

# Risk Adjustment (RA) Training Series for Consumer Operated and Oriented Health Plans (CO-OPs)

**January 7, 2016**

Health Insurance Exchange Program  
Training Series

# Agenda

- Session Guidelines
- Session Purpose
- Risk Adjustment Overview
- Risk Score Calculation Overview
- Risk Adjustment Data Collection
- Risk Adjustment Claims Selection
- Risk Score Calculation
- Risk Adjustment Payment Transfers
- Next Steps
- Questions
- Closing Remarks

# Session Guidelines

- This is a 90-minute webinar session.
- For questions regarding content, please submit inquiries to REGTAP at <https://www.regtap.info/>.
- For questions regarding logistics and registration, please contact the Registrar at: (800) 257-9520.

# Purpose

This Risk Adjustment (RA) stakeholder training session will provide Consumer Operated and Oriented Health Plans (CO-OPs) with a review of ACA risk score calculation and payment transfer calculation.

# Risk Adjustment Overview

- Risk Adjustment: one (1) of three (3) premium stabilization programs established by the ACA with the overall goal of providing certainty and protecting against adverse selection in the individual and small group markets while stabilizing premiums under new market reforms beginning in 2014.
- The ACA grants authority for HHS to operate an RA program on behalf of any state that chooses not to implement its own state-based program.
- Regulations at 45 CFR Part 153 establish standards for the RA program. The Premium Stabilization Rule, Annual Notices of Benefit and Payment Parameters, and the Program Integrity Rule have all addressed RA issues. Links to these rules can be found in the Resources section of these slides.
- CMS is the HHS entity responsible for implementing the HHS-operated RA program under ACA.

# Risk Adjustment Overview

- RA methodology is defined in the Premium Stabilization Final Rule as:
  - Risk adjustment model
  - Calculation of plan average actuarial risk
  - Calculation of payments and charges
    - includes removing rating variations for age or family tier (based on state rating method) and geography
  - Data collection approach
  - Schedule for implementation

# RA Overview: Key Concepts

- **Risk adjustment data:** Refers to a subset of issuer data submitted on the External Data Gathering Environment (EDGE) server that is relevant for RA calculations.
- **Payment transfers:** Amounts transferred between plans. Calculated for each plan within a state market risk pool and plan rating area.
- **Budget neutral:** RA payments and charges within a market and risk pool rating area should net to zero (0) dollars.

# RA Markets and Risk Pools

- **Risk adjustment model:** A tool used to predict health care costs based on the relative actuarial risk **of enrollees.**
- **Risk pool:** a group of plans in the same market.
- Market and risk pool combinations:
  - Small group market metal plans (bronze, silver, gold, platinum)
  - Individual market metal plans (bronze, silver, gold, platinum)
  - Individual market catastrophic plans
  - Merged market – two (2) risk pools
    - 1) All metal plans (individual market non-catastrophic and small group market bronze, silver, gold, platinum plans) and,
    - 2) Individual market catastrophic plans.

# Risk Score Calculation Overview

# RA Data Collection

- Issuer EDGE data files that are used for RA calculations:
  - Enrollment Files:
    - Contain demographic information and enrollment period information.
  - Medical Claims Data Files:
    - Contain diagnosis and procedure codes, bill types, service dates.
  - Supplemental Files:
    - Contain additional diagnoses discovered after claim adjudication or final encounter approval, submitted in accordance with supplemental diagnosis file business rules.
- RA process associates RA eligible claims to member information on enrollment files.

# Risk Score Models

## Infant (Age 0-1)

Platinum

Gold

Silver

Bronze

Catastrophic\*

## Child (Age 2-20)

Platinum

Gold

Silver

Bronze

Catastrophic\*

## Adult (Age 21+)

Platinum

Gold

Silver

Bronze

Catastrophic\*

\*Individual Market only

# Risk Score Models (continued)

- The model calculates risk scores for each enrollee in a plan based on four (4) factors:
  - an age model factor,
  - a demographic factor within the age model,
  - diagnostic factor(s),
  - and a Cost-Sharing Reduction (CSR) factor.
    - Adjustment for increased utilization by enrollees who receive cost-sharing reduction in certain individual market plans.

# Risk Score Do-It-Yourself (DIY) Software

- CCIIO publishes the HHS-Developed Risk Adjustment Model Algorithm annually; referred to as 'Do-It-Yourself (DIY) Risk Score Software'.
- Issuers can use the DIY Software to **simulate** the HHS risk score calculation.
- The RA DIY software can be found at the CCIIO website under Premium Stabilization Programs. The most recent guidance and instructions were posted on October 19, 2015 at:  
<https://www.cms.gov/cciio/Resources/Regulations-and-Guidance/index.html>



**IMPORTANT:** The RA DIY software does not include supplemental diagnoses unless the issuer adds that information to the RA DIY software input.

# Risk Adjustment Data Collection

# EDGE RA Software - Enrollment Data

## – Age

- Use of date of birth (DOB) to select age-specific diagnoses for risk score calculation:
  - Determine age at time of diagnosis (Statement Covers Through date) to retain all age-specific diagnoses for an enrollee, regardless of age model selection for risk score calculation.
  - Diagnosis types subject to edits:
    - Newborn diagnosis (age 0)
    - Pediatric diagnosis (age range is 0-17 years inclusive)
    - Maternity diagnosis (age range is 12-55 years inclusive)
    - Adult diagnosis (age range is 15 years or older)



**Although the adult RA model = age 21 or greater, there are a few diagnoses that are termed adult starting at age 15.**

# EDGE RA Software - Enrollment Data

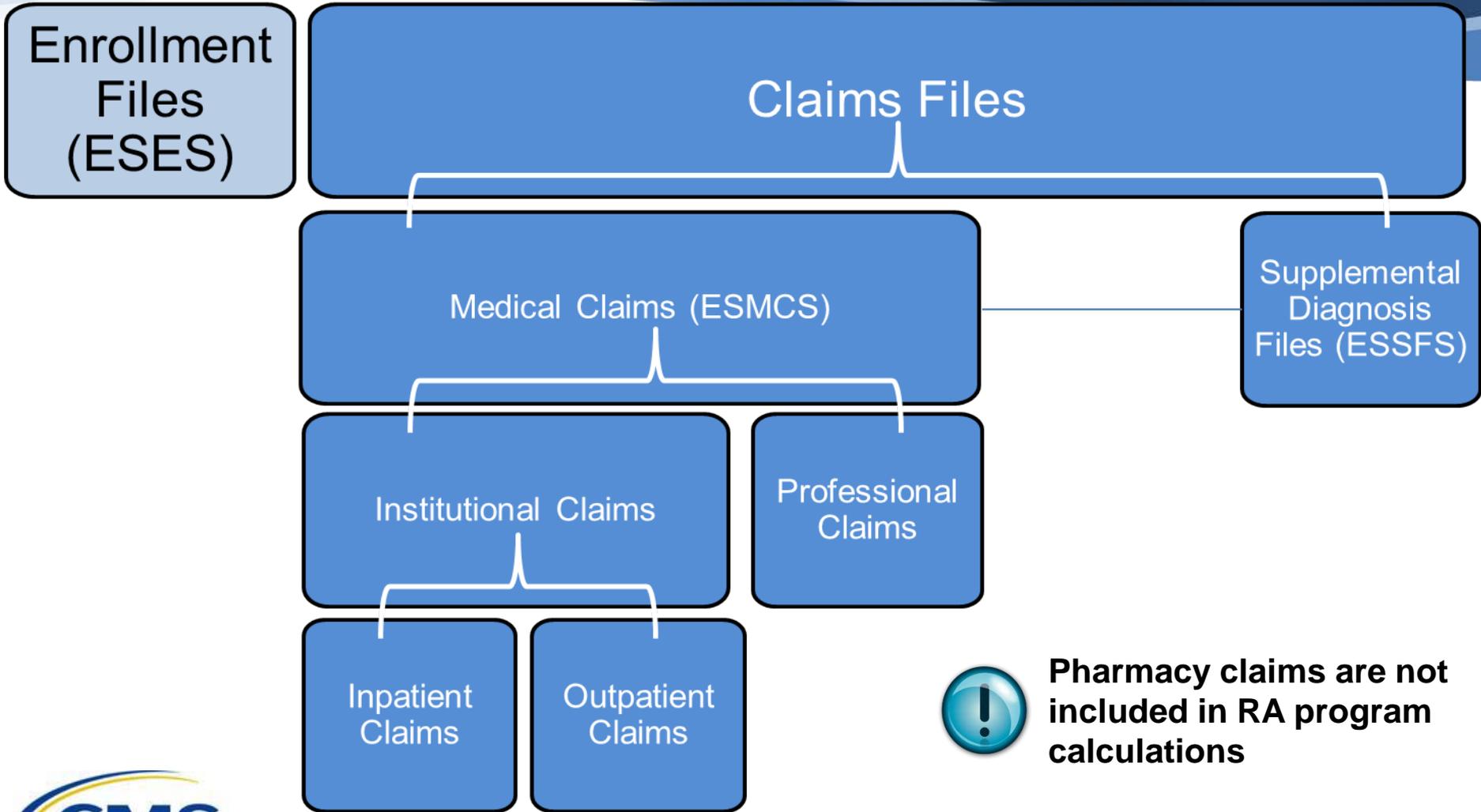
## – Age (continued)

