

**HEDIS® MY 2023 Volume 2  
Risk Adjustment Utilization Tables  
User Manual**

The Risk Adjustment Utilization Tables (the “Tables”) and this User Manual were developed by and are owned by NCQA. **The Tables may only be used, without modification, for a noncommercial purpose to assist with calculation of NCQA’s Risk Adjusted Utilization HEDIS® measures.** NCQA holds a copyright to these materials and may rescind or alter these materials at any time. You may not use the Tables or this User Manual for any other purpose, including, but not limited to, a commercial (including, but not limited to, vendors using the Tables or this User Manual as part of a product or service to calculate HEDIS measure rates) or research purpose unless you obtain prior written approval from NCQA and agree to the terms of a separate license, at NCQA’s sole discretion.

You may not copy electronically or otherwise transmit, redistribute, republish, modify, adapt, translate, reverse engineer, decompile, disassemble, sublicense or otherwise provide the Tables to any third party. You may not use or include the Tables in any other print or electronic publication, service or product.

Limited proprietary coding is contained in the Tables for convenience. NCQA disclaims all liability for use or accuracy of any third-party code values contained in the Tables.

© 2023 National Committee for Quality Assurance, all rights reserved.

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

## **Table of Contents**

What Are the HEDIS Volume 2 Risk Adjustment Utilization Tables? .....	2
What's New in the Risk Adjustment Tables? .....	2
Shared Risk Adjustment Tables .....	2
Measure-Specific Tables .....	3
Plan All-Cause Readmissions (PCR) Risk Adjustment Tables .....	4
Hospitalization Following Discharge From a Skilled Nursing Facility (HFS) Risk Adjustment Tables .....	5
Acute Hospitalization Utilization (AHU) Risk Adjustment Tables .....	5
Emergency Department Utilization (EDU) Risk Adjustment Tables .....	6
Hospitalization for Potentially Preventable Complications (HPC) Risk Adjustment Tables .....	7
Emergency Department Visits for Hypoglycemia in Older Adults With Diabetes (EDH) Risk Adjustment Tables .....	7
Summary of Changes for Measure-Specific Tables .....	8
Technical Support .....	9

# HEDIS MY 2023 Volume 2 Risk Adjustment Utilization Tables User Manual

## What Are the HEDIS Volume 2 Risk Adjustment Utilization Tables?

The Risk Adjustment Utilization (RAU) Tables are reference documents integral to the calculation of NCQA's six HEDIS Risk Adjustment Utilization Measures:

- Plan All-Cause Readmissions (PCR).
- Hospitalization Following Discharge From a Skilled Nursing Facility (HFS).
- Acute Hospital Utilization (AHU).
- Emergency Department Utilization (EDU).
- Hospitalization for Potentially Preventable Complications (HPC).
- Emergency Department Visits for Hypoglycemia in Older Adults With Diabetes (EDH).

All RAU measures leverage the Shared Risk Adjustment Tables (Shared Tables), which define condition-based risk-adjustment variables.

In addition to the Shared Tables, each RAU measure has a corresponding table containing risk weight variables (e.g., demographic variables and clinical case-mix variables) and their related numeric risk weights. These risk weights are ultimately combined to calculate the expected values that are the denominators of the observed-to-expected (O/E) ratios.

Refer to instructions on determining risk adjustment in *Risk Adjustment Comorbidity Category Determination* in the *HEDIS MY 2023 Volume 2: Technical Specifications for Health Plans* publication.

**Note:** This manual is a supplement to the HEDIS MY 2023 RAU Tables released on March 31, 2023.

## What's New in the Risk Adjustment Tables?

- Added a new RAU Table for the Emergency Department Visits for Hypoglycemia in Older Adults With Diabetes (EDH) measure: *EDH Risk Adjustment Tables*.

## Shared Risk Adjustment Tables

The Shared Tables help users determine a patient's condition-based risk-adjustment variables and select the proper risk weights. They contain five spreadsheets:

- *Copyright & Licensing*: Details on table copyright and licensing.
- *Table CC-Mapping*: Maps ICD diagnosis codes to their corresponding clinical categories, which are used to determine comorbid CCs and discharge CC variables, as applicable.
- *Table HCC-Rank*: Ranks the comorbid CCs from the Table CC-Mapping spreadsheet. Only the highest ranked HCC in ranking group is considered.
- *Table HCC-Comb*: Identifies combination HCCs (some combinations present a greater amount of risk when observed together).
- *Summary of Changes*: Documents updates to the Shared Tables, identifying the applicable spreadsheet, change and change description. If the Summary of Changes spreadsheet is blank, no changes were made since the last release.

Refer to instructions for using the tables in the *Guidelines for Risk Adjusted Utilization Measures* in HEDIS Volume 2.

