Division of TennCare

TennCare Population Health
Annual Outcome Metrics
Final Technical Specifications v2.0

July 31, 2020

Revision History:

Version Number	Modified Date	Modified By	Section, pages, summary of changes
1.0	05/01/2020	Maxwell Deaton Curtis Popp Joanna Spencer	Original
1.1	05/28/2020	Joanna Spencer	Added information for determining members age for measures that didn't already stated specifically.
1.2	06/04/2020	Joanna Spencer	Updated exclusions for Measure 8 Preterm Birth Rate
1.3	06/05/2020	Joanna Spencer	Updated calculation of member months for measures 1, 2, 5, and 6.
2.0	07/31/2020	Curtis Popp Joanna Spencer	- Added definition of claim to each measure. - Updated continuous enrollment criteria for custom measures. - Preterm Birth Rate Measure: removed exclusions for gestational age and for limiting births to 17-37 weeks. - Updated value sets of Preterm Birth rate and PDC measure.

Division of TennCare

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Utilization Measures

Measure 1: Emergency Department Utilization (Custom)

Definition:

For members ages 18 and older, the number of Emergency Department (ED) visits per 1,000 member months for the following populations:

1. All Medicaid members meeting this definition
2. Members Engaged meeting this definition

For each population, report the total member months, the number of ED Visits, and the number of ED visits per 1,000 member months per Table 1.

Table 1: Emergency Department Utilization

Population	Member Months	Number of ED Visits	(Number of ED Visits / Member Months) * 1,000
All Medicaid Members			
Members Engaged			

Population Definitions:

Claims: Only paid final action claims should be included.

Medicaid Population:

1. All members ages 18 and older as of January 1st of the measurement year.
2. Continuous Enrollment Requirements:
    a. At a minimum, members must be enrolled for at least six months.
    b. No more than one gap of up to 45 days during the enrollment period is allowed. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).

Members Engaged:

1. From the total Medicaid population, an engaged member is a member that is involved in a program with interactive contact. Members must have at least one interactive contact during the measurement year to be considered engaged.

    Interactive contact is two-way communication between the organization and the member, during which the member received self-management support, health education or care coordination through one of the following methods:

    a. Telephone
        i. Voice Communication
        ii. Two-Way Text (Digital) Messaging

b. In-person Contact (i.e. individual or group)
c. Online contact:
    i. Interactive Web-based module
    ii. Live Chat
    iii. Secure Email
    iv. Video Conference

Interactive contact does not include:

a. Completion of health appraisal
b. Contact made only to make an appointment, leave a message, or verify receipt of materials
c. Contact made to inform members of the availability of an affinity program (e.g. subsidized gym memberships, device purchases, and discounted weight loss subscriptions)

2. Continuous Enrollment Requirements: Members must have a minimum of 3 months of eligibility pre and post intervention. If the member does not meet the eligibility requirement, they are not counted.

Exclusions:

- Members in Hospice, CHOICES, and ECF CHOICES are excluded from all populations.
    - Exclude members who utilize hospice services (Hospice Encounter, Hospice Intervention) or elect to use a hospice benefit any time during the measurement year.
    - Exclude CHOICES and ECF CHOICES members using any indicators that are present in the systems.
- Undocumented and incarcerated members are excluded from the TennCare *Select* population.

Eligible Population:

Member Months:

1. For members ages 18 and older, determine member months using a specified day of each month (e.g. the 15th or the last day of the month), to be determined according to the organization's administrative processes. The day selected must be consistent from member to member and from year to year.
2. Report all member months for the measurement year.
    a. For the members engaged population, report the total member months for all engaged members.
3. Apply all exclusion and continuous enrollment criteria.
4. For identified members, calculate the number of months the member is eligible for Medicaid.
    a. Identify all months that the identified member is eligible and sum all the identified months.
5. Sum all members months of eligibility to get the total member months.

Specifications:

Denominator: The eligible population.

Numerator: ED Visits

Count each visit to an ED once, regardless of the intensity or duration of the visit. Count multiple ED visits on the same date of service as one visit. Identify all ED visits during the measurement year using the following:

- An ED Visit (ED Value Set)
- A Procedure Code (ED Procedure Code Value Set) with an ED Place of Service (ED POS Value Set)
- Do not include ED Visits that result in an inpatient stay (Inpatient Stay Value Set).

Note: this measure is based on visits, not members. Include all ED visits for members who had one or more visit on or between January 1st and December 31st of the measurement year.

*The value sets for this measure can be found in the Population Health Value Sets Excel document.

Measure 2: Inpatient Utilization (HEDIS)

Definition:

The number of inpatient discharges per 1,000 member months for the following populations:

1. All Medicaid members meeting this definition
2. Members Engaged meeting this definition

Note that the numbers reported for all Medicaid members will be the same as the total inpatient numbers reported for HEDIS.

For each population, report the total member months, the number of acute IP discharges Visits, and the number of acute IP discharges per 1,000 member months.

Table 2: Inpatient Utilization

Population	Member Months	Number of IP Discharges	(Number of IP Discharges / Member Months) * 1,000
All Medicaid Members			
Members Engaged			

Population Definitions:

Claims: Only paid final action claims should be included.

Medicaid Population:

1. All members enrolled during the measurement period.

Members Engaged:

1. From the total Medicaid population, an engaged member is a member that is involved in a program with interactive contact. Members must have at least one interactive contact during the measurement year to be considered engaged.

   Interactive contact is two-way communication between the organization and the member, during which the member received self-management support, health education or care coordination through one of the following methods:

   a. Telephone
      i. Voice Communication
      ii. Two-Way Text (Digital) Messaging
   b. In-person Contact (i.e. individual or group)
   c. Online contact:
      i. Interactive Web-based module
      ii. Live Chat
      iii. Secure Email
      iv. Video Conference

Interactive contact does not include:

a. Completion of health appraisal
b. Contact made only to make an appointment, leave a message, or verify receipt of materials
c. Contact made to inform members of the availability of an affinity program (e.g. subsidized gym memberships, device purchases, and discounted weight loss subscriptions)

2. Continuous Enrollment Requirements: Members must have a minimum of 3 months of eligibility pre and post intervention. If the member does not meet the eligibility requirement, they are not counted.

Exclusions:

- Members in hospice are excluded from all populations. Refer to HEDIS *General Guideline 17: Members in Hospice.*
- Undocumented and incarcerated members are excluded from the TennCare *Select* population.

Eligible Population:

Member Months:

1. For all members, determine member months using a specified day of each month (e.g. the 15th or the last day of the month), to be determined according to the organization's administrative processes. The day selected must be consistent from member to member and from year to year.
2. Report all member months for the measurement year.
    a. For the members engaged population, report the total member months for all engaged members.
3. Apply all exclusion and continuous enrollment criteria.
4. For identified members, calculate the number of months the member is eligible for Medicaid.
    a. Identify all months that the identified member is eligible and sum all the identified months.
5. Sum all members months of eligibility to get the total member months.

Specifications:

Denominator: The eligible population.

Numerator:

1. Identify all acute inpatient discharges on or between January 1st and December 31st of measurement year. Use the following criteria to identify IP discharges:
    a. Identify all acute and nonacute IP stays (Inpatient Stay Value Set)
    b. Exclude nonacute IP stays (Nonacute Inpatient Stay Value Set)
    c. Identify the discharge date for the stay
2. Exclude discharges with a principal diagnosis of mental health or chemical dependency (Mental and Behavioral Disorders Value Set) on the discharge claim.
3. Exclude newborn care rendered from birth to discharge home from delivery (only include care rendered during subsequent rehospitalizations after the delivery discharge). Identify newborn

care by a principal diagnosis of live-born infant (Deliveries Infant Record Value Set). Organizations must develop methods to differentiate between the mother's claim and the newborn's claim, if needed.