- Use of DOB to calculate ‘Risk Score Model Age’ and assign enrollees to appropriate age model for application of metal-specific HCCs.
- **Important Note:** Risk Score Model Age = age as of last date of enrollment in a plan within an issuer for the payment year.
  - If an enrollee is enrolled in more than one plan with the same issuer, then the age as of the last enrollment date for the most recent plan ID in the payment year will be applied to all plan IDs for the same issuer.

# EDGE RA Software - Enrollment Edits – Gender

- Gender is used to check that the enrollee has the correct gender for certain diagnosis codes to determine inclusion or exclusion in the risk score calculation.
- Gender is also used to assign the appropriate condition categories (CC) for certain diagnosis codes.

# Risk Adjustment Data



**Pharmacy claims are not included in RA program calculations**

# Risk Adjustment Claims Selection

# RA Claims Selection Job Code

- CMS will initiate a job code run for RA claims selection.
- When the RA Claims Selection job code run completes, RA Claims Selection detail (RACSD) and summary (RACSS) reports are generated.
- **Important Note:** During RA claims selection, claims are validated against the enrollment file and orphaned claims\* will be marked as ineligible for RA.

\*orphaned claims = claim that is either for an enrollee ID that does not exist in the enrollment file, OR a claim for which the enrollee does not have enrollment coverage in the same 16-digit plan on the Statement Covers From date of the claim.

# RA Bill Types and Claims

- Institutional Inpatient: 111, 117.
- Institutional Outpatient: 131, 137, 711, 717, 761, 767, 771, and 777.
- Reminder: Interim bill types are not accepted at file submission.
- Professional claims (no bill type).
- **REMINDER:** Issuers should not filter their own claims prior to submitting claims data to the EDGE Server. The RA claims selection process will select the appropriate claim types.

# RA Flagged Claims

- Institutional inpatient claims with RA bill type.
- Institutional outpatient claims with:
  - RA bill type and
  - At least one (1) RA acceptable Current Procedural Terminology (CPT)/Healthcare Common Procedure Coding System (HCPCS) code at the claim line level.
- Professional Claims:
  - At least one (1) RA acceptable CPT/HCPCS code at the claim line level.

# RA Claims Selection Reason Codes

RA Reason Codes Provided in the RACSD Report:

Code	Description
R01	Unacceptable bill type for an RA institutional claim
R02	Medical claims (institutional inpatient, institutional outpatient and professional claims) cannot have the Statement Covers From date prior to 2014
R03	Professional and institutional outpatient claims must have at least one RA eligible service code
R04	Unacceptable discharge status code for an institutional inpatient claim
R05	Active plan record does not exist for the year of the claim coverage from date
R06	Claim not associated to an active enrollment period of an enrollee
R07	Claim Statement Covers Through date does not fall within the payment year
R08	Outpatient or professional cross year claim excluded from RA because the enrollee has no issuer submitted enrollment coverage in the payment year* * RA Reason Code R08 is effective with the EDGE server maintenance release scheduled for January 22, 2016.

# Risk Score Calculation

# Risk Score Calculation Steps

- Step 1: Select enrollees
- Step 2: Associate and select enrollee claims
- Step 3: Select diagnosis codes and map CCs
- Step 4: Impose CC hierarchies (HCCs)
- Step 5: Apply RA model HCCs and interactions
- Step 6: Assign demographic and HCC factors
- Step 7: Calculate individual risk scores
- Step 8: Calculate Plan Liability Average Risk Score (PLRS<sub>i</sub>)
- Step 9: Generate RA risk score detail (RARSD) and summary (RARSS) reports

# Step 1: Select Enrollees

- Enrollee must have at least one (1) active enrollment period within the payment year.
- Enrollee must be enrolled in a RA covered plan.
- ESES enrollee record data captured: Issuer ID, Enrollee ID, Gender, DOB.
- ESES enrollment period data captured: Plan ID, enrollment period start and end dates within the payment year, rating area.
- **Important Note:** If an enrollment period goes beyond 12/31/XX of a payment year, only the enrollment days within the payment year are used.

# Step 2: Associate and Select Enrollee Claims

- Claims identified during RA claims selection are reviewed further for selection during the risk score calculation job code run:
  - Enrollee ID from ESES is matched.
  - Plan ID for the selected enrollment periods must match Plan ID on the RA claims.
  - Supplemental diagnosis code 'adds' (included) and 'deletes' (excluded) are applied if the linked medical claim is selected and is matched.

# Step 3: Select Diagnosis Codes and Map CCs

- All enrollee diagnosis codes from step two (2) are considered for risk score calculation if they pass the following RA software edits:
  - Diagnosis code and diagnosis code qualifier match.
  - Diagnosis code effective date is within the Statement Covers Through date.
  - Age, if appropriate for the diagnosis code.
  - Gender, if appropriate for the diagnosis code.
  - Diagnosis code is in the risk adjustment model.

# Step 3: Select Diagnosis Codes and Map CCs (continued)

- Diagnosis codes that pass the RA software edits are mapped to CCs in the risk score model.

ICD-9 Diagnosis Code	CC
0031	2
00321	3
00323	55
00324	55
0063	38
0064	163

# Step 3: Select Diagnosis Codes and Map CCs (continued)

- As mentioned in the data collection section, age must be considered for the mapping of some CCs.
- In these cases, the ‘Risk Score Model Age’ is used.
  - Age as of last day of enrollment in the payment year for one (1) or more plan IDs (if the enrollee is enrolled in multiple plans during the payment year) under the same issuer ID.

