Risk Adjustment Methodology

2023 Payment Year Updates and Sample Calculations

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

Table of Contents

Introduction

Welcome to Module 4 of the Risk Adjustment Methodology series. The foundation modules in this series, released late 2021, began with an overview of risk adjustment (Module 1), followed by a deep dive into the risk score calculation process (Module 2), and then concluded with a step-by-step walkthrough (using scenario-based learning) of how to calculate Payment Year 2022 risk scores for certain Medicare Part C and D beneficiaries (Module 3).

To access all modules in this series, please select COURSE RESOURCES and then the Risk Adjustment Methodology Series link.

In Module 4, we will also use scenarios to guide us through the four-step process of calculating risk scores for beneficiaries enrolled in Medicare Advantage Organizations (or MAOs), the Program of All Inclusive Care for the Elderly (or PACE), certain demonstrations, and prescription drug plans for Payment Year 2023.

We will also highlight the changes that were made to the model types, which were outlined in the 2023 Advance Notice and the 2023 Annual Rate Announcement. The model types that were not changed for this payment year will be briefly addressed.

To calculate risk scores for beneficiaries in each of the three scenarios in this module, we will use either the non-PACE End-Stage Renal Disease (or ESRD) model or the Part D Hierarchical Condition Category (or RxHCC) model for Payment Year 2023. For each scenario, we will learn how to identify which risk adjustment payment model to use, how to find the beneficiary's relative factors and adjustment factors, and how to calculate the beneficiary's risk score using the risk adjustment formula.

Please note that if you are new to calculating risk scores, you should review all three scenarios in this module.

Select the NEXT button to continue.

2023 Payment Year Updates

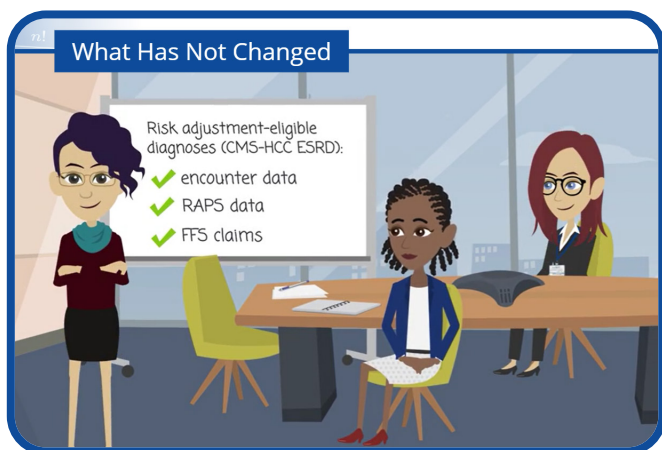Interested in learning more about what has changed, and what has not changed, for Payment Year 2023 risk score calculations? Select each button to learn more. When you are finished, select the NEXT button to continue.

What Has Not Changed

So, what hasn't changed?

According to the 2023 Rate Announcement, there are no changes to Payment Year 2022 for Medicare Advantage Part C and PACE models. This means, for non-ESRD and non-PACE Medicare Advantage enrollees, CMS will continue to calculate 100 percent of the risk score using the 2020 CMS-HCC model, which uses only risk adjustment-eligible diagnoses from encounter data and fee-for-service claims.

Also, as in Payment Year 2022, risk scores for PACE organizations should be calculated using the 2017 CMS-HCC model for Part C beneficiaries, the 2019 CMS-HCC ESRD model for ESRD beneficiaries, and the 2020 RxHCC model for Part D beneficiaries. For PACE organizations, CMS will continue using the same method of calculating risk scores that we have been using since Calendar Year 2015. This method pools risk adjustment-eligible diagnoses from encounter data, Risk Adjustment Processing System (or RAPS) data, and fee-for-service claims to calculate a single risk score (with no weighting).

Select the RETURN button to go back to the 2023 Payment Year Updates menu.

What Has Changed
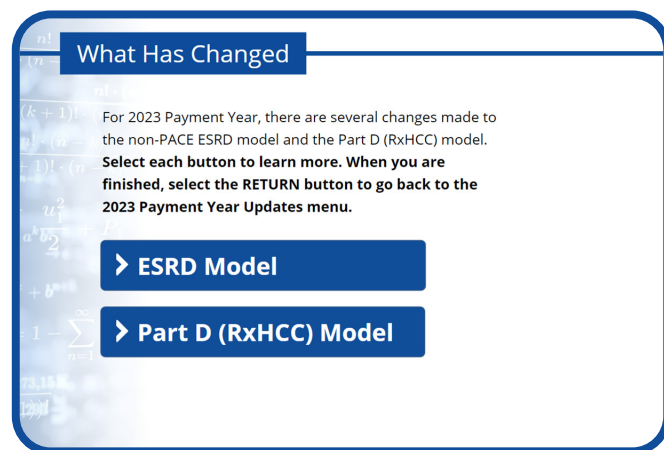
For 2023 Payment Year, there are several changes made to the non-PACE ESRD model and the Part D (RxHCC) model. Select each button to learn more. When you are finished, select the RETURN button to go back to the 2023 Payment Year Updates menu.

ESRD

What changes have been made to the ESRD model for Payment Year 2023?

For Payment Year 2023, CMS revised the ESRD models by updating the clinical version of the ESRD model from version 21 to version 24. CMS also updated the data years used for model calibration—from using 2014 diagnoses to predict 2015 costs to using 2018 diagnoses to predict 2019 costs.

ESRD models were also updated to account for differences in cost patterns for dual eligible beneficiaries.

Updates were also made to the ESRD model adjustments, including the following:

The actuarial adjustment was removed from the functioning graft long term institutional (or LTI) segment.

The functioning graft model new enrollee coefficients were adjusted separately for beneficiaries who are four to nine months post-transplant and those who are 10 or more months post-transplant.

There is one major change in the ESRD model relative factor tables from the Rate Announcement that needs to be highlighted. The change is that the relative factor table for the functioning graft community and institutional segments were combined into one table, which is now titled Functioning Graft Relative Factors for Continuing Enrollees in Table VIII-4 in the 2023 Announcement.

Additionally, the functioning graft community segment was broken out into four separate model segments. This was done to reflect beneficiaries' dual eligibility and age versus disabled status. Please note that relative factors were independently developed for each segment so that the table now reflects the specific relative costs for an HCC for each subgroup.

Additional updates were made to the ESRD functioning graft factors. There are now eight add-on factors (prior to 2023, there were four factors) used to account for age, duration since transplant, and dual status. For example, instead of Aged<65, with duration since transplant of 4 to 9 months, we will find two specific beneficiary status factors—NonDual and Partial Benefit Dual, or Full Benefit Dual.

An institutional add-on factor was also included in the dialysis continuing enrollee and functioning graft long-term institutional (or LTI) models.

The relative factor tables for the dialysis and functioning graft models include relative factors, which accounts for those that are dual eligible and originally aged or disabled status either as a segment within the model or as an interaction factor.

Select the RETURN button to go back to the "What Has Changed" menu.

Part D (RxHCC)
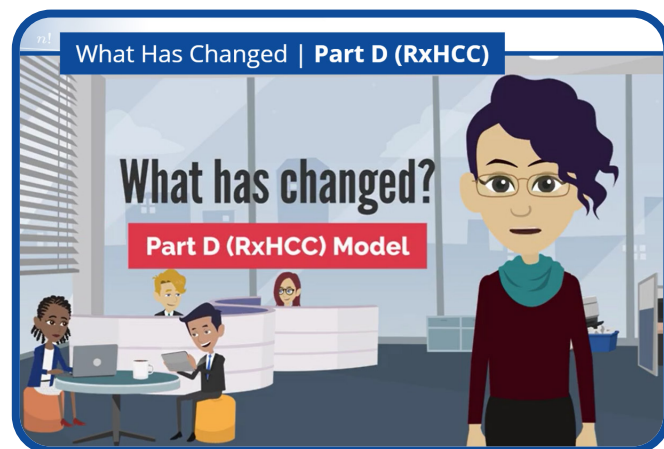
Several changes have been made to the Part D RxHCC model for Payment Year 2023.

Historically, the RxHCC model was based on the International Classification of Diseases, 9th Revision (or ICD-9). Under the new Payment Year 2023 requirements, RxHCCs are now based on the International Classification of Diseases, 10th Revision (or ICD-10). Unlike the ICD-9, which has 14,400 diagnosis codes, the ICD-10 has approximately 70,000 diagnosis codes, which increased the number of RxHCCs from 76 to 84.

In addition to changes from the ICD-9 to the ICD-10, updates were made to the data years used to calibrate the model. The use of more recent underlying data as a baseline to update the relative factors helps ensure more accurate Payment Year 2023 risk scores.

All changes to the RxHCC model were made to reflect current prescription drug utilization and spending patterns and to improve predictive beneficiary cost accuracy.

Select the RETURN button to go back to the "What Has Changed" menu.

Knowledge Check

It is now time to check your knowledge on what has been covered so far. Don't worry, this is not graded!

Select the NEXT button to continue.

Which of the following reflects the changes that were made to the risk adjustment calculation process for Payment Year 2023? **Select all that apply.**

Which of the following reflects the changes that were made to the risk adjustment calculation process for Payment Year 2023? **Select all that apply.**

☐ RxHCCs are based on International Classification of Diseases 9th Revision (or ICD-9).

☐ New model segments were created for the ESRD transplant model.

☐ There are updates to the Functioning Graft Relative Factor for Continuing Enrollees table.

☐ The ESRD Functioning Graft Community segment was broken down into four separate model segments.

A. RxHCCs are based on International Classification of Diseases 9th Revision (or ICD-9).

B. New model segments were created for the ESRD transplant model.

C. There are updates to the Functioning Graft Relative Factor for Continuing Enrollees table.

D. The ESRD Functioning Graft Community segment was broken down into four separate model segments.

Correct answer. For Payment Year 2023, the Functioning Graft Relative Factors for Continuing Enrollees table was updated, and the ESRD Functioning Graft Community segment was broken down into four separate model segments.

Select the Continue button when you have finished reviewing your results.

Knowledge Check 2

CMS updated which of the following risk adjustment models for Payment Year 2023? **Select all that apply.**

> CMS updated which of the following risk adjustment models for Payment Year 2023? **Select all that apply.**
>
> ☐ PACE model
>
> ☐ ESRD model
>
> ☐ RxHCC model
>
> ☐ Part C CMS-HCC model

A. PACE model

B. ESRD model

C. RxHCC model

D. Part C CMS-HCC model

Correct answers. CMS updated the ESRD model and the RxHCC model for Payment Year 2023.

Select the Continue button when you have finished reviewing your results.

Knowledge Check 3

Changes to the RxHCC model were made to _____ and to improve _____. **Select the best answer.**

> Changes to the RxHCC model were made to _____ and to improve ____. **Select the best answer.**
>
> ○ reflect current prescription drug utilization and spending patterns; communication
>
> ○ reflect current prescription drug utilization and spending patterns; predictive beneficiary cost accuracy
>
> ○ make it easier to comprehend; cost accuracy
>
> ○ none of the above

A. reflect current prescription drug utilization and spending patterns; communication

B. reflect current prescription drug utilization and spending patterns; predictive beneficiary cost accuracy

C. make it easier to comprehend; cost accuracy

D. none of the above

Correct answer. Changes to the RxHCC model were made to reflect current prescription drug utilization and spending patterns and to improve predictive beneficiary cost accuracy.

Select the Continue button when you have finished reviewing your results.

Scenario Selection

It's time to choose your scenario. **Select the name of each beneficiary to learn more. When you are finished, select the NEXT button to continue.**

Click on Scenario Icon to Review

Review the scenarios in order by continuing to the next page OR click on the Start Scenario button below each example beneficiary to proceed to a specific scenario. At the end of each scenario, select the Choose Scenario button to return to this page.

Ms. Jacobs	Mr. Shuman	Mr. Daniels
ESRD – Dialysis	ESRD – Functioning Graft	Part D (RxHCC)

START SCENARIO   **START SCENARIO**   **START SCENARIO**

Scenario 1: ESRD - Dialysis

Ms. Jacobs
ESRD - Dialysis

Meet Ms. Jacobs, an 86-year-old beneficiary who is living in a nursing home.

This scenario demonstrates how to calculate a risk score for a Part C beneficiary with End-Stage Renal Disease (or ESRD) status who receives dialysis treatment in a long-term care institution.

➡ START SCENARIO

Meet Ms. Jacobs, an 86-year-old beneficiary who is living in a nursing home.

This scenario demonstrates how to calculate a risk score for a Part C beneficiary with End-Stage Renal Disease (or ESRD) status who receives dialysis treatment in a long-term care institution.

To begin the process of calculating Ms. Jacobs' risk score, select the START SCENARIO button. To choose another scenario, select the RETURN button.

S1 Risk Score Calculation
ESRD – Dialysis Beneficiary

Ms. Jacobs

STEP 1 — Gather reports and resources
STEP 2 — Identify demographic and disease information
STEP 3 — Identify relative factors and adjustment factors
STEP 4 — Calculate the risk score

Are you ready to walk through the process of calculating Ms. Jacobs' risk score?

Select the STEP 1 button to begin.