4. Report total inpatient, using all discharges identified after completing steps 1 and 2.

* Note: this measure is based on discharges, not members. Include all acute IP Discharges for members who had one or more discharge on or between January 1st and December 31st of the measurement year.

Measure 3: Plan All-cause Readmission (HEDIS)

Definition:

For members ages 18 – 64, the number of acute inpatient and observation stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days. The count of Index Hospital Stays (IHS) (denominator), the count of observed 30-Day readmissions (numerator), and the rate of readmission are reported for the following populations:

1. All Medicaid members meeting this definition
2. Members Engaged meeting this definition

Note, for this measure we are not requiring that you report the predicted probability of an acute readmission. The numbers reported for the all Medicaid population will be the same numbers that are reported for HEDIS.

For each population, report the total Index Hospital Stays (IHS), the count of observed 30-day readmissions, and the rate of readmissions per the following table:

Table 3: Plan All-Cause Readmission

Population	IHS Count	Count of Observed 30-Day Readmissions	Rate of Readmissions
All Medicaid Members			
Members Engaged			

Population Definitions:

Claims: Only paid final action claims should be included.

Medicaid Population:

1. Ages 18–64 as of the Index Discharge Date.
2. Continuous Enrollment Requirements: Continuously enrolled for 365 days prior to the Index Discharge Date through 30 days after the Index Discharge Date.
    a. Allowable Gap: no more than one gap in enrollment of up to 45 days during the 365 days prior to the Index Discharge Date and no gap during the 30 days following the Index Discharge Date.

Members Engaged:

1. From the total Medicaid population, an engaged member is a member that is involved in a program with interactive contact. Members must have at least one interactive contact during the measurement year to be considered engaged.

   Interactive contact is two-way communication between the organization and the member, during which the member received self-management support, health education or care coordination through one of the following methods:
    a. Telephone
        i. Voice Communication

ii. Two-Way Text (Digital) Messaging

b. In-person Contact (i.e. individual or group)

c. Online contact:

i. Interactive Web-based module

ii. Live Chat

iii. Secure Email

iv. Video Conference

Interactive contact does not include:

a. Completion of health appraisal

b. Contact made only to make an appointment, leave a message, or verify receipt of materials

c. Contact made to inform members of the availability of an affinity program (e.g. subsidized gym memberships, device purchases, and discounted weight loss subscriptions)

2. Continuous Enrollment Requirements: Members must have a minimum of 3 months of eligibility pre and post intervention. If the member does not meet the eligibility requirement, they are not counted.

Exclusions:

- Members in Hospice are excluded from all populations. Refer to HEDIS *General Guidelines 17: Members in Hospice.*
- Undocumented and incarcerated members are excluded from the TennCare *Select* population.

IHS: Index Hospital stay – an acute inpatient or observation stay with a discharge on or between January 1st and December 1st of the measurement year.

Index Discharge Date: The IHS discharge date. The index discharge date must occur on or between January 1st and December 1st of the measurement year.

Index Readmission Stay: An acute inpatient or observation stay for any diagnosis with an admission date within 30 days of a previous Index Discharge Date.

Outlier: Medicaid members in the eligible population with four or more index hospital stays between January 1 and December 1 of the measurement year.

Anchor Date: Index Discharge Date

Event/Diagnosis: An acute inpatient or observation stay discharge on or between January 1st and December 1st of the measurement year.

The denominator for this measure is based on discharges, not members. Include all acute inpatient or observation stay discharges for nonoutlier members who had one or more discharges on or between January 1st and December 1st of the measurement year.

Eligible Population:

1. Identify all acute inpatient and observation stay discharges on or between January 1st and December 1st of the measurement year for the Medicaid population. To identify acute inpatient and observation stay discharges:
    a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) and observation stays (Observation Stay Value Set).
    b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
    c. Identify the discharge date for the stay.

    Inpatient and observation stays where the discharge date from the first setting and the admission date to the second setting are two or more calendar days apart must be considered distinct stays.

    The measure includes acute discharges from any type of facility (including behavioral healthcare facilities).

2. Direct Transfers: For discharges with one or more direct transfers, use the last discharge.

    Using the discharges identified in step 1, identify direct transfers between acute inpatient and observation or between observation and acute inpatient using the definition in the *Guidelines for Risk Adjusted Utilization Measures.*

    Exclude the hospital stay if the direct transfer's discharge date occurs after December 1st of the measurement year.

3. Exclude hospital stays where the Index Admission Date is the same as the Index Discharge Date.

4. Exclude hospital stays for the following reasons:
    a. The member dies during the stay
    b. Female members with a principal diagnosis of pregnancy (Pregnancy Value Set) on the discharge claim.
    c. A principal diagnosis of a condition originating in the perinatal period (Perinatal Conditions Value Set) on the discharge claim.

    Note: *For hospital stays where there was a direct transfer (identified in step 2), use the original stay and any direct transfer stays to identify exclusions in this step.*

5. Calculate continuous enrollment.

6. Remove hospital stays for outlier members.

Specifications:

Denominator: The eligible population.

Numerator: At least one acute readmission for any diagnosis within 30 days of the Index Discharge Date.

1. Identify all acute inpatient and observation stays with an admission date on or between January 3rd and December 31st of the measurement year. To identify acute inpatient and observation admissions:
    a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) and observation stays (Observation Stay Value Set).
    b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
    c. Identify the admission date for stay.

2. Direct Transfers: For discharges with one or more direct transfers, use the last discharge

    Using the discharges identified in step 1, identify direct transfers between acute inpatient and observation or between observation and acute inpatient using the definition found in the *Guidelines for Risk Adjusted Utilization Measures*.

3. Exclude acute hospitalization with any of the following criteria on the discharge claim:
    a. Female members with a principal diagnosis of pregnancy (Pregnancy Value Set)
    b. A principal diagnosis for a condition originating in the perinatal period (Perinatal Conditions Value Set).
    c. Planned admissions using any of the following:
        i. A principal diagnosis of maintenance chemotherapy (Chemotherapy Encounter Value Set)
        ii. A principal diagnosis of rehabilitation (Rehabilitation Value Set)
        iii. 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).
        iv. A potentially planned procedure (Potentially Planned Procedures Value Set) without a principal acute diagnosis (Acute Condition Value Set).

    Note: For hospital stays where there was a direct transfer (identified in step 2), use the original stay and any direct transfer stays to identify exclusions in this step.

4. For each IHS identified in the denominator, determine if any of the acute inpatient and observation stays identified in the numerator have an admission date within 30 days after the Index Discharge Date

Note: Count each acute hospitalization only once toward the numerator for the last denominator event. If a single numerator event meets criteria for multiple denominator events, only count the last denominator event. For example, consider the following events:

- *Acute Inpatient Stay 1: May 1-10*
- *Acute Inpatient Stay 2: May 15-20 (principal diagnosis of maintenance of chemotherapy)*
- *Acute inpatient Stay 3: May 30-June 5*

All three acute inpatient stays are included as denominator events. Stay 2 is excluded from the numerator because it is planned hospitalization. Stay 3 is within 30 days of Stay 1 and Stay 2. Count Stay 3 as a numerator only towards the last denominator event (Stay 2, May 15-20).