# Step 3: Select Diagnosis Codes and Map CCs (continued)

**ENROLLEE ZX49**

ISSUER ABC, PLAN A, RATING AREA 005  
Enrollment Period Start Date: 01/01/2014  
Enrollment Period End Date: 08/31/2014

Diagnosis Code 1  
Submitted by: Plan A

Diagnosis Code 2  
Submitted by: Plan A

Diagnosis Code 3  
Submitted by: Plan B

ENROLLEE RISK  
SCORE  
PLAN A, RATING 005

ENROLLEE RISK  
SCORE  
PLAN B, RATING 005

ISSUER ABC, PLAN B, RATING AREA 005  
Enrollment Period Start Date: 01/01/2014  
Enrollment Period End Date: 08/31/2014

**Key RA Concept: RA diagnosis codes are applied to all plan IDs within the same issuer ID when the same enrollee ID is used.**

# Step 4: Impose CC Hierarchies (HCCs)

- When an enrollee has multiple diagnosis codes for related CCs that vary in cost and severity, then a hierarchy is imposed and an HCC is the result.
- When this situation occurs, the HCC with the most costly and severe manifestation will count for an enrollee and the other related CCs will be dropped.
- At this point, a CC becomes an HCC.
- Dropped HCCs will appear on the risk score reports.

# Step 4: Impose CC Hierarchies (HCCs) (continued)

HCC/CC	CCs to Exclude from RA Calculation	HCC Label
3	4	Central Nervous System Infections, Except Viral Meningitis
8	9 ,10 ,11 ,12 ,13	Metastatic Cancer
9	10 ,11 ,12 ,13	Lung, Brain, and Other Severe Cancers, Including Pediatric Acute Lymphoid Leukemia
10	11 ,12 ,13	Non-Hodgkin's Lymphomas and Other Cancers and Tumors
11	12 ,13	Colorectal, Breast (Age < 50), Kidney, and Other Cancers
12	13	Breast (Age 50+) and Prostate Cancer, Benign/Uncertain Brain Tumors, and Other Cancers and Tumors
18	19 ,20 ,21 ,46 ,47	Pancreas Transplant Status/Complications

\*This is an excerpt.

# Step 5: Apply RA Model HCCs and Interactions

Infant = 0 – 1

Assign Maturity Level

Assign Severity Level

Assign Single Highest Interaction of Maturity and Severity

Child = 2 – 20

Assign HCCs Based on CCs

Assign HCC Groups

Adult = 21+

Assign HCCs Based on CCs

Assign HCC Groups

Assign Severity HCCs (if present)

Identify HCC Interactions

Assign Single Highest Severity Level

# Step 5: Apply RA Model HCCs and Interactions (continued)

- HCC Groups: In the adult and child models, some HCCs are ‘grouped’; when this occurs an HCC group code replaces the HCC.
  - Example: Adult Model, HCC 061 = G04

HCC Group	HCCs in Group
G01	19, 20, 21
G02A	26, 27, 29, 30
G03	54, 55
G04	61, 62
G06	67, 68

# Step 5: Apply RA Model HCCs and Interactions (continued)

- Severity Indicator and Interactions:
  - Adult Model
    - A subset of HCCs trigger a severity indicator (V3).
    - When a severity indicator is present, the model will look for interactions with a subset of HCCs or Group codes.
    - There are two (2) types of severity indicators: INT Group H (high-cost) and INT Group M (medium-cost).
    - If an enrollee has both INT Group H and INT Group M severity indicators, then only the INT Group H will count.

# Step 5: Apply RA Model HCCs and Interactions (continued)

- Adult Model Severity Indicator

HCC	Severe Indicator
2	Y
42	Y
120	Y
122	Y

- Adult Model Severity Interaction

HCC or Group including Severe Flag	Interaction Group Category M, H
6	H
8	H
153	M
154	M

# Step 5: Apply RA Model HCCs and Interactions (continued)

- Severity Indicator:
  - Infant Model
    - Each infant enrollee is assigned 1 of 5 severity indicators; referred to as an IHCC (infant HCC).
    - Severity 1 is the lowest and Severity 5 is the highest.
    - Infant enrollees with no HCCs are assigned Severity 1.

# Step 5: Apply RA Model HCCs and Interactions (continued)

- **Maturity Indicator:**
  - **Infant Model**
    - Each infant enrollee is assigned one (1) of five (5) maturity levels based on birth diagnosis code; referred to as an IHCC (infant HCC).
    - **Maturity Levels:**
      - Extremely immature
      - Immature
      - Premature/multiples
      - Term
      - Age 1
    - If no maturity diagnosis code is present, then Term (HCC 249) will be assigned.

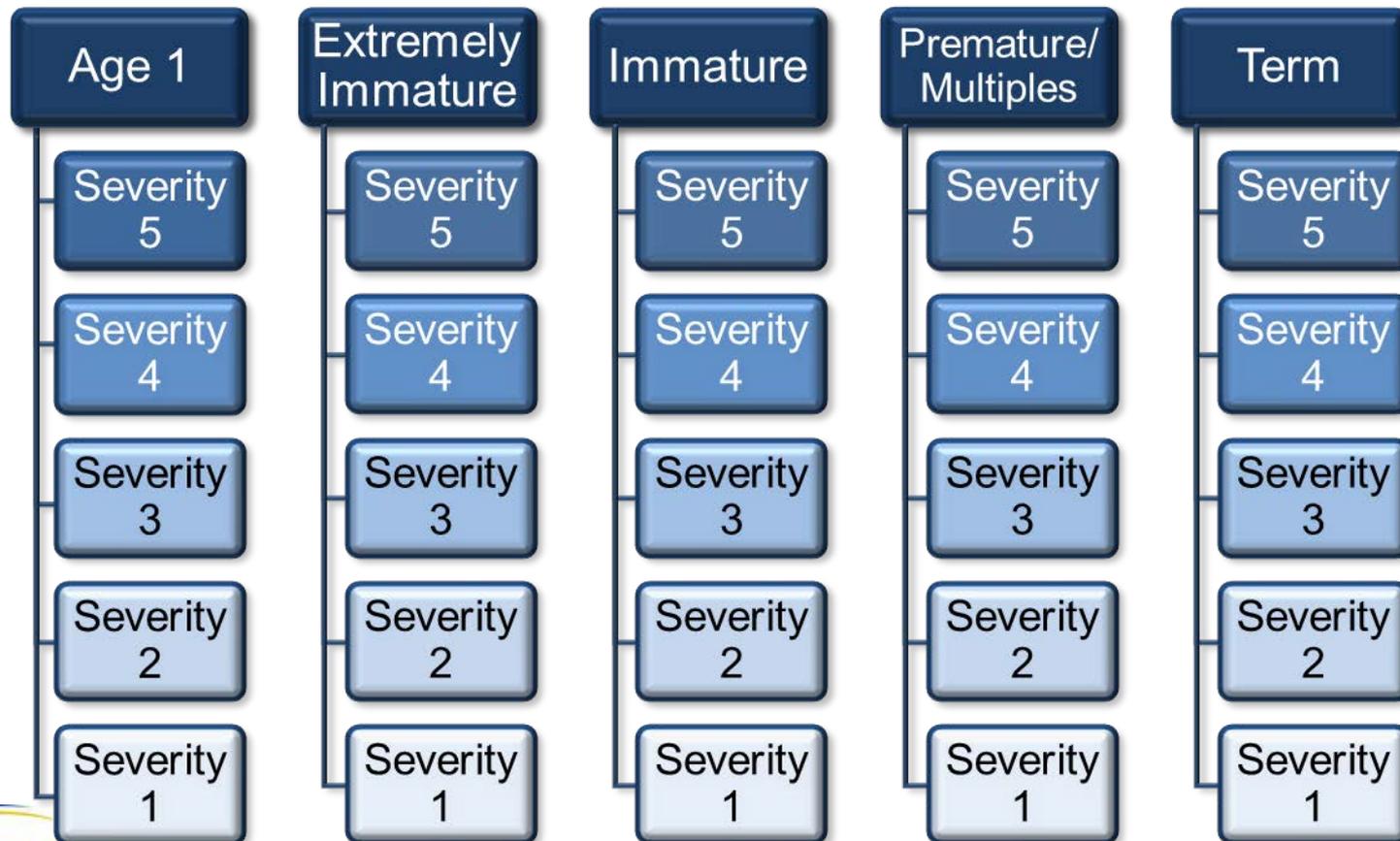
# Step 5: Apply RA Model HCCs and Interactions (continued)

- Maturity & Severity Interaction:
  - Infant Model
    - 25 infant interactions.
    - Once all IHCCs are assigned, then only the highest interaction will be assigned for the infant enrollee for the payment year.
    - Other IHCCs will be dropped.

