

# 2017 CMS-HCC Model Updates and Implementation



**Thursday, July 21, 2016**  
**2:00 p.m. – 3:30 p.m. ET**

# Agenda

- Introduction
  - Session Guidelines
  - Upcoming User Group Calls
- 2017 CMS-HCC Model Revision Overview
- 2017 Risk Score Calculations
- 2017 CMS-HCC Model Implementation
- Q & A

# Session Guidelines

- This is a 1.5 hour webinar session for MAOs and other entities.
- There will be opportunities to submit questions to the question and answer box available via the webinar.
- Slides and documented Q&As will be posted in coming weeks on the CSSC Operations webpage under *Risk Adjustment Processing System>User Group and Medicare Encounter Data>User Group pages*.
- For questions regarding content of this webinar, submit inquiries to the CMS Risk Adjustment mailbox at: [RiskAdjustment@cms.hhs.gov](mailto:RiskAdjustment@cms.hhs.gov).
- Please refer to <http://www.tarsc.info> for the most up to date details regarding training opportunities.

# Upcoming Encounter Data and Risk Adjustment User Group Calls

- CMS plans to hold monthly user group calls to address topics related to risk adjustment data (encounter data and RAPS data submissions).
- The current plan is to hold calls on or around the 3rd Thursday of each month.
- Schedule
  - Thursday, August 18
- The topics and dates will be posted at <http://www.tarsc.info>.



# 2017 CMS-HCC Model Revisions Overview

# 2017 CMS-HCC Model Update

- In 2017, CMS will implement a revised version of the CMS-HCC risk adjustment model.
- The revised model improves the predictive accuracy of the community dual and non-dual aged/disabled subgroups.

# Key Updates to the CMS-HCC Model

- Revisions to the community segment of the model.
- Updates to data years used to recalibrate the model.
- Updates to disease interactions.
- Updates to how dual status is handled in the community and long term institution (LTI) segments:
  - Community: dual status in the payment month.
  - LTI: dual status in the payment year.

# CMS-HCC Model – Quick Background

- The CMS-HCC model is a prospective model: diagnoses in one year are used to predict costs in the following year.
- The model includes demographic and condition factors to predict costs.
- Hierarchical condition categories (HCCs): Diagnoses are grouped into condition categories; hierarchies are applied so that risk scores reflect the most severe category of a condition.



# CMS-HCC Model – Quick Background (continued)

- From 2004-2016, the CMS-HCC model has included separate risk scores for new enrollees, long-term institutional beneficiaries, and community beneficiaries.
- For more information on the CMS-HCC model, please refer to the documents listed here, as well as the resource materials listed at the end of this presentation.
  - October 28, 2015 HPMS memo
  - 2017 Advance Notice and Announcement

# Revisions to the Community Segment

- The revised CMS-HCC model will separate the single community segment into six (6) segments; one for each of the following dual eligible subgroups:
  - Full benefit dual aged
  - Full benefit dual disabled
  - Partial benefit dual aged
  - Partial benefit dual disabled
  - Non-dual aged
  - Non-dual disabled

# Revisions to the Community Segment (continued)

- Dual status will be determined
  - On a month-by-month basis
  - During the payment year
- Instead of being a factor in the model, dual status will be used to select the appropriate risk score for a month.
- We will no longer look for dual status any time during the data collection year.

# Institutional and New Enrollee Segments

- The institutional and new enrollee segments are unchanged from the 2014 CMS-HCC model, except for the following updates:
  - For the institutional segment:
    - Recalibrated with more recent data.
    - Dual status will be measured concurrently.
  - For the new enrollee segment:
    - Recalibrated with more recent data.

# Model Relative Factors

- All model HCCs that were in the 2014 CMS-HCC model will remain the same in the 2017 CMS-HCC model.
  - We did not conduct a clinical revision of HCCs.