Measure 4: Follow-Up After Hospitalization for Mental Illness (HEDIS)

Definition:

The percentage of discharges from members ages 6 years of age and older who were hospitalized for treatment of selected mental illness or intentional self-harm diagnosis and who had a follow-up visit with a mental health practitioner for the following populations:

1. All Medicaid members meeting this definition
2. Members Engaged meeting this definition

Two rates are reported for each population:

1. The percentage of discharges for which the member received follow-up within 30 days after discharge.
2. The percentage of discharges for which the member received follow-up within 7 days after discharge.

Note that the numbers reported for the All Medicaid Members population are the same as those that are reported for the total stratification for HEDIS.

The following information is reported for each population and for each rate: the total discharges, the count of follow-ups within the specified timeframe, and the rate of follow-up.

Table 4: Follow-up After Hospitalization for Mental Illness

Time Frame	Population	Total Discharges	Count of Follow-up Visits	Rate
7-Day Follow-up	All Medicaid Members			
	Members Engaged			
30-Day Follow-up	All Medicaid Members			
	Members Engaged			

Population Definitions:

Claims: All paid, suspended, pending and denied claims should be included.

Medicaid Population:

1. All members ages 6 years and older as of the discharge date.
2. Continuous Enrollment Requirements: Members must be enrolled from the date of discharge through 30 days after discharge. There are no allowable gaps in enrollment.

Members Engaged:

1. From the total Medicaid population, an engaged member is a member that is involved in a program with interactive contact. Members must have at least one interactive contact during the measurement year to be considered engaged.

Interactive contact is two-way communication between the organization and the member, during which the member received self-management support, health education or care coordination through one of the following methods:

a. Telephone
    i. Voice Communication
    ii. Two-Way Text (Digital) Messaging
b. In-person Contact (i.e. individual or group)
c. Online contact:
    i. Interactive Web-based module
    ii. Live Chat
    iii. Secure Email
    iv. Video Conference

Interactive contact does not include:

a. Completion of health appraisal
b. Contact made only to make an appointment, leave a message, or verify receipt of materials
c. Contact made to inform members of the availability of an affinity program (e.g. subsidized gym memberships, device purchases, and discounted weight loss subscriptions)

2. Continuous Enrollment Requirements: Members must have a minimum of 3 months of eligibility pre and post intervention. If the member does not meet the eligibility requirement, they are not counted.

Exclusions:

- Members in Hospice are excluded from all populations. Refer to HEDIS *General Guideline 17: Members in Hospice.*
- Undocumented and incarcerated members are excluded from the TennCare *Select* population.

Eligible Population:

Event/Diagnosis: An acute inpatient discharge with a principal diagnosis of mental illness or intentional self-harm (Mental Illness Value Set; Intentional Self-Harm Value Set) on the discharge claim on or between January 1st and December 1st of the measurement year. To identify acute inpatient discharges:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set)
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set)
3. Identify the discharge date for the stay

The denominator for this measure is based on discharges, not on members. If members have more than one discharge, include all discharges on or between January 1st and December 1st of the measurement year.

Acute Readmission or Direct Transfer: Identify readmissions and direct transfers to an acute inpatient care setting during the 30-day follow-up period:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set)
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set)
3. Identify the admission date for the stay.

Exclude both the initial discharge and the readmission/direct transfers discharge if the last discharge occurs after December 1st of the measurement year.

If the readmission/direct transfer to the acute inpatient care setting was for a principal diagnosis (use only the principal diagnosis on the discharge claim) of mental health disorder or intentional self-harm (Mental Health Diagnosis Value Set; Intentional Self-Harm Value Set), count only the last discharge.

Nonacute Readmission or Direct Transfer: Exclude discharges followed by readmission or direct transfer to a nonacute inpatient care setting within the 30-day follow-up period, regardless of principal diagnosis for the readmission. To identify readmissions and direct transfers to a nonacute inpatient care setting:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set)
2. Confirm the stay was for nonacute care based on the presence of a nonacute code (Nonacute Inpatient Stay Value Set) on the claim.
3. Identify the admission date for the stay.

These discharges are excluded from the measure because rehospitalization or direct transfer may prevent an outpatient follow-up visit from taking place.

Specifications:

Denominator: The eligible population.

Note: The denominator for this measure is based on discharges, not on members. If members have more than one discharge, include all discharges on or between January 1st and December 1st of the measurement year.

Numerator:

30-Day Follow-Up: A follow-up visit with a mental health practitioner within 30 days of discharge. Do not include visits that occur on the date of discharge.

7-Day Follow-Up: A follow-up visit with a mental health practitioner within 7 days of discharge. Do not include visits that occur on the date of discharge.

For both indicators, any of the following meet criteria for a follow-up visit:

- An outpatient visit (Visit Setting Unspecified Value Set) ***with*** (Outpatient POS Value Set) ***with*** a mental health practitioner (Mental Health Practitioner Value Set)

- An outpatient visit (BH Outpatient Value Set) ***with*** a mental health practitioner (Mental Health Practitioner Value Set).

- An intensive outpatient encounter or partial hospitalization (Visit Setting Unspecified Value Set) ***with*** (Partial Hospitalization POS Value Set) ***with*** a mental health practitioner (Mental Health Practitioner Value Set).

- An intensive outpatient encounter or partial hospitalization (Partial Hospitalization or Intensive Outpatient Value Set) ***with*** a mental health practitioner (Mental Health Practitioner Value Set).

- A community mental health center visit (Visit Setting Unspecified Value Set) ***with*** (Community Mental Health Center POS Value Set) ***with*** a mental health practitioner (Mental Health Practitioner Value Set).

- Electroconvulsive therapy (Electroconvulsive Therapy Value Set) ***with*** (Ambulatory Surgical Center POS Value Set; Community Mental Health Center POS Value Set; Outpatient POS Value Set; Partial Hospitalization POS Value Set) ***with*** a mental health practitioner (Mental Health Practitioner Value Set).

- A telehealth visit: (Visit Setting Unspecified Value Set) ***with*** (Telehealth POS Value Set) ***with*** a mental health practitioner (Mental Health Practitioner Value Set).

- An observation visit (Observation Value Set) ***with*** a mental health practitioner (Mental Health Practitioner Value Set).

- Transitional care management services (Transitional Care Management Services Value Set), ***with*** a mental health practitioner (Mental Health Practitioner Value Set).

Measure 5: PCP Utilization (Custom)

Definition:

The number of Primary Care Physician (PCP) visits per 1,000 member months for the following populations:

1. All Medicaid members meeting this definition
2. Members Engaged meeting this definition

For each of the populations, the rates will be reported for the following three age stratifications:

- Pediatric (Ages 0-20)
- Adult (Ages 21+)
- Total

For each population and each age stratification, report the total member months, the number of PCP Visits, and the number of PCP visits per 1,000 member months per Table 5.

Table 5: Primary Care Visits

Populations	Age Stratifications	Member Months	Number of PCP Visits	(Number of PCP Visits / Member Months) * 1,000
All Medicaid Members	Pediatric (Ages 0-20)			
	Adult (Ages 21+)			
	Total			
Members Engaged	Pediatric (Ages 0-20)			
	Adult (Ages 21+)			
	Total			

Population Definitions:

Claims: Only paid final action claims should be included.

Medicaid Population:

1. All members enrolled during the measurement period.
    a. Calculate the members age for stratification as of January 1st of the measurement year.
2. Continuous Enrollment Requirements: Members must be enrolled for the measurement year.
    a. At a minimum, members must be enrolled for at least six months.
    b. Allowable gap: No more than one gap in continuous enrollment of up to 45 days during the measurement year is allowed. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).

Members Engaged:

1. From the total Medicaid population, an engaged member is a member that is involved in a program with interactive contact. Members must have at least one interactive contact during the measurement year to be considered engaged.