Maturity-Severity	Platinum	Gold	Silver	Bronze	Catastrophic
EI-S5	393.816	392.281	391.387	391.399	391.407
EI-S4	225.037	223.380	222.424	222.371	222.365
EI-S3	60.363	59.232	58.532	58.247	58.181
EI-S2	60.363	59.232	58.532	58.247	58.181
EI-S1	60.363	59.232	58.532	58.247	58.181

# Step 5: Apply RA Model HCCs and Interactions (continued)

## Infant Maturity/Severity Interactions



# Step 6: Assign Demographic and HCC Factors

- The RA software uses the enrollee's demographics, plan ID metal level, HCCs and interactions to assign risk score factors from the software reference tables.

Model	Minimum Age (Inclusive)	Maximum Age (Exclusive)	Sex	Platinum	Gold	Silver	Bronze	Catastrophic
Adult	30	34	M	0.338	0.274	0.187	0.101	0.079

Model	HCC	Platinum	Gold	Silver	Bronze	Catastrophic
Adult	23	14.790	14.790	14.786	14.862	14.883

# Step 7: Calculate Individual Risk Scores

- $PLRS_e$  = individual risk score
  - $PLRS_e$  = (demographic factors + age model factors)

# Step 7: Calculate Individual Risk Scores (continued)

- The RA software will calculate a risk score for each enrollment period.
- Multiple enrollment periods, same plan ID = all risk scores will be the same and the final enrollment period risk score will be applied.
- Example:

Enrollee ID	Issuer ID	Plan ID	Enrollment Period	Rating Area	Risk Score
DD987ZZ	20243	20243AK0019999	1	005	42.35
DD987ZZ	20243	20243AK0019999	2	005	42.35
DD987ZZ	20243	20243AK0019999	3	005	42.35
DD987ZZ	20243	20243AK0019999	4	005	42.35
DD987ZZ	20243	20243AK0019999	5	005	<b>42.35</b>

# Step 7: Calculate Individual Risk Scores (continued)

- Multiple enrollment periods, two (2) or more plan IDs, same Issuer ID = the risk score will be different for each Plan ID based on difference in metal level.
- Each enrollment period risk score for the enrollee includes the enrollee's diagnoses from across all plans of enrollment within the issuer.
- Enrollee diagnoses will not be linked across issuers.
- Example:

Enrollee ID	Issuer ID	Plan ID	Enrollment Period	Rating Area	Risk Score
DD987ZZ	20243	20243AK0019999	1	005	42.35
DD987ZZ	20243	20243AK0019999	2	005	42.35
DD987ZZ	20243	20243AK0019999	3	005	<b>42.35</b>
DD987ZZ	20243	20243AK0039999	1	008	36.50
DD987ZZ	20243	20243AK0039999	2	008	<b>36.50</b>

# Step 7: Calculate Individual Risk Scores (continued)

- **CSR Factor**

- If an enrollee is enrolled in a CSR variant plan, then the calculated risk score is multiplied by the appropriate CSR factor and results in the final enrollee risk score.
- If CSR is not present, the default is 1.00.
- $PLRS_e = (\text{demographic factors} + \text{age model factors}) \times \text{CSR factor}$ .
- Example:  $20.15 (PLRS_e) \times 1.12 (\text{CSR variant factor}) = 22.568$ .

Enrollee ID	Issuer ID	Plan ID	CSR Variant	Rating Area	Risk Score
DD987ZZ	20243	20243AK0019999	01	005	20.15

# Step 8: Calculate $PLRS_i$

- $PLRS_i$  = Plan Liability Average Risk Score
- The  $PLRS_i$  describes the overall level of risk associated with each plan:
  - $PLRS_i$  is the average enrollee risk score in the plan.
  - Risk scores are weighted by billable member months, so that enrollees who are in the plan longer have more weight in their scores.

# Step 8: Calculate $PLRS_i$ (continued)

$$PLRS_i = \frac{\sum_e (M_e \times PLRS_e)}{\sum_b M_b}$$

- $PLRS_i$  = plan's Plan Average Liability Risk Score.
- $M_e$  = number of months during the payment year that each enrollee is enrolled in the plan.
- $\sum_e$  = sum for all enrollees in the plan.
- $PLRS_e$  = Individual risk score for each enrollee.
- $M_b$  = number of months during the payment year that each billable member is enrolled in the plan.

# Step 8: Calculate $PLRS_i$ (continued)

- Billable Members
  - Since billable members contribute to premium rate setting, PLRS is weighted by all billable member months in a plan.
- How are billable members identified?
  - We apply the State reported rating method  
(per §147.102 and 147.103 of the Health Insurance Market Rules)
  - For 2015 there are 2 rating methods:
    - ACA Rating: considers three (3) oldest children on a family plan
    - Family Tiering: based on family structure
    - For more information go to: <http://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Market-Reforms/state-rating.html>

# Step 8: Calculate PLRS<sub>i</sub> (continued)

- ACA Rating Method:
  - Subscriber = billable
  - Non-subscriber adults (21+) = billable
  - 1-3 non-subscriber children (0-20) = billable
  - 4+ non-subscriber children (0-20) = three (3) oldest children selected
  - Family plans: members are identified by the subscriber's ID in the ESES enrollment period record.
  - When the RA risk score job is run, the billable members will be determined and calculated at the time of the job.
-  When the risk score job is run at a later date, changes to billable members will be accounted for at that time.

# Step 8: Calculate PLRS<sub>i</sub> (continued)

- Family Tier Rating Method:
  - Typical Family Tiers: one (1) adult, two (2) adults, one (1) adult & one (1) or more children, two (2) adults & one (1) or more children
  - Subscriber = 1st adult and is billable
  - Non-subscriber adult (18+) = 2<sup>nd</sup> adult and is billable
  - Child/Dependent age varies by State
    - If 1 or more children/dependents are on a policy, then the RA software will select the child/dependent with the most member months as a billable member.
  - Family plans: members are identified by the subscriber's ID in the ESES enrollment period record.
  - When the RA risk score job is run, the billable members will be determined and calculated at the time of the job.

