October 2, 2017

Dear Colleague:

NCQA is pleased to present the HEDIS®[1] 2018 *Volume 2: Technical Update.* With this release, NCQA freezes the technical specifications for Volume 2, with the exception of measures that require pharmacy data, the Risk Adjusted Utilization measures and the *Standardized Healthcare-Associated Infection Ratio (HAI)* measure.

Measures that require pharmacy data and the Risk Adjusted Utilization measures will be final when the Medication List Directory of National Drug Codes (NDC) and the risk-adjustment tables are posted on November 1, 2017. The HAI measure will be final when the HAI Standard Infection Ratio (SIR) table is posted on January 10, 2018.

This memo contains the following information:

- Random Number (RAND) table for HEDIS 2018.
- Corrections, policy changes and clarifications to HEDIS 2018 *Volume 2: Technical Specifications.*
- An announcement and attachments for the following measure specifications:
  - *Follow-Up After Emergency Department Visit for People With High-Risk Multiple Chronic Conditions (FMC).*
  - *Frequency of Ongoing Prenatal Care (FPC).*
  - *Annual Monitoring for Patients on Persistent Medications (MPM).*
  - *Inpatient Hospital Utilization (IHU).*
  - *Hospitalization for Potentially Preventable Complications (HPC).*
  - *Unhealthy Alcohol Use Screening and Follow-Up (ASF).*

Following release of the new FMC measure in the HEDIS 2018 *Volume 2: Technical Specifications,* it was determined that additional clarifications were required to the eligible population criteria. The updated version of the FMC measure specifications (Attachment A) must be used for HEDIS 2018 reporting.

NCQA has been engaged in efforts to streamline how we evaluate HEDIS measures, starting with a pilot project to test rapid retirement. Based on this review, the FPC measure was retired from the HEDIS 2018 *Volume 2: Technical Specifications* and the Medicare product line was retired from the MPM measure. In addition, the digoxin rate was removed from the MPM measure. See the specification updates for the MPM measure below.

[1]HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

NCQA posted proposed revisions to the IHU and HPC measures for an off-cycle HEDIS 2018 public comment, which took place from July 13–27, 2017. The proposed revisions were approved by the Committee on Performance Measurement (CPM) on September 7, 2017, for incorporation in the HEDIS 2018 *Volume 2: Technical Specifications.* Updated versions of the IHU (Attachment B) and HPC (Attachment C) measure specifications must be used for HEDIS 2018 reporting.

Following release of the new ASF measure in the HEDIS 2018 *Volume 2: Technical Specifications*, it was determined that additional clarifications were required for the time frames in the measure. The updated version of the ASF measure specifications (Attachment D) must be used for HEDIS 2018 reporting.

This memo does not contain changes to medications. Refer to the *Medication List Directory Technical Update* document posted with the Medication List Directory (NDC codes) in November for all medication changes.

This memo does not contain coding changes. Organizations must go to the NCQA Download Center (https://downloads.ncqa.org/customer/Login.aspx) and download the October 2 version of the Value Set Directory (VSD), which contains all coding changes. Refer to the Summary of Changes spreadsheets in the VSD to identify codes and value sets that were added, deleted or revised.

Review all items in the table and attachments, and incorporate them into your implementation processes. HEDIS Compliance Auditors will consider these documents to be part of the specifications. If you have questions about information included in the *Technical Update* or about other measure specifications, contact us through our Policy Clarification Support (PCS) system at http://my.ncqa.org. We wish everyone a successful HEDIS data collection season!

Sincerely,

Cindy Ottone, MHA
Director, Policy

Enclosure

RAND Table for Measures Using the Hybrid Method

Measure	RAND
Adult BMI Assessment	.69
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents	.58
Childhood Immunization Status *and* Lead Screening in Children	.77*
Immunizations for Adolescents	.96
Cervical Cancer Screening	.27
Colorectal Cancer Screening	.73
Care for Older Adults	.90
Controlling High Blood Pressure	.63
Comprehensive Diabetes Care	.03
Medication Reconciliation Post-Discharge *and* Transitions of Care	.39*
Prenatal and Postpartum Care	.78
Well-Child Visits in the First 15 Months of Life (Medicaid only)	.66
Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life (Medicaid only)	.10
Adolescent Well-Care Visits (Medicaid only)	.57

* The RANDs for these measures are the same. Organizations may choose to use the same sample for the two measures. If organizations chose to use different samples for these measures a different Minimum Required Sample Size (MRSS) is used in the sampling protocol.

Specification Updates

This document contains corrections, policy changes and clarifications to HEDIS 2018 *Volume 2, Technical Specifications.* NCQA has identified the appropriate page number, measure/guideline and head/subtitle for each item.

Page	Measure/Guideline	Head/Subtitle	Update
2	What's New in Volume 2	Retired Measures	Replace the text in this section with the following text: • *Frequency of Ongoing Prenatal Care.*
3	What's New in Volume 2?	First-year measure evaluation	Replace the text in this section with the following text: The following HEDIS 2017 *first-year measures* will be publicly reported for HEDIS 2018: • *Follow-Up After Emergency Department Visit for Mental Illness.* • *Follow-Up After Emergency Department Visit for Alcohol and Other Drug Dependence.* ***Note*** • *NCQA will not publicly report the Standardized Healthcare-Associated Infection Ratio (HAI) measure for HEDIS 2018.* • *The Depression Remission or Response for Adolescents and Adults (DRR) measure is optional for reporting. NCQA will not publicly report this measure for HEDIS 2018.*
20	General Guideline 17	Members With Dual Commercial/ Medicaid Coverage	Add the following text as the third sentence: This guideline must be used consistently across all measures.
29	General Guideline 33	Supplemental Data—Required Data Elements, Nonstandard supplemental data	Add the following text as a new paragraph after the third paragraph: Records from services rendered or information collected during home visits. Data collected or reported by practitioners who render the clinical service during home visits must have evidence of accountability by the practitioner (i.e., date, name, signature and TIN/NPI on each in-home form).
35	General Guideline 46	Principal vs. Secondary Diagnosis	Replace the second bullet with the following text: • On a CMS1500 claim form, the primary diagnosis is listed in Item Number 21, line A, and secondary diagnoses are listed in Item Number 21, lines B-I.
35	General Guideline 47	CPT[2] Code Modifiers	Replace the first sentence in the second paragraph with the following text: Exclude any CPT Category II code in conjunction with a 1P, 2P, 3P or 8P modifier code (CPT CAT II Modifier Value Set) from HEDIS reporting.
45	Guidelines for Calculations and Sampling	Table 1: Sample Size Information for Hybrid Measures	In the "Immunizations for Adolescents" row, replace "Y" with "Y[2]"" in the "Prior Year's Rate May Be Used to Reduce MY 2017 Sample Size[1]" column.

[2]The American Medical Association holds a copyright to the CPT® codes contained in the measures specifications.

Page	Measure/Guideline	Head/Subtitle	Update
49	Systematic Sampling Methodology	Oversampling methodology	Replace the calculation example under the third paragraph with the following text: 411 x 0.10 = 41.1 (rounded up to 42 = oversample).
79	Breast Cancer Screening	Required exclusion	Replace the text in this section with the following text: Exclude from Medicare reporting members age 65 and older as of January 1 of the measurement year who meet either of the following: • Enrolled in an Institutional SNP (I-SNP) any time during the measurement year. • Living long-term in an institution any time during the measurement year as identified by the LTI flag in the Medicare Part C monthly membership file.
81	Breast Cancer Screening	Table BCS-1/2/3: Data Elements for Breast Cancer Screening	Add the following row under the "Eligible population" row in Table BCS-1/2/3: Number of required exclusions (Medicare only) ✓
86	Colorectal Cancer Screening	Required exclusion	Replace the text in this section with the following text: Exclude from Medicare reporting members age 65 and older as of January 1 of the measurement year who meet either of the following: • Enrolled in an Institutional SNP (I-SNP) any time during the measurement year. • Living long-term in an institution any time during the measurement year as identified by the LTI flag in the Medicare Part C monthly membership file.
89	Colorectal Cancer Screening	Table COL-2/3: Data Elements for Colorectal Cancer Screening	Add the following row under the "Eligible population" row in Table COL-2/3: Number of required exclusions (Medicare only) ✓ ✓
94	Care for Older Adults	Administrative Specification—Numerators, Medication Review	Replace the second bullet with the following text: • Transitional care management services (Transitional Care Management Services Value Set) during the measurement year.
108	Pharmacotherapy Management of COPD Exacerbation	Event/diagnosis—Step 2	Add the following text as the third and fourth sentences: An acute inpatient discharge and ED visit on the same date are counted as two COPD episodes. Multiple ED visits on the same date are counted as one COPD episode.
112	Medication Management for People With Asthma	Definitions—Injection dispensing event	Replace "Injection dispensing event" with "Injection or intravenous dispensing event."
112	Medication Management for People With Asthma	Definitions—Injection dispensing event	Replace the first sentence of the definition with the following text: Each injection or intravenous infusion counts as one dispensing event.
113	Medication Management for People With Asthma	Allowable gap	Replace the last sentence in this section with the following text: 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 during each year of continuous enrollment.

Page	Measure/Guideline	Head/Subtitle	Update
113	Medication Management for People With Asthma	Asthma Controller Medications Table	Add the following row to the Asthma Controller Medications table. Anti-interleukin-5 | • Mepolizumab • Reslizumab
116	Asthma Medication Ratio	Definitions—Injection dispensing event	Replace "Injection dispensing event" with "Injection or intravenous dispensing event."
116	Asthma Medication Ratio	Definitions—Injection dispensing event	Replace the first sentence of the definition with the following text: Each injection or intravenous infusion counts as one dispensing event.
117	Asthma Medication Ratio	Definitions—Units of medications	Replace the second sentence of the definition with the following text: One medication unit equals one inhaler canister, one injection, one infusion or a 30-day or less supply of an oral medication.
117	Asthma Medication Ratio	Allowable gap	Replace the last sentence in this section with the following text: 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 during each year of continuous enrollment.
119	Asthma Medication Ratio	Asthma Controller Medications Table	Add the following row to the Asthma Controller Medications table. Anti-interleukin-5 | • Mepolizumab • Reslizumab
123	Controlling High Blood Pressure	Required exclusion	Replace the text in this section with the following text: Exclude from Medicare reporting members age 65 and older as of January 1 of the measurement year who meet either of the following: • Enrolled in an Institutional SNP (I-SNP) any time during the measurement year. • Living long-term in an institution any time during the measurement year as identified by the LTI flag in the Medicare Part C monthly membership file.
125	Controlling High Blood Pressure	Hybrid Specification—Denominator	Replace the last bullet under the second paragraph with the following text: • A diagnosis code for essential hypertension (from the Essential Hypertension Value Set) documented in the medical record.
128	Controlling High Blood Pressure	Table CBP-1/2/3: Data Elements for Controlling High Blood Pressure	Add the following row under the "Eligible population" row in Table CBP-1/2/3: Number of required exclusions (Medicare only) | ✓
135	Statin Therapy for Patients With Cardiovascular Disease	Eligible Population: Rate 1—Received Statin Therapy—Step 2: Required exclusions	Replace the third bullet with the following text: • Dispensed at least one prescription for clomiphene (Estrogen Agonists Medications List) during the measurement year or the year prior to the measurement year.
135	Statin Therapy for Patients With Cardiovascular Disease	Estrogen Agonist Medications Table	Replace the "Estrogen Agonist Medications" list table header with the following text: *Estrogen Agonists Medications*