   Interactive contact is two-way communication between the organization and the member, during which the member received self-management support, health education or care coordination through one of the following methods:

   a. Telephone
      i. Voice Communication
      ii. Two-Way Text (Digital) Messaging
   b. In-person Contact (i.e. individual or group)
   c. Online contact:
      i. Interactive Web-based module
      ii. Live Chat
      iii. Secure Email
      iv. Video Conference

   Interactive contact does not include:

   a. Completion of health appraisal
   b. Contact made only to make an appointment, leave a message, or verify receipt of materials
   c. Contact made to inform members of the availability of an affinity program (e.g. subsidized gym memberships, device purchases, and discounted weight loss subscriptions)
2. Continuous Enrollment Requirements: Members must have a minimum of 3 months of eligibility pre and post intervention. If the member does not meet the eligibility requirement, they are not counted.

Exclusions:

- Members in Hospice, CHOICES, and ECF CHOICES are excluded from all populations.
  - Exclude members who utilize hospice services (Hospice Encounter, Hospice Intervention) or elect to use a hospice benefit any time during the measurement year.
  - Exclude CHOICES and ECF CHOICES members using any indicators that are present in the systems.
- Undocumented and incarcerated members are excluded from the TennCare *Select* population.

Eligible Population:

Member Months for Members:

1. For all members, determine member months using a specified day of each month (e.g. the 15th or the last day of the month), to be determined according to the organization's administrative processes. The day selected must be consistent from member to member and from year to year.
2. Report all member months for the measurement year.
    a. For the members engaged population, report the total member months for all engaged members.
3. Apply all exclusion and continuous enrollment criteria.
4. For identified members, calculate the number of months the member is eligible for Medicaid.
    a. Identify all months that the identified member is eligible and sum all the identified months.
5. Sum all members months of eligibility to get the total member months.

Specifications:

Denominator: The eligible population.

Numerator: Count of PCP visits during the measurement year for the eligible population.

To identify the PCP visits:

1. For the eligible population, identify all office visit services (Office Visit Value Set)
2. For the identified services, limit to services rendered by a PCP. A PCP is identified by the provider specialty code (PCP Value Set).
3. Limit the services to those rendered in the following POS:
    a. 11 (Office)
    b. 50 (Federally Qualified Health Center)
    c. 53 (Community Mental Health Center)
    d. 71 (Public Health Clinic)
    e. 72 (Rural Health Clinic)
4. Stratify the identified visits by age range
    a. Pediatric (0-20)
    b. Adult (21+)
5. Count the total number of office visits rendered by the PCP for each age stratification and for the total population.

Note: The value sets for this measure are custom. They are available in the Population Health Value Set.

Measure 6: Specialist Utilization (Custom)

Definition:

The number of Specialist visits per 1,000 member months for the following populations:

1. All Medicaid members meeting this definition
2. Members Engaged meeting this definition

For each of the populations, the rates will be reported for the following three age stratifications:

- Pediatric (Ages 0-20)
- Adult (Ages 21+)
- Total

For each population and each age stratification, report the total member months, the number of Specialist Visits, and the number of Specialist Visits per 1,000 member months per Table 6 below.

Table 6: Specialists Visits

Populations	Age Stratifications	Member Months	Number of Specialists Visits	(Number of Specialist Visits / Member Months) * 1,000
All Medicaid Members	Pediatric (Ages 0-20)			
	Adult (Ages 21+)			
	Total			
Members Engaged	Pediatric (Ages 0-20)			
	Adult (Ages 21+)			
	Total			

Population Definitions:

Claims: Only paid final action claims should be included.

Medicaid Population:

1. All members enrolled during the measurement period.
    a. Calculate the members age for stratification as of January 1st of the measurement year.
2. Continuous Enrollment Requirements: Members must be enrolled for the measurement year.
    a. At a minimum, members must be enrolled for at least six months.
    b. No more than one gap in continuous enrollment of up to 45 days during the measurement year is allowed. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).

Members Engaged:

1. From the total Medicaid population, an engaged member is a member that is involved in a program with interactive contact. Members must have at least one interactive contact during the measurement year to be considered engaged.

   Interactive contact is two-way communication between the organization and the member, during which the member received self-management support, health education or care coordination through one of the following methods:
   a. Telephone
      i. Voice Communication
      ii. Two-Way Text (Digital) Messaging
   b. In-person Contact (i.e. individual or group)
   c. Online contact:
      i. Interactive Web-based module
      ii. Live Chat
      iii. Secure Email
      iv. Video Conference

   Interactive contact does not include:
   a. Completion of health appraisal
   b. Contact made only to make an appointment, leave a message, or verify receipt of materials
   c. Contact made to inform members of the availability of an affinity program (e.g. subsidized gym memberships, device purchases, and discounted weight loss subscriptions)
2. Continuous Enrollment Requirements: Members must have a minimum of 3 months of eligibility pre and post intervention. If the member does not meet the eligibility requirement, they are not counted.

Exclusions:

- Members in Hospice, CHOICES, and ECF CHOICES are excluded from all populations.
  - Exclude members who utilize hospice services (Hospice Encounter, Hospice Intervention) or elect to use a hospice benefit any time during the measurement year.
  - Exclude CHOICES and ECF CHOICES members using any indicators that are present in the systems.
- Undocumented and incarcerated members are excluded from the TennCare *Select* population.

Eligible Population:

Member Months for Members:

1. For all members, determine member months using a specified day of each month (e.g. the 15th or the last day of the month), to be determined according to the organization's administrative processes. The day selected must be consistent from member to member and from year to year.
2. Report all member months for the measurement year.
    a. For the members engaged population, report the total member months for all engaged members.
3. Apply all exclusion and continuous enrollment criteria.
4. For identified members, calculate the number of months the member is eligible for Medicaid.
    a. Identify all months that the identified member is eligible and sum all the identified months.
5. Sum all members months of eligibility to get the total member months.

Specifications:

Denominator: The eligible population.

Numerator: The count of specialist visits within the measurement year.

To identify specialist visits:

1. For the eligible population, identify all office visit services (Office Visit Value Set)
2. For the identified services, limit to services rendered by a specialist. A specialist is identified by the provider specialty code (Specialist Value Set). Only consider the provider's primary area of practice to identify the specialists.
3. Stratify the identified visits by age range
    a. Pediatric (0-20)
    b. Adult (21+)
4. Count the total number of office visits rendered by specialist for each age stratification and for the total population.

Note: The value sets for this measure are custom. They are available in the Population Health Value Set

Maternity Measures

Measure 7: Prenatal and Postpartum Care (HEDIS – Administrative Specification)

Definition:

The percentage of deliveries of live births, for members, on or between October 8th of the year prior to the measurement year and October 7th of the measurement year. For these women, the measure assesses the following facets of prenatal and postpartum care.

> ***Timeliness of Prenatal Care*:** The percentage of deliveries that received a prenatal care visit in the first trimester, on or before the enrollment start date or within 42 days of enrollment in the organization.
>
> ***Postpartum Care*:** The percentage of deliveries that had a postpartum visit on or between 7 and 84 days after delivery.

This measure will be reported for the following populations using the below tables.

1. All Medicaid members meeting this definition (note: These are the same numbers as reported for HEDIS.)
2. Members Engaged meeting this definition

Table 7a: Timeliness of Prenatal Care

Population	Number of Live Births	Count of Prenatal Care Visits	Rate of Timeliness of Prenatal Care
All Medicaid Members			
Members Engaged			

Table 7b: Postpartum Care

Population	Number of Live Births	Count of Postpartum Care Visits	Rate of Postpartum Care
All Medicaid Members			
Members Engaged			

Population Definitions:

Claims: All paid, suspended, pending and denied claims should be included.