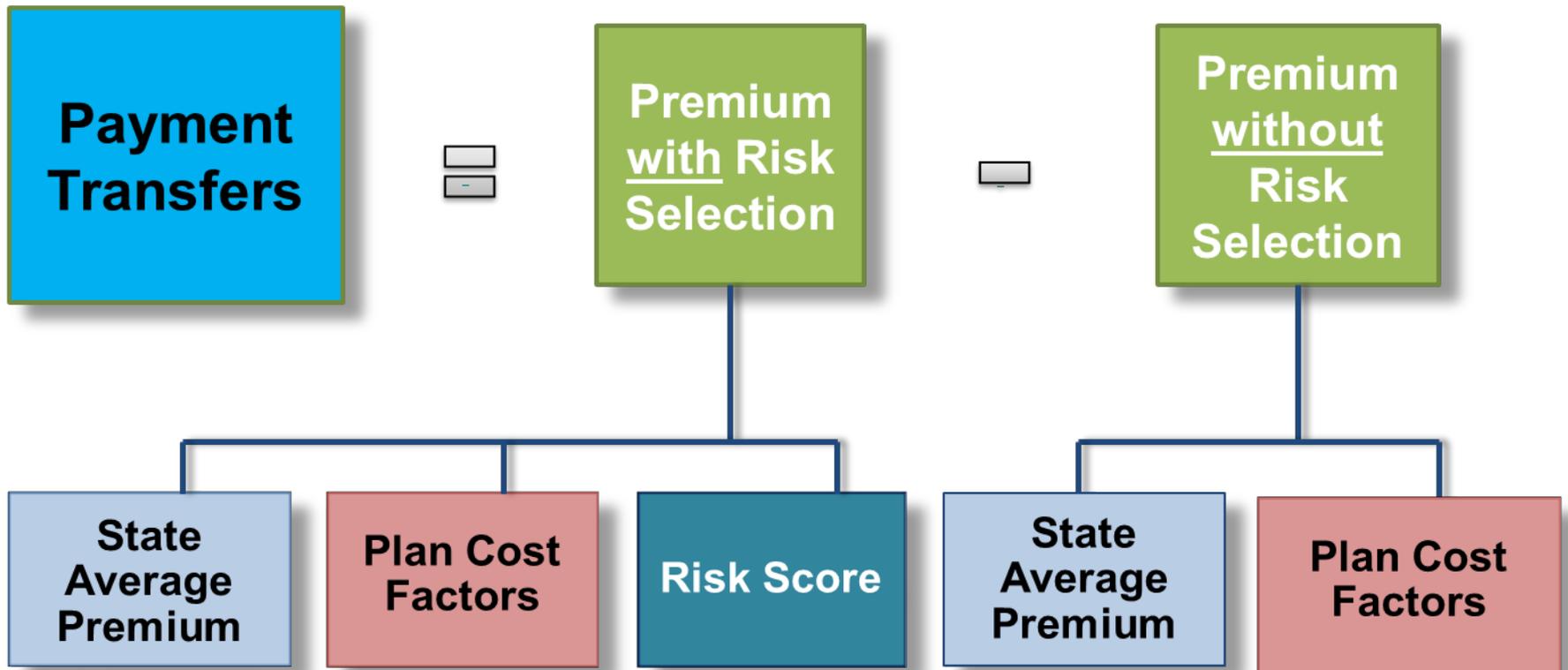


When the risk score job is run at a later date, changes to billable members will be accounted for at that time.

# Risk Score Calculation Examples

# Risk Adjustment Payment Transfers

# Payment Transfer Overview



# Payment Transfers Purpose

- RA payment transfers compensate for a plan's actual risk exposure, beyond the premiums a plan charges accounting for allowable rating and cost factors.
- Payment transfers are calculated at the geographic rating area level for each plan.
- The transfers are intended to bridge the gap between the plan's actual revenue requirement and the revenue requirement without risk selection.

\*Plan = plan in a rating area in a risk pool/market

State/Risk Pool Market	Plan	Rating Area	Result: Transfer Amount
Maryland/Metal Plans/Individual	12345MD0019999	002	Payment: \$100
Maryland/Metal Plans/Individual	12345MD0019999	003	Charge: \$150

# State Average Premium

State average premium is the baseline premium for the risk pool/market:

- The state average premium is the average premium for the risk pool/market in the state, weighted by billable member enrollment months.
- CMS uses actual plan premiums reported to the EDGE server.
  - The premium amount is the monthly total rated premium charged for a subscriber's policy, including the Advanced Premium Tax Credit (APTC) amount.
- State average premium is used to calculate both premium estimates.
- The state average premium also represents the average revenue requirement to provide insurance coverage.

# Premium Adjustments

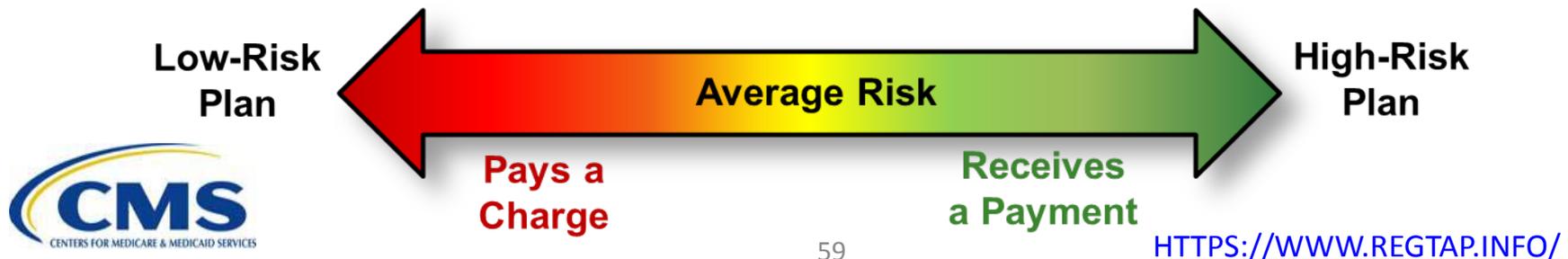
- Plan average risk score: derived by multiplying the plan average risk score by the state average premium to show how a plan's premium differs from the state average premium based on the risk selection experienced by the plan.
- Actuarial value (AV): a particular plan's premium may differ from the state average premium based on the plan's cost-sharing structure, or AV.

# Premium Adjustments (continued)

- Allowable Rating Factor (ARF): permissible rating variation; rates may differ based on allowable rating factors, like age.
- Geographic cost differences: differences in unit costs and utilization may lead to differences in the average premium between intra-state rating areas, while holding other cost factors constant.
- Induced Demand Factor (IDF): accounts for greater utilization of health care services induced by lower enrollee cost sharing in higher metal level plans.

# Payments and Charges

- Payment transfers compare the target plan's average premium including risk selection (expressed in the PLRS) against the risk pool's average premium. Generally, the difference results in a payment or charge.
  - If a plan's risk is high, the plan will receive a payment.
  - If a plan's risk is low, the plan will pay a charge.
- CMS will calculate payment transfers separately for plans operating in more than one (1) rating area. That is, after controlling for cost factors, there will be one payment transfer calculation for each plan, for each rating area in which the plan operates.



# Net to Zero



- RA payments and charges must net to zero (0) within a risk pool.
- Risk Adjustment is a budget-neutral program: the program requires no outside funding.
- Payments originate from charges assessed to low-risk plans and transferred to high-risk plans.

# Payment Transfer Formula

# Payment Transfer Formula

The formula for a plan's per member, per month (PMPM) payment transfer amount ( $T_{PMPM}$ ) is the premium with risk selection minus the premium without risk selection, multiplied by the state average premium.

$$T_{PMPM} = \left[ \frac{PLRS_i * IDF_i * GCF_i}{\sum_i (s_i * PLRS_i * IDF_i * GCF_i)} - \frac{AV_i * ARF_i * IDF_i * GCF_i}{\sum_i (s_i * AV_i * ARF_i * IDF_i * GCF_i)} \right] \bar{P}_s$$

Where:

$\bar{P}_s$  = state average premium

$PLRS_i$  = plan's liability score

$AV_i$  = plan's metal level actuarial value

$ARF_i$  = plans allowable rating factor

$IDF_i$  = plan's induced demand factor

$GCF_i$  = plan's geographic cost factor

$s_i$  = plan's share of state enrollment

$T_{PMPM}$  = plan's per member per month transfer amount

$\sum_i$  = sum of the plans

# Plan's Total Transfer Amount

- After the transfer PMPM is calculated, the PMPM amount is then multiplied by the plan's total billable member months for the rating area.
- The formula is:

$$T_i = T_{PMPM} * \sum_b M_b$$

# Payment Transfer Calculation

# Payment Transfer Calculations Operations

- Payment transfer calculation takes place in two (2) phases:
  - Phase 1: Calculate plan-specific components on the EDGE server.
  - Phase 2: CMS uses the plan-specific transfer components to calculate transfer amounts for all plans in a state risk pool/market rating area. CMS then aggregates all plan rating area amounts to the plan level and generates a report for issuers.