<table>
<tr><th>Page</th><th>Measure/Guideline</th><th>Head/Subtitle</th><th>Update</th></tr>
<tr><td>145</td><td>Comprehensive Diabetes Care</td><td>Administrative Specification—Numerators, Eye exam</td><td>Replace the second bullet with the following text:
Two unilateral eye enucleations (Unilateral Eye Enucleation Value Set) with service dates 14 days or more apart. For example, if the service date for the first unilateral eye enucleation was February 1 of the measurement year, the service date for the second unilateral eye enucleation must be on or after February 15.</td></tr>
<tr><td>158</td><td>Statin Therapy for Patients With Diabetes</td><td>Eligible Population: Rate 1—Received Statin Therapy—Step 2: Required exclusions</td><td>Add the following as a new table below the last bullet of step 2.
Estrogen Agonists Medications<table><tr><th>Description</th><th>Prescription</th></tr><tr><td>Estrogen agonists</td><td>• Clomiphene</td></tr></table></td></tr>
<tr><td>164</td><td>Disease-Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis</td><td>Table ART-1/2/3: Data Elements for DMARD Therapy for Rheumatoid Arthritis</td><td>Add the following row to the bottom of Table ART-1/2/3:<table><tr><td>Upper 95% confidence interval</td><td>✓</td></tr></table></td></tr>
<tr><td>167</td><td>Osteoporosis Management in Women Who Had a Fracture</td><td>Step 4: Required exclusions</td><td>Replace the fifth bullet with the following text:
Members living long-term in an institution any time during the measurement year as identified by the LTI flag in the Medicare Part C monthly membership file.</td></tr>
<tr><td>176</td><td>Follow-Up Care for Children Prescribed ADHD Medication</td><td>Administration Specification: Rate 1–Initiation Phase—Numerator</td><td>Add another note to the numerator:
Note: Do not count visits billed with a telehealth modifier (Telehealth Modifier Value Set) or billed with a telehealth POS code (Telehealth POS Value Set).</td></tr>
<tr><td>177</td><td>Follow-Up Care for Children Prescribed ADHD Medication</td><td>Administration Specification: Rate 2–C&M Phase—Numerator</td><td>Replace the paragraph after the first two bullets with the following text:
Only one of the two visits (during days 31-300) may be a telephone visit (Telephone Visits Value Set) or a telehealth visit. Identify follow-up visits using the code combinations below. Then, identify telehealth visits by the presence of a telehealth modifier (Telehealth Modifier Value Set) or the presence of a telehealth POS code (Telehealth POS Value Set) on the claim.</td></tr>
<tr><td>177</td><td>Follow-Up Care for Children Prescribed ADHD Medication</td><td>Administration Specification: Rate 2–C&M Phase—Numerator</td><td>Add the following as the fifth and sixth bullets in the last paragraph:
ADD Visits Group 1 Value Set with Telehealth POS Value Set
ADD Visits Group 2 Value Set with Telehealth POS Value Set</td></tr>
<tr><td>181</td><td>Follow-Up After Hospitalization for Mental Illness</td><td>Administrative Specification—Numerators, 7-Day Follow-Up</td><td>Delete the two transitional care management bullets and the sentence that reads, “The following meets criteria for only the 30-Day Follow-Up indicator. Replace with the following text:
Transitional care management services (Transitional Care Management Services Value Set), with or without a telehealth modifier (Telehealth Modifier Value Set).</td></tr>
<tr><td>182</td><td>Follow-Up After Emergency Department Visits for Mental Illness</td><td>Event/diagnosis—Multiple visits in a 31-day period</td><td>Add the following to the end of the paragraph for “Multiple visits in a 31-day period.”
Note: Removal of multiple visits in a 31-day period is based on eligible visits. Assess each ED visit for exclusions before removing multiple visits in a 31-day period.</td></tr>
</table>

<table>
<tr><th>Page</th><th>Measure/Guideline</th><th>Head/Subtitle</th><th>Update</th></tr>
<tr><td>186</td><td>Follow-Up After Emergency Department Visit for AOD Abuse or Dependence</td><td>Event/diagnosis— Multiple visits in a 31-day period</td><td>Add the following to the end of the paragraph for “Multiple visits in a 31-day period.”
Note: Removal of multiple visits in a 31-day period is based on eligible visits. Assess each ED visit for exclusions before removing multiple visits in a 31-day period.</td></tr>
<tr><td>202</td><td>Adherence to Antipsychotic Medications for Individuals With Schizophrenia</td><td>Table: Long-Acting Injections 14-Days Supply Medications</td><td>Replace the “Long-Acting Injections 14 Days Supply Medications” table with the following table:
Long-Acting Injections 14 Days Supply Medications<table><tr><th>Description</th><th>Prescription</th></tr><tr><td>Long-acting injections 14 days supply</td><td>• Risperidone</td></tr></table></td></tr>
<tr><td>202</td><td>Adherence to Antipsychotic Medications for Individuals With Schizophrenia</td><td>Table: Long-Acting Injections 28-Days Supply Medications</td><td>Replace the “Long-Acting Injections 28-Days Supply Medications” table with the following table:
Long-Acting Injections 28 Days Supply Medications<table><tr><th>Description</th><th colspan="2">Prescription</th></tr><tr><td>Long-acting injections 28 days supply</td><td>• Aripiprazole
• Fluphenazine decanoate
• Haloperidol decanoate</td><td>• Olanzapine
• Paliperidone palmitate</td></tr></table></td></tr>
<tr><td>203</td><td>Adherence to Antipsychotic Medications for Individuals With Schizophrenia</td><td>Administrative Specification—Numerator</td><td>Replace the first paragraph with the following text:
The number of members who achieved a PDC of at least 80% for their antipsychotic medications (Oral Antipsychotic Medications List; Long-Acting Injections 14 Days Supply Medications List; Long-Acting Injections 28 Days Supply Medications List; Long-Acting Injections 14 Days Supply Value Set; Long-Acting Injections 28 Days Supply Value Set) during the measurement year.</td></tr>
<tr><td>208</td><td>Annual Monitoring for Patients on Persistent Medications</td><td>Description</td><td>Replace the last sentence of the first paragraph with the following text:
For each product line, report each of the two rates separately and as a total rate.</td></tr>
<tr><td>208</td><td>Annual Monitoring for Patients on Persistent Medications</td><td>Description</td><td>Delete the second bullet, which reads:
• Annual monitoring for members on digoxin.</td></tr>
<tr><td>208</td><td>Annual Monitoring for Patients on Persistent Medications</td><td>Description</td><td>Replace the last bullet with the following text:
• Total rate (the sum of the two numerators divided by the sum of the two denominators).</td></tr>
<tr><td>208</td><td>Annual Monitoring for Patients on Persistent Medications</td><td>Eligible Population—Product lines</td><td>Replace the text in this section with the following text:
Commercial, Medicaid (report each product line separately).</td></tr>
</table>

Page	Measure/Guideline	Head/Subtitle	Update
209	Annual Monitoring for Patients on Persistent Medications	Administrative Specification	Replace all references to "three" with "two."
209-210	Annual Monitoring for Patients on Persistent Medications	Rate 2: Annual Monitoring for Members on Digoxin	Delete Rate 2 from the measure entirely. Rate 2 is retired; report only Rates 1 and 3 in HEDIS 2018.
211	Annual Monitoring for Patients on Persistent Medications	Table MPM-1/2/3: Data Elements for Annual Monitoring for Patients on Persistent Medications	Replace all references to "*For each of the 3 rates and total*" with "*For each of the 2 rates and total."*
217	Transitions of Care	Event/diagnosis—Readmission or direct transfer	Replace the first sentence with the following text: If the discharge is followed by a readmission or direct transfer to an acute or nonacute inpatient care setting on the date of discharge through 30 days after discharge (31 days total), use the admit date from the first admission and the discharge date from the last discharge.
217	Transitions of Care	Administrative Specification—Numerators, Patient Engagement After Inpatient Discharge	Replace the last bullet with the following text: • Transitional care management services (Transitional Care Management Services Value Set).
218	Transitions of Care	Hybrid Specification—Numerators, Notification of Inpatient Admission, Medical Record	In the first sentence of the third paragraph, replace "date/time" with "date."
219	Transitions of Care	Hybrid Specification—Numerators, Notification of Inpatient Admission, Medical Record	Replace the last bullet with the following text: • Documentation that the PCP or ongoing care provider performed a preadmission exam or received communication about a planned inpatient admission. The timeframe that the planned inpatient admission must be communicated is not limited to the day of admission or the following day; documentation that the PCP or ongoing care provider performed a preadmission exam or received notification of a planned admission prior to the admit date also meets criteria. The planned admission documentation or preadmission exam must clearly pertain to the denominator event.
221	Transitions of Care	Table TRC-3: Data Elements for Transitions of Care	In the "Current year's administrative rate (before exclusions)" row, replace the language in the Hybrid column with "*Each of the 4 rates, for each age stratification and total."*
221	Transitions of Care	Table TRC-3: Data Elements for Transitions of Care	In the "Minimum required sample size (MRSS)," "Oversampling rate," "Number of oversample records," "Number of original sample records excluded because of valid data errors," "Number of employee/dependent medical records excluded" and "Records added from the oversample list" rows, replace the language in the Hybrid column with "*Each of the 4 rates*."

<table>
<tr><th>Page</th><th>Measure/Guideline</th><th>Head/Subtitle</th><th>Update</th></tr>
<tr><td>222</td><td>Follow-Up After Emergency Department Visit for People with High-Risk Multiple Chronic Conditions</td><td>Entire Measure Specification</td><td>Remove this measure and its specification in its entirety from Volume 2 and replace it with the measure specification in Attachment A.</td></tr>
<tr><td>235</td><td>Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis</td><td>Eligible Population—Event/diagnosis, Step 3</td><td>Add the following bullet:
• Other Malignant Neoplasm of Skin Value Set.</td></tr>
<tr><td>240</td><td>Use of Imaging Studies for Low Back Pain</td><td>Eligible Population—Event/diagnosis, Step 4: Required exclusions</td><td>Add the following dash to the list of dashes under the Cancer bullet:
– Other Malignant Neoplasm of Skin Value Set.</td></tr>
<tr><td>258</td><td>Use of Opioids at High Dosage</td><td>Measure Definitions</td><td>Replace “Calculating number of days covered for multiple prescriptions” with “Calculating number of days covered for the denominator”.</td></tr>
<tr><td>259</td><td>Use of Opioids at High Dosage</td><td>Measure Definitions—Average MED</td><td>Replace the text in this definition with the following text:
The average MED for all opioids dispensed during the treatment period.</td></tr>
<tr><td>259</td><td>Use of Opioids at High Dosage</td><td>Eligible Population—Event/diagnosis, Step 1</td><td>Replace the second sentence with the following text:
Calculate the number of days covered for all dispensing events and determine who meets the threshold of ≥15 total days covered during the measurement year.</td></tr>
<tr><td>259</td><td>Use of Opioids at High Dosage</td><td>Eligible Population—Event/diagnosis, Step 2: Required exclusions</td><td>Delete the Other Neoplasms Value Set from the Cancer bullet.</td></tr>
<tr><td>259</td><td>Use of Opioids at High Dosage</td><td>Table: Opioid Medications</td><td>Delete “Nalbuphine” from the table.</td></tr>
<tr><td>259</td><td>Use of Opioids at High Dosage</td><td>Table: Opioid Medications</td><td>Replace “Oxymorphine” with Oxymorphone”.</td></tr>
<tr><td>261</td><td>Use of Opioids at High Dosage</td><td>Table UOD-A: Opioid Morphine Milligram Equivalent Conversion Factors</td><td>Replace “Table UOD-A: Opioid Morphine Milligram Equivalent Conversion Factors” with the following table and Note. Do not delete the table footnotes.
Table UOD-A: Opioid Morphine Milligram Equivalent Conversion Factors[1]
<table>
<tr><th>Type of Opioid</th><th>Morphine Equivalent Dose (MED) Conversion Factor</th></tr>
<tr><td>Buprenorphine transdermal patch (mcg/hr)[2]</td><td>12.6</td></tr>
<tr><td>Buprenorphine tab or film</td><td>30</td></tr>
<tr><td>Buprenorphine film (mcg)</td><td>0.03</td></tr>
<tr><td>Butorphanol</td><td>7</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>Page</th><th>Measure/Guideline</th><th>Head/Subtitle</th><th>Update</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>Codeine</td><td>0.15</td></tr>
<tr><td>Dihydrocodeine</td><td>0.25</td></tr>
<tr><td>Fentanyl buccal, SL tablets or lozenge/troche (mcg)[3]</td><td>0.13</td></tr>
<tr><td>Fentanyl film or oral spray (mcg)[4]</td><td>0.18</td></tr>
<tr><td>Fentanyl nasal spray[5]</td><td>0.16</td></tr>
<tr><td>Fentanyl transdermal patch (mcg/hr)[6]</td><td>7.2</td></tr>
<tr><td>Hydrocodone</td><td>1</td></tr>
<tr><td>Hydromorphone</td><td>4</td></tr>
<tr><td>Levomethadyl acetate</td><td>8</td></tr>
<tr><td>Levorphanol tartrate</td><td>11</td></tr>
<tr><td>Meperidine hydrochloride</td><td>0.1</td></tr>
<tr><td colspan="2">Methadone[7]</td></tr>
<tr><td>1-20 mg/day</td><td>4</td></tr>
<tr><td>21-40 mg/day</td><td>8</td></tr>
<tr><td>41-60 mg/day</td><td>10</td></tr>
<tr><td>≥61-80 mg/day</td><td>12</td></tr>
<tr><td>Morphine</td><td>1</td></tr>
<tr><td>Opium</td><td>1</td></tr>
<tr><td>Oxycodone</td><td>1.5</td></tr>
<tr><td>Oxymorphone</td><td>3</td></tr>
<tr><td>Pentazocine</td><td>0.37</td></tr>
<tr><td>Tapentadol</td><td>0.4</td></tr>
<tr><td>Tramadol</td><td>0.1</td></tr>
</table>
Note: Organizations must use the Medication List Directory of NDC codes posted to the NCQA website to confirm the appropriate conversion factor associated with the opioid product.
</td></tr>
<tr><td>262</td><td>Use of Opioids at High Dosage</td><td>Administrative Specification—Numerator, Step 4</td><td>Add the following text to the end of the step:
If the member does not have an IPSD (does not ever have an opioid medication with Total MED >120 during the measurement period), the member is numerator noncompliant (do not perform Steps 5 or 6 for the member).</td></tr>
</table>