**Note:** For the PCR Medicaid product line only, organizations must use the “RAU Table – PCR Medicaid” risk adjustment table when assigning comorbid and discharge conditions. For all other measures and the commercial and Medicare PCR product lines, organizations must use the “RAU Shared Tables” risk adjustment table when assigning comorbid and discharge conditions.

## Measure-Specific Tables

Each RAU measure has a corresponding measure-specific table that contains the risk weight values used to calculate the expected rates. Each table is an Excel workbook file (.xlsx) containing spreadsheets organized by product line. For example, the AHU risk adjustment table comprises two spreadsheets, one for Medicare and one for the commercial product line. Additionally, updates to measure-specific tables are documented in the Summary of Changes spreadsheet.

**Note:** Only measure-specific tables with changes to content or formatting updates will have content in the Summary of Changes spreadsheet. Refer to the **Summary of Changes-Measure Specific Tables** section on page 8 of this manual for guidance and information.

Product line spreadsheets in the measure-specific RAU Tables contain seven columns. Refer to Table 1 for product line spreadsheet details.

**Table 1. Description of Product Line Spreadsheet Columns**

Column	Column Title	Column Format	Description
Column A	Variable Type	character	Identifier describing the category of risk weight variable: <ul style="list-style-type: none"> <li>• <i>HCC</i>: Hierarchical Comorbidity Condition.</li> <li>• <i>DCC</i>: Discharge Clinical Condition.</li> <li>• <i>Demo</i>: Demographics.</li> <li>• <i>Util</i>: Utilization (e.g., observation stay, surgery).</li> <li>• <i>Med</i>: Medication (e.g. dispensed basal insulin).</li> </ul> <b>Note:</b> Not every measure has every type of variable.
Column B	Variable Name	character	The name of the risk weight variable included in the measure.
Column C	Variable Description	character	A brief description of the risk weight variable.
Column D	Reporting Indicator	character	The measure reporting rate to which the risk weight variable applies.
Column E	Model	character	The calculation model (i.e., statistical model for the expected value calculation) as described in the “Risk Adjustment Weighting and Calculation of Expected Events” section of each measure.

Column	Column Title	Column Format	Description
Column F	AdjustorID	character	A unique identifier for each specific risk weight variable.
Column G	Weight	numeric, 4 decimal points*	The numeric risk weight value.

\*Risk weight values are limited to 4 decimal points; however, values may appear as less than 4 decimal places as a result of Excel formatting of weights ending in “0” (e.g., 0.34, which can be interpreted the same as 0.3400).

**Note:** The measure-specific tables define all variables used in each model. Programming CC and HCC variables through application of the steps in “Risk Adjustment Comorbidity Category Determination” in the Guidelines for Risk Adjusted Utilization Measures may result in more variables than are used in a given model. If no weight is specified for a variable (e.g., a specific CC or HCC) the variable is not included and should be omitted from the calculation of the predicted values for that model.

The following sections provide instructions for using the risk adjustment tables by measure.

### Plan All-Cause Readmissions (PCR) Risk Adjustment Tables

Follow these steps to select the proper risk weights among nonoutliers for the PCR measure.

**Note:** The PCR measure uses one calculation model (Logistic), as listed in Column E (“Model”).

- Step 1** Navigate to the spreadsheets at the bottom of the Excel file and select the correct spreadsheet by product line. There are three spreadsheets for PCR: Medicare, Commercial, Medicaid. Refer to the *Note* below.
- Step 2** Identify and filter for the measure reporting rate indicator in Column D (“Reporting Indicator”):
- **Standard 18-64:** Includes all age strata for members 18–64 years of age.
  - **Standard 65+:** Includes all age strata for members 65 years of age and older (Medicare only).
  - **SNF - 65+:** Includes all age strata for members 65 years of age and older with readmission events following discharge from a skilled nursing facility (SNF) (Medicare only).
- Step 3** Identify and filter for risk weight variables needed for reporting in Column A (“Variable Type”):
- **Demo:** Demographics, including age and gender (e.g., Male 18–64).
  - **Util:** Utilization variable that indicates whether this is an observation stay or surgery flag.
  - **DCC:** Discharge conditions.
  - **HCC:** Comorbidities.
- Step 4** Identify appropriate weight(s) using Column G (“Weight”).
- Step 5** Assign the weight(s) as appropriate for each indicator of interest.
- Step 6** Repeat steps 2–5 for all other reporting rate indicators of interest.

**Note:**

- For the PCR Medicaid product line only, organizations must use the “RAU Table – PCR Medicaid” risk adjustment table when assigning comorbid and discharge conditions.
- For the commercial and Medicare PCR product lines, organizations must use the “RAU Shared Tables” risk adjustment table when assigning comorbid and discharge conditions.