# Disease Interactions

- The disease-disease interactions for each of the six (6) separate community segments are the same, except for one disease-disease interaction that is only included in the three disabled community segments:
  - All Aged and Disabled Segments:
    - Cancer HCC group × disorders of immunity individual HCC
    - CHF individual HCC × diabetes HCC group
    - CHF individual HCC × COPD HCC group
    - CHF individual HCC × renal HCC group
    - CHF individual HCC × specified heart arrhythmias individual HCC
    - COPD HCC group × cardio respiratory failure HCC group
  - Disabled Segments Only
    - Psych HCC group × substance abuse HCC group

# Dual status

- We defined dual status as follows:
  - **Full benefit dual eligibles**: eligible for full Medicaid benefits under title XIX of the Social Security Act. Include those who have Medicaid benefits only, or who are also eligible as Qualified Medicare Beneficiaries (QMBs) or Specified Low Income Medicare Beneficiaries (SLMBs).
    - Dual status codes 02, 04, 08, or presence on the monthly Puerto Rico file
  - **Partial benefit dual eligibles**: eligible only as Qualified Medicare Beneficiaries (QMBs), Specified Low Income Medicare Beneficiaries (SLMBs), and under other categories of beneficiaries who are not eligible for full Medicaid benefits under title XIX.
    - Dual status code 01, 03, 05, or 06
  - **Non dual eligible**: Neither full benefit dual or partial benefit dual eligible.

# Medicaid status

- We will use Medicaid data from three (3) sources:
  - 1) Medicare Modernization Act (MMA) State files
  - 2) Point of Sale data
  - 3) Monthly Medicaid file that the Commonwealth of Puerto Rico submits to CMS





# PY 2017 Risk Score Calculations

# Payment Year 2017 Risk Score Calculation

- In PY 2017, CMS will continue calculating risk scores by blending two risk scores:
  1. The risk score calculated using diagnoses from the Risk Adjustment Processing System (RAPS) and FFS.
  2. The risk score calculated using diagnoses from the Encounter Data System (EDS) and FFS.

# Payment Year 2017 Risk Score Calculation (continued)

- The blend of RAPS-based and encounter data-based risk scores will apply to risk scores calculated with the following models:
  - CMS-HCC model (revised for PY 2017)
  - ESRD dialysis model
  - ESRD functioning graft model
  - RxHCC model (recalibrated for PY 2017)

\* Risk scores for PACE organizations will be calculated using the same method as used for PY 2016.

# Risk Score Calculation - Overview

## Risk Adjustment Model Variables and Adjustments

### Demographic Variables:

- Age / Sex
- Originally Disabled

There are relative factors associated with each demographic variable.

### Disease Variables:

- Disease Hierarchical Condition Categories (HCCs)
- Disease / Disabled Interactions

CMS uses diagnoses submitted by plans to assign HCCs and interactions for each beneficiary. There are relative factors associated with each HCC and interaction.

### *Sum of Factors*

### *Demographic + Disease*

*The relative factors for all of the demographic variables, HCCs and interactions are added together. The result is the raw risk score.*

### • **Normalized Score**

A normalization factor is applied to keep the average FFS risk score at 1.0.

### • **MA Coding Pattern Adjusted Score**

A coding pattern adjustment is applied to account for differential coding patterns between MA and FFS.

*Final product is the payment risk score*

# Risk Score Calculation for PY 2017

For PY 2017 risk scores will be calculated independently and then blended:

- **Portion of risk score from 75% RAPS & FFS**
  - $[(\text{raw risk score from RAPS} + \text{FFS diagnoses}) / (\text{PY 2017 normalization factor})] \times (1 - \text{PY 2017 coding adjustment factor}) \times 75\% = \text{portion of the risk score from RAPS and FFS .}$
- **Portion of risk score from 25% ED & FFS**
  - $[(\text{raw risk score from ED} + \text{FFS diagnoses}) / (\text{PY 2017 normalization factor})] \times (1 - \text{PY 2017 coding adjustment factor}) \times 25\% = \text{portion of the risk score from ED and FFS.}$
- **Blended risk score** = RAPS and FFS portion of the risk score + the ED and FFS portion of the risk score.

# CMS-HCC Risk Model

## Example Risk Score Calculation for PY 2017

Demographics	RAPS and FFS	ED and FFS
Male, Age 82 (aged), FB-Dual, Community	0.816	0.816
Diagnoses:		
Diabetes w/o complications	0.097	0.097
COPD	0.422	0.422
Total Raw Risk Score (Demographic Factors + Diagnostic factors)	1.335	1.335

# Adjustments to Risk Scores

## 2017 MA Coding Pattern Adjustment:

For PY 2017, CMS will implement an MA coding pattern difference adjustment of **5.66%**.