Page	Measure/Guideline	Head/Subtitle	Update
263	Use of Opioids From Multiple Providers	Measure Definitions—Identifying prescribers	Add the following text as the second sentence: If the provider NPI is missing, count each dispensing event with a missing NPI number as a new prescriber when reporting the measure.
263	Use of Opioids From Multiple Providers	Measure Definitions—Identifying pharmacies	Add the following text as the second sentence: If the pharmacy NPI is missing, count each dispensing event with a missing NPI number as a new pharmacy when reporting the measure.
264	Use of Opioids From Multiple Providers	Table: Opioid Medications	Delete "Nalbuphine."
264	Use of Opioids From Multiple Providers	Table: Opioid Medications	Replace "Oxymorphine" with Oxymorphone."
287	Initiation and Engagement of AOD Abuse or Dependence Treatment	Definitions—Intake Period	Replace the text in this definition with the following text: January 1–November 14 of the measurement year. The Intake Period is used to capture new episodes of AOD abuse and dependence.
288	Initiation and Engagement of AOD Abuse or Dependence Treatment	Definitions—IESD	Replace the first sentence of the first paragraph with the following text: For an ED visit that results in an inpatient stay, the IESD is the date of the inpatient discharge (an AOD diagnosis is not required for the inpatient stay; use the diagnosis from the ED visit to determine the diagnosis cohort).
288	Initiation and Engagement of AOD Abuse or Dependence Treatment	Definitions—IESD	Replace the second paragraph with the following text: *For direct transfers*, the IESD is the discharge date from the last admission (an AOD diagnosis is not required for the transfer; use the diagnosis from the initial admission to determine the diagnosis cohort).
290	Initiation and Engagement of AOD Abuse or Dependence Treatment	Event/diagnosis—Step 1	Replace the first sentence of the last paragraph of step 1 with the following text: *For members whose first episode was an ED visit that resulted in an inpatient stay,* use the diagnosis from the ED visit to determine the diagnosis cohort and use the inpatient discharge date as the IESD.
291	Initiation and Engagement of AOD Abuse or Dependence Treatment	Administrative Specification—Numerator, Initiation of AOD Treatment	Replace the second paragraph with the following text: *If the Index Episode was an inpatient discharge (or an ED visit that resulted in an inpatient stay)*, the inpatient stay is considered initiation of treatment and the member is compliant.
291	Initiation and Engagement of AOD Abuse or Dependence Treatment	Administrative Specification—Numerator, Initiation of AOD Treatment	Replace the last bullet on the page with the following text: • If the Index Episode was for a diagnosis of alcohol abuse or dependence (Alcohol Abuse and Dependence Value Set) a MAT dispensing event (MAT for Alcohol Abuse or Dependence Medications List) or a claim for MAT (Medication Assisted Treatment Value Set).
292	Initiation and Engagement of AOD Abuse or Dependence Treatment	Administrative Specification—Numerator, Initiation of AOD Treatment	Replace the first bullet at the top of the page with the following text: • If the Index Episode was for a diagnosis of opioid abuse or dependence (Opioid Abuse and Dependence Value Set) a MAT dispensing event (MAT for Opioid Abuse or Dependence Medications List) or a claim for MAT (Medication Assisted Treatment Value Set).

Page	Measure/Guideline	Head/Subtitle	Update
292	Initiation and Engagement of AOD Abuse or Dependence Treatment	Administrative Specification—Numerator, Initiation of AOD Treatment	Replace the last sentence in the last paragraph with the following text: Exclude the member from the denominator for both indicators *(Initiation of AOD Treatment* and *Engagement of AOD Treatment)* if the initiation of treatment event is an inpatient stay with a discharge date after November 27 of the measurement year.
292	Initiation and Engagement of AOD Abuse or Dependence Treatment	Administrative Specification—Numerator, Engagement of AOD Treatment	In the first paragraph of the section labeled "1," replace the references to "29 days" with "34 days."
293	Initiation and Engagement of AOD Abuse or Dependence Treatment	Administrative Specification—Numerator, Engagement of AOD Treatment	In the section labeled "2" at the top of the page replace all references to "33 days" with "34 days."
293	Initiation and Engagement of AOD Abuse or Dependence Treatment	Administrative Specification—Numerator, Engagement of AOD Treatment	In the second to last paragraph, replace the reference to "33-day period" with "34-day period."
297	Prenatal and Postpartum Care	Identifying Prenatal Care for Women Continuously Enrolled During the First Trimester—Decision Rule 3	Replace the first sentence with "Either of the following during the first trimester where the practitioner type is a PCP:"
297-298	Prenatal and Postpartum Care	Identifying Prenatal Care for Women Continuously Enrolled During the First Trimester—Decision Rule 3	Replace the bullets after "OR" with the following text: • A prenatal visit (Prenatal Visits Value Set) with a pregnancy-related diagnosis code (Pregnancy Diagnosis Value Set) (codes must be on the same claim) where the practitioner type is a PCP and at least one of the following, all during the first trimester (on the same date of service as the prenatal visit or on different dates of service). — An obstetric panel (Obstetric Panel Value Set). — An ultrasound (echocardiography) of the pregnant uterus (Prenatal Ultrasound Value Set). — All of the following on the same date of service or on different dates of service: ▪ Toxoplasma (Toxoplasma Antibody Value Set). ▪ Rubella (Rubella Antibody Value Set). ▪ Cytomegalovirus (Cytomegalovirus Antibody Value Set). ▪ Herpes simplex (Herpes Simplex Antibody Value Set). — A rubella antibody test (Rubella Antibody Value Set) ***and*** an ABO test (ABO Value Set) on the same date of service or on different dates of service. — A rubella antibody test (Rubella Antibody Value Set) ***and*** an Rh test (Rh Value Set) on the same date of service or on different dates of service. — A rubella antibody test (Rubella Antibody Value Set) ***and*** an ABO/Rh test (ABO and Rh Value Set) on the same date of service or on different dates of service.

Page	Measure/Guideline	Head/Subtitle	Update
303	Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	Event—Step 4: Required exclusions	Add the following text after the last dash under the first bullet: – BH Acute Inpatient Value Set ***with*** Telehealth POS Value Set ***with*** Schizophrenia Value Set, with or without a telehealth modifier (Telehealth Modifier Value Set). – BH Acute Inpatient Value Set ***with*** Telehealth POS Value Set ***with*** Bipolar Disorder Value Set, with or without a telehealth modifier (Telehealth Modifier Value Set). – BH Acute Inpatient Value Set ***with*** Telehealth POS Value Set ***with*** Other Psychotic Disorders Value Set, with or without a telehealth modifier (Telehealth Modifier Value Set).
303	Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	Event—Step 4: Required exclusions	In the second bullet, after the last dash add the following dashes: – BH Outpatient/PH/IOP Value Set ***with*** Telehealth POS Value Set ***with*** Schizophrenia Value Set. – BH Outpatient/PH/IOP Value Set ***with*** Telehealth POS Value Set ***with*** Bipolar Disorder Value Set. – BH Outpatient/PH/IOP Value Set ***with*** Telehealth POS Value Set ***with*** Other Psychotic Disorders Value Set.
304	Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	Administrative Specification—Numerator	Replace the numerator with the following text: Documentation of psychosocial care (Psychosocial Care Value Set) with or without a telehealth modifier (Telehealth Modifier Value Set) in the 121-day period from 90 days prior to the IPSD through 30 days after the IPSD.
315	Frequency of Ongoing Prenatal Care	Entire Measure Specification	Remove this measure and its specification in its entirety from Volume 2.
350	Identification of Alcohol and Other Drug Services	Calculations—Intensive outpatient and partial hospitalization	Replace the *Note* with the following text: ***Note:*** *Report only in-person services in the intensive outpatient and partial hospitalization category. Exclude all services billed with a telehealth modifier (Telehealth Modifier Value Set) or billed with a telehealth POS code (Telehealth POS Value Set) from the Intensive Outpatient and Partial Hospitalization category.*
351	Identification of Alcohol and Other Drug Services	Calculations—Outpatient or an ambulatory MAT dispensing event	Replace the *Note* with the following text: ***Note:*** *Report only in-person services in the Outpatient category. Exclude all services billed with a telehealth modifier (Telehealth Modifier Value Set) or billed with a telehealth POS code (Telehealth POS Value Set) from the Outpatient category.*
351	Identification of Alcohol and Other Drug Services	Calculations—ED	Replace the *Note* with the following text: ***Note:*** *Report only in-person services in the ED category. Exclude all services billed with a telehealth modifier (Telehealth Modifier Value Set) or billed with a telehealth POS code (Telehealth POS Value Set) from the ED category.*
357	Mental Health Utilization	Calculations—Intensive outpatient and partial hospitalization	Replace the *Note* with the following text: ***Note:*** *Report only in-person services in the intensive outpatient and partial hospitalization category. Exclude all services billed with a telehealth modifier (Telehealth Modifier Value Set) or billed with a telehealth POS code (Telehealth POS Value Set) from the Intensive Outpatient and Partial Hospitalization category.*