# EDGE Components of Payment Transfer Calculations: Phase 1

- The first step in calculating the RA payment transfers is performing risk score calculations on the issuer's EDGE server.
- CMS initiates the risk score calculation and the EDGE server performs the calculations.
- Once the calculations are complete, the EDGE server generates a RA Transfer Elements Extract (RATEE) report.

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

1. Calculate Total Member Months
2. Calculate Total Billable Months
3. Calculate Total Subscriber Months
4. Calculate PLRS<sub>i</sub>
5. Calculate Allowable Rating Factor (ARF)
6. Calculate Individual Plan's Average Premium ( $\bar{P}_i$ )
7. Calculate Age Adjusted Average Premium
8. Generate RATEE Report

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

Calculate plan-specific inputs to the payment transfer formula:

- All plan-specific components of the payment transfer formula are calculated on the EDGE server at the same time as the risk score calculation.

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 1. Calculate Total Member Months

- The calculation uses enrollment start and end dates to calculate an enrollee's member months for the payment year.
- Member month calculation = total number of days in an enrollment period divided by 30.
  - Member months are calculated for each enrollment period.
  - If an enrollee has multiple enrollment periods for the same policy (plan ID/rating area combination), then the system will add all member months together.

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 2. Calculate Total Billable Months

- Billable Members
    - Since billable members contribute to premium rate setting, payment transfers are weighted by all billable member months in a plan.
  - The payment transfer calculation uses billable member months to calculate ARF, Geographic Cost Factor (GCF) and the state average premium.
  - When the RA risk score job is run, the billable members will be determined and calculated at the time of the job.
-  When the risk score job is run at a later date, changes to billable members will be accounted for at that time.

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 2. Calculate Total Billable Months

- How are billable members identified?
  - We apply the state reported rating method  
(per §147.102 and 147.103 of the Health Insurance Market Rules)
  - For 2015 there are 2 rating methods:
    - ACA Rating: considers three (3) oldest children on a family plan.
    - Family Tiering: based on family structure.
    - For more information go to <http://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Market-Reforms/state-rating.html> on the CMS website.

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 2. Calculate Total Billable Months

- ACA Rating Method:
  - Subscriber = billable
  - Non-subscriber adults (21+) = billable
    - The oldest non-subscriber  $\geq 18$  is designated a spouse, and is billable.
  - 1-3 non-subscriber children (0-20) = billable
  - 4+ non-subscriber children (0-20) = three (3) oldest children selected
  - Family plans: members are identified by the subscriber's ID in the ESES enrollment period record.

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 2. Calculate Total Billable Months

- Family Tier Rating Method:
  - Typical Family Tiers: one (1) adult, two (2) adults, one (1) adult & one (1) or more children, two (2) adults & one (1) or more children
  - Subscriber = 1st adult and is billable
  - Non-subscriber adult (18+) = 2<sup>nd</sup> adult and is billable
  - Child/Dependent age varies by state
    - If one (1) or more children/dependents are on a policy and <26, then the RA software will select the child/dependent with the most member months as a billable member.
  - Family plans: members are identified by the subscriber's ID in the ESES enrollment period record.

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 3. Calculate Total Subscriber Months

- A subscriber's member months are calculated and used for the calculation of plan average premium.

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 4. Calculate PLRS<sub>i</sub>

$$\frac{\sum_e (M_e * PLRS_e)}{\sum_b M_b} = PLRS_i$$

- The individual plan's PLRS is calculated at the plan rating area level.
- All enrollee risk scores are weighted by the plan's billable member months to produce an average plan risk score.

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 5. Calculate Allowable Rating Factor (ARF)

- ARF is calculated for each plan/rating level combination, using the rating areas defined by each state and the plan's calculated billable member months.
- ARF can be calculated using either the ACA age rating curve or family tiering rates, depending on the rating structure in the state.

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 5. Calculate Allowable Rating Factor (ARF) – ACA Rating

To find a plan's ARF factor in a state using ACA rating:

1. Determine the number of billable members in the plan.
  - Subscriber = billable
  - Non-subscriber adults (21+) = billable
  - 1-3 non-subscriber children (0-20) = billable
  - 4+ non-subscriber children (0-20) = three (3) oldest children selected
2. Assign an ARF value to each billable member's enrollment period, based on the enrollee's age.

See the ACA Age Rating Curve reference table at <http://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Market-Reforms/Downloads/state-specific-age-curve-variations-08-09-2013.pdf> on the CMS website.

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 5. Calculate Allowable Rating Factor (ARF) – ACA Rating

$$\frac{\sum_b (M_b * ARF_b)}{\sum_b M_b} = ARF_i$$

- All billable member months for each age rating band are multiplied by that age band factor and divided by all billable member months for the plan.
- This calculation establishes the plan's share of enrollment for each age rating band.
- The plan's ARF is the result of adding the products for each age rating band and dividing by all billable member months for the plan.

ACA Age Rating Curve

Age (years)	0-20	21	22	23	...
ACA	0.635	1	1	1	...

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 5. Calculate Allowable Rating Factor (ARF) – Family Tiering

To find a plan's ARF factor in a state using Family Tiering:

1. Determine the number of billable members in the plan.

- Subscriber = billable
- Oldest non-subscriber adults (18+) = billable
- One (1) non-subscriber child (0-20) = billable

Selected by:

- Maximum number of member months enrolled
- Age
- Enrollee ID

2. Assign an ARF value to each billable member's enrollment period, based on the family structure.

See the Family Tiering rating structure reference table at

<http://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Market-Reforms/state-rating.html> on the CMS website.

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 5. Calculate Allowable Rating Factor (ARF) – Family Tiering

$$\frac{\sum_{S}(ARF_{S} * MS_{S})}{\sum_{S}(MB_{S})} = ARF_{i}$$

- For the family tiering method, each policy is assigned one factor based on the family composition, unlike the ACA age rating method.
- The family factor is multiplied by the subscriber's billable member months only.
- The plan's ARF is the result of adding the products for each policy and dividing by all billable member months for the plan.

**Family Tiering Factors**

State	One Adult	Two Adults	One Adult and One or More Children	Two Adults and One or More Children	Adult Cutoff Age
New York	1	2	1.7	2.85	18
Vermont	1	2	1.93	2.81	18

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 6. Calculate Individual Plan's Average Premium ( $\bar{P}_i$ )

$$\frac{\sum_s (M_s * P_s)}{\sum_b M_b} = \bar{P}_i$$

- To calculate the plan's average premium, each subscriber's billable member months are multiplied by the subscriber's monthly premium amount. Next, all products are summed for the plan and then divided by all billable member months for the plan.

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 7. Calculate Age Adjusted Average Premium

$$\bar{P}_i^{AS} = \frac{\bar{P}_i}{ARF_i}$$

- This calculation is part of the GCF calculation for the full payment transfers calculation, but it must be calculated on the EDGE server for each silver or catastrophic plan in the rating area.
- The result of this calculation is input into the GCF calculation in Phase 2 of the full payment transfer calculation.
- The plan's age adjusted average premium uses the plan's average premium (#7) and divides by the plan's calculated ARF (#5).

# EDGE Components of Payment Transfer Calculations: Phase 1 (continued)

## 8. Generate RATEE Report

- As part of the risk score calculation job, items 1-7 are calculated and a report is generated with the results for each plan in a rating area.
- CMS uses these calculated results to perform Phase 2 of the full payment transfer calculation.