### Hospitalization Following Discharge From a Skilled Nursing Facility (HFS) Risk Adjustment Tables

---

Follow these steps to identify risk adjustment weights for each SNF discharge for the HFS measure.

**Note:** The HFS measure uses one calculation model (Logistic), as listed in Column E (“Model”).

- Step 1** From the Medicare spreadsheet, identify and filter for the measure reporting rate indicator in Column D (“Reporting Indicator”):
- *30 Day Hospitalization*: Observed hospitalizations 30 days after discharge from an SNF.
  - *60 Day Hospitalization*: Observed hospitalizations 60 days after discharge from an SNF.
- Step 2** Identify and filter for risk weight variables needed for reporting in Column A (“Variable Type”):
- *Demo*: Demographics, including age and gender (e.g., Male 65+).
  - *DCC*: Discharge conditions.
  - *HCC*: Comorbidities.
- Step 3** Identify appropriate weight(s) using Column G (“Weight”).
- Step 4** Assign the weight(s) as appropriate for each indicator of interest.
- Step 5** Repeat steps 1–4 for all other reporting rate indicators of interest.

### Acute Hospitalization Utilization (AHU) Risk Adjustment Tables

---

Follow these steps to identify risk adjustment weights for each nonoutlier member in the eligible AHU population.

- Step 1** Navigate to the spreadsheets at the bottom of the Excel file and select the correct spreadsheet by product line. There are two spreadsheets for AHU: Medicare and Commercial.
- Step 2** Filter Column E (“Model”) to select the appropriate calculation model. Refer to *Risk Adjustment Weighting and Calculation of Expected Events* in the measure specifications.
- *PPD*: Predicted Probability of Discharge (logistic model).
  - *PUCD*: Predicted Unconditional Count of Discharges (Poisson model).
- Step 3** Identify and filter for the measure reporting rate indicator of interest in Column D (“Reporting Indicator”):
- *Total 18-64*: Acute inpatient and observation stay discharges for members 18–64 years of age (Medicare only).
  - *Total 65+*: Acute inpatient and observation stay discharges for members 65 years of age and older (Medicare only).

- *Total 18+*: Acute inpatient and observation stay discharges for members 18 years of age and older (Commercial only).

**Step 4** Identify and filter for risk weight variables needed for reporting in Column A ("Variable Type"):

- *Demo*: Demographics, including age and gender (e.g., Male 18–64).
- *HCC*: Comorbidities.

**Step 5** Identify appropriate weight(s) using Column G ("Weight").

**Step 6** Assign the weight(s) as appropriate for each indicator of interest.

**Step 7** Repeat steps 2–6 for other reporting rate indicators of interest.

---

### **Emergency Department Utilization (EDU) Risk Adjustment Tables**

---

Use these steps to identify risk adjustment weights for each nonoutlier member in the eligible EDU population.

**Step 1** Navigate to the spreadsheets at the bottom of the Excel file and select the correct spreadsheet by product line. There are two spreadsheets for EDU: Medicare and Commercial.

**Step 2** Filter Column E ("Model") to select the appropriate calculation model. Refer to *Risk Adjustment Weighting and Calculation of Expected Events* in the measure specifications.

- *PPV*: Predicted Probability of Visit (logistic model).
- *PUCV*: Predicted Unconditional Count of Visits (Poisson model).

**Step 3** Identify and filter for the measure reporting rate of interest in Column D ("Reporting Indicator"):

- *Standard 18-64*: Includes all age strata for members 18–64 years of age (Medicare only).
- *Standard 65+*: Includes all age strata for members 65 years of age and older (Medicare only).
- *Standard 18+*: Includes all age strata for members 18 years of age and older (Commercial only).

**Step 4** Identify and filter for risk weight variables needed for reporting in Column A ("Variable Type"):

- *Demo*: Demographics, including age and gender (e.g., Male 18–64).
- *HCC*: Comorbidities.

**Step 5** Identify appropriate weight(s) using Column G ("Weight").

**Step 6** Assign the weight(s) as appropriate for each indicator of interest.

**Step 7** Repeat steps 2–6 for other reporting rate indicators of interest.



---

## Hospitalization for Potentially Preventable Complications (HPC) Risk Adjustment Tables

---

Follow these steps to identify risk adjustment weights for each nonoutlier member in the eligible HPC population.