Step 1: Gather Reports & Resources

STEP 1 — Gather Reports and Resources
ESRD – Dialysis Beneficiary

To accurately calculate Ms. Jacobs' risk score, we will need the following reports and resources:

- Monthly Membership Detail Report (MMR) ⓘ
- Model Output Report (MOR) ⓘ
- Plan Communication User Guide (PCUG) ⓘ
- Annual Rate Announcement(s)

To accurately calculate Ms. Jacobs' risk score, we need to gather all the necessary reports and resources. You can access those resources by selecting the RESOURCES button on the screen.

These reports and resources include the Monthly Membership Detail Report (or MMR), the Model Output Report (or MOR), the Plan Communication User Guide (or PCUG), and the Annual Rate Announcement.

Please select the NEXT button to continue.

The Monthly Membership Detail Report

STEP 1 — Gather Reports and Resources
ESRD – Dialysis Beneficiary

Monthly Membership Detail Report (MMR)
The Monthly Membership Detail Report (MMR) provides Plans with beneficiary demographic and status information that is used to calculate risk scores for a specific payment month. We will need the data found in this report to complete Step 3 of the risk score calculation process.

- Annual Rate Announcement(s)

The Monthly Membership Detail Report (MMR) provides Plans with beneficiary demographic and status information that is used to calculate risk scores for a specific payment month. We will need the data found in this report to complete Step 3 of the risk score calculation process.

The Part C Model Output Report

STEP 1 — Gather Reports and Resources | MENU

Model Output Report (MOR)
The Part C Model Output Report (MOR) is a monthly report that lists the HCCs that are applicable to each beneficiary. We will need the data from this report to complete Step 3 in the risk score calculation process.

To accurately [...] will need the f[...]

- Monthly [...]
- Model Output Report (MOR) ⓘ
- Plan Communication User Guide (PCUG) ⓘ
- Annual Rate Announcement(s)

The Part C Model Output Report (MOR) is a monthly report that lists the HCCs that are applicable to each beneficiary. We will need the data from this report to complete Step 3 in the risk score calculation process.

The Plan Communication User Guide

STEP 1 — Gather Reports and Resources | MENU

ESRD – Dialysis Beneficiary

To accurately calculate Ms. Jacobs' risk score, we will nee[...]

Plan Communication User Guide (PCUG)
The Plan Communication User Guide (PCUG) provides layout and field description information for the MMR and MOR.

- M[...] ⓘ
- M[...]
- Plan Communication User Guide (PCUG) ⓘ
- Annual Rate Announcement(s)

The Plan Communication User Guide (PCUG) provides layout and field description information for the MMR and MOR.

Annual Rate Announcement
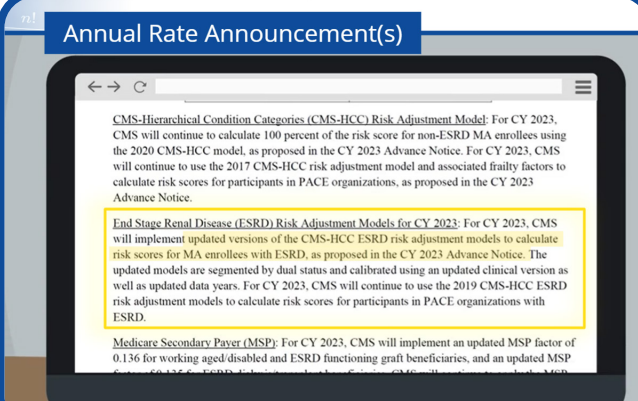

Annual Rate Announcement Introduction

SHOW ME

We must first verify which payment year the risk score calculation should be based on to ensure that we are entering correct data into the risk score calculation formula. For this scenario, Ms. Jacobs' risk score calculations will be based on Payment Year 2023.

Therefore, we will need to refer to the 2023 Rate Announcement to determine which risk adjustment model to use.

Select the SHOW ME button to learn how.

Annual Rate Announcement(s)

CMS-Hierarchical Condition Categories (CMS-HCC) Risk Adjustment Model: For CY 2023, CMS will continue to calculate 100 percent of the risk score for non-ESRD MA enrollees using the 2020 CMS-HCC model, as proposed in the CY 2023 Advance Notice. For CY 2023, CMS will continue to use the 2017 CMS-HCC risk adjustment model and associated frailty factors to calculate risk scores for participants in PACE organizations, as proposed in the CY 2023 Advance Notice.

End Stage Renal Disease (ESRD) Risk Adjustment Models for CY 2023: For CY 2023, CMS will implement updated versions of the CMS-HCC ESRD risk adjustment models to calculate risk scores for MA enrollees with ESRD, as proposed in the CY 2023 Advance Notice. The updated models are segmented by dual status and calibrated using an updated clinical version as well as updated data years. For CY 2023, CMS will continue to use the 2019 CMS-HCC ESRD risk adjustment models to calculate risk scores for participants in PACE organizations with ESRD.

Medicare Secondary Payer (MSP): For CY 2023, CMS will implement an updated MSP factor of 0.136 for working aged/disabled and ESRD functioning graft beneficiaries, and an updated MSP [...]

To verify which model to use for 2023 risk score calculations, open the 2023 Rate Announcement and scroll to the section that describes the ESRD models for Payment Year 2023. The information in this section states that CMS updated versions of the CMS-HCC ESRD models in 2023. Therefore, 100 percent of the risk score is calculated using the 2023 CMS-HCC ESRD model for non-PACE organizations that use only risk adjustment-eligible diagnoses from encounter data and fee-for-service claims.

Since Ms. Jacobs is in dialysis status, we will need to use the ESRD model that is specific to dialysis beneficiaries when calculating her risk score. This will be covered later in the course.

Select the NEXT button to continue.

Step 2: Identify Demographic & Disease Information

The next step in the risk score calculation process involves gathering Ms. Jacobs' demographic and disease information.

Please select each button to learn more. When you have finished reviewing each section, select the NEXT button to continue.

Demographic Factors

MMR Field #	Demographic/Model Indicator	Value
7	Gender Code	F
15	ESRD	Y
20	LTI Flag	Y
39	Medicaid Full/Partial/Non-Dual	1
40	Risk Adjustment Age Group	85-89
46	Risk Adjustment Factor Type (RAFT) Code	D1
48	Original Reason for Entitlement Code (OREC)	0
84	Medicaid Dual Status Code	2

To gather Ms. Jacobs' demographic information, we will need to reference the Monthly Membership Detail Report.

The highlighted data shown on this MMR table are the

required demographic and model indicators that we will need to calculate the sum of Ms. Jacobs' demographic relative factors during Step 3 of this process.

The "F" value in field 7 indicates that this beneficiary is a female.

The "Y" value in field 15 indicates this beneficiary has ESRD status.

The "Y" value in field 20 indicates that this beneficiary resides in a long-term institution.

The number "1" value in field 39 indicates that the beneficiary is either full or partial Medicaid.

The value in field 40 indicates that this beneficiary is in the "85–89" age group.

The "D1" RAFT Code value in field 46 indicates that this beneficiary is categorized as Dialysis Full Dual, which means she is in dialysis and receives full Medicaid benefits.

The number "0" value in field 48 indicates that this beneficiary is Medicare eligible due to her age.

Finally, the number "2" value in field 84 confirms that this beneficiary is in fact full dual.

Disease Factors

To gather Ms. Jacobs' disease information, or HCCs, we will need to reference the Model Output Report.

Take a moment to review Ms. Jacobs' information. Notice that the payment HCCs identified for this bene-

ficiary are HCC18, Diabetes with Chronic Complications, and HCC111, Chronic Obstructive Pulmonary Disease. We will need this information when calculating the sum of Ms. Jacobs' disease factors in Step 3.

Note #1: Scenario 1

NOTE 1

Field 39, "Medicaid Full/Partial/Non-Dual," and field 84, "Medicaid Dual Status Code," are populated using the "bobber month" logic. This is the Medicaid status that was in effect three months prior to the current payment month. This is determined each month on a rolling basis.

Starting in 2023, ESRD dialysis and post-graft factors for both the community and long-term institutionalized beneficiaries will also use the "bobber month" logic, and fields 39 and 84 are used to communicate the Medicaid status that was used to select the Risk Adjustment Factor Type (RAFT) Code in field 46.

Field 21, "Medicaid Add-On Factor Indicator," is populated based on the Medicaid Flag from the Risk Adjustment Factor (RAF) file. It is a yes/no determination made by the Risk Adjustment Suite of Systems (RASS). Starting in 2023, field 21 will no longer be used for ESRD dialysis and post-graft factors but will continue to apply to ESRD risk factors used for PACE organizations and LTI risk factors used for all organizations.

Field 39, "Medicaid Full/Partial/Non-Dual," and field 84, "Medicaid Dual Status Code," are populated using the "bobber month" logic. This is the Medicaid status that was in effect three months prior to the current payment month. This is determined each month on a rolling basis.

Starting in 2023, ESRD dialysis and post-graft factors for both the community and long-term institutionalized beneficiaries will also use the "bobber month" logic, and fields 39 and 84 are used to communicate the Medicaid status that was used to select the Risk Adjustment Factor Type (RAFT) Code in field 46.

Field 21, "Medicaid Add-on Factor Indicator," is populated based on the Medicaid Flag from the Risk Adjustment Factor (RAF) file. It is a yes/no determination made by the Risk Adjustment Suite of Systems (RASS). Starting in 2023, field 21 will no longer be used for ESRD dialysis and post-graft factors but will continue to apply to ESRD risk factors used for PACE organizations and LTI risk factors used for all organizations.

Step 3: Identify Relative Factors & Adjustment Factors

The next step is to gather Ms. Jacobs' relative factors and adjustment factors.

Please select each button to learn more. When you have finished reviewing each section, select the NEXT button to continue.

Relative Factors

To gather Ms. Jacobs' demographic relative factors and disease relative factors, open the 2023 Rate Announcement and navigate to Attachment VIII: 2023 CMS-HCC ESRD and 2023 RxHCC Risk Adjustment Model Relative Factors section.

Since we know that Ms. Jacobs is a Part C ESRD beneficiary, Table VIII-1 through Table VIII-6 may apply. We know from the RAFT code that Ms. Jacobs has dialysis and full dual status. We also know that Ms. Jacobs is a continuing enrollee. Therefore, the appropriate table to use when looking up Ms. Jacobs' relative factors is

Table VIII-1: 2023 CMS-HCC ESRD Model Continuing Enrollee Dialysis Relative Factors.

Select the name of this table to continue.
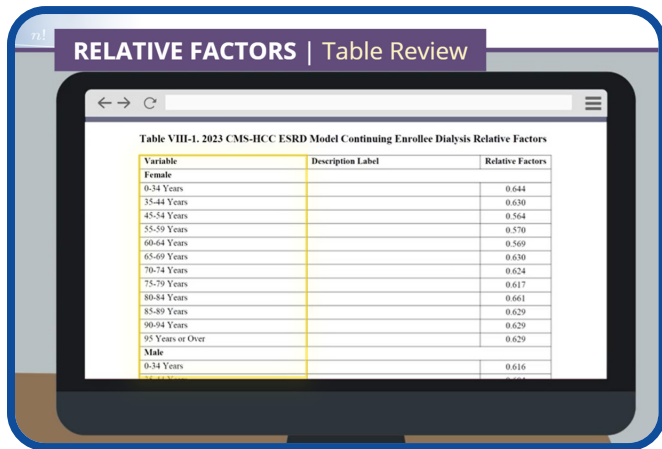
Take a few moments to review Table VIII-1 on your screen. Notice the "Relative Factors" column to the right and the "Variables" column on the left. Review the following variables from top to bottom: gender/age factors; Medicaid, Originally Disabled, and Originally ESRD Interactions with Age and Sex; and then Institutional Status Factors.

We will need to reference this information later in the process.

Select the NEXT button to continue.
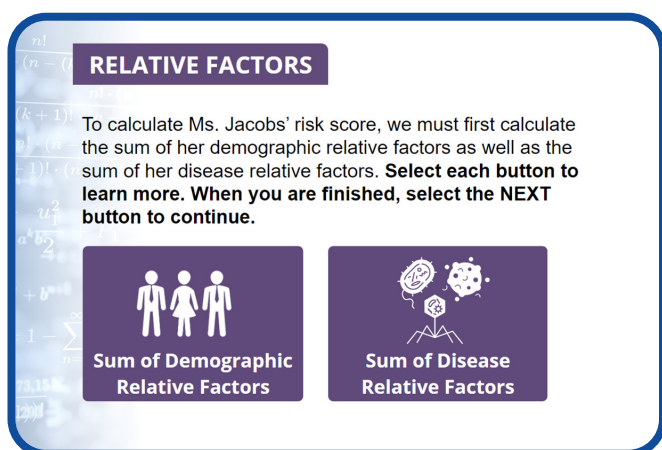
To calculate Ms. Jacobs' risk score, we must first calculate the sum of her demographic relative factors as well as the sum of her disease relative factors.

Select each button to learn more. When you are finished, select the NEXT button to continue.

Demographic Factors
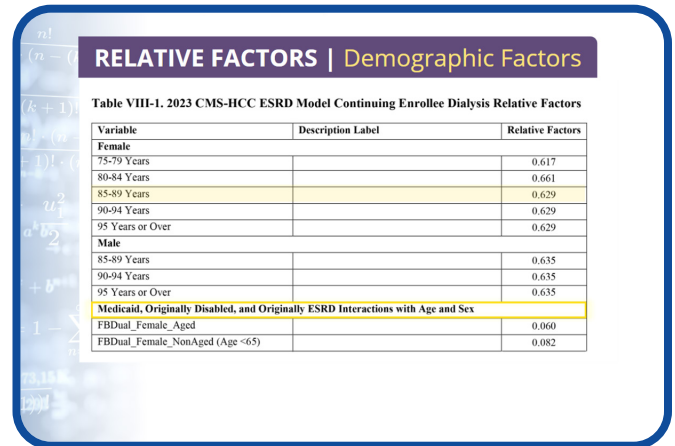
To calculate the sum of Ms. Jacobs' demographic relative factors, we must first identify the correct factor for each relevant demographic variable.