Page	Measure/Guideline	Head/Subtitle	Update
358	Mental Health Utilization	Calculations—Outpatient	Replace the *Note* with the following text: *Note: Report only in-person services in the Outpatient category. Exclude all services billed with a telehealth modifier (Telehealth Modifier Value Set) or billed with a telehealth POS code (Telehealth POS Value Set) from the Outpatient category.*
358	Mental Health Utilization	Calculations—ED	Replace the *Note* with the following text: *Note: Report only in-person services in the ED category. Exclude all services billed with a telehealth modifier (Telehealth Modifier Value Set) or billed with a telehealth POS code (Telehealth POS Value Set) from the ED category.*
382	Plan All-Cause Readmissions	Administrative Specification—Denominator, Step 5: Required exclusions	Replace the third dash under "4" with the following text: – 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).
386	Plan All-Cause Readmissions	Numerator—Step 3	Replace the first sentence with the following text: Exclude acute inpatient hospital admissions for female members with a principal diagnosis of pregnancy (Pregnancy Value Set) or for any member (any gender) with a principal diagnosis for a condition originating in the perinatal period (Perinatal Conditions Value Set).
389	Plan All-Cause Readmissions	Administrative Specification—Reporting Tables	Add the following table after Table PCR-A-2/3: Plan All-Cause Readmissions Rates by Age and Risk Adjustment (commercial and Medicare):

Table PCR-B-3: Plan All-Cause Readmissions Rates by Age and Risk Adjustment

Age	Count of Index Stays (Denominator)	Count of Observed 30-Day Readmissions (Numerator)	Observed Readmissions Rate (Num/Den)	Count of Expected 30-Day Readmissions	Expected Readmissions Rate (Expected Readmissions/ Den)	Total Variance (O/E)	O/E Ratio (Observed Readmissions/Expected Readmissions)	Lower Confidence Interval (O/E Ratio)	Upper Confidence Interval (O/E Ratio)
65-74	_____	_____	_____	_____	_____	_____		_____	_____
75-84	_____	_____	_____	_____	_____	_____		_____	_____
85+	_____	_____	_____	_____	_____	_____		_____	_____
Total	_____	_____	_____	_____	_____	_____	_____	_____	_____

390	Inpatient Hospital Utilization (Renamed "Acute Hospital Utilization")	Entire Measure Specification	Remove this measure and its specification in its entirety from Volume 2 and replace it with the measure specification in Attachment B.

Page	Measure/Guideline	Head/Subtitle	Update
404	Hospitalization for Potentially Preventable Complications	Entire Measure Specification	Remove this measure and its specification in its entirety from Volume 2 and replace it with the measure specification in Attachment C.
450	Depression Screening and Follow-Up for Adolescents and Adults	Depression Screening—Numerator 1	Replace the text in this section with the following text: Members who were screened for clinical depression using an age-appropriate standardized tool. Identify all members with a documented depression screening performed (Depression Screen Value Set) between January 1 of the measurement year through December 1 of the measurement year.
450	Depression Screening and Follow-Up for Adolescents and Adults	Depression Screening—Numerator 1 logic	Replace the text in this section with the following text: define "Depression Screening Numerator": exists (["Assessment, Performed": "Depression Screen"] DepScreenNum where DepScreenNum.authorDatetime 335 days or less after start of "Measurement Period")
450	Depression Screening and Follow-Up for Adolescents and Adults	Follow-Up on Positive Screen—Denominator 2	Replace the first sentence with the following text: All members from Numerator 1 who screened positive for depression.
450	Depression Screening and Follow-Up for Adolescents and Adults	Follow-Up on Positive Screen—Denominator 2 logic	Replace the first paragraph with the following text: define "Positive Follow Up Denominator": "Depression Screening Numerator" and exists ("Positive Depression Screen During Follow Up Period")
460	Depression Remission or Response for Adolescents and Adults	Measure Description	Replace the bullets with the following text: • Follow-Up PHQ-9. The percentage of members who have a follow-up PHQ-9 score documented within the four to eight months after the initial elevated PHQ-9 score. • Depression Remission. The percentage of members who achieved remission within four to eight months after the initial elevated PHQ-9 score. • Depression Response. The percentage of members who showed response within four to eight months after the initial elevated PHQ-9 score.
461	Depression Remission or Response for Adolescents and Adults	Measure Definitions—Depression follow-up period	Replace the text in this section with the following text: The 120–240 day period after the IESD when depression symptoms are reevaluated using the PHQ-9 tool (e.g., if a member has an IESD PHQ-9 on January 3 of the measurement year, the depression follow-up period is May 3 through August 31 of the measurement year).
1-5	Appendix 1—Summary Table of Measures, Product Lines and Changes	Annual Monitoring for Patients on Persistent Medications (MPM)	Remove the check mark (✓) in the "Medicare" Product Line column.
7-3	Appendix 7—Logical Measure Groups	MPM	Remove the check mark (✓) in the "Medicare" Product Line row.
7-3	Appendix 7—Logical Measure Groups	FMC	Remove the check mark (✓) in the "Required exclusions" row.

Follow-Up After Emergency Department Visit for People With High-Risk Multiple Chronic Conditions (FMC)

SUMMARY OF CHANGES FOR HEDIS 2018

- First-year measure.

SUMMARY OF CHANGES FOR HEDIS 2018 TECHNICAL UPDATE

- Added a *Note* to clarify members in hospice are excluded from the eligible population.
- Revised the steps in the event/diagnosis criteria in the eligible population.
- Added telehealth modifiers to the numerator.
- Renamed the "TCM 7 Day Value Set" to "Transitional Care Management Services Value Set."
- Deleted "Number of required exclusions" from the Data Elements for Reporting table.

Description

The percentage of emergency department (ED) visits for members 18 years and older who have high-risk multiple chronic conditions who had a follow-up service within 7 days of the ED visit.

Eligible Population

Note: *Members in hospice are excluded from the eligible population. Refer to General Guideline 20: Members in Hospice.*

Product lines Medicare.

Ages 18 years and older as of the ED visit. Report two age stratifications and a total rate:
- 18–64 years.
- 65 years and older.
- Total.

Continuous enrollment 365 days prior to the ED visit through 7 days after the ED visit.

Allowable gap No more than one gap in enrollment of up to 45 days during the 365 days prior to the ED visit and no gap during the 7 days following the ED visit.

Anchor date None.

Benefits Medical.

Event/diagnosis Follow the steps below to identify the eligible population.

Step 1 An ED visit (ED Value Set) on or between January 1 and December 24 of the measurement year where the member was 18 years or older on the date of the visit.

The denominator for this measure is based on ED visits, not on members. If a member has more than one ED visit, identify all ED visits between January 1 and December 24 of the measurement year.

Step 2: Exclusions Exclude ED visits followed by admission to an acute or nonacute inpatient care setting on the date of the ED visit or within 7 days after the ED visit, regardless of the

principal diagnosis for admission. To identify admissions to an acute or nonacute inpatient care setting:

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

An ED visit billed on the same claim as an inpatient stay is considered a visit that resulted in an inpatient stay.

These events are excluded from the measure because admission to an acute or nonacute setting may prevent an outpatient follow-up visit from taking place.

Step 3: Eligible chronic condition diagnoses

Identify ED visits where the member had a chronic condition prior to the ED visit.

The following are eligible chronic condition diagnoses. Each bullet indicates an eligible chronic condition (for example, COPD and asthma are considered the same chronic condition):

- COPD and asthma (COPD Diagnosis Value Set; Asthma Diagnosis Value Set; Unspecified Bronchitis Value Set).
- Alzheimer's disease and related disorders (Dementia Value Set; Frontotemporal Dementia Value Set).
- Chronic kidney disease (Chronic Kidney Disease Value Set).
- Depression (Major Depression Value Set; Dysthymic Disorder Value Set).
- Heart failure (Chronic Heart Failure Value Set; Heart Failure Diagnosis Value Set).
- Acute myocardial infarction (MI Value Set).
- Atrial fibrillation (Atrial Fibrillation Value Set).
- Stroke and transient ischemic attack (Stroke Value Set).
  - Exclude any claim with a principal diagnosis of encounter for other specified aftercare (Stroke Exclusion Value Set).
  - Exclude any claim with any diagnosis of concussion with loss of consciousness or fracture of vault of skull, initial encounter (Other Stroke Exclusions Value Set).

Using the eligible chronic condition diagnoses above, identify members who had either of the following during the measurement year or the year prior to the measurement year, **but prior to the ED visit** (count services that occur over both years):

- 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) on different dates of service, with an eligible chronic condition. Visit type need not be the same for the two visits, but the visits must be for the same eligible chronic condition.
- At least one acute inpatient encounter (Acute Inpatient Value Set) with an eligible chronic condition.

For each ED visit, identify the total number of chronic conditions the member had prior to the ED visit.

Step 4: Identifying members with multiple chronic conditions

Identify ED visits where the member had **two or more** different chronic conditions prior to the ED visit, that meet the criteria included in step 3. These are eligible ED visits.

Step 5: Multiple visits in 8-day period If a member has more than one ED visit in an 8-day period, include only the first eligible ED visit. For example, if a member has an eligible ED visit on January 1, include the January 1 visit and do not include ED visits that occur on or between January 2 and January 8. Then, if applicable, include the next eligible ED visit that occurs on or after January 9. Identify visits chronologically, including only one visit per 8-day period.

Administrative Specification

Denominator The eligible population.

Numerator

7-Day Follow-Up A follow-up service within 7 days after the ED visit (8 total days). Include visits that occur on the date of the ED visit. The following meet criteria for follow-up:

- An outpatient visit (Outpatient Value Set), with or without a telehealth modifier (Telehealth Modifier Value Set).
- A behavioral health visit (FUH Stand Alone Visits Value Set; FUH Visits Group 1 Value Set ***with*** FUH POS Group 1 Value Set; FUH Visits Group 2 Value Set ***with*** FUH POS Group 2 Value Set; FUH RevCodes Group 1 Value Set; FUH RevCodes Group 2 Value Set; IET Stand Alone Visits Value Set; IET Visits Group 1 Value Set ***with*** IET POS Group 1 Value Set; IET Visits Group 2 Value Set ***with*** IET POS Group 2 Value Set. Include behavioral health visits, with or without a telehealth modifier (Telehealth Modifier Value Set).
- A telephone visit (Telephone Visits Value Set).
- Transitional care management services (Transitional Care Management Services Value Set).
- Case management visits (Case Management Encounter Value Set).
- Complex Care Management Services (Complex Care Management Services Value Set).

Note

- *Organizations may have different methods for billing intensive outpatient visits and partial hospitalizations. Some methods may be comparable to outpatient billing, with separate claims for each date of service; others may be comparable to inpatient billing, with an admission date, a discharge date and units of service. Organizations whose billing methods are comparable to inpatient billing may count each unit of service as an individual visit. The unit of service must have occurred during the required period for the rate (i.e., within 7 days after the ED visit).*

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table FMC-3: Data Elements for Follow-Up After Emergency Department Visit for People With High-Risk Multiple Chronic Conditions

Data Elements	Administrative
Measurement year	✓
Data collection methodology (Administrative)	✓
Eligible population	*For each age stratification and total*
Numerator events by administrative data	*For each age stratification and total*
Numerator events by supplemental data	*For each age stratification and total*
Reported rate	*For each age stratification and total*
Lower 95% confidence interval	*For each age stratification and total*
Upper 95% confidence interval	*For each age stratification and total*

Acute Hospital Utilization (AHU)

SUMMARY OF CHANGES FOR HEDIS 2018

- Added a note to clarify that "Total Inpatient" will not equal "Surgery and Medicine" sum if reporting using MS-DRGs.
- Clarified to round to ten decimal places using the .5 rule during the intermediate calculations of Expected events.
- Added steps 5 and 6 to the calculation of the PUCD risk weights to calculate covariance and total variance for each category.
- Removed the Risk Adjustment Weighting Process diagram.
- Added "Total Variance" as a data element to Table IHU-B-2/3, Table IHU-C-2/3 and Table IHU-D-2/3.