# Payment Transfer Calculations: Phase 2

- Phase 2 is the full payment transfer calculation completed at CMS. CMS will use the EDGE components from Phase 1 to complete the payment transfer calculations.
- CMS uses all the plan-specific components calculated in Phase 1 to compute the payment transfer amount for each plan in a rating area in a risk pool/market.
- CMS assigns (based on reference tables):
  - Induced Demand Factor (IDF)
  - Actuarial Value (AV)
- The final output of the payment transfer calculations is the payment transfer amounts and Notification of Payments and Charges to the issuer on June 30<sup>th</sup>.

# Payment Transfer Calculations: Phase 2 (continued)

1. CMS Uses Calculations from the EDGE Server
2. Calculate Geographic Cost Factor (GCF)
3. Calculate Plan's Share of Statewide Enrollment in a Risk Pool
4. Calculate State Average Premium
5. Apply ARF Variable
6. Assign IDF and AV Variables
7. Calculate Plan's PMPM Transfer Amount
8. Calculate Plan's Total Transfer Amount for a Rating Area
9. Aggregate Plan's Total Transfer Amount to Issuer level By State and Market

# Payment Transfer Calculations: Phase 2 (continued)

## 1. CMS Uses Calculations from the EDGE Server

- CMS will use the results from calculations performed on the EDGE server for each plan in a rating area:
  - Total Billable Months ( $M_b$ )
  - Total Subscriber Months ( $M_s$ )
  - Plan Liability Risk Score ( $PLRS_i$ )
  - Allowable Rating Factor ( $ARF_i$ )
  - Plan Average Premium ( $\bar{P}_i$ )
  - Plan Age Standardized Average Premium ( $\bar{P}_i^{AS}$ )

# Payment Transfer Calculations:

## Phase 2 (continued)

### 2. Calculate Geographic Cost Factor (GCF)

- Three (3) comprehensive calculation steps:
- Step 1:
  - CMS will calculate a silver plan average premium based on all silver plans in a rating area in a risk pool/market. Each GCF factor will be applied to the appropriate rating area metal plans (platinum, gold, silver, bronze) in either the metal plans/Individual market or metal plans/Small Group market.
  - CMS will calculate a catastrophic plan average premium based on all catastrophic plans in a rating area in a risk pool/market. Each GCF factor will be applied to the appropriate rating area catastrophic plans in the catastrophic/Individual market combination.
  - Both calculations are completed on the EDGE server.

# Payment Transfer Calculations:

## Phase 2 (continued)

### 2. Calculate Geographic Cost Factor (GCF)

- Step 1 uses the following formula to calculate the average premium:

$$\bar{P}_i = \frac{\sum_s (M_s * P_s)}{\sum_b M_b}$$

$\frac{\sum_s \text{ (subscriber billable member months * subscriber monthly premium) }}{\sum_b \text{ plan's billable member months}}$

# Payment Transfer Calculations:

## Phase 2 (continued)

### 2. Calculate Geographic Cost Factor (GCF)

- Step 2: The next step for GCF is to calculate age standardized plan premiums for each rating area/risk pool/market combination. As discussed in Phase 1, this result is calculated on the EDGE server.
- The calculation formula is:

$$\bar{P}_i^{AS} = \frac{\bar{P}_i}{ARF_i} = \frac{\text{plan average premium}}{\text{plan allowable rating factor}}$$

# Payment Transfer Calculations:

## Phase 2 (continued)

### 2. Calculate Geographic Cost Factor (GCF)

- Step 3 is to calculate the rating area GCF
  - The first part of Step 3 is to calculate each plan's share of enrollment based on all silver plans in a rating area/risk pool/market combination and also calculate each plan's share of enrollment based on all catastrophic plans in the rating area/risk pool market. CMS performs this calculation.
  - This calculation is:

$$s_i^a = \frac{\text{(Silver or catastrophic plan's billable member months)}}{\text{(Total billable member months for all silver plans or catastrophic plans in a rating area)}}$$

# Payment Transfer Calculations:

## Phase 2 (continued)

### 2. Calculate Geographic Cost Factor (GCF)

- Step 3 (continued)
  - The second part of Step 3 is to calculate each plan's share of enrollment based on all silver plans in a state and also calculate each plan's share of enrollment based on all catastrophic plans in a state. CMS performs this calculation.
  - This calculation is:

$$s_i^s = \frac{\text{(Silver or catastrophic plan's billable member months)}}{\text{(Total billable member months for all silver or catastrophic plans in state)}}$$

# Payment Transfer Calculations:

## Phase 2 (continued)

### 2. Calculate Geographic Cost Factor (GCF)

- Step 3 (continued)
  - The final part of step 3 is to calculate the rating area GCF using the following formula:

$$GCF_i = \frac{\sum RatingArea (s_i^a \times \bar{P}_i^{AS})}{\sum State (s_i^s \times \bar{P}_i^{AS})}$$

- CMS performs this calculation.

# Payment Transfer Calculations:

## Phase 2 (continued)

### 3. Calculate Plan's Share Of Statewide Enrollment in a Risk Pool

- CMS will calculate the plan's share of statewide enrollment in a risk pool/market in a state.

$$S_i = \frac{\text{plan's total billable member months in a risk pool}}{\text{total billable member months in a risk pool}}$$

# Payment Transfer Calculations:

## Phase 2 (continued)

### 4. Calculate State Average Premium

- CMS will calculate the State Average Premium by summing the product of each plan's share of statewide enrollment in the risk pool/market multiplied by the plan's average premium.

$$\overline{P}_S = \sum_j (\text{plan share of statewide enrollment in risk pool} * \text{plan average premium})$$

### 5. Apply ARF Variable

- CMS will use the plan's calculated ARF factor from Phase 1.

# Payment Transfer Calculations:

## Phase 2 (continued)

### 6. Assign IDF and AV Variables

- CMS will assign the correct values for a plan's induced demand factor (IDF).
  - Catastrophic = 1.00
  - Bronze = 1.00
  - Silver = 1.03
  - Gold = 1.08
  - Platinum = 1.15
- CMS will assign the correct values for a plan's actuarial value (AV).
  - Catastrophic = 0.57
  - Bronze = 0.60
  - Silver = 0.70
  - Gold = 0.80
  - Platinum = 0.90

# Payment Transfer Calculations: Phase 2 (continued)

## 7. Calculate Plan's PMPM Transfer Amount

- CMS will calculate the PMPM transfer amount for the plan in a rating area in a risk pool/market in a state using all transfer formula components.

$$T_{PMPM} = \left[ \frac{PLRS_j * IDF_j * GCF_j}{\sum_j (s_j * PLRS_j * IDF_j * GCF_j)} - \frac{AV_j * ARF_j * IDF_j * GCF_j}{\sum_j (s_j * AV_j * ARF_j * IDF_j * GCF_j)} \right] \bar{P}_s$$

# Payment Transfer Calculations: Phase 2 (continued)

## 8. Calculate Plan's Total Transfer Amount for a Rating Area

- CMS will calculate each plan's total transfer amount for a rating area using the following formula:

$$T_i = T_{PMPM} * \sum_b M_b$$

*(Plan's rating area transfer amount \* plan's billable member months)*

# Payment Transfer Calculations: Phase 2 (continued)

## 9. Aggregate Plan's Total Transfer Amount to Issuer Level by State and Market

- CMS will aggregate all payments and charges for all plan rating areas in the same risk pool/market in a state.