- Step 1** In the Medicare spreadsheet, filter Column E (“Model”) to select the appropriate calculation model. Refer to *Risk Adjustment Weighting and Calculation of Expected Events* in the measure specifications.
- *PPD*: Predicted Probability of Discharge (logistic model).
  - *PUCD*: Predicted Unconditional Count of Discharges (Poisson model).
- Step 2** Identify and filter for the measure reporting rate indicator of interest in Column D (“Reporting Indicator”):
- *Chronic ACSC*: Chronic ambulatory care sensitive condition inpatient or observation stay discharges.
  - *Acute ACSC*: Acute ambulatory care sensitive condition inpatient or observation stay discharges.
  - *Total ACSC*: Total ambulatory care sensitive condition inpatient or observation stay discharges.
- Step 3** Identify and filter for risk weight variables needed for reporting in Column A (“Variable Type”):
- *Demo*: Demographics, including age and gender (e.g., Male 67+).
  - *HCC*: Comorbidities.
- Step 4** Identify appropriate weight(s) using Column G (“Weight”).
- Step 5** Assign the weight(s) as appropriate for each indicator of interest.
- Step 6** Repeat steps 1–5 for other reporting rate indicators of interest.

---

## Emergency Department Visits for Hypoglycemia in Older Adults With Diabetes (EDH) Risk Adjustment Tables

---

Follow these steps to identify risk adjustment weights for each nonoutlier member in the eligible EDH population.

- Step 1** In the Medicare spreadsheet, filter Column E (“Model”) to select the appropriate calculation model. Refer to *Risk Adjustment Weighting and Calculation of Expected Events* in the measure specifications.
- *PPV*: Predicted Probability of Visit (logistic model).
  - *PUCV*: Predicted Unconditional Count of Visits (Poisson model).
- Step 2** Identify and filter for the measure reporting rate of interest in Column D (“Reporting Indicator”):
- *Diabetes*: Includes all age and dual-eligibility strata for members in the eligible population (Medicare).
  - *Insulin*: Includes all age and dual eligibility strata for members receiving insulin in the eligible population (Medicare).

**Step 3** Identify and filter for risk weight variables needed for reporting in Column A (“Variable Type”):

- *Demo*: Demographics, including age and gender (e.g., male 65–74).
- *HCC*: Comorbidities.
- *Med*: Medication (e.g. dispensed basal insulin).

**Step 4** Identify appropriate weight(s) using Column G (“Weight”).

**Step 5** Assign the weight(s) as appropriate for each indicator of interest.

**Note:** The same weights are used for dual and non-dual eligible members for each reporting indicator.

**Step 6** Repeat steps 2–6 for other reporting rate indicators of interest.

### Summary of Changes for Measure-Specific Tables

Changes impacting measure-specific tables are documented in the Summary of Changes spreadsheet in each table. If the Summary of Changes spreadsheet is blank, no changes were made since the last release. Examples of changes listed in the Summary of Changes spreadsheet include:

- Changes to the risk adjustment variables based on updates to measure reporting requirements.
- Updates to risk weight values.
- Changes to names, titles or descriptions in the tables.

The Summary of Changes spreadsheet will show data from the previous publication; the product-line spreadsheets will reflect up-to-date information. Refer to Table 2 for Summary of Changes column details.

**Table 2. Summary of Changes**

Column	Column Title	Column Format	Description
Column A	Product Line	character	The product-line spreadsheet where the change occurred.
Column B*	Model	character	The calculation model (i.e., statistical model for the expected value calculation) as described in the “Risk Adjustment Weighting and Calculation of Expected Events” section of each measure.
Column C*	Reporting Indicator	character	The measure reporting rate to which the risk weight variable applies.
Column D*	Variable Type	character	Identifier describing the category of risk weight variable: <ul style="list-style-type: none"> <li>• <i>HCC</i>: Hierarchical Comorbidity Condition.</li> <li>• <i>DCC</i>: Discharge Clinical Condition.</li> <li>• <i>Demo</i>: Demographics.</li> <li>• <i>Util</i>: Utilization (e.g., observation stay, surgery).</li> </ul>

Column	Column Title	Column Format	Description
			<ul style="list-style-type: none"> <li>• <i>Med</i>: Medication (e.g. dispensed basal insulin).</li> </ul> <p><b>Note:</b> <i>Not every measure has every type of variable.</i></p>
Column E	Change	character	<p>The type of change:</p> <ul style="list-style-type: none"> <li>• <i>Removed</i>: An entire variable and associated information was deleted from the risk weight table.</li> <li>• <i>Added</i>: An entire variable and associated information was added to the risk weight table.</li> <li>• <i>Updated</i>: Content in a column was updated.</li> </ul>
Column F	Change Description	character	Description of the change that occurred.
Column G*	Variable Name	character	The name of the risk weight variable included in the measure.
Column H*	Variable Description	character	A brief description of the risk weight variable.

**\*Note:** Columns B–D and G–H in the SOC spreadsheet reflect data that may have been removed, added or updated, depending on the change identified in Columns E and F (“Change” and “Change Description,” respectively).

## Technical Support

Submit questions about the RAU Manual via My NCQA at <https://my.ncqa.org>.