indicators (PQIs) version 7
Definition:	Prevention Quality Asthma in Younger Adults (PQI 15).
Numerator:	Inpatient Stays for patients ages **18 - 39 years** with a principal diagnosis for asthma. **Exclusions** • Standard exclusions for all Inpatient Stays • Inpatient Stay with any diagnosis for Cystic Fibrosis and Respiratory System Anomalies
Denominator:	All members of the younger adult SIM population (aged 18 to 39).
Value Sets:	In addition to those defined in the Inpatient Stays section: Asthma Diagnosis (HEDIS value set since it is identical to AHRQ), MDC-Cystic-Fibrosis-and-Respiratory-System-Anomalies (AHRQ code sets)

PQI #16: LOWER-EXTREMITY AMPUTATION AMONG PATIENTS WITH DIABETES

Source:	AHRQ Prevention Quality Indicators (PQIs) version 7
Definition:	Prevention Quality Lower-Extremity Amputation Among Patients with Diabetes (PQI 16).
Numerator:	Inpatient Stays for patients ages 18 or older with any diagnosis of diabetes and any listed procedure of lower-extremity amputation (except toe amputations). **Exclusions** • Standard exclusions for all Inpatient Stays • Inpatient Stay with any diagnosis for traumatic lower-extremity amputations
Denominator:	All members of the adult SIM population (aged 18 or older).
Value Sets:	In addition to those defined in the Inpatient Stays section: MDC-Diabetes, MDC-Amputation, (AHRQ code sets), Traumatic Amputation (HEDIS value set since it is identical to AHRQ)

Pediatric Quality Indicators

The individual PDIs that comprise the composite measures are defined in this section.

PDI #14: PEDIATRIC ASTHMA

Source:	AHRQ Pediatric Quality Indicators (PDIs) version 7
Definition:	Pediatric Quality Asthma (PDI 14).
Numerator:	Inpatient Stays for patients ages **2 through 17** with a principal diagnosis of asthma. **Exclusions** • Standard exclusions for all Inpatient Stays • Inpatient Stay with any diagnosis for cystic fibrosis and anomalies of the respiratory system
Denominator:	Members of the pediatric SIM population (aged 2 through 17).
Value Sets:	In addition to those defined in the Inpatient Stays section: Asthma (HEDIS value set since it is identical to AHRQ) MDC-Cystic-Fibrosis-and-Respiratory-System-Anomalies, (AHRQ code set)

PDI #15: PEDIATRIC DIABETES SHORT-TERM COMPLICATIONS

Source:	AHRQ Pediatric Quality Indicators (PDIs) version 7
Definition:	Pediatric Quality Diabetes Short-Term Complications (PDI 15).
Numerator:	Inpatient Stays for patients ages **6 through 17** with a principal diagnosis of diabetes short-term complications (ketoacidosis hyperosmolarity, or coma). **Exclusions** Standard exclusions for all Inpatient Stays (no additional exclusions)
Denominator:	Members of the pediatric SIM population (aged 6 through 17).
Value Sets:	In addition to those defined in the Inpatient Stays section: MDC-Diabetes-Short-Term-Complications (AHRQ code set)

PDI #16: PEDIATRIC GASTROENTERITIS

Source:	AHRQ Pediatric Quality Indicators (PDIs) version 7
Definition:	Pediatric Quality Asthma (PDI 16).
Numerator:	Inpatient Stays for patients ages **3 months through 17** with either: • Principal diagnosis of gastroenteritis OR • Principal diagnosis of dehydration with a secondary diagnosis of gastroenteritis **Exclusions** • Standard exclusions for all Inpatient Stays • Inpatient Stay with any diagnosis for gastrointestinal abnormalities • Inpatient Stay with any diagnosis for bacterial gastroenteritis
Denominator:	Members of the pediatric SIM population (aged 3 months through 17).
Value Sets:	In addition to those defined in the Inpatient Stays section: MDC-Gastro, MDC-Excl Gastro Peds (AHRQ code sets.