# Next Steps

# Training Sessions

## Upcoming CO-OP Sessions

Date	Time	Topic
January 14, 2016	11:30 a.m. – 1:00 p.m. ET	Q&A Session
January 21, 2016	11:30 a.m. – 1:00 p.m. ET	Webinar

# Training Sessions

## Upcoming EDGE Sessions

Date	Time	Topic
January 12, 2016	11:30 a.m. – 12:30 p.m. ET	EDGE Data Management

# Locating RA Documents in REGTAP

Stakeholders can access additional documents at <https://www.REGTAP.info> in the REGTAP Library

Under Program Area, select "Risk Adjustment"

The screenshot shows the REGTAP Library interface. At the top, the logo 'REGTAP' is displayed with the tagline 'Registration for Technical Assistance Portal'. Navigation links include 'My Dashboard', 'Training Events', 'Inquiry Tracking', 'Library', and 'FAQs'. The 'Library' section is active, showing a 'Filter by:' dropdown menu. The 'Program Area' dropdown is open, listing various categories such as 'Agent Broker', 'Enrollment and Eligibility', 'Payments', and 'Risk Adjustment'. A red arrow points to the 'Risk Adjustment' option. Other filters include 'Training Event' and 'Program Area'.



# Questions?

To submit questions by phone:

- *dial '14' on your phone's keypad*
  - *dial '13' to withdraw your question*

To submit questions by webinar:

- *type your question in the text box under the 'Q&A' tab*

# Resources

# Resources

Resource	Resource Link
U.S. Department of Health & Human Services	<a href="http://www.hhs.gov/">http://www.hhs.gov/</a>
Centers for Medicare & Medicaid Services (CMS)	<a href="http://www.cms.gov/">http://www.cms.gov/</a>
The Center for Consumer Information & Insurance Oversight (CCIIO) web page	<a href="http://www.cms.gov/ccio">http://www.cms.gov/ccio</a>
Consumer website on Health Reform	<a href="http://www.healthcare.gov/">http://www.healthcare.gov/</a>
Registration for Technical Assistance Portal (REGTAP) - presentations, FAQs	<a href="https://www.REGTAP.info">https://www.REGTAP.info</a>
Do-It-Yourself (DIY) Software	<a href="http://www.cms.gov/ccio/Resources/Regulations-and-Guidance/index.html#Premium%20Stabilization%20Programs">http://www.cms.gov/ccio/Resources/Regulations-and-Guidance/index.html#Premium Stabilization Programs</a> <a href="https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/DIY-instructions-10-16-15.pdf">https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/DIY-instructions-10-16-15.pdf</a>

# Resources (continued)

Resource	Resource Link
Patient Protection and Affordable Care Act (ACA)	<a href="http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/content-detail.html">http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/content-detail.html</a>
Standards Related to Reinsurance, Risk Corridors, and Risk Adjustment under the ACA	<a href="http://www.gpo.gov/fdsys/pkg/FR-2011-07-15/pdf/2011-17609.pdf">http://www.gpo.gov/fdsys/pkg/FR-2011-07-15/pdf/2011-17609.pdf</a>
HHS Notice of Benefit and Payment Parameters for 2014 and Amendments to the HHS Notice of Benefit and Payment Parameters for 2014	<a href="http://www.gpo.gov/fdsys/pkg/FR-2013-03-11/pdf/2013-04902.pdf">http://www.gpo.gov/fdsys/pkg/FR-2013-03-11/pdf/2013-04902.pdf</a>
HHS Notice of Benefit and Payment Parameters for 2015 and Amendments to the HHS Notice of Benefit and Payment Parameters for 2015	<a href="http://www.gpo.gov/fdsys/pkg/FR-2014-03-11/pdf/2014-05052.pdf">http://www.gpo.gov/fdsys/pkg/FR-2014-03-11/pdf/2014-05052.pdf</a>

# Resources (Continued)

Resource	Resource Link
HHS Notice of Benefit and Payment Parameters for 2015 and Amendments to the HHS Notice of Benefit and Payment Parameters for 2016	<a href="http://www.gpo.gov/fdsys/pkg/FR-2015-02-27/pdf/2015-03751.pdf">http://www.gpo.gov/fdsys/pkg/FR-2015-02-27/pdf/2015-03751.pdf</a>
Standards Related to Reinsurance, Risk Corridors and Risk Adjustment under the ACA	<a href="http://www.gpo.gov/fdsys/pkg/FR-2012-03-23/pdf/2012-6594.pdf">http://www.gpo.gov/fdsys/pkg/FR-2012-03-23/pdf/2012-6594.pdf</a>
Program Integrity: Exchange, Premium Stabilization Programs, and Market Standards; Amendments to the HHS Notice of Benefit and Payment Parameters for 2014	<a href="http://www.gpo.gov/fdsys/pkg/FR-2013-10-30/pdf/2013-25326.pdf">http://www.gpo.gov/fdsys/pkg/FR-2013-10-30/pdf/2013-25326.pdf</a>
Health Insurance Market Rules, Rate Review Final Rule	<a href="http://www.gpo.gov/fdsys/pkg/FR-2013-02-27/pdf/2013-04335.pdf">http://www.gpo.gov/fdsys/pkg/FR-2013-02-27/pdf/2013-04335.pdf</a>

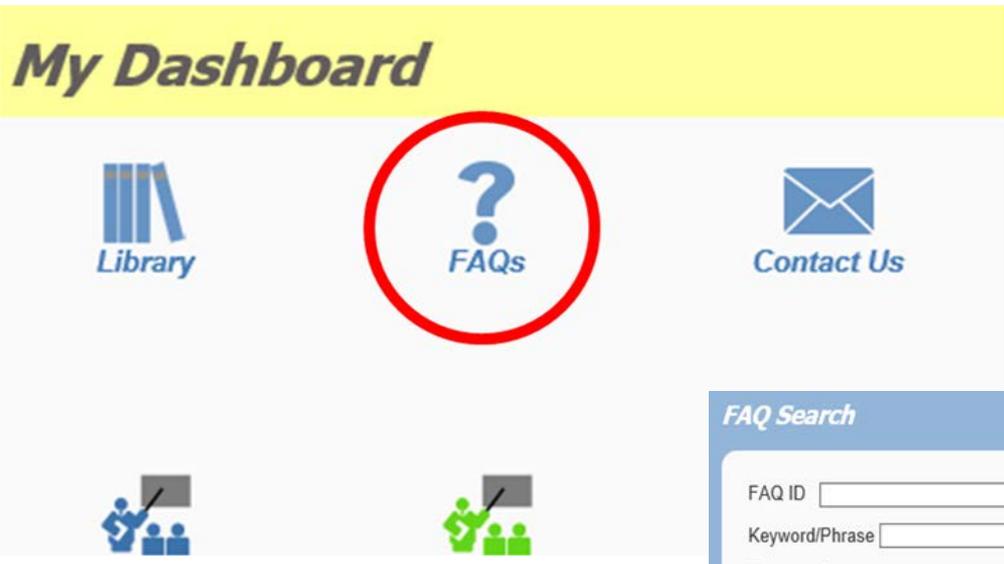
# Inquiry Tracking and Management System (ITMS)

Stakeholders can submit inquiries to ITMS at <https://www.REGTAP.info>

Select “Submit an Inquiry” from My Dashboard.

The screenshot displays the REGTAP My Dashboard interface. The dashboard is titled "My Dashboard" and shows various navigation options. A red arrow points from the text "Select 'Submit an Inquiry' from My Dashboard." to the "Submit an Inquiry" button, which is highlighted with a red box. Other buttons include Library, FAQs, Contact Us, Suggestion Box, Update Password, Training Events, My Events, My Proxy Events, and REGTAP Training. The left sidebar contains announcements and a "My Events" section.

# FAQ Database on REGTAP



The FAQ Database allows users to search FAQs by FAQ ID, Keyword/Phrase, Program Area, Primary and Secondary categories, and Publish Date.

FAQ Database is available at <https://www.regtap.info/>



# Closing Remarks