## 2017 Normalization Factors:

Model	Factor
Revised CMS-HCC model	0.998
PACE model	1.051
ESRD dialysis model	0.994
ESRD functioning graft model	1.051
Recalibrated RxHCC model	0.976

# CMS-HCC Risk Model

## Example Risk Score Calculation for PY 2017

Demographics	RAPS and FFS	ED and FFS
Total Raw Risk Score	1.335	1.335
Adjustments:		
Normalization factor (0.998)	$1.335/0.998 = 1.338$	$1.335/0.998 = 1.338$
Coding differences (5.66%)	$1.338 \times (1 - 0.0566) = 1.26$	$1.338 \times (1 - 0.0566) = 1.26$
Blending of the Risk Scores	$1.26 \times 0.75 = 0.945$	$1.26 \times 0.25 = 0.315$
<b>Payment Risk Score</b>	<b><math>0.945 + 0.315 = 1.26</math></b>	



# Using EDS Diagnoses for Risk Score Calculation

- **For PY 2016 (DOS 2015)**, CMS will blend the risk scores:
  - Portion of risk score from 90% RAPs & FFS diagnoses +
  - Portion of risk score from 10% ED and FFS diagnoses =
  - Blended 2016 risk score.
- **For PY 2017(DOS 2016)**, CMS will blend the risk scores:
  - Portion of risk score from 75% RAPs & FFS diagnoses +
  - Portion of risk score from 25% ED and FFS diagnoses =
  - Blended 2017 risk score.
    - \*As noted in the 2017 Announcement, CMS plans to continue increasing the weighting of encounter data-based risk scores.
- **For PACE organizations** for PY 2016 & PY 2017 risk score calculations, CMS will continue to use the same method as used for PY 2015, which is to use diagnoses from RAPS, FFS and ED in equal measure (with no weighting).



# PY 2017 CMS-HCC Model Implementation

# Information on Model Implementation

- CMS released an HPMS memo on the implementation of the 2017 CMS-HCC Model on June 10th, 2016.
  - This memo describes CMS' initial implementation approach, as well as some changes that will be seen in early 2017.
  - Information presented here is also found in this memo.
- System release memos – similar information will be included in the relevant system release memos, to be published along with the release schedules.

# General Approach

- CMS believes that this approach is the best way to minimize both the potential to generate multiple adjustment records for an enrollee throughout a year, and the amount of revenue that is paid or netted out of payment at final reconciliation.
- We are open for feedback from the industry about our approach.

# Model Implementation

- Eight (8) mutually exclusive segments
  - Six (6) community (Full Benefit Dual Aged, Full Benefit Dual Disabled, Partial Benefit Dual Aged, Partial Benefit Dual Disabled, Non-Dual Aged, Non-Dual Disabled)
  - Long term institutional (LTI)
  - New enrollee
- We will determine when to use LTI and new enrollee risk scores in the same manner as today.
- As we do today, LTI or community scores are applied on a monthly basis at final recon.
- For community scores, beneficiary's aged v. disabled status for the year, along with their dual status for each month, will determine which of the six (6) segments will be selected.