Since we know that Ms. Jacobs is a female between the ages of 85 to 89, we need to capture the factor displayed in row "85 to 89 Years," which is 0.629.

We also know that Ms. Jacobs is full benefit dual, not originally disabled or originally ESRD. Therefore, the Medicaid, Originally Disabled, and Originally ESRD Interactions with Age and Sex Factor that applies is Full Benefit Dual, Female aged, which is 0.060.

Select the NEXT button to continue.
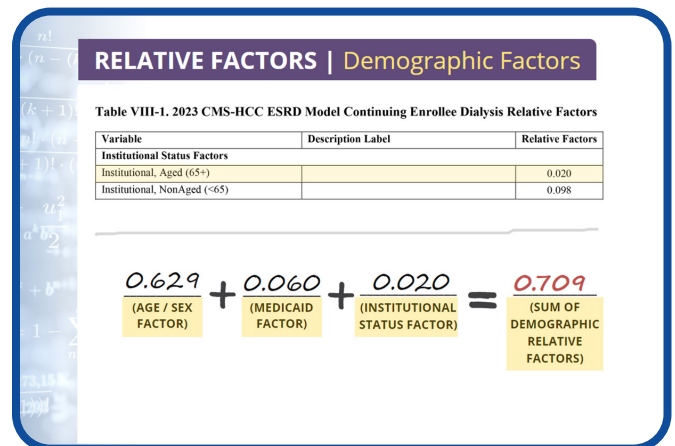
Lastly, we know Ms. Jacobs is living in an institution. So, the institutional status factor that applies is "Institutional, Aged 65+," which is 0.020.

Therefore, Ms. Jacobs' demographic relative factor, using the 2023 ESRD Dialysis model, is 0.709.

Select the NEXT button to continue.

Disease Factors

RELATIVE FACTORS | Disease Factors

Table VIII-1. 2023 CMS-HCC ESRD Model Continuing Enrollee Dialysis Relative Factors

Variable	Description Label	Relative Factors
Disease Coefficients		
HCC1	HIV/AIDS	0.122
HCC17	Diabetes with Acute Complications	0.084
HCC18	Diabetes with Chronic Complications	0.084
HCC19	Diabetes without Complication	0.084
HCC110	Cystic Fibrosis	0.125
HCC111	Chronic Obstructive Pulmonary Disease	0.058
HCC112	Fibrosis of Lung and Other Chronic Lung Disorders	0.058

$$0.084 + 0.058 = 0.142$$

(HCC18 FACTOR) + (HCC111 FACTOR) = (SUM OF DISEASE RELATIVE FACTORS)

Using the same table (Table VIII-1) that we used to gather Ms. Jacobs' demographic relative factors, the next step in the process is to locate the values for each of Ms. Jacobs' disease factors (or HCCs) to calculate the sum of her disease relative factors.

During our MOR review in Step 2, we confirmed that Ms. Jacobs has two HCCs:

- HCC18, Diabetes with Chronic Complications, and
- HCC111, Chronic Obstructive Pulmonary Disease.

To identify the relative factor for HCC18, we must capture the value displayed for row "HCC18," which is 0.084.

To identify the relative factor for HCC111, we must capture the value displayed for row "HCC111," which is 0.058.

Since there are no disease or disabled/disease interactions for this beneficiary, we can calculate the sum of Ms. Jacobs' disease relative factors by simply adding the relative factor for HCC18, which is 0.084, to the relative factor for HCC111, which is 0.058.

Using the 2023 ESRD Dialysis model, the sum of Ms. Jacobs' disease relative factors is 0.142.

Select the NEXT button to continue.

Adjustment Factors

ADJUSTMENT FACTORS

It is now time to identify the adjustment factors we will need to apply when calculating Ms. Jacobs' risk score. **Select the NORMALIZATION FACTOR button to learn more. When you are finished, select the NEXT button to continue.**

Normalization Factor

MA Coding Pattern Adjustment Factor

It is now time to identify the adjustment factors we will need to apply when calculating Ms. Jacobs' risk score.

Please note that the MA Coding Pattern Adjustment Factor does not apply when using the Dialysis model to calculate risk scores.

Select the NORMALIZATION FACTOR button to learn more. When you are finished, select the NEXT button to continue.

Normalization Factor

ADJUSTMENT FACTORS | Normalization

The normalization factor adjusts for population and coding changes between the denominator year and the payment year.

We will need to reference the 2023 Rate Announcement to locate the normalization factor information we will need to calculate Ms. Jacobs' 2023 risk score.

Select the SHOW ME button to learn more.

SHOW ME

The normalization factor adjusts for population and coding changes between the denominator year and the payment year.

We will need to reference the 2023 Rate Announcement to locate the normalization factor information we will need to calculate Ms. Jacobs' 2023 risk score.

Select the SHOW ME button to learn more.

ADJUSTMENT FACTORS | Normalization

- 2020 CMS-HCC model for organizations other than PACE: 1.127
- 2017 CMS-HCC model for PACE organizations: 1.140
- 2023 CMS-HCC ESRD dialysis model for organizations other than PACE: 1.034
- 2019 CMS-HCC ESRD dialysis model for PACE organizations: 1.088
- 2023 CMS-HCC ESRD functioning graft model for organizations other than PACE: 1.048
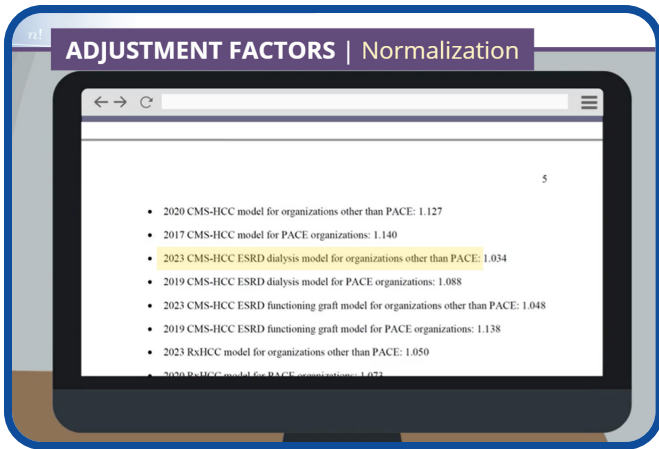- 2019 CMS-HCC ESRD functioning graft model for PACE organizations: 1.138
- 2023 RxHCC model for organizations other than PACE: 1.050
- 2020 RxHCC model for PACE organizations: 1.073

Open the 2023 Rate Announcement by selecting the RESOURCES button. Navigate to the "Final 2023 Normalization Factors" section.

(Notice that the Rate Announcement includes separate normalization factors for each model.)

Since we are using the 2023 CMS-HCC ESRD Dialysis model for organizations other than PACE to calculate Ms. Jacobs' risk score, the normalization factor we need to use is 1.034.
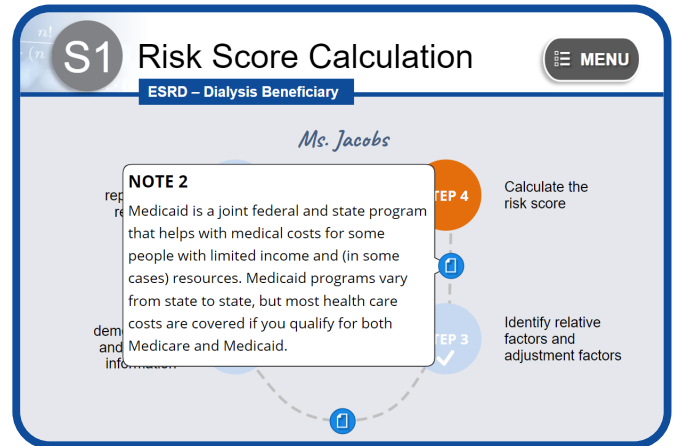
Select the NEXT button to continue.
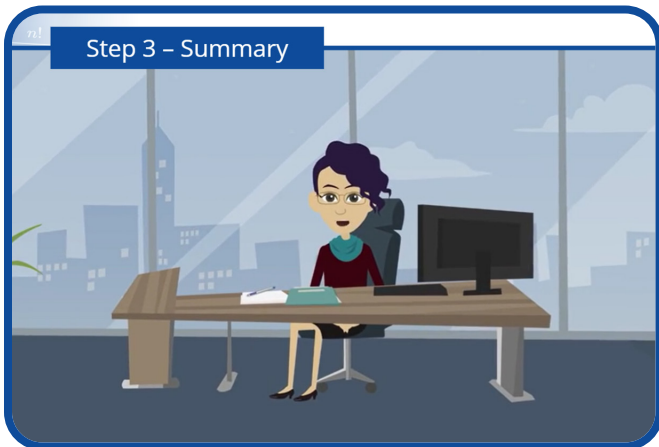
Step 3 – Summary

Great job! You gathered all the necessary values to complete the fourth and final step of the risk score calculation process.

Select the NEXT button to continue.

Note #2: Scenario 1

S1 Risk Score Calculation ☰ MENU

ESRD – Dialysis Beneficiary

Ms. Jacobs

NOTE 2
Medicaid is a joint federal and state program that helps with medical costs for some people with limited income and (in some cases) resources. Medicaid programs vary from state to state, but most health care costs are covered if you qualify for both Medicare and Medicaid.

Calculate the risk score

Identify relative factors and adjustment factors

Medicaid is a joint federal and state program that helps with medical costs for some people with limited income and (in some cases) resources. Medicaid programs vary from state to state, but most health care costs are covered if you qualify for both Medicare and Medicaid.

Step 4: Using the Risk Score Formula

Step 4 – Introduction

Calculation Values
› Sum of Demographic Relative Factors
› Sum of Disease Relative Factors
› Normalization Factor
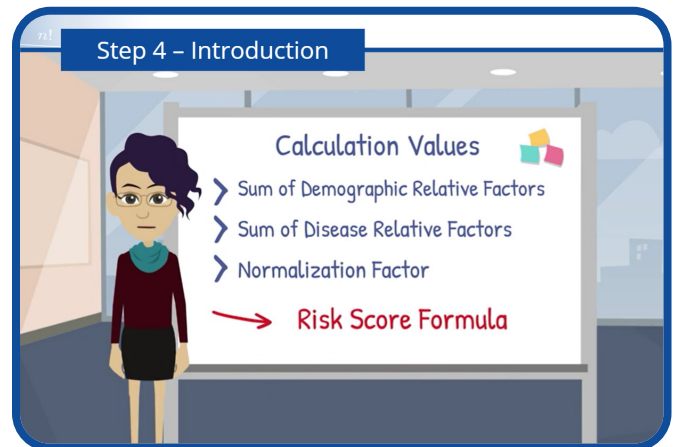
→ Risk Score Formula

It is finally time to calculate Ms. Jacobs' risk score!

In this step, we will enter the values generated in Step 3 — the sum of demographic relative factors, sum of the disease relative factors, and the normalization factor — into the risk score formula to produce Ms. Jacobs' final risk score for Payment Year 2023.

Select the SHOW ME button to learn more.

When using the risk score formula, we must perform several steps to accurately calculate Ms. Jacobs' final payment risk score. Select each button to learn more. When you are finished, select the NEXT button to continue.

1. Calculate the Raw Risk Score

STEP 4

Using the Risk Score Formula MENU

ESRD – Dialysis Beneficiary

RAW RISK SCORE CALCULATION

$$\underset{\substack{\text{(SUM OF}\\\text{DEMOGRAPHIC}\\\text{FACTORS)}}}{0.709} + \underset{\substack{\text{(SUM OF DISEASE}\\\text{FACTORS)}}}{0.142} = \underset{\text{(RAW RISK SCORE)}}{0.851}$$

✕ CLOSE

The first step is to add the sum of Ms. Jacobs' demographic factors, which is 0.709, to the sum of disease factors, which is 0.142 to determine the raw risk score.

Ms. Jacobs' raw risk score is 0.851.

2. Calculate the Rounded Normalized Risk Score

STEP 4

Using the Risk Score Formula MENU

ESRD – Dialysis Beneficiary

ROUNDED NORMALIZED RISK SCORE CALCULATION

$$\underset{\text{(RAW RISK SCORE)}}{0.851} \div \underset{\substack{\text{(2023}\\\text{NORMALIZATION}\\\text{FACTOR)}}}{1.034} = \underset{\substack{\text{(ROUNDED}\\\text{NORMALIZED}\\\text{SCORE)}}}{0.823}$$

✕ CLOSE

Next, we must divide the raw risk score, 0.851, by the 2023 normalization factor for the 2023 ESRD Dialysis model, which is 1.034, to get a normalized score of 0.82302.

We must round this number to the third decimal place to get a rounded normalized score of 0.823. Please note that if we skip this rounding step, it may affect the risk score at the third decimal place, which will impact the final calculated payment risk score.

Since the MA coding pattern adjustment factor is not applied to the ESRD Dialysis model, Ms. Jacobs' final risk score for Payment Year 2023 is 0.823.