SUMMARY OF CHANGES FOR HEDIS 2018 TECHNICAL UPDATE

- Renamed the measure.
- Added observation stay discharges.
- Added definitions for "outlier" and "non-outlier."
- Revised steps 1 and 3 in the calculation of observed events to include observations stay discharges.
- Added step 2 in the calculation of observed events to clarify how to handle acute-to-acute direct transfers.
- Added step 4 in the calculation of observed events to remove discharges for members with three or more inpatient or observation stay discharges.
- Revised the risk adjustment weight table names.
- Added new PPD and PUCD risk adjustment weight tables specific to the Medicare population <65 and the Medicare population 65+.
- Removed step 3 to identify the base risk weight from the calculation of PPD and PUCD; renumbered subsequent steps.
- Revised the data elements tables and added reporting columns.

Description

For members 18 years of age and older, the risk-adjusted ratio of observed to expected acute inpatient and observation stay discharges during the measurement year reported by Surgery, Medicine and Total.

Definitions

Outlier	Members with three or more inpatient or observation stay discharges during the measurement year.
Non-outlier	Members with two or less inpatient or observation stay discharges during the measurement year.
Classification period	The year prior to the measurement year.
PPD	Predicted probability of discharge. The predicted probability of a member having any discharge in the measurement year.
PUCD	Predicted unconditional count of discharge. The predicted unconditional count of discharges for members during the measurement year.

Eligible Population

Note: *Members in hospice are excluded from the eligible population. Refer to General Guideline 20: Members in Hospice.*

Product lines	Commercial, Medicare (report each product line separately).
Ages	18 and older as of December 31 of the measurement year.
Continuous enrollment	The measurement year and the year prior to the measurement year.
Allowable gap	No more than one gap in enrollment of up to 45 days during each year of continuous enrollment.
Anchor date	December 31 of the measurement year.
Benefit	Medical.
Event/diagnosis	None

Calculation of Observed Events

Use the following steps to identify and categorize acute inpatient and observation stay discharges.

Step 1 Identify all acute inpatient and observation discharges during the measurement year. To identify acute inpatient and observation discharges:

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

If an observation stay results in an acute inpatient stay, include only the acute inpatient stay discharge. When an observation visit and an inpatient stay are billed on separate claims, the visit results in an inpatient stay when the admission date for the inpatient stay occurs on the observation date of service or one calendar day after. An observation visit billed on the same claim as an inpatient stay is considered a visit that resulted in an inpatient stay.

Step 2 *Acute-to-acute direct transfers:* Keep the original discharge and drop the direct transfer's discharge.

A **direct transfer** is when the discharge date from the first inpatient setting precedes the admission date to a second inpatient setting by one calendar day or less. For example:

- An inpatient discharge on June 1, followed by an admission to another inpatient setting on June 1, is a direct transfer.
- An inpatient discharge on June 1, followed by an admission to an inpatient setting on June 2, is a direct transfer.
- An inpatient discharge on June 1, followed by an admission to another inpatient setting on June 3, is not a direct transfer; these are two distinct inpatient stays.

Use the following method to identify acute-to-acute direct transfers:

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 and discharge dates for the stay.

Step 3 For the remaining observation stay and inpatient discharges, exclude inpatient and observation stay discharges with:

- A principal diagnosis of mental health or chemical dependency (Mental and Behavioral Disorders Value Set).
- A principal diagnosis of live-born infant (Deliveries Infant Record Value Set).
- A maternity-related principal diagnosis (Maternity Diagnosis Value Set).
- A maternity-related stay (Maternity Value Set; Maternity MS-DRG Value Set).
- A mental health, chemical dependency or rehabilitation related stay (IPU Exclusions MS-DRG Value Set).
- Newborn care (Newborns/Neonates MS-DRG Value Set).
- Inpatient and observation stays with a discharge for death.

Note: *For observation stays that result in an inpatient stay, use only the inpatient stay claim to identify exclusions in this step.*

Step 4 For the remaining observation stay and inpatient discharges, remove discharges for members with three or more inpatient or observation discharges during the measurement year and report these members as outliers in Table AHU-A.

Step 5 Calculate the total using all discharges identified after completing steps 1–4.

Step 6 Identify surgery and medicine using MS-DRGs. For organizations that use DRGs, categorize each discharge as Surgery or Medicine.

- Surgery (Surgery MS-DRG Value Set).
- Medicine (Medicine MS-DRG Value Set).

Note: *If reporting using MS-DRGs, Total will not equal the sum of Surgery and Medicine because DRGs for Principal Diagnosis Invalid as Discharge Diagnosis and Ungroupable are included in Total Inpatient, but are not included in Surgery or Medicine.*

For observation stays and if the organization does not use MS-DRGs for inpatient stays, follow steps 7–8 to categorize discharges.

Step 7 Calculate surgery. Identify the surgery discharges (Surgery Value Set) from the total discharges (step 5).

Step 8 Calculate medicine. Categorize as medicine the discharges remaining after removing surgery (step 7) from the total discharges (step 5).

Risk Adjustment Determination

For each non-outlier member in the eligible population, use the steps in the *Utilization Risk Adjustment Determination* section in the *Guidelines for Risk Adjusted Utilization Measures* to identify risk adjustment categories based on presence of comorbidities.

Risk Adjustment Weighting and Calculation of Expected Events

Calculation of risk-adjusted outcomes (counts of discharges) uses predetermined risk weights generated by two separate regression models. Weights from each model are combined to predict how many discharges each member may have during the measurement year, given age, gender and presence or absence of a comorbid condition. Refer to the Risk Adjustment Weight Process diagram for an overview of the process.

For each non-outlier member in the eligible population, assign Predicted Probability of Discharge (PPD) risk weights. Calculate the PPD for each service utilization category: Surgery, Medicine, Total.

Step 1 For each member with a comorbidity HCC category, link the PPD weights.

- *For the Medicare product line,* use the following tables for beneficiaries 64 and younger:
  - *For Surgery:* Use Table AHUS-MA-PPD-ComorbHCC-Under65.
  - *For Medicine*: Use Table AHUM-MA-PPD-ComorbHCC-Under65.
  - *For Total:* Use Table AHUT-MA-PPD-ComorbHCC-Under65.
- *For the Medicare product line,* use the following tables for beneficiaries 65 and older:
  - *For Surgery:* Use Table AHUS-MA-PPD-ComorbHCC-65Plus.
  - *For Medicine*: Use Table AHUM-MA-PPD-ComorbHCC-65Plus.
  - *For Total:* Use Table AHUT-MA-PPD-ComorbHCC-65Plus.
- *For the commercial product line,* use the following tables:
  - *For Surgery*: Use Table AHUS-Comm-PPD-ComorbHCC.
  - *For Medicine:* Use Table AHUM-Comm-PPD-ComorbHCC.
  - *For Total:* Use Table AHUT-Comm-PPD-ComorbHCC.

Step 2 Link the age-gender PPD weights for each member.

- *For the Medicare product line,* use the following tables:
  - *For Surgery:* Use Table AHUS-MA-PPD.
  - *For Medicine*: Use Table AHUM-MA-PPD.
  - *For Total:* Use Table AHUT-MA-PPD.
- *For the commercial product line,* use the following tables:
  - *For Surgery*: Use Table AHUS-Comm-PPD.
  - *For Medicine:* Use Table AHUM-Comm-PPD.
  - *For Total:* Use Table AHUT-Comm-PPD.

Step 3 Sum all PPD weights (HCC, age and gender) associated with the member for each category (Medicine, Surgery, Total).

Step 4 Calculate the predicted probability of having at least one discharge in the measurement year based on the sum of the weights for each member, for each category (Surgery, Medicine, Total), using the formula below.

$$\text{PPD} = \frac{e^{(\sum \text{PPD WeightsForEachMember})}}{1+e^{(\sum \text{PPD WeightsForEachMember})}}$$

Note: *The risk adjustment tables will be released on November 1, 2017, and posted to www.ncqa.org.*

For each non-outlier member in the eligible population assign Predicted Unconditional Count of Discharge (PUCD) risk weights.

Step 1 For each member with a comorbidity HCC Category, link the PUCD weights. If a member does not have any comorbidities to which a weight could be linked, assign a weight of 1.

- *For Medicare product line,* use the following tables for beneficiaries 64 and younger:
  - *For Surgery:* Use Table AHUS-MA-PUCD-ComorbHCC-Under65.
  - *For Medicine*: Use Table AHUM-MA-PUCD-ComorbHCC-Under65.
  - *For Total:* Use Table AHUT-MA-PUCD-ComorbHCC-Under65.
- *For Medicare product line,* use the following tables for beneficiaries 65 and older:
  - *For Surgery:* Use Table AHUS-MA-PUCD-ComorbHCC-65Plus.
  - *For Medicine*: Use Table AHUM-MA-PUCD-ComorbHCC-65Plus.
  - *For Total:* Use Table AHUT-MA-PUCD-ComorbHCC-65Plus.

- *For the commercial product line,* use the following tables:
  - *For Surgery*: Use Table AHUS-Comm-PUCD-ComorbHCC.
  - *For Medicine:* Use Table AHUM-Comm-PUCD-ComorbHCC.
  - *For Total:* Use Table AHUT-Comm-PUCD-ComorbHCC.

Step 2 Link the PUCD age-gender weights for each member.

- *For Medicare product line,* use the following tables:
  - *For Surgery*: Use Table AHUS-MA-PUCD.
  - *For Medicine:* Use Table AHUM-MA-PUCD.
  - *For Total:* Use Table AHUT-MA-PUCD.
- *For the commercial product line,* use the following tables:
  - *For Surgery*: Use Table AHUS-Comm-PUCD.
  - *For Medicine:* Use Table AHUM-Comm-PUCD.
  - *For Total:* Use Table AHUT-Comm-PUCD.

Step 3 Calculate the predicted unconditional count of discharges in the measurement year, by multiplying all PUCD weights (HCC, age and gender) associated with the member for each category (Surgery, Medicine, Total). Use the following formula:

PUCD = Age/Gender Weight * HCC Weight

Note: *Multiply by each HCC associated with the member. For example, assume a member with HCC-2, HCC-10, HCC-47. The formula would be:*

*PUCD = Age/Gender Weight * HCC-2 * HCC-10 * HCC-47*

Round intermediate calculations to 10 decimal places using the .5 rule.

Expected count of hospitalization Report the final member-level expected count of discharges for each category using the formula below. Round to four decimal places using the .5 rule and enter these values in the reporting table.

Expected Count of Discharges = PPD x PUCD

Step 4 Use the formula below to calculate the covariance of the predicted outcomes for each category (i.e., gender, age group and type of hospital stay).

$$COV = \frac{\sum_{i=1}^{n}(PPD - mean(PPD)) \times (PUCD - mean(PUCD))}{n-1}$$

Step 5 Use the formula below to calculate the variance for each category.

$$Total\ Variance = \sum_{i=1}^{n}(PPD \times PUCD)^2 \times \left(1 + (1 - PPD)^2 + \left(\frac{2 \times COV}{PPD \times PUCD}\right)\right)$$

Reporting: Number of Members in the Eligible Population

The number of members in the eligible population (including outliers) for each age and gender group and the overall total. Enter these values in the reporting table (Table AHU-A-2/3).

Reporting: Number of Non-Outliers

The number of non-outlier members for each age and gender group and the overall total. Enter these values in the reporting table (Table AHU-A-2/3).

Reporting: Number of Outliers

The number of outlier members for each age and gender group and the overall total. Enter these values in the reporting table (Table AHU-A-2/3).

Reporting: Number of Observed Events Among Non-Outlier Members

The number of observed discharges within each age and gender group and the overall total for each category (Surgery, Medicine, Total).

Reporting: Observed Discharges per 1,000 Non-Outlier Members

The number of observed discharges divided by the number of non-outlier members in the eligible population, multiplied by 1,000 within each age and gender group and the overall total for each category (Surgery, Medicine, Total).

Reporting: Number of Expected Events Among Non-Outlier Members

The number of expected discharges within each age and gender group and the overall total for each category (Surgery, Medicine, Total).