PDI #18: PEDIATRIC URINARY TRACT INFECTION

Source:	AHRQ Pediatric Quality Indicators (PDIs) version 7
Definition:	Pediatric Quality Urinary Tract Infection (PDI 18).
Numerator:	Inpatient Stays for patients ages **3 months through 17** with a principal diagnosis of Urinary Tract Infection **Exclusions** • Standard exclusions for all Inpatient Stays • Inpatient Stay with any diagnosis for kidney/urinary tract disorder • Inpatient Stay with any diagnosis for high-risk immunocompromised state • Inpatient Stay with any ICD Procedure for transplant (high-risk immunocompromised state procedures) • Inpatient Stay with any diagnosis for intermediate-risk immunocompromised state (including hepatic failure and cirrhosis)
Denominator:	Members of the pediatric SIM population (aged 3 months through 17).
Value Sets:	In addition to those defined in the Inpatient Stays section: Urinary Tract Infection (HEDIS value set since it is identical to AHRQ), MDC-Kidney and Urinary Tract Disorder, MDC-PED High Risk Imm, MDC-PED High Risk Imm Proc, MDC-Ped Int Risk Imm (AHRQ code sets)

Chronic Condition Descriptions

Asthma

Source: Custom MDC measure with a numerator based on HEDIS 2018 *Medication Management for People with Asthma (MMA)*, and *Asthma Medication Ratio (AMR)* definitions of asthma population and denominator.

Definition: Measure the percentage of members who have chronic asthma.

Numerator: The numerator includes members who are defined as having persistent asthma by meeting at least one of the following criteria:

- one Emergency Department visit with asthma as the principle diagnosis
- one Acute Inpatient encounter with asthma as the principal diagnosis
- at least four outpatient or observation visits with asthma as any diagnosis
- at least four asthma medication dispensing events (If all prescriptions are for Leukotriene modifiers or antibody inhibitors, the patient must also have an asthma diagnosis.)

Exclusions

- Members who had a diagnosis from any of the following value sets any time during the member's history through end of the current measurement year:
  - Emphysema
  - Other Emphysema
  - COPD
  - Obstructive Chronic Bronchitis
  - Chronic Respiratory Conditions Due to Fumes/Vapors
  - Cystic Fibrosis
  - Acute Respiratory Failure
- Members who have only leukotriene modifier pharmacy events and no diagnosis of Asthma.

Denominator: All members of the SIM population regardless of eligibility, enrollment, age, or diagnosis.

Exclusions

Members who use hospice services any time during the measurement year.

Value Sets: ED, Asthma, Acute Inpatient, Observation, Outpatient, Emphysema, Other Emphysema, COPD, Obstructive Chronic Bronchitis, Chronic Respiratory Conditions Due To Fumes/Vapors, Cystic Fibrosis, Acute Respiratory Failure, Hospice

Asthma Controller Medications and Asthma Reliever Medications (Pharmacy)

Diabetes

Source: Based on HEDIS 2018 Comprehensive Diabetes Care measures.

Definition: Measure the percentage of members who have diabetes.

Numerator: Members qualify for the numerator if they meet at least one of the following requirements in all available data received by MDC:

- At least 2 Outpatient, Observation, ED, or Nonacute Inpatient (any combination) visits with different dates of service with any diagnosis of Diabetes.
- An Acute Inpatient visit and any diagnosis of Diabetes.
- Dispensed insulin or hypoglycemics/ antihyperglycemics on an ambulatory basis

Denominator: All members of the SIM PCMH population.

Exclusions
Members who use hospice services any time during the measurement year.

Value Sets: Outpatient, Observation, ED, Nonacute Inpatient, Diabetes, Acute Inpatient, Diabetes Medication List, Hospice

Hypertension

Source: Custom MDC measure based on the HEDIS 2018 Controlling Blood Pressure specifications (CBP). However, unlike the HEDIS specification, it includes ALL members with hypertension rather than limiting based on age.

Definition: Measure the percentage of adults who were ever told they have hypertension or high blood pressure.

Numerator: Patients who had any diagnosis of hypertension before the end of the reporting period.

Note: Only CPT codes are used to identify outpatient visits.

Exclusions

- Members who have had a kidney transplant
- Female members who are pregnant (if patient did not have any diagnosis for Essential Hypertension in the reporting year prior to the measurement year)
- Members with End Stage Renal Disease (ESRD)

Denominator: All members of the SIM PCMH population.

Exclusions
Members who use hospice services any time during the measurement year.

Value Sets: Outpatient Without UBREV, Essential Hypertension, Kidney Transplant, Pregnancy, ESRD, Hospice

Obesity

Source: Custom MDC measure based on definitions from the CDC, CHRT, and the American Congress of Obstetricians and Gynecologists.

Definition: Track all patients who are outside of the range of healthy weight, including overweight and obese patients. The measure assigns patients to the following categories: Overweight, Moderate Obesity, and Severe Obesity.

