Controlling High Blood Pressure (CBP-BH) Denominator Calculation

**Include**
- Identify consumers flagged as having been seen at the provider entity at least once during the measurement year
- Flag consumer by payer using continuous enrollment criteria (Medicaid, dually eligible, other, all)
- Identify consumers who were 18 - 85 years of age at the end of the measurement year
- Break out and flag the groups into three categories: 18-59, 60-64, and 65-85
- Identify consumers with at least one outpatient visit (as defined in the Outpatient Without UBREV Value Set) with a diagnosis of hypertension (as defined in the Essential Hypertension Value Set) during the first 6 months of the measurement year
- Exclude all consumers with evidence of end-stage renal disease (as defined in the ESRD Value Set or ESRD Obsolete Value Set) on or prior to the last day of the measurement year - must confirm in medical record
- Exclude all consumers with evidence of a kidney transplant (as defined in the Kidney Transplant Value Set) on or prior to the last day of the measurement year - must confirm in medical record
- Exclude all consumers with a diagnosis of pregnancy (as defined in the Pregnancy Value Set) during the measurement year
- Exclude all consumers with a non-acute inpatient admission during the measurement year. Do this by identifying all acute and non-acute inpatient stays in Inpatient Stay Value Set. Confirm stay was for non-acute care based on the presence of a non-acute code (Non-Acute Inpatient Stay Value Set) on the claim. Identify the admission date for the stay.
- Oversample (or use the entire population) from the eligible population and review medical records to confirm hypertension in 1st six months of measurement year or in history before.
- If a member of the oversample does not have a confirmatory hypertension notation, exclude them from the sample
- The remaining population is your denominator

To confirm the diagnosis of hypertension, there must be a notation of one of the following in the medical record anytime during the consumer’s history on or before the end of the 6th month of the measurement year:
- Hypertension
- HTN
- High BP (HBP)
- Elevated BP (EBP)
- Borderline HTN
- Intermittent HTN
- History of HTN
- Hypertensive Vascular Disease
- Hyperpepsia
- Hyperpepsis

It does not matter if hypertension was treated or is currently being treated. The notation indicating a diagnosis of hypertension may be recorded in any of the following documents:
- Problem List
- Office Note
- Subjective, Objective, Assessment, Plan Note
- Encounter Form
- Diagnostic Report
- Hospital Discharge Summary

Statements such as “rule out HTN,” “possible HTN,” “white coat HTN,” “questionable HTN,” and “consistent with HTN” are not sufficient to confirm the diagnosis if such statements are the only notations of hypertension in the medical record. If the diagnosis of hypertension cannot be confirmed, the consumer is excluded and replaced by the next consumer from the oversample.
Controlling High Blood Pressure (CBP-BH) Numerator Calculation

Identify

- From the denominator sample (already stratified by payer and divided into age categories), look to the Medical Record to create a diabetes flag

- Using the Medical Record, find the most recent (representative) blood pressure reading in the measurement year (after the time of diagnosis)
- If <1 in a day, use the lowest reading

*Consumer has Blood Pressure = 140/90 mm Hg or lower

No*

*Exclude from the numerator

18-59 Years of Age Cohort

Yes

Include in the Numerator

No*

*Exclude from the numerator

60-64 Years of Age Cohort

Yes

Include in the Numerator

No*

*Exclude from the numerator

65-85 Years of Age Cohort

Yes

Include in the Numerator

No*

*Exclude from the numerator

Assign each consumer a diabetic or non-diabetic flag using the administrative data and steps below. The flag determines the appropriate BP threshold to use during numerator assessment.

Step 1 - Assign a flag of diabetic to consumers who were identified using claims/encounter data or pharmacy data. The BHCO must use both methods to assign the diabetes flag, but a consumer only needs to be identified by one method. Consumers may be identified as having diabetes during the measurement year or the year prior to the measurement year.

1. Claims/Encounter Data: Consumer who met any of the following during the measurement year or the year prior to the measurement year (count services that occur over both years):
   a. At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set), or nonacute inpatient encounters (Nonacute Inpatient Value Set) or on different dates of service with a diagnosis of diabetes (Diabetes Value Set). Visit types need not be the same for the two visits.
   OR
   At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of diabetes (Diabetes Value Set).

2. Pharmacy Data: Consumers who were dispensed insulin or hypoglycemic/antihyperglycemics on an ambulatory basis during the measurement year or the year prior to the measurement year (refer to Table CBP-A in Appendix CBP-BH).

Step 2 - From consumers identified in Step 1, assign a flag of “not diabetic” to consumers who do not have a diagnosis of diabetes (Diabetes Value Set), in any setting, during the measurement year or year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes (Diabetes Exclusion Value Set), in any setting, during the measurement year.

Note: Consumers classified as diabetic in step 1 based on pharmacy data alone and who had a diagnosis of gestational or steroid-induced diabetes as specified above are re-classified as not diabetic in this step.

Step 3 - For consumers who were not assigned a flag in step 1 or step 2, assign a flag of “not diabetic”.

Combining the 18-59 and 60-64 Cohorts into Two Groups

1. Numerator Compliant

2. Numerator Compliant

This is the numerator

This is the numerator

*If there is no BP reading, the person is treated as having uncontrolled BP and excluded from the numerator.