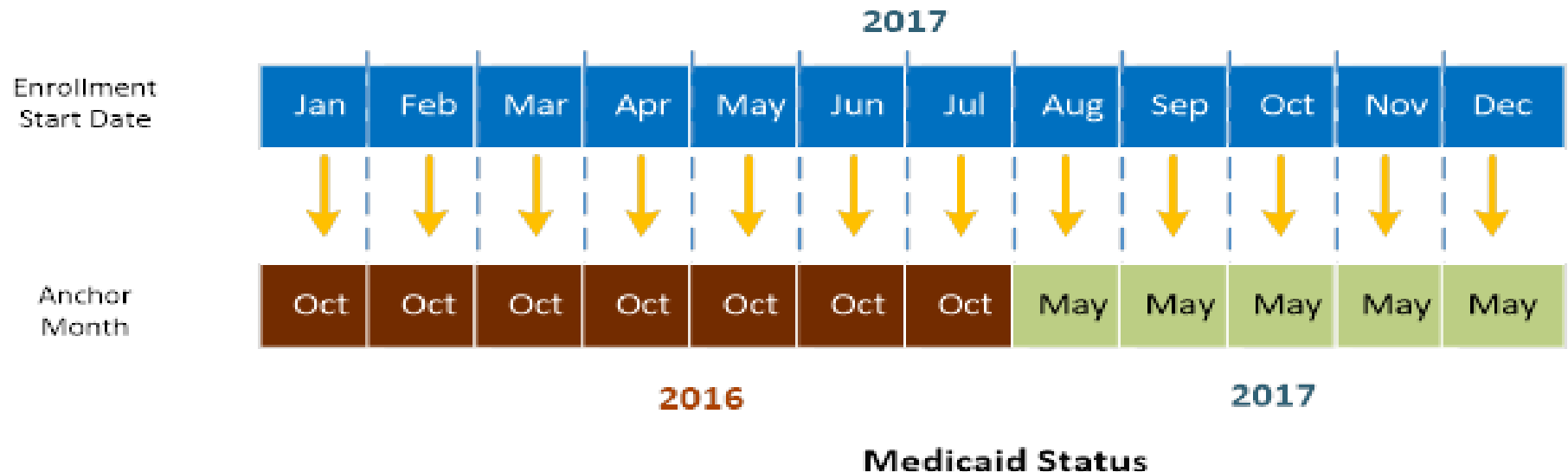
# Determining Community Scores

- Because we won't know a beneficiary's dual status for a payment month at the time we calculate that month's payment, we will use historical dual status to calculate monthly payments throughout the year.
- Two (2) "Anchor Months" will be used
  - One (1) prior to Mid Year Update and one (1) after Mid Year
- At final recon, we will use the actual dual status in each payment month to choose the risk score to apply in payment.

# Determining Community Scores (continued)

## Enrollments and Anchor Months

*When MARx receives an enrollment, the beneficiaries Medicaid status as of the applicable anchor month will be used to choose the correct Community RAF for payment calculation.*



- January- July 2017 payments will use Oct 2016 dual status.
- August-Dec 2017 payments will use May 2017 dual status.
- We will update payments to reflect actual monthly dual status at Final Recon.

# Monthly Membership Report Updates

- Update to Risk Adjustment Factor Type Code (Field 46)
  - C = Community (Payments and Adjustments prior to 2017; PACE only beginning 1/2017)
  - C1 = Community Post-Graft I (ESRD)
  - C2 = Community Post-Graft II (ESRD)
  - CF = Community Full Dual
  - CP = Community Partial Dual
  - CN = Community Non-Dual



# Monthly Membership Report Updates

- Medicaid Dual Status Code (Field 84 )
  - For Community scores, this field reflects the status code for the month used to determine the risk score (either the anchor month or, at final recon, the actual month).
  - A similar change will be made for Current Medicaid Status (Field 39).
  - For non community beneficiaries, Fields 84 and 39 are informational only.
- Final Recon – changes will be indicated by adjustment reason code (ARC) 25 “Part C Risk Adjustment Factor Change / Recon.”

# MARX UI Module & Transaction Reply Reports (TRRs)

- Look for future updates to the MARX UI which will display increased information on monthly Medicaid status.
- After the running of Mid-Year or Final reconciliation, transaction reply code (TRC) 366 (Community Medicaid Status) will be used to report both the Medicaid status and the month used to determine the Medicaid status to the plans.

# TRC Updates

- The effective date of this change is reported in field 18. The end date is reported in field 44. The month used to determine dual status is reported in field 24. The dual status is reported in field 85:
  - 'F' – Full Dual
  - 'P' – Partial Dual
  - 'N' – Non-dual
- After the Mid Year risk score update, the TRR will reflect the dual status from May of the payment year.
- After final reconciliation, the TRR will reflect dual status for each payment month.