Scenario 1 Conclusion
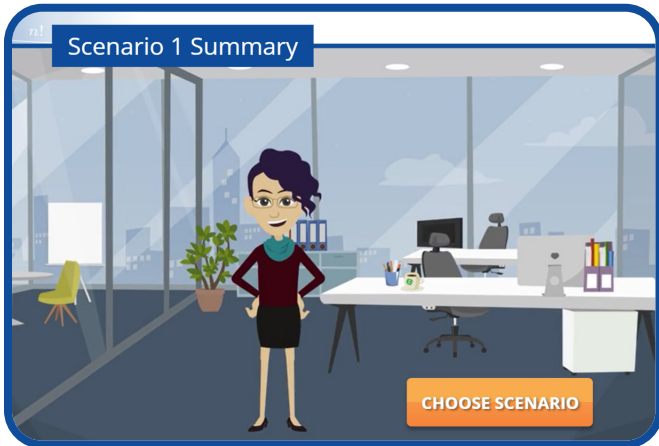
Congratulations! You have just completed the four-step process of calculating Ms. Jacobs' risk score.
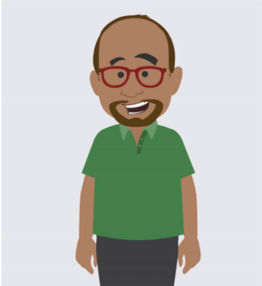
From gathering the necessary reports and resources and finding beneficiary demographic, and disease information to identifying relative and adjustment factors as well as using the risk score formula, you now know how to calculate the 2023 payment risk score for an ESRD beneficiary on dialysis.

There are two additional scenarios in this module. To choose another scenario, simply select the CHOOSE SCENARIO button. Otherwise, select the NEXT button to continue.

Scenario 2:
ESRD – Functioning Graft

Mr. Shuman
ESRD - Functioning Graft

Meet Mr. Shuman, a 72-year-old beneficiary who is living in the community with his daughter.

This scenario demonstrates how to calculate a risk score for a Part C beneficiary with End-Stage Renal Disease (or ESRD) and in functioning graft status.

➪ START SCENARIO

Meet Mr. Shuman, a 72-year-old beneficiary who is living in the community with his daughter.

This scenario demonstrates how to calculate a risk score for a Part C beneficiary with End-Stage Renal Disease (or ESRD) and in functioning graft status.

To begin the process of calculating Mr. Shuman's risk score, select the START SCENARIO button. To choose another scenario, select the RETURN button.

S2 Risk Score Calculation
ESRD – Functioning Graft Beneficiary

Mr. Shuman

STEP 1 — Gather reports and resources
STEP 2 — Identify demographic and disease information
STEP 3 — Identify relative factors and adjustment factors
STEP 4 — Calculate the risk score

Are you ready to walk through the process of calculating Mr. Shuman's risk score?

Select the STEP 1 button to begin.

Step 1: Gather Reports & Resources

STEP 1 — Gather Reports and Resources
Part C (ESRD) Beneficiary

To accurately calculate Mr. Shuman's risk score, we will need the following reports and resources:

- Monthly Membership Detail Report (MMR) ⓘ
- Model Output Report (MOR) ⓘ
- Plan Communication User Guide (PCUG) ⓘ
- Annual Rate Announcement(s)

To accurately calculate Mr. Shuman's risk score, we need to gather all the necessary reports and resources. You can access those resources by selecting the RESOURCES button on the screen.

These reports and resources include the Monthly Membership Detail Report (or MMR), the Model Output Report (or MOR), the Plan Communication User Guide (or PCUG), and the Annual Rate Announcement.

Please select the NEXT button to continue.

The Monthly Membership Detail Report

STEP 1 — Gather Reports and Resources
Part C (ESRD) Beneficiary

Monthly Membership Detail Report (MMR)
The Monthly Membership Detail Report (MMR) provides Plans with beneficiary demographic and status information that is used to calculate risk scores for a specific payment month. We will need the data found in this report to complete Step 3 of the risk score calculation process.

Annual Rate Announcement(s)

The Monthly Membership Detail Report (MMR) provides Plans with beneficiary demographic and status information that is used to calculate risk scores for a specific payment month. We will need the data found in this report to complete Step 3 of the risk score calculation process.

The Part C Model Output Report

STEP 1 — Gather Reports and Resources — MENU

Model Output Report (MOR)

The Part C Model Output Report (MOR) is a monthly report that lists the HCCs that are applicable to each beneficiary. We will need the data from this report to complete Step 3 in the risk score calculation process.

To accurately ... will need the f...

- Monthly ...
- Model Output Report (MOR) ⓘ
- Plan Communication User Guide (PCUG) ⓘ
- Annual Rate Announcement(s)

The Part C Model Output Report (MOR) is a monthly report that lists the HCCs that are applicable to each beneficiary. We will need the data from this report to complete Step 3 in the risk score calculation process.

The Plan Communication User Guide

STEP 1 — Gather Reports and Resources — MENU

Part C (ESRD) Beneficiary

To accurately calculate Mr. Shuman's risk score, we will nee...

Plan Communication User Guide (PCUG)

The Plan Communication User Guide (PCUG) provides layout and field description information for the MMR and MOR.

- M... ⓘ
- M...
- Plan Communication User Guide (PCUG) ⓘ
- Annual Rate Announcement(s)

The Plan Communication User Guide (PCUG) provides layout and field description information for the MMR and MOR.

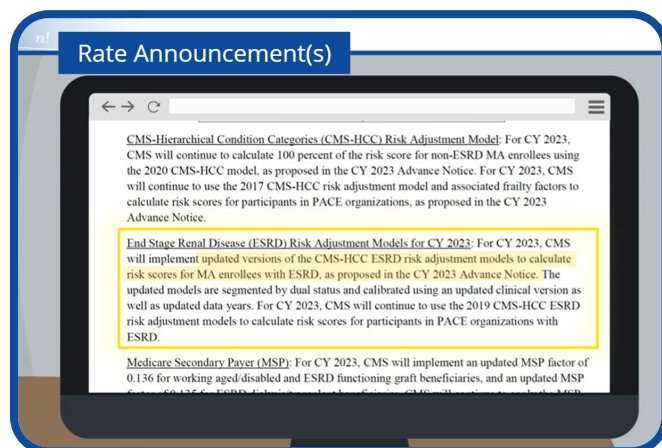## Annual Rate Announcement

Annual Rate Announcement Introduction

SHOW ME

We must first verify which payment year the risk score calculation should be based on to ensure that we are entering correct data into the risk score calculation formula. For this scenario, Mr. Shuman's risk score calculations will be based on Payment Year 2023.

Therefore, we will need to refer to the 2023 Rate Announcement to determine which risk adjustment model to use.

Select the SHOW ME button to learn how.

Rate Announcement(s)

CMS-Hierarchical Condition Categories (CMS-HCC) Risk Adjustment Model: For CY 2023, CMS will continue to calculate 100 percent of the risk score for non-ESRD MA enrollees using the 2020 CMS-HCC model, as proposed in the CY 2023 Advance Notice. For CY 2023, CMS will continue to use the 2017 CMS-HCC risk adjustment model and associated frailty factors to calculate risk scores for participants in PACE organizations, as proposed in the CY 2023 Advance Notice.

End Stage Renal Disease (ESRD) Risk Adjustment Models for CY 2023: For CY 2023, CMS will implement updated versions of the CMS-HCC ESRD risk adjustment models to calculate risk scores for MA enrollees with ESRD, as proposed in the CY 2023 Advance Notice. The updated models are segmented by dual status and calibrated using an updated clinical version as well as updated data years. For CY 2023, CMS will continue to use the 2019 CMS-HCC ESRD risk adjustment models to calculate risk scores for participants in PACE organizations with ESRD.

Medicare Secondary Payer (MSP): For CY 2023, CMS will implement an updated MSP factor of 0.136 for working aged/disabled and ESRD functioning graft beneficiaries, and an updated MSP ...

To verify which model to use for 2023 risk score calculations, open the 2023 Rate Announcement and scroll to the section that describes the ESRD models for Payment Year 2023. The information in this section states that CMS updated versions of the CMS-HCC ESRD models in 2023. Therefore, 100 percent of the risk score is calculated using the 2023 CMS-HCC ESRD model for non-PACE organizations that use only risk adjustment-eligible diagnoses from encounter data and fee-for-service claims.

Since Mr. Shuman has a functioning graft, we will need to use the ESRD model that is specific to his condition when calculating his risk score. This will be covered later in the course.

Select the NEXT button to continue.

Step 2: Identify Demographic & Disease Information

The next step in the risk score calculation process involves gathering Mr. Shuman's demographic and disease information.

Please select each button to learn more. When you have finished reviewing each section, select the NEXT button to continue.

To gather Mr. Shuman's demographic information, we will need to reference the Monthly Membership Detail Report.

The highlighted data shown on this MMR table are the required demographic and model indicators that we will need to calculate the sum of Mr. Shuman's demographic relative factors during Step 3 of this process.

The "M" value in field 7 indicates that this beneficiary is a male.

The "Y" value in field 15 indicates this beneficiary has ESRD status.

The "<space>" value in field 20 indicates that this beneficiary does not reside in a long-term institution.

The number "1" value in field 39 indicates that the beneficiary is either full or partial Medicaid.

The value in field 40 indicates that this beneficiary is in the "70–74" age group.

The "C7" RAFT Code value in field 46 indicates that this beneficiary is Community Post-Graft 10+ months (ESRD) Partial Dual, which means the beneficiary is living in the community, more than 10 months past transplant, and qualifies for some assistance from Medicaid.

The number "0" value in field 48 indicates that this beneficiary is Medicare eligible due to his age.

Finally, the number "1" value in field 84 confirms that this beneficiary is partial dual.

Disease Factors

To gather Mr. Shuman's disease information, or HCCs, we will need to reference the Model Output Report.

Take a moment to review Mr. Shuman's information. Notice that the payment HCCs identified for this beneficiary are HCC19, Diabetes without Complication, HCC40, Rheumatoid Arthritis and Inflammatory Connective Tissue Disease, and HCC111, Chronic Obstructive Pulmonary Disease. We will need this information when calculating the sum of Mr. Shuman's disease relative factors in Step 3.

Note #1: Scenario 2

The MOR data file and report have been updated with the following key changes for Payment Year 2023:

- A new record type L was added to replace record type G.

- The Risk Adjustment System (RAS) ESRD Indicator Switch was removed.

- Medicaid Female Disabled, Medicaid Female Aged, Medicaid Male Disabled, and Medicaid Male Aged indicators were removed.

- Originally ESRD Female and Originally ESRD Male indicators were added.

- Medicaid and Originally Disabled flags were removed.

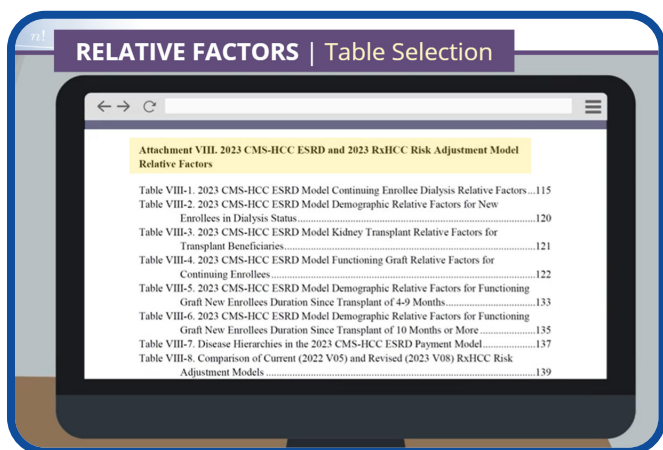- Certain HCCs and Interactions were added while others were removed.

Step 3: Identify Relative Factors & Adjustment Factors

The next step is to gather Mr. Shuman's relative factors and adjustment factors.

Please select each button to learn more. When you have finished reviewing each section, select the NEXT button to continue.

Relative Factors

RELATIVE FACTORS | Table Selection

Attachment VIII. 2023 CMS-HCC ESRD and 2023 RxHCC Risk Adjustment Model Relative Factors

Table VIII-1. 2023 CMS-HCC ESRD Model Continuing Enrollee Dialysis Relative Factors ...115
Table VIII-2. 2023 CMS-HCC ESRD Model Demographic Relative Factors for New
   Enrollees in Dialysis Status..120
Table VIII-3. 2023 CMS-HCC ESRD Model Kidney Transplant Relative Factors for
   Transplant Beneficiaries...121
Table VIII-4. 2023 CMS-HCC ESRD Model Functioning Graft Relative Factors for
   Continuing Enrollees..122
Table VIII-5. 2023 CMS-HCC ESRD Model Demographic Relative Factors for Functioning
   Graft New Enrollees Duration Since Transplant for 4-9 Months........................133
Table VIII-6. 2023 CMS-HCC ESRD Model Demographic Relative Factors for Functioning
   Graft New Enrollees Duration Since Transplant of 10 Months or More 135
Table VIII-7. Disease Hierarchies in the 2023 CMS-HCC ESRD Payment Model.....................137
Table VIII-8. Comparison of Current (2022 V05) and Revised (2023 V08) RxHCC Risk
   Adjustment Models 139

To gather Mr. Shuman's demographic relative factors and disease relative factors, open the 2023 Rate Announcement and navigate to Attachment VIII: 2023 CMS-HCC ESRD and 2023 RxHCC Risk Adjustment Model Relative Factors section.