Reporting: Expected Discharges per 1,000 Non-Outlier Members

The number of expected discharges divided by the number of non-outlier members in the eligible population, multiplied by 1,000 within each age and gender group and the overall total for each category (Surgery, Medicine, Total).

Reporting: Total Variance Among Non-Outlier Members

The variance (from Risk Adjustment Weighting and Calculation of Expected Events, PUCD, step 5) within each age and gender group and the overall total for each category (Surgery, Medicine, Total).

Table AHU-A-2/3: Eligible Population and Outlier Rate

Age	Sex	Members in Eligible Population	Non-Outlier Members	Outlier Members	Outlier Rate
18-44	Male	_____	_____	_____	
	Female	_____	_____	_____	
	Total	_____	_____	_____	
45-54	Male	_____	_____	_____	
	Female	_____	_____	_____	
	Total	_____	_____	_____	
55-64	Male	_____	_____	_____	
	Female	_____	_____	_____	
	Total	_____	_____	_____	
65-74	Male	_____	_____	_____	
	Female	_____	_____	_____	
	Total	_____	_____	_____	
75-84	Male	_____	_____	_____	
	Female	_____	_____	_____	
	Total	_____	_____	_____	
85+	Male	_____	_____	_____	
	Female	_____	_____	_____	
	Total	_____	_____	_____	
Total	Male	_____	_____	_____	
	Female	_____	_____	_____	
	Total	_____	_____	_____	

Table AHU-B-2/3: Non-Outlier Member Acute Inpatient and Observation Stay Discharges by Age and Risk Adjustment: Surgery

Age	Sex	Observed Discharges	Observed Discharges/ 1,000 Members	Expected Discharges	Expected Discharges/ 1,000 Members	Total Variance (O/E)	O/E Ratio (Observed Discharges/ Expected Discharges)
18-44	Male						
	Female						
	Total						
45-54	Male						
	Female						
	Total						
55-64	Male						
	Female						
	Total						
65-74	Male						
	Female						
	Total						
75-84	Male						
	Female						
	Total						
85+	Male						
	Female						
	Total						
Total	Male						
	Female						
	Total						

Table AHU-C-2/3: Non-Outlier Member Acute Inpatient and Observation Stay Discharges by Age and Risk Adjustment: Medicine

Age	Sex	Observed Discharges	Observed Discharges/ 1,000 Members	Expected Discharges	Expected Discharges/ 1,000 Members	Total Variance (O/E)	O/E Ratio (Observed Discharges/ Expected Discharges)
18-44	Male						
	Female						
	Total						
45-54	Male						
	Female						
	Total						
55-64	Male						
	Female						
	Total						
65-74	Male						
	Female						
	Total						
75-84	Male						
	Female						
	Total						
85+	Male						
	Female						
	Total						
Total	Male						
	Female						
	Total						

Table AHU-D-2/3: Non-Outlier Member Acute Inpatient and Observation Stay Discharges by Age and Risk Adjustment: Total

Age	Sex	Observed Discharges	Observed Discharges/ 1,000 Members	Expected Discharges	Expected Discharges/ 1,000 Members	Total Variance (O/E)	O/E Ratio (Observed Discharges/ Expected Discharges)
18-44	Male						
	Female						
	Total						
45-54	Male						
	Female						
	Total						
55-64	Male						
	Female						
	Total						
65-74	Male						
	Female						
	Total						
75-84	Male						
	Female						
	Total						
85+	Male						
	Female						
	Total						
Total	Male						
	Female						
	Total						

Hospitalization for Potentially Preventable Complications (HPC)

Developed by the Agency for Healthcare Research and Quality (AHRQ) and adapted by NCQA with permission.

SUMMARY OF CHANGES FOR HEDIS 2018

- Clarified the definition of "direct transfer": when the discharge date from the first inpatient setting precedes the admission date to a second inpatient setting by one calendar day or less.
- Clarified to round to 10 decimal places using the .5 rule during the intermediate calculations of Expected events.
- Added steps 5 and 6 to the calculation of the PPD risk weights to calculate covariance and total variance for each category.
- Removed the Risk Adjustment Weighting Process diagram.
- Added "Total Variance" as a data element to Table HPC-B-2/3, Table HPC-C-3 and Table HPC-D-3.

SUMMARY OF CHANGES FOR HEDIS 2018 TECHNICAL UPDATE

- Added observation stay discharges.
- Added definitions for "chronic ACSC outlier," "chronic ACSC non-outlier," "acute ACSC outlier" and "acute ACSC non-outlier."
- Added a required exclusion for members living long-term in institutional settings.
- Revised steps 1 and 3 in the calculation of observed events for chronic ACSC and acute ACSC to include observations stay discharges.
- Added step 4 in the calculation of observed events for chronic ACSC and acute ACSC to remove discharges for members with three or more discharges.
- Removed step 3 to identify the base risk weight from the calculation of PPD and PUCD; renumbered subsequent steps.
- Revised the data elements tables and added reporting columns.

Description

For members 67 years of age and older, the rate of discharges for ambulatory care sensitive conditions (ACSC) per 1,000 members and the risk-adjusted ratio of observed to expected discharges for ACSC by chronic and acute conditions.

Definitions

ACSC Ambulatory care sensitive condition. An acute or chronic health condition that can be managed or treated in an outpatient setting. The ambulatory care conditions included in this measure are:

- *Chronic ACSC*
  - Diabetes short-term complications.
  - Diabetes long-term complications.
  - Uncontrolled diabetes.
  - Lower-extremity amputation among patients with diabetes.
  - COPD.
  - Asthma.

  - Hypertension.
  - Heart failure.
- *Acute ACSC*
  - Bacterial pneumonia.
  - Urinary tract infection.
  - Cellulitis.
  - Pressure ulcer.

Chronic ACSC outlier	Members with three or more inpatient or observation stay chronic ACSCs during the measurement year.
Chronic ACSC non-outlier	Members with two or less inpatient or observation stay chronic ACSCs during the measurement year.
Acute ACSC outlier	Members with three or more inpatient or observation stay ACSCs during the measurement year.
Acute ACSC non-outlier	Members with two or less inpatient or observation stay acute ACSCs during the measurement year.
Classification period	The year prior to the measurement year.
PPD	Predicted probability of discharge. The predicted probability of a member having any discharge in the measurement year.
PUCD	Predicted unconditional count of discharge. The predicted unconditional count of discharges for members during the measurement year.

Eligible Population

Note: *Members in hospice are excluded from the eligible population. Refer to General Guideline 20: Members in Hospice.*

Product lines	Medicare.
Ages	67 years and older as of December 31 of the measurement year.
Continuous enrollment	The measurement year and the year prior to the measurement year.
Allowable gap	No more than one gap in enrollment of up to 45 days during each year of continuous enrollment.
Anchor date	December 31 of the measurement year.
Benefit	Medical.
Event/diagnosis	None.
Required exclusions	Members enrolled in an Institutional SNP (I-SNP) any time during the measurement year. Members living long-term in an institution any time during the measurement year, as identified by the LTI flag in the Medicare Part C monthly membership file.

Calculation of Observed Events

Report each ACSC category separately and as a combined total. The total is the sum of the acute and chronic ACSC categories.

Chronic ACSC

Follow the steps below to identify the number of chronic ACSC acute inpatient and observation stay discharges.

Step 1 Identify all acute inpatient and observation stay discharges during the measurement year. To identify acute inpatient and observation stay discharges:

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

If an observation stay results in an acute inpatient stay, include only the acute inpatient stay discharge. When an observation visit and an inpatient stay are billed on separate claims, the visit results in an inpatient stay when the admission date for the inpatient stay occurs on the observation date of service or one calendar day after. An observation visit billed on the same claim as an inpatient stay is considered a visit that resulted in an inpatient stay.

Step 2 *Acute-to-acute direct transfers:* Keep the original discharge and drop the direct transfer's discharge.

A **direct transfer** is when the discharge date from the first inpatient setting precedes the admission date to a second inpatient setting by one calendar day or less. For example:

- An inpatient discharge on June 1, followed by an admission to another inpatient setting on June 1, is a direct transfer.
- An inpatient discharge on June 1, followed by an admission to an inpatient setting on June 2, is a direct transfer.
- An inpatient discharge on June 1, followed by an admission to another inpatient setting on June 3, is not a direct transfer; these are two distinct inpatient stays.

Use the following method to identify acute-to-acute direct transfers:

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 and discharge dates for the stay.

Step 3 For the remaining acute inpatient and observation stay discharges, identify discharges with any of the following:

- Primary diagnosis of diabetes short-term complications (ketoacidosis, hyperosmolarity or coma; Diabetes Short Term Complications Value Set).
- Primary diagnosis of diabetes with long-term complications (renal, eye, neurological, circulatory or unspecified complications; Diabetes Long Term Complications Value Set).
- Primary diagnosis of uncontrolled diabetes (Uncontrolled Diabetes Value Set).
- A procedure code for lower extremity amputation (Lower Extremity Amputation Procedures Value Set) ***with*** any diagnosis of diabetes (Diabetes Diagnosis Value Set).
  - Exclude any discharge with a diagnosis of traumatic amputation of the lower extremity (Traumatic Amputation of Lower Extremity Value Set).

  - Exclude any discharge with a toe amputation procedure (Toe Amputation Value Set).
- Primary diagnosis of COPD (COPD Diagnosis Value Set).
  - Exclude any discharge with a diagnosis of cystic fibrosis or anomaly of the respiratory system (Cystic Fibrosis and Respiratory System Anomalies Value Set).
- Primary diagnosis of asthma (Asthma Diagnosis Value Set).
  - Exclude any discharge with a diagnosis of cystic fibrosis or anomaly of the respiratory system (Cystic Fibrosis and Respiratory System Anomalies Value Set).
- Primary diagnosis of acute bronchitis (Acute Bronchitis Diagnosis Value Set) ***with*** diagnosis of COPD (COPD Diagnosis Value Set).
  - Exclude any discharge with a diagnosis of cystic fibrosis or anomaly of the respiratory system (Cystic Fibrosis and Respiratory System Anomalies Value Set).
- Primary diagnosis of heart failure (Heart Failure Diagnosis Value Set)
  - Exclude any discharges with a cardiac procedure (Cardiac Procedure Value Set).
- Primary diagnosis of hypertension (Hypertension Value Set).
  - Exclude any discharge with a cardiac procedure (Cardiac Procedure Value Set).
  - Exclude any discharge with a diagnosis of Stage I-IV kidney disease (Stage I-IV Kidney Disease Value Set) ***with*** a dialysis procedure (Dialysis Value Set).

Note: For observation stays that result in an inpatient stay, use only the inpatient stay claim to identify exclusions in this step.

Step 4 Remove discharges for members with any three or more chronic ACSC discharges during the measurement year and report these members as chronic ACSC outliers.

Acute ACSC Follow the steps below to identify the number of acute ACSC acute inpatient and observation stay discharges.

Step 1 Identify all acute inpatient and observation stay discharges during the measurement year. To identify acute inpatient and observation stay discharges:

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

If an observation stay results in an acute inpatient stay, include only the acute inpatient stay discharge. When an observation visit and an inpatient stay are billed on separate claims, the visit results in an inpatient stay when the admission date for the inpatient stay occurs on the observation date of service or one calendar day after. An observation visit billed on the same claim as an inpatient stay is considered a visit that resulted in an inpatient stay.

Step 2 *Acute-to-acute direct transfers:* Keep the original discharge and drop the direct transfer discharge.

A **direct transfer** is when the discharge date from the first inpatient setting precedes the admission date to a second inpatient setting by one calendar day or less. For example:

- An inpatient discharge on June 1, followed by an admission to another inpatient setting on June 1, is a direct transfer.

- An inpatient discharge on June 1, followed by an admission to an inpatient setting on June 2, is a direct transfer.
- An inpatient discharge on June 1, followed by an admission to another inpatient setting on June 3, is not a direct transfer; these are two distinct inpatient stays.