Medicaid Population:

1. All members enrolled during the measurement period.
2. Continuous Enrollment Requirements: Members must be eligible at least 43 days prior to delivery through 60 days after delivery.
    a. There are no allowable gaps in enrollment.

Members Engaged:

1. From the total Medicaid population, an engaged member is a member that is involved in a program with interactive contact. Members must have at least one interactive contact during the measurement year to be considered engaged.

   Interactive contact is two-way communication between the organization and the member, during which the member received self-management support, health education or care coordination through one of the following methods:
   a. Telephone
      i. Voice Communication
      ii. Two-Way Text (Digital) Messaging
   b. In-person Contact (i.e. individual or group)
   c. Online contact:
      i. Interactive Web-based module
      ii. Live Chat
      iii. Secure Email
      iv. Video Conference

   Interactive contact does not include:
   a. Completion of health appraisal
   b. Contact made only to make an appointment, leave a message, or verify receipt of materials
   c. Contact made to inform members of the availability of an affinity program (e.g. subsidized gym memberships, device purchases, and discounted weight loss subscriptions)
2. Continuous Enrollment Requirements: Members must have a minimum of 3 months of eligibility pre and post intervention. If the member does not meet the eligibility requirement, they are not counted.

Exclusions:

- Members in Hospice are excluded from all populations. Refer to HEDIS *Guideline 17: Members in Hospice.*
- Undocumented and incarcerated members are excluded from the TennCare *Select* population.

First Trimester 280-176 days prior to delivery (or EDD).

Anchor Date: Date of Delivery.

Last Enrollment Segment: The enrollment segment during the pregnancy with the start date that is closest to the delivery date.

Event/Diagnosis: Delivered a live birth on or between October 8th of the year prior to the measurement year and October 7th of the measurement year. Include women who delivered in any setting.

Multiple births: Women who had two separate deliveries (different dates of service) between October 8th of the year prior to the measurement year and October 7th of the measurement year count twice. Women who had multiple live births during one pregnancy count once. Include women who delivered in any setting.

Eligible Population:

1. Identify deliveries. Identify all women with a delivery (Deliveries Value Set) on or between October 8th of the year prior to the measurement year and October 7th of the measurement year.

   Note: *The intent is to identify the date of delivery (the date of the "procedure"). If the date of the delivery cannot be interpreted on the claim, use the date of service or, for inpatient claims, the date of discharge.*

2. Exclude non-live births (Non-live Births Value Set).
3. Identify continuous enrollment. Determine if enrollment was continuous 43 days prior to delivery through 60 days after delivery, with no gaps.

Specifications:

Denominator: The eligible population

Numerator:

Timeliness of Prenatal Care:

A prenatal visit during the first trimester, on or before the enrollment start date, or within 42 days of enrollment, depending on the date of enrollment in the organization and the gaps in enrollment during the pregnancy.

1. Identify all women whose last enrollment segment started before, on or between 280 and 219 days before delivery.

   These women must have a prenatal visit during the first trimester (280-176 days prior to delivery).

2. Identify women whose last enrollment segment started less than 219 days before delivery.

   These women must have a prenatal visit any time during the period that begins 280 days prior to delivery and ends 42 days after enrollment date. Do not count visits that occur on the date of delivery.

   Do not count visits that occur on the date of delivery.

3. Identify prenatal visits that occurred within the required timeframe (step 1 and 2). Any of the following meet the criteria for a prenatal visit.
    a. A bundled service (Prenatal Bundled Services Value Set) where the organization can identify the date when prenatal care was initiated (because bundled service codes are used on the date of delivery, these codes may be used ONLY if the claim form indicates when prenatal care was initiated).
    b. A visit for prenatal care (Stand Alone Prenatal Visits Value Set).
    c. A prenatal visit (Prenatal Visits Value Set) WITH a pregnancy-related diagnosis code (Pregnancy Diagnosis Value Set).

Postpartum Care:

A postpartum visit on or between 7 and 84 days after delivery. Any of the following meet the criteria:

1. A postpartum visit (Postpartum Visits Value Set)
2. Cervical Cytology (Cervical Cytology Lab Test Value Set; Cervical Cytology Result or Finding Set)
3. A bundled service (Postpartum Bundled Services Value Set) where the organization can identify the date when postpartum care was rendered (because bundled service codes are used on the date of delivery, not on the date of the postpartum visit, these codes may be used ONLY if the claim form indicates when postpartum care was rendered).

    Exclude services provided in an acute inpatient setting (Acute Inpatient Value Set; Acute Inpatient POS Value Set).

Measure 8: Preterm Birth Rate (Custom)

Definition:

The percentage of live births that occurred before the 37th week of pregnancy for the following populations:

1. All Medicaid members meeting this definition
2. Members Engaged meeting this definition

For each population, report the following information: the number of live births, the number of preterm births, and the rate of preterm births.

Table 8: Preterm Delivery Rate

Population	Number of Live Births	Number of Preterm Births	Rate of Preterm Births
All Medicaid Members			
Members Engaged			

Population Definition:

Claims: All claims (i.e. both paid and denied claims) should be included.

Medicaid Population:

1. All members enrolled during the measurement period.
2. Continuous Enrollment Requirements:
   a. At a minimum, members must be enrolled for at least six months.
   b. Members must be eligible at least 43 days prior to delivery through 60 days after delivery.
   c. There are no allowable gaps in enrollment.

Members Engaged:

1. From the total Medicaid population, an engaged member is a member that is involved in a program with interactive contact. Members must have at least one interactive contact during the measurement year to be considered engaged.

   Interactive contact is two-way communication between the organization and the member, during which the member received self-management support, health education or care coordination through one of the following methods:

   a. Telephone
      i. Voice Communication
      ii. Two-Way Text (Digital) Messaging
   b. In-person Contact (i.e. individual or group)
   c. Online contact:
      i. Interactive Web-based module
      ii. Live Chat

iii. Secure Email
iv. Video Conference

Interactive contact does not include:

a. Completion of health appraisal
b. Contact made only to make an appointment, leave a message, or verify receipt of materials
c. Contact made to inform members of the availability of an affinity program (e.g. subsidized gym memberships, device purchases, and discounted weight loss subscriptions)

2. Continuous Enrollment Requirements: Members must have a minimum of 3 months of eligibility pre and post intervention. If the member does not meet the eligibility requirement, they are not counted.

Exclusions:

- Members in Hospice, CHOICES, and ECF CHOICES are excluded from all populations.
  - Exclude members who utilize hospice services (Hospice Encounter, Hospice Intervention) or elect to use a hospice benefit any time during the measurement year.
  - Exclude CHOICES and ECF CHOICES members using any indicators that are present in the systems.
- Undocumented and incarcerated members are excluded from the TennCare *Select* population.

Anchor Date: Date of Delivery.

Event/Diagnosis: Delivered a live birth on or between October 8th of the year prior to the measurement year and October 7th of the measurement year. Include women who delivered in any setting.

Multiple births: Women who had two separate deliveries (different dates of service) between October 8th of the year prior to the measurement year and October 7th of the measurement year count twice. Women who had multiple live births during one pregnancy count once. Include women who delivered in any setting.

Eligible Population:

1. Identify all live deliveries. Identify all eligible women with a delivery (All Births Value Set) on or between October 8th of the year prior to the measurement year and October 7th of the measurement year.

   Note: The intent is to identify the date of delivery (the date of the "procedure"). If the date of the delivery cannot be interpreted on the claim, use the date of service or, for inpatient claims, the date of discharge.