Since we know that Mr. Shuman is a Part C ESRD Functioning Graft beneficiary, Tables VIII-1 through VIII-6 may apply.

We know from the RAFT code that Mr. Shuman is a 10+ month post graft beneficiary. We also know he is living in the community. Therefore, the appropriate table to use when looking up Mr. Shuman's relative factors is Table VIII-4: 2023 CMS-HCC ESRD Model Functioning Graft Relative Factors for Continuing Enrollees.

Select the name of this table to continue.

RELATIVE FACTORS | Column Selection

Now that we have selected the correct table, we need to determine which column to use.

Take a few moments to review the headings for each of the five columns that are highlighted on the screen. Given what you know about Mr. Shuman, which one best fits his status?

Go ahead; select the name of the column you think should be used.

Correct answer. In Step 2, we learned that Mr. Shuman is a partial-dual Medicare beneficiary that was originally eligible due to age. Therefore, we should reference the "Community, NonDual or Partial Benefit Dual, Aged" column to gather his demographic and disease relative factors.

Select the button on the screen to continue.

RELATIVE FACTORS

To calculate Mr. Shuman's risk score, we must first calculate the sum of his demographic relative factors as well as the sum of his disease relative factors.

Select each button to learn more. When you are finished, select the NEXT button to continue.

Sum of Demographic Relative Factors   Sum of Disease Relative Factors

To calculate Mr. Shuman's risk score, we must first calculate the sum of his demographic relative factors as well as the sum of his disease relative factors.

Select each button to learn more. When you are finished, select the NEXT button to continue.

Demographic Factors

RELATIVE FACTORS | Demographic Factors

Table VIII-4. 2023 CMS-HCC ESRD Model Functioning Graft Relative Factors for Continuing Enrollees

Variable	Description Label	Community, NonDual or Partial Benefit Dual, Aged	Community, NonDual or Partial Benefit Dual, NonAged	Community, Full Benefit Dual, Aged	Community, Full Benefit Dual, NonAged	Institutional
Functioning Graft Factors						
Aged <65, with duration since transplant of 4-9 months, NonDual and Partial Benefit Dual		–	1.737	–	–	1.737
Aged <65, with duration since transplant of 4-9 months, Full Benefit Dual		–	–	–	2.083	2.083
Aged 65+, with duration since transplant of 4-9 months, NonDual and Partial Benefit Dual		2.529	–	–	–	2.529
Aged 65+, with duration since transplant of 4-9 months, Full Benefit Dual		–	–	2.605	–	2.605
Aged <65, with duration since transplant of 10 months or more, NonDual and Partial Benefit Dual		–	0.335	–	–	0.335
Aged <65, with duration since transplant of 10 months or more, Full Benefit Dual		–	–	–	0.648	0.648
Aged 65+, with duration since transplant of 10 months or more, NonDual and Partial Benefit Dual		0.905	–	–	–	0.905
Aged 65+, with duration since transplant of 10 months or more, Full Benefit Dual		–	–	1.279	–	1.279
Partial Benefit Dual Status Factors						
Partial Benefit Dual, Aged		0.162	–	–	–	0.162
Partial Benefit Dual, NonAged		–	0.141	–	–	0.141
Originally Disabled Interactions with Age and Sex						
Originally Disabled, Female Age 65+		0.219	–	0.143	–	–
Originally Disabled, Male Age 65+		0.125	–	0.136	–	–
Institutional Status Factors						
Institutional Status, NonAged		–	–	–	–	2.146

To calculate the sum of Mr. Shuman's demographic relative factors, we must first identify the correct factor for each relevant demographic variable.

It's been over 10 months since Mr. Shuman's transplant. Since he is a 72-year-old non-dual beneficiary, we must capture the Functioning Graft Factor that intersects row "Aged 65+, with duration since transplant of 10 months or more, NonDual and Partial Benefit Dual" with the "Community, NonDual or Partial Benefit Dual, Aged" column, which is 0.905.

Since Mr. Shuman is partial dual and originally aged, we also need to capture the Partial Benefit Dual Status Factor that intersects the row labeled "Partial Benefits Dual, Aged" and the column labeled "Community, NonDual or Partial Benefit Dual, Aged," which is 0.162.

Select the NEXT button to continue.

RELATIVE FACTORS | Demographic Factors

Variable	Description Label	Community, NonDual or Partial Benefit Dual, Aged	Community, NonDual or Partial Benefit Dual, NonAged	Community, Full Benefit Dual, Aged	Community, Full Benefit Dual, NonAged	Institutional
Institutional Status, Aged		–	–	–	–	0.955
Female						
70-74 Years		0.359	–	0.464	–	1.202
75-79 Years		0.420	–	0.545	–	1.046
80-84 Years		0.474	–	0.608	–	0.935
85-89 Years		0.570	–	0.714	–	0.822
90-94 Years		0.678	–	0.803	–	0.700
95 Years or Over		0.686	–	0.804	–	0.560
Male						
65-69 Years		0.303	–	0.486	–	1.323
70-74 Years		0.358	–	0.570	–	1.265
75-79 Years		0.451	–	0.646	–	1.353
80-84 Years		0.512	–	0.714	–	1.268

$$0.358 + 0.162 + 0.905 = 1.425$$

(AGE / SEX FACTOR) + (PARTIAL BENEFIT DUAL FACTOR) + (FUNCTIONING GRAPH FACTOR) = (SUM OF DEMOGRAPHIC RELATIVE FACTORS)

Next, we must capture Mr. Shuman's age/gender factor. We know Mr. Shuman is a male between the ages of 70 to 74, so we need to capture the factor that intersects the row labeled 70 to 74, with the column labeled "Community, NonDual or Partial Benefit Dual, Aged," which is 0.358.

Since Mr. Shuman is living in the community the institutional factor does not apply.

Therefore, Mr. Shuman's sum of demographic relative factors, using the 2023 CMS-HCC Functioning Graft model, is 1.425.

Select the NEXT button to continue.

Disease Factors

RELATIVE FACTORS | Disease Factors

Table VIII-4. 2023 CMS-HCC ESRD Model Functioning Graft Relative Factors for Continuing Enrollees

Variable	Description Label	Community, NonDual or Partial Benefit Dual, Aged	Community, NonDual or Partial Benefit Dual, NonAged	Community, Full Benefit Dual, Aged	Community, Full Benefit Dual, NonAged	Institutional
Disease Coefficients	**Description Label**					
HCC18	Diabetes with Chronic Complications	0.219	0.241	0.233	0.296	0.359
HCC19	Diabetes without Complication	0.073	0.083	0.051	0.102	0.128
HCC21	Protein-Calorie Malnutrition	0.549	0.870	0.712	0.963	0.326
HCC39	Bone/Joint/Muscle Infections/Necrosis	0.431	0.440	0.578	0.537	0.434
HCC40	Rheumatoid Arthritis and Inflammatory Connective Tissue Disease	0.414	0.353	0.313	0.299	0.284
HCC46	Severe Hematological Disorders	1.346	4.064	1.361	3.980	0.748
HCC108	Vascular Disease	0.257	0.273	0.287	0.283	0.074
HCC110	Cystic Fibrosis	0.919	2.244	1.348	3.090	0.329
HCC111	Chronic Obstructive Pulmonary Disease	0.291	0.187	0.344	0.256	0.272
HCC112	Fibrosis of Lung and Other Chronic Lung Disorders	0.201	0.187	0.147	0.256	0.080

$$0.073 + 0.141 + 0.291 = 0.778$$

(HCC19 FACTOR) + (HCC40 FACTOR) + (HCC111 FACTOR) = (SUM OF DISEASE RELATIVE FACTORS)

Using the same table (Table VIII-4) that we used to gather Mr. Shuman's demographic relative factors, the next step in the process is to locate the values for each of Mr. Shuman's disease factors (or HCCs) to calculate the sum of his disease relative factors.

During our MOR review in Step 2, we confirmed that Mr. Shuman has three HCCs:

- HCC19, Diabetes without Complication
- HCC40, Rheumatoid Arthritis and Inflammatory Connective Tissue Disease, and
- HCC111, Chronic Obstructive Pulmonary Disease

To calculate Mr. Shuman's Sum of Disease factors, we must capture the values that intersects the "Community, NonDual or Partial Benefit Dual, Aged" column, and each row that matches his HCCs.

So, the relative factor for HCC19 is 0.073.

The relative factor for HCC40 is 0.414.

The relative factor for HCC111, is 0.291.

Since there are no disease interactions for this beneficiary, to calculate the sum of Mr. Shuman's disease relative factors using the 2023 ESRD Functioning Graft model, simply add the relative factor for each of his HCCs, which is 0.778.

Select the NEXT button to continue.

Adjustment Factors

ADJUSTMENT FACTORS

It is now time to identify the adjustment factors we will need to apply when calculating Mr. Shuman's risk score.

Select each button to learn more. When you are finished, select the NEXT button to continue.

| Normalization Factor | MA Coding Pattern Adjustment Factor |

It is now time to identify the adjustment factors we will need to apply when calculating Mr. Shuman's risk score. Select each button to learn more. When you are finished, select the NEXT button to continue.

Normalization Factor

ADJUSTMENT FACTORS | Normalization

The normalization factor adjusts for population and coding changes between the denominator year and the payment year.

We will need to reference the 2023 Rate Announcement to locate the normalization factor information when calculating Mr. Shuman's 2023 risk score.

Select the SHOW ME button to learn more.

SHOW ME

The normalization factor adjusts for population and coding changes between the denominator year and the payment year.

We will need to reference the 2023 Rate Announcement to locate the normalization factor information when calculating Mr. Shuman's 2023 risk score.

Select the SHOW ME button to learn more.

ADJUSTMENT FACTORS | Normalization

- 2020 CMS-HCC model for organizations other than PACE: 1.127
- 2017 CMS-HCC model for PACE organizations: 1.140
- 2023 CMS-HCC ESRD dialysis model for organizations other than PACE: 1.034
- 2019 CMS-HCC ESRD dialysis model for PACE organizations: 1.088
- 2023 CMS-HCC ESRD functioning graft model for organizations other than PACE: 1.048
- 2019 CMS-HCC ESRD functioning graft model for PACE organizations: 1.138
- 2023 RxHCC model for organizations other than PACE: 1.050
- 2020 RxHCC model for PACE organizations: 1.073

Open the 2023 Rate Announcement by selecting the RESOURCES button. Navigate to the "Final 2023 Normalization Factors" section.

(Notice that the Rate Announcement includes separate normalization factors for each model.)

Since we are using the 2023 CMS-HCC ESRD Functioning Graft model to calculate Mr. Shuman's risk score, the normalization factor we need to use is 1.048.

Select the NEXT button to continue.

MA Coding Pattern Adjustment Factor

ADJUSTMENT FACTORS | MA Coding Pattern

The Medicare Advantage (MA) coding pattern adjustment factor we will need to calculate Mr. Shuman's 2023 risk score can also be found in the 2023 Rate Announcement.

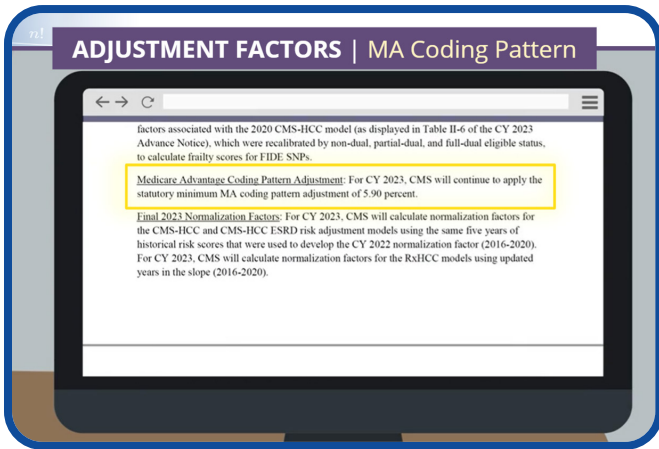**Select the SHOW ME button to learn more.**

SHOW ME

The Medicare Advantage (MA) coding pattern adjustment factor we will need to calculate Mr. Shuman's 2023 risk score can also be found in the 2023 Rate Announcement.

Select the SHOW ME button to learn more.

ADJUSTMENT FACTORS | MA Coding Pattern

factors associated with the 2020 CMS-HCC model (as displayed in Table II-6 of the CY 2023 Advance Notice), which were recalibrated by non-dual, partial-dual, and full-dual eligible status, to calculate frailty scores for FIDE SNPs.

Medicare Advantage Coding Pattern Adjustment: For CY 2023, CMS will continue to apply the statutory minimum MA coding pattern adjustment of 5.90 percent.

Final 2023 Normalization Factors: For CY 2023, CMS will calculate normalization factors for the CMS-HCC and CMS-HCC ESRD risk adjustment models using the same five years of historical risk scores that were used to develop the CY 2022 normalization factor (2016-2020). For CY 2023, CMS will calculate normalization factors for the RxHCC models using updated years in the slope (2016-2020).

Open the 2023 Rate Announcement and navigate to the "Medicare Advantage Coding Pattern Adjustment" section.