Numerator: A patient is defined as overweight /obese if a diagnosis includes any of the related ICD9/10CM Diagnostic codes in the most recent measurement year.

The following BMI definitions are used to categorize patients:

Adult Patients:

- BMI of 25.0 - 29.9 (Overweight)
- BMI of 30.0 – 34.9 (Moderate Obesity)
- BMI of 35.0 or greater (Severe Obesity)

Pediatric Patients:

- BMI at or above the 85th percentile and below the 94th percentile (Overweight)
- BMI at or above 95th percentile (Obese)

Denominator: All members of the SIM PCMH population.

Exclusions

This measure includes only the data for the most recent twelve months.

Value Sets: MDC-Overweight, MDC-Moderate Obesity, MDC-Severe Obesity

Miscellaneous Measure Descriptions

Total Cost PMPM

Source: Based on the aggregated medical and pharmacy claim paid amounts and total member months eligible in the measurement period.

Definition: Define the total cost per member per month (PMPM) for members between the ages 1 and 64 years old.

Total PMPM = (Total Medical Cost + Total Pharmacy Cost) / Total Medical Member Months

Numerator: Member medical and pharmacy claim amounts paid with service dates in the measurement year.

Pharmacy claims based on transaction type and date filled. Medical claims based on claim source and type. Institutional claim amounts are submitted at the aggregate level (header). Professional claim amounts are submitted at the line level and need to be aggregated. Duplicate, void and denied claim amounts are excluded from the cost calculation

Exclusions

- Claims designated as a duplicate and having a claim error number equal to 20902.
- Denied and voided claims.

Denominator: All eligible members between the ages of 1 to 64.

Care Management and Coordination Descriptions

The measures included in this section are included in the Care Management Reports, which are provided on the SIM PCMH Dashboard.

Percentage of Patients with a Care Management Claim

Source: Custom measure based on SIM PCMH participation and medical claims data.

Definition: Percentage of SIM PCMH eligible population that received a Care Management or Care Coordination service in the reporting period.

Numerator: Identify patients from the eligible population who had one of the following CPT codes during the reporting period:

CPT Code	Description	Notes
G9001	Coordinated Care Fee, Initial Rate	
G9002	Coordinated Care Fee, Maintenance Rate	
98966	Telephone assessment; 5-10 minutes of medical discussion	
98967	Telephone assessment, 11-20 minutes of medical discussion	
98968	Telephone assessment, 21-30 minutes of medical discussion	
99495	Communication (direct contact, telephone, electronic) with the patient and/or caregiver within 2 business days of discharge	
99496	Communication (direct contact, telephone, electronic) with the patient and/or caregiver within 2 business days of discharge	
G9008	Physician Coordinated Care Oversight Services	These code are effective January 1, 2018 and will be available in reporting in April 2018.
98961 and 98962	Group Education and Training	
S0257	End of Life Counseling	

CPT Code	Description	Notes
G9007	Coordinated care fee, scheduled team conference	Members whose only claim is for this procedure code are not included in the numerator or displayed in the Claims Detail Reports.

Denominator: The sum of beneficiaries with participating SIM PCMH Primary Care providers

Percentage of Patients with Timely Follow-Up After Inpatient Discharge

Source:	Custom measure based on the SIM Acute Hospital Admissions measure and HEDIS 2018 Inpatient Utilization – General Hospital/Acute Care.
Definition:	Percentage of acute inpatient stay discharges in the measurement period that include a follow-up Primary Care Physician visit within 14 days of the discharge date.
Numerator:	Count of admission discharges receiving a follow-up with a PCP within 14 days of the discharge date. A visit counts as any claim between 0 and 14 days after a discharge date with either a servicing or billing provider in the current measurement period's SIM Provider Directory. Members may have multiple discharges within the measurement period.
Denominator:	The number of acute inpatient Admission discharges within the measurement period. **Exclusions:** • Discharge status death or transfer to Skilled Nursing Facility (SNF). • Inpatient stays with value sets related to: Nonacute Inpatient Stay, Mental and Behavioral Health, Chemical Dependency and Rehabilitation, IPU Exclusions, Maternity and Delivery, Newborn/Neonates, or Surgery
Value Sets:	Inpatient Stay, Nonacute Inpatient Stay, Mental and Behavioral Disorders, IPU Exclusions MS-DRG, Maternity Diagnosis, Maternity, Maternity MS-DRG, Deliveries Infant Record, Newborns/Neonates MS-DRG, Surgery, Surgery MS-DRG