Specifications:

Denominator: The eligible population.

Numerator:

From the eligible population, identify all deliveries which had a gestational age of less than 37 weeks. Any of the following qualify:

1. Gestational age less than 37 weeks (Preterm Gestational Age Value Set).
2. Preterm labor with a preterm delivery (Preterm Delivery Value Set).
3. Preterm newborn (Preterm Newborn Value Set).

*Note: The value sets for this measure can be found in the Population Health Value Sets document.

Chronic/Complex Measures

Measure 9: Comprehensive Diabetes Control (HEDIS – Administrative Specifications)

Definition:

The percentage of members 18-75 years of age with diabetes (Type 1 and Type 2) with most recent HbA1c (<8%) for the following populations:

1. All Medicaid members meeting this definition
2. Members Engaged meeting this definition

For each population, report the following information: the number of members with diabetes, the number of members with diabetes and an HbA1c test <8%, and the rate of diabetes control.

Table 9: Diabetes Control

Population	Number of Members with Diabetes	Number of Members with Diabetes and HbA1c Test <8%	Rate of Diabetes Control
All Medicaid Members			
Members Engaged			

Population Definitions:

Claims: All paid, suspended, pending and denied claims should be included.

Medicaid Population:

1. All members ages 18-75 as of December 31st of measurement year enrolled during the measurement period.
2. Continuous Enrollment Requirements: Members must be enrolled for the measurement year.
    a. No more than one gap in continuous enrollment of up to 45 days during the measurement year is allowed. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).

Members Engaged:

1. From the total Medicaid population, an engaged member is a member that is involved in a program with interactive contact. Members must have at least one interactive contact during the measurement year to be considered engaged.

    Interactive contact is two-way communication between the organization and the member, during which the member received self-management support, health education or care coordination through one of the following methods:
    a. Telephone
        i. Voice Communication

ii. Two-Way Text (Digital) Messaging

b. In-person Contact (i.e. individual or group)

c. Online contact:

i. Interactive Web-based module

ii. Live Chat

iii. Secure Email

iv. Video Conference

Interactive contact does not include:

a. Completion of health appraisal

b. Contact made only to make an appointment, leave a message, or verify receipt of materials

c. Contact made to inform members of the availability of an affinity program (e.g. subsidized gym memberships, device purchases, and discounted weight loss subscriptions)

2. Continuous Enrollment Requirements: Members must have a minimum of 3 months of eligibility pre and post intervention. If the member does not meet the eligibility requirement, they are not counted.

Exclusions**:**

- Members in Hospice are excluded from all populations. Refer to HEDIS *Guideline 17: Members in Hospice.*
- Undocumented and incarcerated members are excluded from the TennCare *Select* population.

Eligible Population:

Event/Diagnosis: There are two main ways to identify members with diabetes: by claim/encounter data and by pharmacy data. The organization must use both methods to identify the eligible population, but a member only needs to be identified by one method to be included in the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year.

1. Using Claim/encounter data: Identify members who met any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years):

a. At least one acute inpatient encounter (Acute Inpatient Value Set) WITH a diagnosis of diabetes (Diabetes Value Set) WITHOUT telehealth (Telehealth Modifier Value Set; Telehealth POS Value Set).

b. At least one acute inpatient discharge with a diagnosis of diabetes (Diabetes Value Set) on the discharge claim. To identify an acute inpatient discharge:

i. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).

ii. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).

iii. Identify the discharge date for the stay.

c. At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), telephone visits (Telephone Visits Value Set), online assessments (Online

Assessments Value Set), ED visits (ED Value Set), nonacute inpatient encounters (Nonacute Inpatient Value Set) or nonacute inpatient discharges (instructions below; the diagnosis must be on the discharge claim), on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). To identify a nonacute inpatient discharge:

i. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
ii. Confirm the stay was for nonacute care based on the presence of a nonacute code (Nonacute Inpatient Stay Value Set) on the claim.
iii. Identify the discharge date for the stay.

Only include nonacute inpatient encounters (Nonacute Inpatient Value Set) WITHOUT telehealth (Telehealth Modifier Value Set; Telehealth POS Value Set).

Table 9a: Diabetes Medications

Description	Prescription		
Alpha-glucosidase inhibitors	• Acarbose	• Miglitol	
Amylin analogs	• Pramlinitide		
Antidiabetic combinations	• Alogliptin-metformin • Alogliptin-pioglitazone • Canagliflozin-metformin • Dapagliflozin-metformin • Empaglifozin-linagliptin	• Empagliflozin-metformin • Glimepiride-pioglitazone • Glipizide-metformin • Glyburide-metformin • Linagliptin-metformin	• Metformin-pioglitazone • Metformin-repaglinide • Metformin-rosiglitazone • Metformin-saxagliptin • Metformin-sitagliptin
Insulin	• Insulin aspart • Insulin aspart-insulin aspart protamine • Insulin degludec • Insulin detemir	• Insulin isophane human • Insulin isophane-insulin regular • Insulin lispro • Insulin glargine	• Insulin lispro-insulin lispro protamine • Insulin regular human • Insulin human inhaled • Insulin glulisine
Meglitinides	• Nateglinide	• Repaglinide	
Glucagon-like peptide-1 (GLP1) agonists	• Dulaglutide • Exenatide	• Albiglutide • Liraglutide	
Sodium glucose cotransporter 2 (SGLT2) inhibitor	• Canagliflozin	• Dapagliflozin	• Empagliflozin
Sulfonylureas	• Chlorpropamide • Glimepiride	• Glipizide • Glyburide	• Tolazamide • Tolbutamide
Thiazolidinediones	• Pioglitazone	• Rosiglitazone	
Dipeptidyl peptidase-4 (DDP-4) inhibitors	• Alogliptin • Linagliptin	• Saxagliptin • Sitagliptin	

Note: *Glucophage/metformin as a solo agent is not included because it is used to treat conditions other than diabetes; members with diabetes on these medications are identified through diagnosis codes only.*

2. Using Pharmacy Data: Identify members who were dispensed insulin or hypoglycemics/antihyperglycemics on an ambulatory basis during the measurement year or the year prior to the measurement year (Diabetes Medications List – Table 9a above).

3. Exclude members 66 years of age and older as of December 31st of the measurement year with frailty AND advanced illness. Members must meet BOTH of the following frailty and advanced illness criteria to be excluded:
    a. At least one claim/encounter for frailty (Frailty Device Value Set; Frailty Diagnosis Value Set; Frailty Encounter Value Set; Frailty Symptom Value Set) during the measurement year.
    b. Any of the following during the measurement year or the year prior to the measurement year (count services that occur over both years):
        i. At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set), nonacute inpatient encounters (Nonacute Inpatient Value Set) or nonacute inpatient discharges (instructions below) on different dates of service, with an advanced illness diagnosis (Advanced Illness Value Set). Visit type need not be the same for the two visits.

            To identify a nonacute inpatient discharge:
            1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
            2. Confirm the stay was for nonacute care based on the presence of a nonacute code (Nonacute Inpatient Stay Value Set) on the claim.
            3. Identify the discharge date for the stay.
        ii. At least one acute inpatient encounter (Acute Inpatient Value Set) WITH an advanced illness diagnosis (Advanced Illness Value Set).
        iii. At least one acute inpatient discharge WITH an advanced illness diagnosis (Advanced Illness Value Set). To identify an acute inpatient discharge:
            1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
            2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
            3. Identify the discharge date for the stay.
        iv. A dispensed dementia medication (Dementia Medications List Below):

Table 9b: Dementia Medications

Description	Prescription		
Cholinesterase inhibitors	• Donepezil	• Galantamine	• Rivastigmine
Miscellaneous central nervous system agents	• Memantine		

Specifications:

Denominator: The eligible population.