Based on the information in this Announcement, we must use the MA coding pattern adjustment factor of 5.90 percent, or 0.059, to calculate Mr. Shuman's risk score for Payment Year 2023.
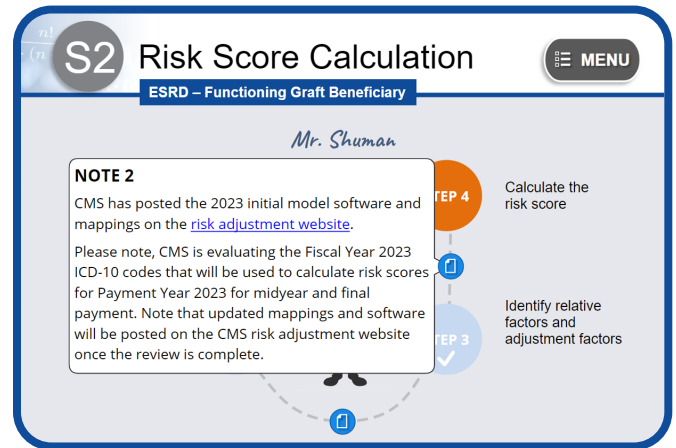
Select the NEXT button to continue.

Step 3 – Summary

Great job! You gathered all the necessary values to complete the fourth and final step of the risk score calculation process.

Select the NEXT button to continue.

Note #2: Scenario 2

S2 Risk Score Calculation ☰ MENU

ESRD – Functioning Graft Beneficiary

Mr. Shuman

NOTE 2
CMS has posted the 2023 initial model software and mappings on the risk adjustment website.

Please note, CMS is evaluating the Fiscal Year 2023 ICD-10 codes that will be used to calculate risk scores for Payment Year 2023 for midyear and final payment. Note that updated mappings and software will be posted on the CMS risk adjustment website once the review is complete.

STEP 4 — Calculate the risk score

STEP 3 — Identify relative factors and adjustment factors

CMS has posted the 2023 initial model software and mappings on the risk adjustment website.

Please note, CMS is evaluating the Fiscal Year 2023 ICD-10 codes that will be used to calculate risk scores for Payment Year 2023 for midyear and final payment. Note that updated mappings and software will be posted on the CMS risk adjustment website once the review is complete.

Step 4: Using the Risk Score Formula

Step 4 – Introduction

Calculation Values
> Sum of Demographic Relative Factors
> Sum of Disease Relative Factors
> Normalization Factor
> MA Coding Pattern Adjustment Factor
→ Risk Score Formula

SHOW ME

It is finally time to calculate Mr. Shuman's risk score!

In this step, we will enter the values generated in Step 3 — the sum of demographic relative factors, sum of disease relative factors, normalization factor, and the MA coding pattern adjustment factor — into the risk score formula to produce Mr. Shuman's final risk score for Payment Year 2023.

Select the SHOW ME button to learn more.

When using the risk score formula, we must perform several steps to accurately calculate Mr. Shuman's final payment risk score. **Select each button to learn more. When you are finished, select the NEXT button to continue.**

1	2	3
RAW RISK SCORE	ROUNDED NORMALIZED RISK SCORE	ROUNDED MA CODING PATTERN ADJUSTED RISK SCORE

When using the risk score formula, we must perform several steps to accurately calculate Mr. Shuman's final payment risk score. Select each button to learn more. When you are finished, select the NEXT button to continue.

1. Calculate the Raw Risk Score

Using the Risk Score Formula

Part C (ESRD) Beneficiary

RAW RISK SCORE CALCULATION

$$\underset{\substack{\text{(SUM OF} \\ \text{DEMOGRAPHIC} \\ \text{FACTORS)}}}{1.425} + \underset{\substack{\text{(SUM OF DISEASE} \\ \text{FACTORS)}}}{0.778} = \underset{\substack{\text{(RAW RISK SCORE)}}}{2.203}$$

✕ CLOSE

The first step is to add the sum of Mr. Shuman's demographic factors, which is 1.425, to the sum of his disease factors, which is 0.778, to determine the raw risk score.

Mr. Shuman's raw risk score is 2.203.

2. Calculate the Rounded Normalized Risk Score

Using the Risk Score Formula

Part C (ESRD) Beneficiary

ROUNDED NORMALIZED RISK SCORE CALCULATION

$$\underset{\substack{\text{(RAW RISK SCORE)}}}{2.203} \div \underset{\substack{\text{(2023} \\ \text{NORMALIZATION} \\ \text{FACTOR)}}}{1.048} = \underset{\substack{\text{(ROUNDED} \\ \text{NORMALIZED} \\ \text{SCORE)}}}{2.102}$$

✕ CLOSE

Next, we must divide the raw risk score, 2.203, by the 2023 normalization factor for the 2023 ESRD Functioning Graft model, which is 1.048, to get a normalized score of 2.102099.

We must round this number to the third decimal place to get a rounded normalized score of 2.102. Please note that if we skip this rounding step, it may affect the risk score at the third decimal place, which will impact the final calculated payment risk score.

3. Calculate the MA Coding Pattern Adjusted Risk Score

Using the Risk Score Formula

Part C (ESRD) Beneficiary

ROUNDED MA CODING PATTERN ADJUSTED RISK SCORE CALCULATION

$$\underset{\substack{\text{(ROUNDED} \\ \text{NORMALIZED} \\ \text{RISK SCORE)}}}{2.102} \times \underset{\substack{\text{(1 - MA CODING} \\ \text{PATTERN} \\ \text{ADJUSTMENT} \\ \text{FACTOR)}}}{0.941} = \underset{\substack{\text{(ROUNDED MA CODING} \\ \text{PATTERN ADJUSTED} \\ \text{RISK SCORE)}}}{1.978}$$

✕ CLOSE

Since we are using the ESRD Functioning Graft model to calculate Mr. Shuman's risk score, we also need to apply the MA coding pattern adjustment factor.

To do this, simply multiply the rounded normalized risk score, which is 2.102, by 1 minus the MA coding pattern adjustment factor, which is 0.941, to get the

MA coding pattern adjusted risk score of 1.977982.

We must round this number to the third decimal point to get the rounded MA coding pattern adjusted risk score of 1.978. This is Mr. Shuman's risk score for Payment Year 2023.

Scenario 2 Conclusion
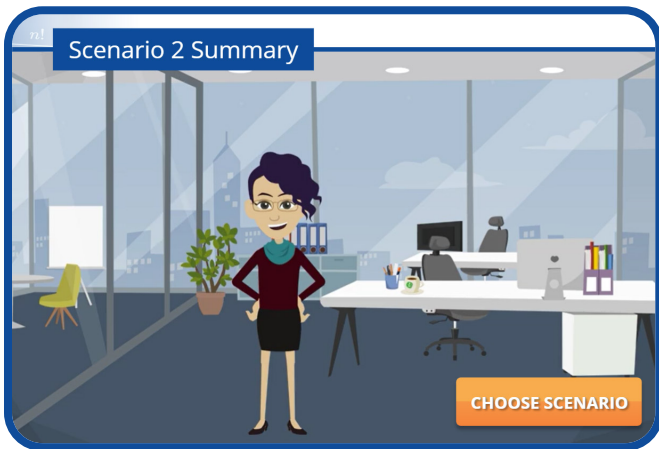
Congratulations! You have just completed the four-step process of calculating Mr. Shuman's risk score.

From gathering the necessary reports and resources and finding beneficiary demographic and disease information to identifying relative and adjustment factors as well as using the risk score formula, you now know how to calculate the 2023 payment risk score for an ESRD beneficiary who is in functioning graft status.

There are two additional scenarios in this module. To choose another scenario, simply select the CHOOSE SCENARIO button. Otherwise, select the NEXT button to continue.

Scenario 3: Part D (RxHCC)

Mr. Daniels
PART D (RxHCC)

Remember Mr. Daniels? He is now 68 years old and still living at home.

This scenario demonstrates how to calculate a risk score for a Part D beneficiary.

▪➜ START SCENARIO

Do you remember Mr. Daniels from the scenario that demonstrated the Part D (RxHCC) risk score calculation for Payment Year 2022 in Module 3: Applying the Risk Score Formula of the Risk Adjustment Methodology computer-based training course? He is now 68 years old, and he still lives at home.

By using the same beneficiary, this scenario highlights the changes from payment years prior to 2023 and demonstrates how to calculate a risk score for a Part D beneficiary.

To begin the process of calculating Mr. Daniels' risk score, select the START SCENARIO button. To choose another scenario, select the RETURN button.

Are you ready to walk through the process of calculating Mr. Daniels' risk score?

Select the STEP 1 button to begin.

Step 1: Gather Reports & Resources

To accurately calculate Mr. Daniels' risk score, we need to gather all the necessary reports and resources. You can access those resources by selecting the RESOURCES button on the screen.

These reports and resources include the Monthly Membership Detail Report (or MMR), the Model Output Report (or MOR), the Plan Communication User Guide (or PCUG), and the Annual Rate Announcement.

Please select the NEXT button to continue.

The Monthly Membership Detail Report

The Monthly Membership Detail Report (MMR) provides Plans with beneficiary demographic and status information that is used to calculate risk scores for a specific payment month. We will need the data found in this report to complete Step 3 of the risk score calculation process.

The Part C Model Output Report

The Part C Model Output Report (MOR) is a monthly report that lists the HCCs that are applicable to each beneficiary. We will need the data from this report to complete Step 3 in the risk score calculation process.

The Plan Communication User Guide

The Plan Communication User Guide (PCUG) provides layout and field description information for the MMR and MOR.

Annual Rate Announcement

We must first verify which payment year the risk score calculation should be based on to ensure that we are entering correct data into the risk score calculation formula. For this scenario, Mr. Daniels' risk score calculations will be based on Payment Year 2023.

Therefore, we will need to refer to the 2023 Rate Announcement to determine which risk adjustment model to use.

Select the SHOW ME button to learn how.
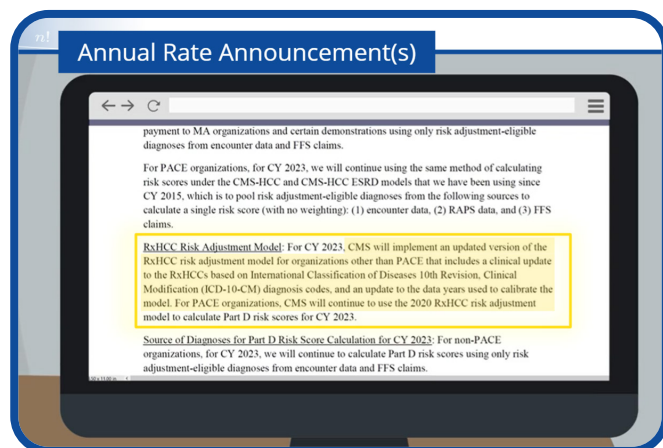
To verify which model to use for 2023 risk score calculations, open the 2023 Rate Announcement and scroll to the section that describes the RxHCC model for Payment Year 2023. The information in this section states that CMS implemented updated versions of the RxHCC model for non-PACE organizations, which includes a clinical update to the RxHCCs based on the International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10) diagnosis codes, and an update to the data years used to calibrate the model.

Therefore, we must use the 2023 RxHCC payment risk adjustment model to calculate Mr. Daniels' risk score.

The 2023 RxHCC Risk Adjustment Model Relative Factors section, which is required to complete Step 3 of the risk score calculation process, is also included in the 2023 Rate Announcement.

Select the NEXT button to continue.

Note #1: Scenario 3

To reflect more current prescription drug utilization and to improve predictive accuracy for the Part D risk adjustment model, changes were made to update the RxHCC diagnosis codes from being based on the ICD-9 classification system to the ICD-10 classification system.

The ICD-9 has 14,400 diagnosis codes, and ICD-10 expands this list to approximately 70,000 codes. The result is a change in the number of payment RxHCCs from 76 to 84.

Step 2: Identify Demographic & Disease Information

The next step in the risk score calculation process involves gathering Mr. Daniels' demographic and disease information.

Please select each button to learn more. When you have finished reviewing each section, select the NEXT button to continue.

Demographic Factors

To gather Mr. Daniels' demographic information, we will need to reference the Monthly Membership Detail Report.

The highlighted data shown on this MMR table are the required demographic and model indicators that we will need to calculate the sum of Mr. Daniels' demographic relative factors during Step 3 of this process.

The "M" value in field 7 indicates that this beneficiary is a male.

The value in field 40 indicates that this beneficiary is in the "65–69" age group.

The number "0" value in field 48 indicates that this beneficiary is Medicare eligible due to age.

Finally, the "D1" Part D RAFT Code value in field 86 indicates that this beneficiary is categorized as a non-low income continuing enrollee who resides in the community.

Disease Factors
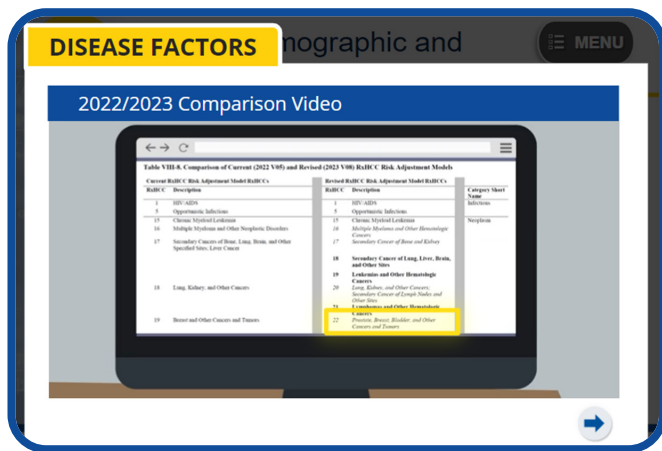
To gather Mr. Daniels' disease information, or RxHCCs, we will need to reference the Model Output Report.