Use the following method to identify acute-to-acute direct transfers:

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 and discharge dates for the stay.

Step 3 For the remaining acute inpatient and observation stay discharges, identify discharges with any of the following:

- Primary diagnosis of bacterial pneumonia (Bacterial Pneumonia Value Set).
  - Exclude any discharge with a diagnosis of sickle cell anemia, HB-S disease (Sickle Cell Anemia and HB-S Disease Value Set).
  - Exclude any discharge with a procedure or diagnosis for immunocompromised state (Immunocompromised State Value Set).
- Primary diagnosis of urinary tract infection (Urinary Tract Infection Value Set).
  - Exclude any discharge with a diagnosis of kidney/urinary tract disorder (Kidney and Urinary Tract Disorder Value Set).
  - Exclude any discharge with a procedure or diagnosis for immunocompromised state (Immunocompromised State Value Set).
- Primary diagnosis of cellulitis (Cellulitis Value Set).
- Primary diagnosis of pressure ulcer (Pressure Ulcer Value Set).

Note: *For observation stays that result in an inpatient stay, use only the inpatient stay claim to identify exclusions in this step.*

Step 4 Remove discharges for members with any three or more acute ACSC discharges during the measurement year and report these members as acute ACSC outliers.

Total ACSC Count of stays with a discharge date during the measurement year for a chronic or acute ACSC.

Sum the events from the Chronic ACSC and Acute ACSC categories to obtain a total ACSC.

Risk Adjustment Determination

For each non-outlier member in the eligible population, use the steps in the *Utilization Risk Adjustment Determination* section in the *Guidelines for Risk Adjusted Utilization Measures* to identify risk adjustment categories based on presence of comorbidities.

Risk Adjustment Weighting and Calculation of Expected Events

Calculation of risk-adjusted outcomes (counts of discharges) uses predetermined risk weights generated by two separate regression models. Weights from each model are combined to predict how many discharges each member may have during the measurement year, given their age, gender and the presence or absence of a comorbid condition. Refer to the Risk Adjustment Weight Process diagram for an overview of the process.

For each non-outlier member in the eligible population, assign Predicted Probability of Discharge (PPD) risk weights. Calculate the PPD for each ACSC category (Chronic ACSC, Acute ACSC, Total ACSC).

Step 1 For each member with a comorbidity HCC Category, link the PPD weights.

- *For Chronic ACSC:* Use Table HPCCh-PPD-ComorbidHCC.
- *For Acute ACSC:* Use Table HPCA-PPD-ComorbidHCC.
- *For Total ACSC*: Use Table HPCT-PPD-ComorbidHCC.

Step 2 Link the age and gender weights for each member.

- *For Chronic ACSC:* Use Table HPCCh-PPD.
- *For Acute ACSC:* Use Table HPCA-PPD.
- *For Total ACSC*: Use Table HPCT-PPD.

Step 3 Sum all PPD weights associated with the member (HCC, age and gender) for each category (Chronic ACSC, Acute ACSC, Total ACSC).

Step 4 Calculate the predicted probability of having at least one discharge in the measurement year, based on the sum of the weights for each member, for each category (Chronic ACSC, Acute ACSC, Total ACSC), using the formula below.

$$PPD = \frac{e^{(\sum \text{PPDWeightsForEachMember})}}{1+e^{(\sum \text{PPD WeightsForEachMember})}}$$

Note: *The risk adjustment tables will be released on November 1, 2017, and posted to www.ncqa.org.*

For each non-outlier member in the eligible population assign Predicted Unconditional Count of Discharge (PUCD) risk weights. Calculate the PUCD for each ACSC category (Chronic ACSC, Acute ACSC, Total ACSC).

Step 1 For each member with a comorbidity HCC Category, link the weights. If a member does not have any comorbidities to which weights can be linked, assign a weight of 1.

- *For Chronic ACSC:* Use Table HPCCh-PUCD-ComorbidHCC.
- *For Acute ACSC:* Use Table HPCA-PUCD-ComorbidHCC.
- *For Total ACSC*: Use Table HPCT-PUCD-ComorbidHCC.

Step 2 Link the age and gender weights for each member.

- *For Chronic ACSC:* Use Table HPCCh-PUCD.
- *For Acute ACSC:* Use Table HPCA-PUCD.
- *For Total ACSC*: Use Table HPCT-PUCD.

Step 3 Calculate the predicted unconditional count of discharges in the measurement year by multiplying all PUCD weights (HCC, age and gender) associated with the member for each ACSC category (Chronic ACSC, Acute ACSC, Total ACSC). Use the following formula:

PUCD = Age/Gender Weight * HCC Weight

Note: *Multiply by each HCC associated with the member. For example, assume a member with HCC-2, HCC-10, HCC-47. The formula would be:*

*PUCD = Age/Gender Weight * HCC-2 * HCC-10 * HCC-47*

Round intermediate calculations to 10 decimal places using the .5 rule.

Expected count of hospitalization Use the formula below to report the final member-level expected count of discharges for each category. Round to four decimal places using the .5 rule and enter these values in the reporting table.

Expected Count of ACSC Discharges = PPD x PUCD

Step 4 Use the formula below to calculate to calculate the covariance of the predicted outcomes for each category (i.e., gender, age group and type of ACSC).

$$COV = \frac{\sum_{i=1}^{n}\left(PPD - mean(PPD)\right) \times \left(PUCD - mean(PUCD)\right)}{n-1}$$

Step 5 Use the formula below to calculate the variance for each category.

$$Total\ Variance = \sum_{i=1}^{n}(PPD \times PUCD)^2 \times \left(1 + \ (1 - PPD)^2 + \left(\frac{2 \times COV}{PPD \times PUCD}\right)\right)$$

Reporting: Number of Members in the Eligible Population

The number of members in the eligible population (including all outliers) for each age and gender group and the overall total. Enter these values in the reporting table (Table HPC-A-3).

Reporting: Number of Chronic ACSC Non-Outliers and Acute ACSC Non-Outliers

The number of chronic ACSC outlier members and the number of acute ACSC outliers for each age and gender group and the overall total. Enter these values in the reporting table (Table HPC-A-3).

Reporting: Number of Chronic ACSC Outliers and Acute ACSC Outliers

The number of chronic ACSC outlier members and the number of acute ACSC outliers for each age and gender group and the overall total. Enter these values in the reporting table (Table HPC-A-3).

Reporting: Number of Observed Events Among Non-Outlier Members

The number of observed discharges within each age and gender group and the overall total for each ACSC category and Total ACSC.

Reporting: Observed Discharges per 1,000 Non-Outlier Members

The number of observed discharges divided by the number of non-outlier members in the eligible population, multiplied by 1,000 within each age and gender group, and the overall total for each ACSC category and Total ACSC.

Reporting: Number of Expected Events Among Non-Outlier Members

The number of expected discharges within each age and gender group and the overall total for each ACSC category and Total ACSC.

Reporting: Expected Discharges per 1,000 Non-Outlier Members

The number of expected discharges divided by the number of non-outlier members in the eligible population, multiplied by 1,000 within each age and gender group, and the overall total for each ACSC category and Total ACSC.

Reporting: Total Variance Among Non-Outlier Members

The variance (from Risk Adjustment Weighting and Calculation of Expected Events, PUCD, step 5) within each age and gender group and the overall total for each category (Chronic ACSC, Acute ACSC, Total ACSC).

Note

- *Organizations may not use risk assessment protocols to supplement diagnoses for calculating risk adjustment scores for this measure. The HPC measurement model was developed and tested using only claims-based diagnoses; diagnoses from additional data sources would affect the validity of the models as they are currently implemented in the specifications.*

Table HPC-A-3: Eligible Population and Outlier Rate

Age	Sex	Members in Eligible Population	Chronic ACSC Non-Outlier Members	Chronic ACSC Outlier Members	Chronic ACSC Outlier Rate	Acute ACSC Non-Outlier Members	Acute ACSC Outlier Members	Acute ACSC Outlier Rate
67-74	Male							
	Female							
	Total							
75-84	Male							
	Female							
	Total							
85+	Male							
	Female							
	Total							
Total	Male							
	Female							
	Total							

Table HPC-B-3: Non-Outlier Member Hospitalization for Potentially Preventable Complication Rates by Age and Risk Adjustment: Chronic ACSC

Age	Sex	Observed Chronic ACSC Discharges	Observed Chronic ACSC Discharges/ 1,000 Members	Expected Chronic ACSC Discharges	Expected Chronic ACSC Discharges/ 1,000 Members	Total Variance (O/E)	O/E Ratio (Observed Discharges/Expected Discharges)
67-74	Male						
	Female						
	Total						
75-84	Male						
	Female						
	Total						
85+	Male						
	Female						
	Total						
Total	Male						
	Female						
	Total:						

Table HPC-C-3: Non-Outlier Member Hospitalization for Potentially Preventable Complication Rates by Age, Gender and Risk Adjustment: Acute ACSC

Age	Sex	Observed Acute ACSC Discharges	Observed Acute ACSC Discharges/ 1,000 Members	Expected Acute ACSC Discharges	Expected Acute ACSC Discharges/ 1,000 Members	Total Variance (O/E)	O/E Ratio (Observed Discharges/Expected Discharges)
67-74	Male						
	Female						
	Total						
75-84	Male						
	Female						
	Total						
85+	Male						
	Female						
	Total						
Total	Male						
	Female						
	Total						

Table HPC-D-3: Non-Outlier Member Hospitalization for Potentially Preventable Complication Rates by Age, Gender and Risk Adjustment: Total ACSC

Age	Sex	Observed Total ACSC Discharges	Observed Total ACSC Discharges/ 1,000 Members	Expected Total ACSC Discharges	Expected Total ACSC Discharges/ 1,000 Members	Total Variance (O/E)	O/E Ratio (Observed Discharges/Expected Discharges)
67-74	Male						
	Female						
	Total						
75-84	Male						
	Female						
	Total						
85+	Male						
	Female						
	Total						
Total	Male						
	Female						
	Total						

Unhealthy Alcohol Use Screening and Follow-Up (ASF)

SUMMARY OF CHANGES FOR HEDIS 2018

- First-year measure.

SUMMARY OF CHANGES FOR HEDIS 2018 TECHNICAL UPDATE

- Revised the measurement period.
- Revised the age stratifications.
- Revised the time frames for the criteria that define the IESD, Intake Period, Ages, exclusions, numerator 1 and numerator 2.
- Updated logic sections to be expressed in Clinical Quality Language (CQL)-based Health Quality Measure Format (HQMF).
- Added a *Note* section.

Measure Description

The percentage of members 18 years of age and older who were screened for unhealthy alcohol use using a standardized tool and, if screened positive, received appropriate follow-up care.

- *Unhealthy Alcohol Use Screening*. The percentage of members who had a systematic screening for unhealthy alcohol use.
- *Counseling or Other Follow-up*. The percentage of members who screened positive for unhealthy alcohol use and received brief counseling or other follow-up care within 2 months of a positive screening.

Measurement Period

Measurement period	January 1 of the measurement year through December 31 of the measurement year.

Clinical Recommendation Statement

The USPSTF recommends that clinicians screen adults aged 18 years or older for alcohol misuse and provide brief behavioral counseling interventions to those who misuse alcohol.

U.S. Preventive Services Task Force. 2013. “Alcohol Misuse: Screening and Behavioral Counseling Interventions in Primary Care.” Annals of Internal Medicine. 159:210-218.

Measure Characteristics

Scoring	Proportion.
Type	Process.
Item count	Members.