Numerator:

1. Use codes (HbA1c Lab Test Value Set; HbA1c Test Result or Finding Value Set) to identify the most recent HbA1c test during the measurement year.
2. Determine if the HbA1c is numerator compliant.
    a. Compliant: HbA1c is <8.0%.
    b. Non-compliant: HbA1c is ≥8.0% or is missing a result, or if an HbA1c test was not done during the measurement year.
2. Organizations that use CPT Category II codes to identify numerator compliance for this indicator must search for all codes in the following value sets and use the most recent code during the measurement year to evaluate whether the member is compliant or not (See List Below).

Value Set	Numerator Compliance
HbA1c Level Less Than 7.0 Value Set	Compliant
HbA1c Level 7.0–9.0 Value Set	Not compliant*
HbA1c Level Greater Than 9.0 Value Set	Not compliant

* The CPT Category II code (3045F) in this value set indicates most recent HbA1c level 7.0% to 9.0% and is not specific enough to denote numerator compliance for this indicator. With this code, the organization must use other sources (laboratory data, HEDIS hybrid reporting method) to identify the actual value and determine if the HbA1c result was <8.0%. Because providers assign the Category II code after reviewing test results, the date of service for the Category II code may not match the date of service for the HbA1c test found in other sources; if dates differ, use the date of service when the test was performed. The date of service for the Category II code and the test result must follow the requirements outlined in HEDIS *General Guidelines 33: Measures That Require Results From Most Recent Test or Measurement* (i.e., the dates of service for the code and the test result must be no more than seven days apart).

Measure 10: Proportion of Days Covered (Custom)

Definition:

Percentage of individuals 18 years and older who met the Proportion of Days Covered (PDC) threshold during the measurement year for the following drugs:

1. Diabetes All Class
2. Beta-Blockers
3. Thiazolidinediones
4. Dipeptidyl Peptidase (DDP)-4 Inhibitors
5. Long-Acting Inhaled Bronchodilator
6. Biguanides
7. Statins
8. Renin Angiotensin System Antagonists
9. Sulfonylureas
10. Calcium Channel Blockers

For the following populations:

1. All Medicaid members meeting this definition
2. Members Engaged meeting this definition

The Proportion of Days Covered will be reported based on the following methodology and the below table.

1. Sum together the eligible populations for *Diabetes All Class*, *Beta-Blockers*, *Thiazolidinediones*, *Dipeptidyl Peptidase (DPP)-4 Inhibitors*, *Long-Acting Inhaled Bronchodilator Agents in COPD Patients*, *Biguanides*, *Statins*, *Renin Angiotensin System Antagonists*, *Sulfonylureas*, and *Calcium Channel Blockers* to create the denominator for PDC.
2. Sum together the numerators for *Diabetes All Class*, *Beta-Blockers*, *Thiazolidinediones*, *Dipeptidyl Peptidase (DPP)-4 Inhibitors*, *Long-Acting Inhaled Bronchodilator Agents in COPD Patients*, *Biguanides*, *Statins*, *Renin Angiotensin System Antagonists*, *Sulfonylureas*, and *Calcium Channel Blockers* to create the numerator for PDC.
3. Divide the numerator by the denominator and multiply by 100 to get the reported percentage for PDC.

Table 10: Proportion of Days Covered

Population	Number of Members in the Eligible Population	Number of Members in Compliance with 80% Threshold	Rate of Proportion of Days Covered
All Medicaid Members			
Members Engaged			

Population Definitions:

Claims: Only paid, non-reversed prescription claims are included.

Medicaid Population:

1. All members, 18 years of age and older as of January 1st of the measurement year.
2. Continuous Enrollment Requirements: Members must be enrolled for the measurement year.
    a. At a minimum, members must be enrolled for at least six months.
    b. No more than one gap in continuous enrollment of up to 1 day.

Members Engaged:

1. From the total Medicaid population, an engaged member is a member that is involved in a program with interactive contact. Members must have at least one interactive contact during the measurement year to be considered engaged.

    Interactive contact is two-way communication between the organization and the member, during which the member received self-management support, health education or care coordination through one of the following methods:
    a. Telephone
        i. Voice Communication
        ii. Two-Way Text (Digital) Messaging
    b. In-person Contact (i.e. individual or group)
    c. Online contact:
        i. Interactive Web-based module
        ii. Live Chat
        iii. Secure Email
        iv. Video Conference

    Interactive contact does not include:
    a. Completion of health appraisal
    b. Contact made only to make an appointment, leave a message, or verify receipt of materials
    c. Contact made to inform members of the availability of an affinity program (e.g. subsidized gym memberships, device purchases, and discounted weight loss subscriptions)
2. Continuous Enrollment Requirements: Members must have a minimum of 3 months of eligibility pre and post intervention. If the member does not meet the eligibility requirement, they are not counted.

Exclusions:

- Members in Hospice, CHOICES, and ECF CHOICES are excluded from all populations.
- Undocumented and incarcerated members are excluded from the TennCare *Select* population.
- Members with an insulin prescription during the measurement year.
- Members with End Stage Renal Disease (ESRD) diagnosis in the measurement year.

Index Prescription Start Date (IPSD) The earliest date of service for a target medication during the measurement year.

Eligible Population:

Age: 18 years and older as of January 1 of measurement year.

Treatment Period: The treatment period begins on the earliest date of service during the measurement year (IPSD) and extends through whichever comes first: December 31st of the measurement year, death, or disenrollment. The treatment period should occur at least 91 days before the end of the enrollment period.

1. Identify all members who filled at least two (2) prescriptions for any of the drug types listed in tables associated with that drug (defined in Table 10a: Inclusions) on different dates of service in the treatment period. The prescriptions can be for the same or different medications within the same drug class. This should identify members that have multiple prescriptions (from the same or different drugs) within the same drug class All NDCs are included in the Population Health Value Set document and broken out by drug class (Diabetes Value Set, Beta-Blockers Value Set, Long Acting Inhaled Bronchodilator Value Set, Statins Value Set, Renin Angiotensin Value Set, Calcium Channel Blockers Value Set).
    a. For members with Long-Acting Inhaled Bronchodilator (Long Acting Inhaled Bronchodilator Value Set), exclude any members that have at least one claim with a COPD diagnosis (COPD Value Set) in any position during the measurement year.

2. Limit to pharmacy claim types. This should remove any drugs that are administered in an IP setting.

3. Exclude members with an insulin prescription claim during the treatment period, see table PDC-DR-H (Insulin Value Set).

4. Exclude members with an at least one claim with End-Stage Renal Disease Diagnosis (ESRD) (ESRD Value Set) diagnosis in any position during the measurement year.

5. Exclude hospice members:
    a. Use hospice indicator from the enrollment database, where available or
    b. Use place of service code 34 where a hospice indicator is not available.

6. Exclude CHOICES and ECF CHOICES members:
    a. Use any CHOICES/ECF CHOICES indicators you may have in your dashboards and systems.

7. Exclude members who are not enrolled for at least 91 days before the end of the enrollment period and who have >1-day gap in enrollment.

Specifications:

Denominator: The eligible population.

Numerator:

1. Determine the member's treatment period, defined as the earliest date of service to the end of the measurement year, disenrollment, or death.