Before we do that, there are some changes in the RxHCCs you should be aware of. These changes are due to the clinical updates to the ICD-10 diagnosis codes.

Last year, we knew from Mr. Daniels' MOR that one of his RxHCC diagnosis codes was RxHCC19, Breast and Other Cancers and Tumors.

In Table VIII-8. Comparison of Current (2022 V05) and Revised (2023 V08) RxHCC Risk Adjustment Models, on the left, the diagnosis code for RxHCC19, Breast and Other Cancers and Tumors was updated to RxHCC22, Prostate, Breast, Bladder, and Other Cancers and Tumors.

Select the NEXT button to continue.
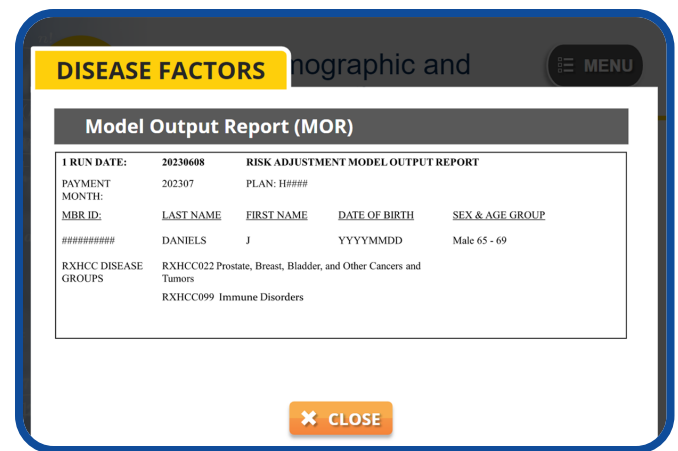
Take a moment to review Mr. Daniels' information. Notice that the RxHCCs identified for Payment Year 2023 for this beneficiary are RxHCC22, Prostate, Breast, Bladder, and Other Cancers and Tumors, and RxHCC99, Immune Disorders.

We will need this information when calculating the sum of Mr. Daniels' disease relative factors in Step 3.

Note #2: Scenario 3
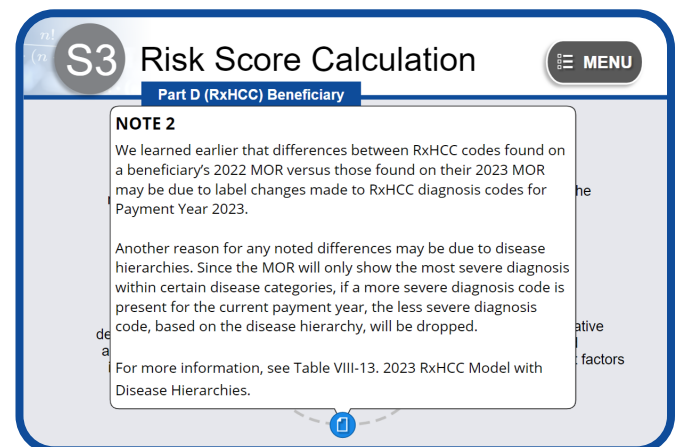
We learned earlier that differences between RxHCC codes found on a beneficiary's 2022 MOR versus those found on their 2023 MOR may be due to label changes made to RxHCC diagnosis codes for Payment Year 2023.

Another reason for any noted differences may be due to disease hierarchies. Since the MOR will only show the most severe diagnosis within certain disease categories, if a more severe diagnosis code is present for the current payment year, the less severe diagnosis code, based on the disease hierarchy, will be dropped.

For more information, see Table VIII-13. 2023 RxHCC Model with Disease Hierarchies.

Step 3: Identify Relative Factors & Adjustment Factors

STEP 3

Identify Relative Factors and Adjustment Factors

☰ MENU

Part D (RxHCC) Beneficiary

Step 3 in the risk score calculation process involves gathering relative factors and adjustment factors. **Select each button to learn more. When you have finished reviewing each section, select the NEXT button to continue.**

Relative Factors 🔍

Adjustment Factors ⇄

The next step is to gather Mr. Daniels' relative factors and adjustment factors.

Please select each button to learn more. When you have finished reviewing each section, select the NEXT button to continue.

Relative Factors

RELATIVE FACTORS | Table Selection

To gather Mr. Daniels' demographic relative factors and disease relative factors, open the 2023 Rate Announcement and navigate to Attachment VIII: 2023 CMS-HCC ESRD and 2023 RxHCC Risk Adjustment Model Relative Factors.

Since we know that Mr. Daniels is a Part D beneficiary, Tables VIII-9 through VIII-12, which identify the RxHCC model relative factors for different enrollee types, may apply. We know from the Part D RAFT code that Mr. Daniels is a continuing enrollee. Therefore, the most appropriate table to use when looking up Mr. Daniels' relative factors is Table VIII-9: 2023 RxHCC Model Relative Factors for Continuing Enrollees.

Select the name of this table to continue.

RELATIVE FACTORS | Column Selection

Table VIII-9. 2023 RxHCC Model Relative Factors for Continuing Enrollees

Variable	Description Label	Community, Non-Low Income, Age≥65	Community, Non-Low Income, Age<65	Community, Low Income, Age≥65	Community, Low Income, Age<65	Institutional
Female						
0-34 Years		-	0.186	-	0.460	1.978
35-44 Years		-	0.323	-	0.629	2.028
45-54 Years		-	0.384	-	0.680	1.705
55-59 Years		-	0.367	-	0.615	1.538
60-64 Years		-	0.328	-	0.511	1.401
65-69						
70-74						
75-79						
80-84						
85-89						
90-94						
95 Years						
Male						
0-34 Years		-	0.200	-	0.498	2.005
35-44 Years		-	0.253	-	0.573	1.875
45-54 Years		-	0.305	-	0.573	1.671
55-59 Years		-	0.329	-	0.532	1.460
60-64 Years		-	0.334	-	0.476	1.308
65-69 Years		0.190	-	0.319	-	1.239
70-74 Years		0.177	-	0.286	-	1.088
75-79 Years		0.180	-	0.252	-	1.021
80-84 Years		0.125	-	0.238	-	0.936
85-89 Years		0.043	-	0.171	-	0.819

Column labels (highlighted): Community, Non-Low Income, Age ≥ 65 | Community, Non-Low Income, Age ≤ 65 | Community, Low Income, Age ≥ 65 | Community, Low Income, Age < 65 | Institutional

Now that we have selected the correct table, we need to determine which column to use.

Take a few moments to review the headings for each of the five columns highlighted on the screen. Given what you know about Mr. Daniels, which one best fits his status?

Go ahead; select the name of the column you think we should use.

Correct answer. In Step 2, we learned that Mr. Daniels is between the ages of 65 and 69, and he is a non-low-income enrollee that resides in the community. Therefore, we should reference the "Community, Non-Low Income, Age ≥ 65" column to gather his demographic and disease relative factors.

Select the CONTINUE button.

RELATIVE FACTORS

To calculate Mr. Daniels' risk score, we must first calculate the sum of his demographic relative factors as well as the sum of his disease relative factors.

Select each button to learn more.

| Sum of Demographic Relative Factors | Sum of Disease Relative Factors |
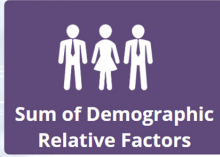
To calculate Mr. Daniels' risk score, we must first calculate the sum of his demographic relative factors as well as the sum of his disease relative factors.

Select each button to learn more.

Demographic Factors

RELATIVE FACTORS | Demographic Factors

Table VIII-9. 2023 RxHCC Model Relative Factors for Continuing Enrollees

Variable	Description Label	Community, Non-Low Income, Age≥65	Community, Non-Low Income, Age<65	Community, Low Income, Age≥65	Community, Low Income, Age<65	Institutional
Female						
45-54 Years		-	0.384	-	0.680	1.705
55-59 Years		-	0.367	-	0.615	1.538
60-64 Years		-	0.328	-	0.511	1.401
65-69 Years		0.156	-	0.347	-	1.374
70-74 Years		0.166	-	0.302	-	1.226
75-79 Years		0.166	-	0.252	-	1.078
80-84 Years		0.142	-	0.216	-	0.948
85-89 Years		0.123	-	0.151	-	0.831
90-94 Years		0.084	-	0.085	-	0.688
95 Years or Over		-	-	-	-	0.489
Male						
55-59 Years		-	0.329	-	0.532	1.460
60-64 Years		-	0.334	-	0.476	1.308
65-69 Years		0.190	-	0.319	-	1.239
70-74 Years		0.177	-	0.286	-	1.088
75-79 Years		0.180	-	0.252	-	1.021
80-84 Years		0.125	-	0.238	-	0.936
85-89 Years		0.043	-	0.171	-	0.819
90-94 Years		-	-	0.123	-	0.700
95 Years or Over		-	-	0.046	-	0.527
Originally Disabled Interactions with Sex						
Originally Disabled Female		0.063	-	0.206	-	0.113
Originally Disabled Male		-	-	0.139	-	0.113

To calculate the sum of Mr. Daniels' demographic relative factors, we must first identify the correct factor for each relevant demographic variable.

Since we know that Mr. Daniels is a male between the ages of 65 to 69, we need to capture the value that is displayed in the cell where row "65 to 69 Years" intersects with the column "Community, Non-Low Income, Age ≥ 65." This value is 0.190.

The only other factor we may need to consider is whether the "Originally Disabled" factor applies.

Since Mr. Daniels was eligible for Medicare due to age, the "Originally Disabled" factor does not apply.

Therefore, Mr. Daniels' demographic relative factor,

using the 2023 RxHCC model, is 0.190.

Select the NEXT button to continue.

Disease Factors

RELATIVE FACTORS | Disease Factors

Variable	Description Label	Community, Non-Low Income, Age≥65	Community, Non-Low Income, Age<65	Community, Low Income, Age≥65	Community, Low Income, Age<65	Institutional
Disease Coefficients						
RXHCC21	Lymphomas and Other Hematologic Cancers	0.212	0.087	0.173	0.139	0.079
RXHCC22	Prostate, Breast, Bladder, and Other Cancers and Tumors	0.100	0.087	0.160	0.139	0.079
RXHCC30	Diabetes with Complications	0.562	0.606	0.733	0.964	0.607
RXHCC96	Acquired Hemolytic, Aplastic, and Sideroblastic Anemias	0.368	0.310	0.388	0.522	0.108
RXHCC98	Hereditary Angioedema and Other Defects in the Complement System	5.764	26.683	7.785	24.546	0.172
RXHCC99	Immune Disorders	0.650	0.500	0.773	0.730	0.433
RXHCC100	Immune Thrombocytopenic Purpura	0.157	0.041	0.667	0.775	0.436
RXHCC111	Alzheimer's Disease	0.096	0.038	-	-	-
RXHCC112	Dementia, Except Alzheimer's Disease	0.096	0.038	-	-	-
RXHCC130	Schizophrenia and Other Psychosis	0.285	0.297	0.435	0.826	0.193

$$0.100 \text{ (RxHCC22 FACTOR)} + 0.650 \text{ (RxHCC99 FACTOR)} = 0.750 \text{ (SUM OF DISEASE RELATIVE FACTORS)}$$

Using the same table (Table VIII-9) and the "Community, Non-Low Income, Age ≥ 65" column that we used to gather Mr. Daniels' demographic relative factors, the next step in the process is to locate the values for each of Mr. Daniels' disease factors (or RxHCCs) to calculate the sum of his disease relative factors.

During our MOR review in Step 2, we confirmed that Mr. Daniels has two RxHCCs:

- RxHCC22, Prostate, Breast, Bladder, and Other Cancer and Tumors, and

- RxHCC99, Immune Disorders

To identify the relative factor for RxHCC22, we must capture the value displayed in the cell where the "Community, Non-Low Income, Age ≥ 65" column and the "RxHCC22" row intersect, which is 0.100.

To identify the relative factor for RxHCC99, we must capture the value where the "Community, Non-Low Income, Age ≥ 65" column and "RxHCC99" row intersect, which is 0.650.

Since there are no disease or disabled/disease interactions for this beneficiary, we can calculate the sum of Mr. Daniels' disease relative factors by simply adding the relative factor for RxHCC22, which is 0.100, to the relative factor for RxHCC99, which is 0.650.

Using the 2023 RxHCC model, the sum of Mr. Daniels' disease relative factors is 0.750.