Stratification	Report each of the following strata: • Stratum 1: Members age 18–44. • Stratum 2: Members age 45–64. • Stratum 3: Members age 65+.
Risk adjustment	None.
Improvement notation	A higher score indicates better performance.
Measure guidance	HEDIS ECDS technical specifications include both narrative specification language and expression of the measure logic in Clinical Quality Language (CQL)-based Health Quality Measure Format (HQMF), Release 1. CQL-HQMF is a draft standard for representing a clinical quality measure (CQM) as an electronic document that references the Quality Data Model (QDM). At this time, the measure logic and the Data Criteria are provided only as additional references, complementing the narrative measure calculation. Members in hospice are excluded from the initial population. Refer to *General Guideline 20: Members in Hospice.*

Measure Definitions

ECDS	Electronic Clinical Data Systems. A network of databases containing plan members' personal health information and a record of their experiences in the health care system. ECDS data are structured so that automated quality measurement queries can be consistently and reliably executed, and provide results to the professionals responsible for care. ECDS may also support other care-related activities directly or indirectly through various interfaces, including evidence-based decision support, quality management and outcome reporting.
ECDS Coverage	The proportion of members for whom a healthcare organization can send or receive any electronic clinical quality data. **To qualify, ECDS data must be accessible by the health care team at the point of care.**
Unhealthy Alcohol Use Screening Tools	An assessment tool that has been normalized and validated for the adult patient population. Acceptable tools (and thresholds for positive results) for use in this measure are: • Alcohol Use Disorders Identification Test (AUDIT) Screening Instrument (score ≥8). • Alcohol Use Disorders Identification Test Consumption (AUDIT-C) Screening Instrument (score ≥4 for men; score ≥3 for women). • Single-Question Screening: How many times in the past year have you had 5 (for men) or 4 (for women and all adults older than 65 years) or more drinks in a day? (response ≥1).
Counseling or Other Follow-up	Counseling refers to one or more counseling sessions, a minimum of 5-15 minutes, which may include at least one of the following: • Feedback on alcohol use and harms. • Identification of high risk situations for drinking and coping strategies. • Increase the motivation to reduce drinking.

- Development of a personal plan to reduce drinking.
- Documentation of receiving alcohol misuse treatment.

IESD Index Episode Start Date. The first event of an alcohol use screening between January 1 of the measurement year to November 1 of the measurement year.

Intake Period A 10-month window that begins on January 1 of the measurement year and ends on November 1 of the measurement year. The Intake Period captures eligible episodes of alcohol screening.

Initial Population

Product lines Commercial, Medicaid, Medicare (report each product line separately).

Ages 18 years of age and older as of January 1 of the r measurement year.

Continuous enrollment The measurement year.

Allowable gap No more than one gap in continuous enrollment of up to 45 days during the measurement year. 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).

Benefit Medical.

Initial population logic

AgeInYearsAt(start of "Intake Period") >= 18

“Intake Period”
define "Intake Period":
Interval[start of "Measurement Period", end of "Measurement Period" -61 days]

“Measurement Period”
define "Measurement Period": Calendar Year (January 1,20XX through December 31,20XX)

Exclusions

Exclusions Exclude members with a diagnosis or history of any of the following:

- Alcohol use disorder (Alcohol Use Disorder Value Set) from January 1 the year prior to the measurement year to December 31 of the measurement year.
- Dementia (Dementia Value Set) between January 1 o the measurement year through November 1 of the measurement year.
- In hospice or using hospice services during the measurement year (Hospice Value Set).

Exclusion logic

define "Denominator Exclusions":
exists (["Diagnosis": "Alcohol abuse or dependence"] D where D.prevalencePeriod starts 12 months or less before start of "Measurement Period")

or exists (["Diagnosis": "Dementia"] D where D.prevalencePeriod overlaps "Intake Period")

or exists (["Intervention, Performed": "Hospice Care All Settings"] I where I.relevantPeriod overlaps "Measurement Period"

Unhealthy Alcohol Use Screening

Denominator 1 The initial population

Denominator 1 logic

define "Denominator 1":
"Initial Population"

Numerator 1 Members who were screened for unhealthy alcohol use using a systematic screening method. Identify all members with a result for a screening tool (Alcohol Screening Value Set) with or without a telehealth modifier (Telehealth Modifier Value Set) documented between January 1 of the measurement year through November 1 of the measurement year.

Numerator 1 logic

define "Numerator 1":
exists ("AUDIT C Assessment")
or exists ("AUDIT Assessment")
or exists ("Alcohol Screening Tool 5")
or exists ("Alcohol Screening Tool 4")
or exists ("Telehealth Encounter")

define "AUDIT-C Assessment":
["Assessment, Performed": "AUDIT-C Total Score (in points)"] A
where A.authorDatetime during "Intake Period" and A.result is not null

define "AUDIT Assessment":
["Assessment, Performed": "AUDIT Tool LOINC Value Set"] A where A.authorDatetime during "Intake Period" and A.result is not null

define "Audit Screening Tool 5"
["Assessment, Performed": "Frequency of Five or More Drinks on One Occasion in Past Year"] A where A.authorDatetime during "Intake Period" and A.result is not null

Define "Audit Screening Tool 4"
["Assessment, Performed": "Frequency of Four or More Drinks on One Occasion in Past Year"] A where A.authorDatetime during "Intake Period" and A.result is not null

Counseling or Other Follow-Up on Positive Screen

Denominator 2 All members in Numerator 1 whose score indicated a positive finding for Unhealthy Alcohol Use

- AUDIT Screening Instrument (AUDIT Total Score LOINC code: 75624-7) with a result ≥8.
- AUDIT-C Screening Instrument (AUDIT-C Total Score LOINC code: 75626-2) with a result >=4 for men (Male AdministrativeGender Value Set) and ≥3 for women (Female AdministrativeGender Value Set).

- Single-Question (Positive) Response:
  - Males (Male AdministrativeGender Value Set) in Strata 1–3: Result for item "How many times in the past year have you had 5 or more drinks in a day? is ≥1\.
  - Females (Female AdministrativeGender Value Set) in Strata 1–3: Result for item "How many times in the past year have you had 4 or more drinks in a day?" is ≥1
  - All members in Stratum 4: Result for item "How many times in the past year have you had 4 or more drinks in a day?" is ≥1.

Denominator 2 logic

```
define "Denominator 2"
    exists "Positive Assessment for Unhealthy Alcohol Abuse"
    or exists (["Patient Characteristic Sex": "Male"]) and "Five or more drinks a day"
    or exists (["Patient Characteristic Sex": "Female"]) and "Four or more drinks a day"
    or "Patient is Over 65" and "Four or more drinks a day"

define "Positive Assessment for Unhealthy Alcohol Use"
    (["Assessment, Performed": "AUDIT Tool LOINC Value Set"] A where
    A.result as Integer >= 8 and A.authorDatetime during "Intake Period")
    union ("AUDIT C Assessment" A
    where ("Patient is Male" and A.result as Integer >= 4 and A.authorDatetime
    during "Intake Period")
    or ("Patient is Female" and A.result as Integer >= 3 and A.authorDatetime
    during "Intake Period"))

define “Patient is Male”
    exists ["Patient Characteristic Sex": "Male"]

define “Patient is Female”
    exists ["Patient Characteristic Sex": "Female"]

define “Patient is Over 65”
    AgeInYearsAt(start of "Measurement Period") >=65

define “Five or more drinks a day”
    exists ("Audit Screening Tool 5") A5 where A5.result >= 5 and
    A5.authorDatetime during "Intake Period"

define “Four or more drinks a day”
    exists ("Audit Screening Tool 4") A4 where A4.result >= 4 'L' and
    A4.authorDatetime during "Intake Period"
```

Numerator 2

Members who received follow-up care on the date of initial positive screen or in the 60 days following the initial positive screen (61 total days). Follow-up must include at least one of the following:

- Documentation of counseling or alcohol misuse treatment (Alcohol Counseling and Treatment Value Set) with or without at telehealth modifier (Telehealth Modifier Value Set).
- Documentation of additional alcohol misuse screening with negative finding from Unhealthy Alcohol Use Screening Tools (Alcohol Screening Value Set) with or without at telehealth modifier (Telehealth Modifier Value Set). Negative finding for alcohol misuse is defined as:

  - AUDIT Screening Instrument (AUDIT Total Score LOINC code: 75624-7) with a result <8.
  - AUDIT-C Screening Instrument (AUDIT-C Total Score LOINC code: 75626-2) with a result <4 for men (Male AdministrativeGender Value Set) and <3 for women (Female AdministrativeGender Value Set).
  - Single-Question (Negative) Response:
    - Males (Male AdministrativeGender Value Set) in Strata 1–3: Result for item "How many times in the past year have you had 5 or more drinks in a day? is <1.
    - Females (Female AdministrativeGender Value Set) in Strata 1–3: Result for item "How many times in the past year have you had 4 or more drinks in a day?" is <1.
    - All adults in Stratum 4: Result for item "How many times in the past year have you had 4 or more drinks in a day?" is 0.

Numerator 2 logic

```
define "Numerator 2":
    exists ("Followup Screening")

define "Followup Screening":
  exists (({"Assessment, Performed": "Alcohol Counseling and Treatment"}) A with
  "Initial Positive Assessment" I such that A.authorDatetime 60 days after
  I.authorDatetime)
```

Stratification logic

```
define "Stratifier 1":
    AgeInYearsAt(start of "Measurement Period") in Interval[18, 44]

define "Stratifier 2":
    AgeInYearsAt(start of "Measurement Period") in Interval[45, 64]

define "Stratifier 3":
    AgeInYearsAt(start of "Measurement Period") >= 65
```

Data Criteria (Element Level)

QDM Variables

Quality Data Elements

- valueset "Alcohol Screening and Brief Counseling": 'urn:oid: 1.1.1.1' // User Defined QDM Value Set
- valueset "AUDIT-C Total Score (in points)": 'urn:oid: 2.16.840.1.113883.3.464.1003.107.12.1022' // Grouping Value Set day": 'urn:oid:2.16.840.1.113883.3.464.1003.106.11.1035' // Value Set
- valueset "Four or more drinks per day": 'urn:oid: 2.16.840.1.113762.1.4.1072.14' // Value Set
- valueset "AUDIT Total Score (in points)": 'urn:oid: 1.1.1.1 // User Defined QDM Value Set
- valueset "Alcohol abuse or dependence": 'urn:oid: 2.16.840.1.113883.3.464.1004.1339' // Value Set
- valueset "Dementia": 'urn:oid:2.16.840.1.113883.3.464.1004.1074' // Value Set
- valueset "Female AdministrativeGender": 'urn:oid: 2.16.840.1.113883.3.560.100.2' // Value Set
- valueset "Five or more drinks per day" 'urn:oid: 1.1.1.1 // User Defined QDM Value Set
- valueset "Male AdministrativeGender": 'urn:oid: 2.16.840.1.113883.3.560.100.1' // Value Set
- valueset "Hospice Care All Settings": 'urn:oid: 2.16.840.1.113883.3.464.1004.1418' // Value Set
- valueset "Telehealth Modifier": 'urn:oid: 2.16.840.1.113883.3.464.1004.1445' // Value Set

Note

- *Because there is no LOINC code for the single-question responses (positive or negative) for the measure, single-question responses are not included in certification or audit.*

Data Elements for Reporting

Organizations that submit data to NCQA will provide the following data elements in a specified file.

Table ASF-A-1/2/3: Metadata Elements for Unhealthy Alcohol Use: Screening and Follow-Up

Metadata ID	Metadata Specification
MeasurementYear	Measurement year
CollectionMethod	Data collection methodology (electronic clinical data)
IP-ECDS Coverage	Initial Population covered by ECDS

Table ASF-B-1/2/3: Data Elements for Unhealthy Alcohol Use: Screening and Follow-Up for Adolescents and Adults

Indicator	Age Stratification	Data Source	Data Element Specification
Alcohol Use Screening	18-44	EHR	Initial population
Counseling or Other Follow-Up on Positive Screen	44-64	HIE/Clinical Registry	Denominator
	65+	Case Management Registry	Exclusions
		Administrative Claims	Numerator events