2. Within the treatment period, count the days the individual was covered by at least one drug in the class based on the prescription fill date and days' supply. If prescriptions for the same target drug (generic ingredient) overlap, then adjust the prescription start date to be the date after the previous fill has ended.
    a. Adjustment of overlap should also occur when there is overlap of a single drug product to a combination product containing the single drug or when there is an overlap of a combination product to another combination product where at least one of the target drugs is common.

3. Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC as a percentage for each member.

4. Count the members who had a PDC of 80% or greater. This is the numerator for *Drug Class.*

5. Sum all numerators from the different drug classes to calculate the numerator for this measure.

Table 10a: Inclusion Table List

Drug Class	Inclusion Tables
Diabetes All Class (This class includes **Thiazolidinediones**, **Dipeptidyl Peptidase-4 (DDP-4) Inhibitors**, **Biguanides**, and **Sulfonylureas**)	PDC-DR-A PDC-DR-B PDC-DR-C PDC-DR-D PDC-DR-E PDC-DR-F PDC-DR-G
Beta-Blockers	PDC-BB-A
Long-Acting Inhaled Bronchodilator Agents in COPD Patients	PDC-COPD-A
Statins	PDC-STA-A
Renin Angiotensin System Antagonists	PDC-RASA-A
Calcium Channel Blockers	PDC-CCB-A

Table PCD-DR-A: Biguanides

Biguanide Medications and Combinations
• Metformin (+/- alogliptin, canagliflozin, dapagliflozin, empagliflozin, ertugliflozin, glipizide, glyburide, linagliptin, pioglitazone, repaglinide, rosiglitazone, saxagliptin, sitagliptin)
*Active ingredients are limited to oral formulations only. Exclude nutrition supplement/dietary management combination products.

Table PCD-DR-B: Sulfonylureas

Sulfonylureas Medications and Combinations		
• chlorpropamide • glimepiride (+/- pioglitazone)	• glipizide (+/- metformin) • glyburide (+/- metformin)	• tolazamide • tolbutamide
*Active ingredients are limited to oral formulas only.		

Table PCD-DR-C: Thiazolidinediones

Thiazolidinedione Medications and Combinations	
• pioglitazone (+/- alogliptin, glimepiride, metformin)	• rosiglitazone (+/- metformin)
*Active ingredients are limited to oral formulations only	

Table PDC-DR-D: DDP-4 Inhibitors

DPP-4 Medications and Combinations	
• alogliptin (+/- metformin, pioglitazone) • linagliptin (+/- empagliflozin, metformin)	• saxagliptin (+/- metformin, dapagliflozin))
• sitagliptin (+/- metformin, ertugliflozin)	
*Active ingredients are limited to oral formulations only	

Table PDC-DR-E: Incretion Mimetics

DPP-4 Medications and Combinations		
• albiglutide • dulaglutide	• exenatide • liraglutide	• lixisenatide • semaglutide
*Excludes products indicated for weight loss		

Table PDC-DR-F: Meglitinides

Meglitinides and Combinations		
• nateglinide	• repaglinide (+/-metformin)	
*Active ingredients are limited to oral formulations only.		

Table PDC-DR-G: Sodium Glucose Co-Transporter (SGLT2) Inhibitors

SGLT2 Inhibitors and Combinations		
• canagliflozin (+/-- metformin) • dapagliflozin (+/- metformin, saxagliptin)	• empagliflozin (+/- metformin, linagliptin)	• ertugliflozin (+/- sitagliptin, metformin)
*Active ingredients are limited to oral formulations only.		

Table PDC-DR-H: Insulin Exclusion

Insulins		
• insulin aspart (+/-insulin aspart protamine) • insulin degludec (+/- liraglutide) • insulin detemir	• insulin glargine (+/- lixisenatide) • insulin glulisine • insulin isophane (+/- regular insulin)	• insulin lispro (+/- insulin lispro protamine) • insulin regular (including inhalation powder)
*Active ingredients are limited to inhaled and injectable formulations only.		

Table PDC-BB-A: Beta-Blockers

Beta-Blocker Medications and Combinations		
• acebutolol • atenolol (+/- chorthalidone) • betaxolol • bisoprolol (+/- hydrochlorothiazide) • carvedilol	• labetalol • metoprolol (+/- hydrochlorothiazide) • metoprolol tartrate • nadolol (+/- bendroflumethiazide) • nebivolol (+/- valsartan)	• penbutolol sulfate • pindolol • propranolol (+/- hydrochlorothiazide) • timolol maleate
*Active ingredients are limited to oral formulations only. Exclude sotalol because it is indicated for the treatment of ventricular arrhythmias (and not for hypertension). Exclude nutritional supplement/dietary management combination products.		

Table PDC-COPD-A: Long-Acting Inhaled Bronchodilator Mediations

Long-acting Inhaled Bronchodilator Medications		
• aclidinium • formoterol (+/- budesonide, glycopyrrolate) • glycopyrrolate (+/- formoterol)	• indacaterol (+/- glycopyrrolate) • olodaterol (+/- tiotropium) • salmeterol (+/- fluticasone)	• tiotropium (+/- olodaterol) • umeclidinium (+/- vilanterol) • vilanterol (+/- fluticasone, umeclidinium
*Exclude nebulized solutions. For salmeterol + fluticasone, include only fluticasone 250 mcg/salmeterol 50 mcg Diskus because it is the only approved dosage for the treatment of COPD		

Table PDC-STA-A Statins

Statin Medications		
• atorvastatin (+/- amlodipine) • fluvastatin • lovastatin (+/- niacin)	• pitavastatin • pravastatin	• rosuvastatin • simvastatin (+/- ezetimibe, niacin)
*Active ingredients are limited to oral formulations only.		

Table PDC-RASA-A: Renin Angiotensin System (RAS) Antagonists

Direct Renin Inhibitor Medications and Combinations		
• aliskiren (+/- hydrochlorothiazide)		
ARB Medications and Combinations		
• azilsartan (+/- chlorthalidone) • candesartan (+/- hydrochlorothiazide) • eprosartan (+/- hydrochlorothiazide)	• irbesartan (+/- hydrochlorothiazide) • losartan (+/- hydrochlorothiazide) • olmesartan (+/- amlodipine, hydrochlorothiazide)	• telmisartan (+/- amlodipine, hydrochlorothiazide) • valsartan (+/- amlodipine, hydrochlorothiazide nebivolol)
ACE Inhibitor Medications and Combination Products		
• benazepril (+/- amlodipine, hydrochlorothiazide) • captopril (+/- hydrochlorothiazide) • enalapril (+/- hydrochlorothiazide) • fosinopril (+/- hydrochlorothiazide)	• lisinopril (+/- hydrochlorothiazide) • moexipril (+/- hydrochlorothiazide) • perindopril (+/- amlodipine)	• quinapril (+/- hydrochlorothiazide) • ramipril • trandolapril (+/- verapamil)
*Active ingredients are limited to oral formulations only. Exclude nutritional supplement/dietary management combination products.		

Table PDC-RASA-B Exclusion: Sacubitril/Valsartan

ARB/Neprilysin Inhibitor Combination Medication
• sacubitril/valsartan

Table PDC-CCB-A: Calcium Channel Blockers

Calcium Channel Blocker Medications and Combinations		
• amlodipine (+/- atorvastatin, benazepril, hydrochlorothiazide, olmesartan, perindopril, telmisartan, valsartan) • diltiazem • felodipine	• isradipine • nicardipine • nifedipine (long-acting only)	• nisoldipine • verapamil (+/- trandolapril)
*Active ingredients are limited to oral formulations only. Exclude CCB nimodipine since it has a limited indication for use following a subarachnoid hemorrhage. Exclude supplement/dietary management combination products.		