Select the NEXT button to continue.
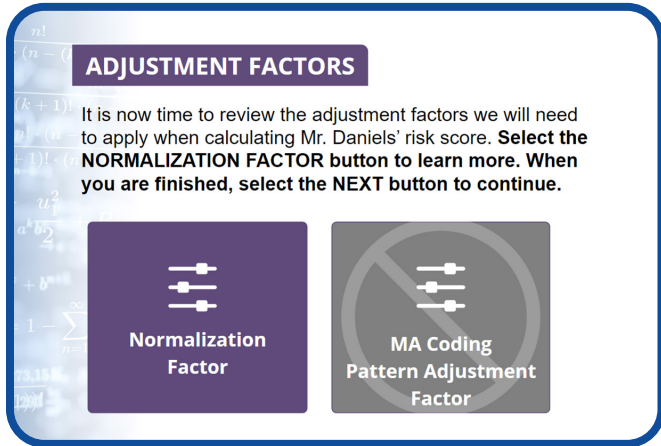
Adjustment Factors

ADJUSTMENT FACTORS

It is now time to review the adjustment factors we will need to apply when calculating Mr. Daniels' risk score. **Select the NORMALIZATION FACTOR button to learn more. When you are finished, select the NEXT button to continue.**

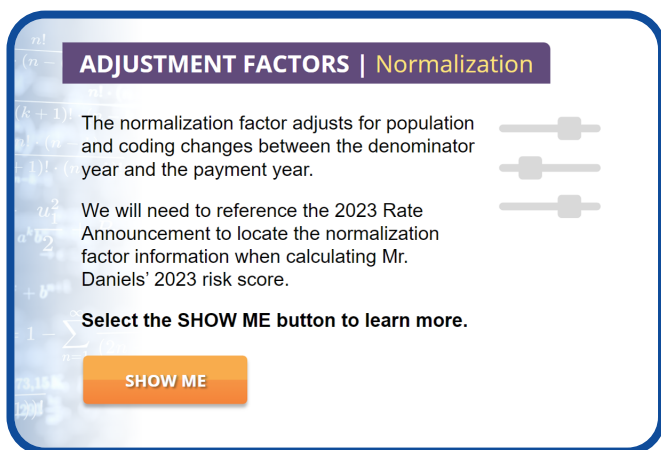Normalization Factor

MA Coding Pattern Adjustment Factor

It is now time to review the adjustment factors we will need to apply when calculating Mr. Daniels' risk score.

Please note that the MA Coding Pattern Adjustment Factor does not apply when using a Part D model to calculate risk scores.

Select the NORMALIZATION FACTOR button to learn more. When you are finished, select the NEXT button to continue.
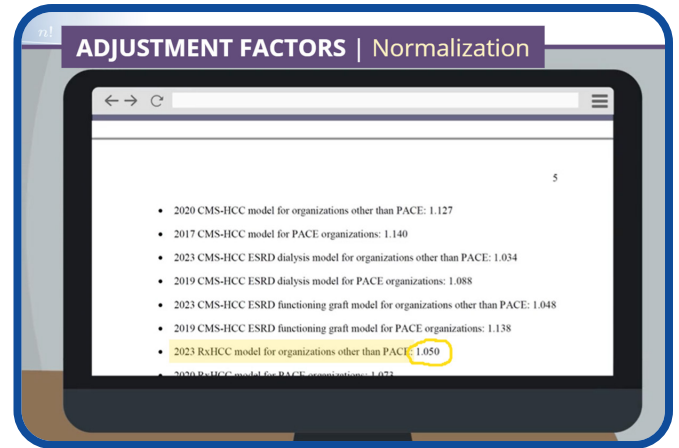
Normalization Factor

ADJUSTMENT FACTORS | Normalization

The normalization factor adjusts for population and coding changes between the denominator year and the payment year.

We will need to reference the 2023 Rate Announcement to locate the normalization factor information when calculating Mr. Daniels' 2023 risk score.

Select the SHOW ME button to learn more.

SHOW ME

The normalization factor adjusts for population and coding changes between the denominator year and the payment year.

We will need to reference the 2023 Rate Announcement to locate the normalization factor information to calculate Mr. Daniels' 2023 risk score.

Select the SHOW ME button to learn more.

ADJUSTMENT FACTORS | Normalization

5

- 2020 CMS-HCC model for organizations other than PACE: 1.127
- 2017 CMS-HCC model for PACE organizations: 1.140
- 2023 CMS-HCC ESRD dialysis model for organizations other than PACE: 1.034
- 2019 CMS-HCC ESRD dialysis model for PACE organizations: 1.088
- 2023 CMS-HCC ESRD functioning graft model for organizations other than PACE: 1.048
- 2019 CMS-HCC ESRD functioning graft model for PACE organizations: 1.138
- 2023 RxHCC model for organizations other than PACE: 1.050
- 2020 RxHCC model for PACE organizations: 1.072

Open the 2023 Rate Announcement by selecting the RESOURCES button. Navigate to the "Final 2023 Normalization Factors" section.

(Notice that the Rate Announcement includes separate normalization factors for each model.)

Since we are using the 2023 RxHCC model for organizations other than PACE to calculate Mr. Daniels' risk score, the normalization factor we need to use is 1.050.
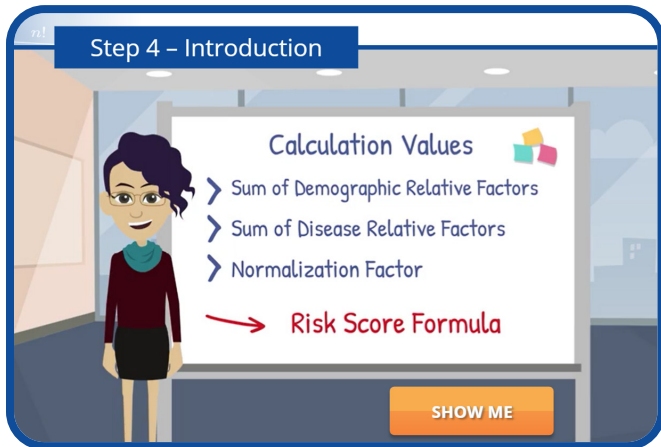
Select the NEXT button to continue.
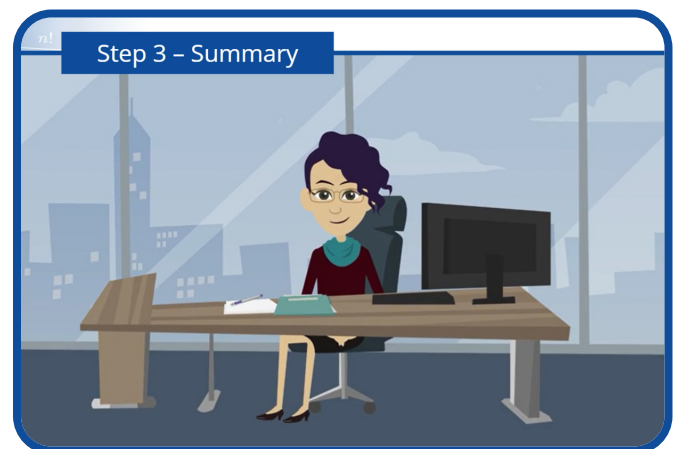
Step 3 – Summary

Great job! You gathered all the necessary values to complete the fourth and final step of the risk score calculation process.
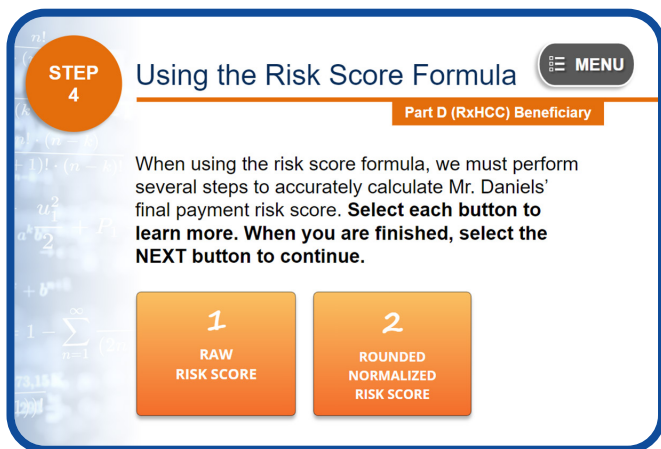
Select the NEXT button to continue.

Step 4: Using the Risk Score Formula


It is finally time to calculate Mr. Daniels' risk score!

In this step, we will enter the values generated in Step 3 — the sum of demographic relative factors, sum of disease relative factors, and the normalization factor — into the risk score formula to produce Mr. Daniels' final Part D risk score for Payment Year 2023.

Select the SHOW ME button to learn more.

When using the risk score formula, we must perform several steps to accurately calculate Mr. Daniels' final payment risk score. Select each button to learn more. When you are finished, select the NEXT button to continue.
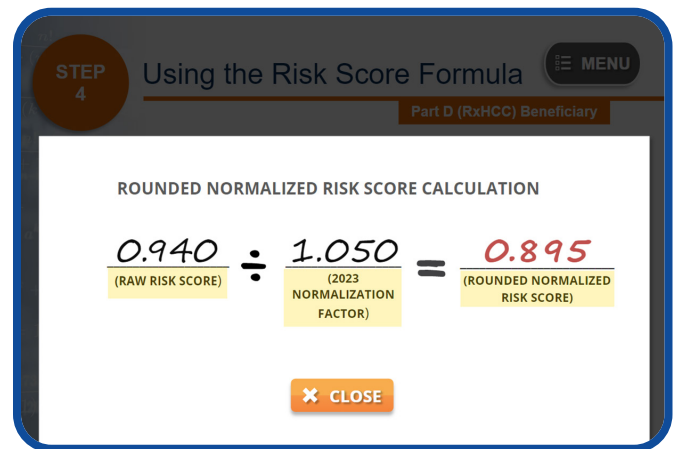
1. Calculate the Raw Risk Score
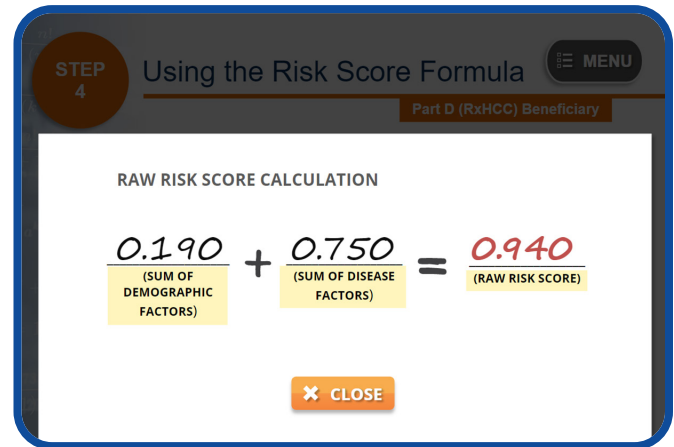
The first step is to add the sum of Mr. Daniels' demographic factors, which is 0.190, to the sum of his disease factors, which is 0.750, to determine the raw risk score.

Mr. Daniels' raw risk score is 0.940.

## 2. Calculate the Rounded Normalized Risk Score

Next, we must divide the raw risk score, 0.940, by the 2023 normalization factor for the 2023 RxHCC, model, which is 1.050, to get a normalized score of 0.89524.

We must round this number to the third decimal place to get a rounded normalized score of 0.895. Please note that if we skip this rounding step, it may affect the risk score at the third decimal place, which will impact the final calculated payment risk score.

Since the MA coding pattern adjustment factor is not applied to Part D models, Mr. Daniels' final Part D risk score for Payment Year 2023 is 0.895.

Scenario 3 Conclusion
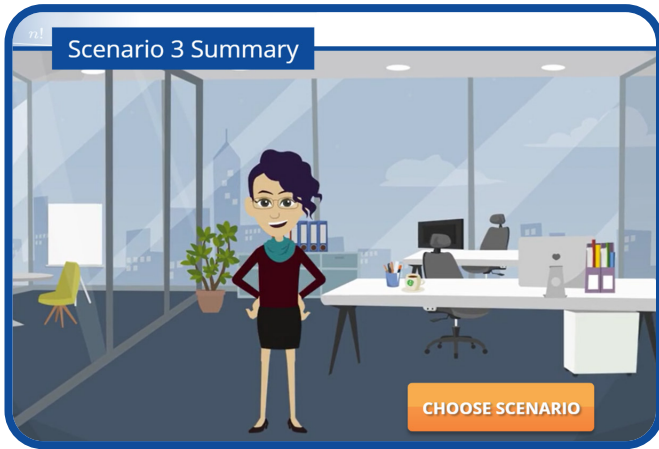
Congratulations! You have just completed the four-step process of calculating Mr. Daniels' Part D risk score.

From gathering the necessary reports and resources, and finding beneficiary demographic and disease information, to identifying relative and adjustment factors, as well as using the risk score formula, you now know how to calculate the 2023 payment risk score for a Part D beneficiary.

There are two additional scenarios in this module. To choose another scenario, simply select the CHOOSE SCENARIO button displayed on the screen. Otherwise, select the NEXT button to continue.

Conclusion
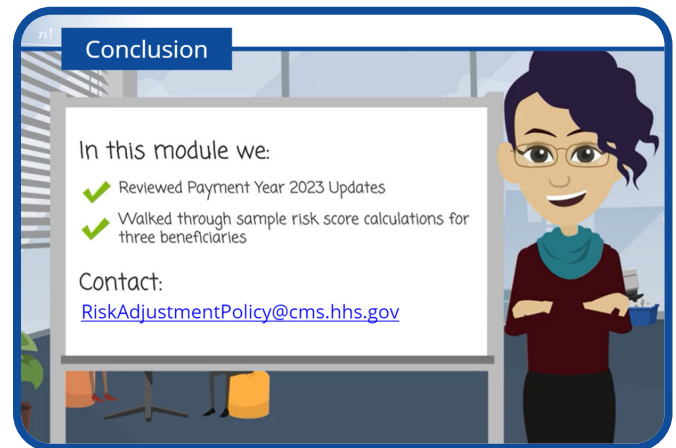
Thank you for viewing Module 4 in the Risk Adjustment Methodology Series. In this module, we reviewed the Payment Year 2023 updates and walked through sample risk score calculations for three beneficiaries.

If you have questions or comments about this training, contact RiskAdjustmentPolicy@cms.hhs.gov.

You may review any of the scenarios covered in this module by selecting the BACK button now. Otherwise, select the EXIT COURSE button to end the course.