# Comments on Model Implementation

- CMS welcomes comments on the implementation of the 2017 CMS-HCC risk adjustment model.
- The operational approach outlined in this presentation will be implemented with the January 2017 payment.
- CMS will consider comments from the industry for future operational changes to our approach for implementing this model.
- While CMS appreciates and will review comments submitted at any time, to accommodate changes made during the 2017 payment year, CMS will need to receive comments/recommendations by July 29, 2016.
- Comments regarding model implementation should be submitted to [RiskAdjustment@cms.hhs.gov](mailto:RiskAdjustment@cms.hhs.gov).

# Frequently Asked Questions

**#1: When will encounter data be incorporated into risk scores for PY 2016 and PY 2017?**

For Payment Year 2016, the blended risk score -- 10% of the risk score calculated with diagnoses from encounter data and FFS summed with 90% of the risk score calculated with diagnoses from RAPS and FFS -- will be implemented when we calculate the final PY 2016 risk scores.

For Payment Year 2017, the blended risk score -- 25% of the risk score calculated with diagnoses from encounter data and FFS summed with 75% of the risk score calculated with diagnoses from RAPS and FFS -- will be implemented when we calculate the mid-year PY 2017 risk scores.

# Frequently Asked Questions

#2: For payment years where risk scores will be calculated using a blend of risk scores calculated using ED+ FFS and RAPS + FFS, will there be a separate model output report (MOR) indicating HCCs that came from the EDS?

The Model Output Report (MOR) provides organizations with the HCCs that are used to calculate the risk score of each beneficiary enrolled in their plan. For risk scores that are a blend of an encounter data-based risk score and a RAPS-based risk score, CMS will make updates to the MOR to separately indicate the HCCs in the encounter data-based risk score and the HCCs in the RAPS-based risk scores. The first of these revised MORs should accompany the final reconciliation for PY 2016.

# Questions & Answers





# Closing Remarks



# Resources

Resource	Link
Centers for Medicare & Medicaid Services (CMS)	<a href="http://www.cms.gov/">http://www.cms.gov/</a>
Customer Support and Service Center (CSSC) Operations	<a href="http://www.csscooperations.com">http://www.csscooperations.com</a> <a href="mailto:csscooperations@palmettogba.com">csscooperations@palmettogba.com</a>
Encounter Data Mailbox	<a href="mailto:encounterdata@cms.hhs.gov">encounterdata@cms.hhs.gov</a>
Risk Adjustment Mailbox	<a href="mailto:riskadjustment@cms.hhs.gov">riskadjustment@cms.hhs.gov</a>
Technical Assistance Registration Service Center (TARSC)	<a href="http://www.tarsc.info/">http://www.tarsc.info/</a>
Medicare Managed Care Manual, Chapter 7 (Risk Adjustment)	<a href="https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Internet-Only-Manuals-IOMs-Items/CMS019326.html?DLPage=2&amp;DLEntries=10&amp;DLSort=0&amp;DLSortDir=ascending">https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Internet-Only-Manuals-IOMs-Items/CMS019326.html?DLPage=2&amp;DLEntries=10&amp;DLSort=0&amp;DLSortDir=ascending</a>

# Resources (continued)

Resource	Link
Medicare Advantage and Prescription Drug Plans Communications User Guide	<a href="https://www.cms.gov/Research-Statistics-Data-and-Systems/CMS-Information-Technology/mapdhelpdesk/Plan_Communications_User_Guide.html">https://www.cms.gov/Research-Statistics-Data-and-Systems/CMS-Information-Technology/mapdhelpdesk/Plan_Communications_User_Guide.html</a>
Announcements	<a href="https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Announcements-and-Documents.html">https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Announcements-and-Documents.html</a>
Risk Adjustment Model Mappings and Software	<a href="https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Risk-Adjustors.html">https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Risk-Adjustors.html</a>

# Contact Us

- Additional questions may also be submitted following the webinar to:

[EncounterData@cms.hhs.gov](mailto:EncounterData@cms.hhs.gov)

or

[RiskAdjustment@cms.hhs.gov](mailto:RiskAdjustment@cms.hhs.gov)

- Questions submitted to other CMS mailboxes will be forwarded to the risk adjustment or encounter data mailboxes as appropriate.

# Evaluation

A formal request for evaluation feedback will be sent at the conclusion of this session.

Please take a moment to note any feedback you wish to give concerning this session.

## Your Feedback is Important.



## Thank You!

Stay Connected with CMS

