



# Risk Adjustment Under ACA

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# Overview

- I. ACA Risk Adjustment Methodology
- II. Medicare Advantage Comparison
- III. Risk Adjustment vs. Risk Transfer

# I. ACA Risk Adjustment - Overview

The primary source for risk adjustment model calibration is Thomson Reuters MarketScan® data

- Data from employers and health plans
- HIPAA de-identified

2010 MarketScan® database Initial Sample Size: 49.2 million in 2009, 45.2 million in 2010

- Male (49%), Female (51%)
- Ages 0 to 64
- Includes data from all 50 States and DC

# I. ACA Risk Adjustment - Overview

- Concurrent model – current year diagnoses and current year demographics used to predict current costs
- Model is calibrated to predict plan liability (paid amount) at the member level
- Risk model coefficients vary by metal tier due to different benefit (AV) levels and adult, child, and infant
- CSR (Cost Sharing Reduction) factors are applied to account for induced utilization for members with reduced or zero cost sharing
- Hierarchical Condition Categories (HCCs) are specific to non-elderly, non-disabled population
- Infant, child, and adult models separately

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TABLE 2—ADULT RISK ADJUSTMENT MODEL FACTORS—Continued

Factor	Platinum	Gold	Silver	Bronze	Catastrophic
<b>Diagnosis Factors</b>					
HIV/AIDS .....	5.485	4.972	4.740	4.740	4.749
Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock .....	13.696	13.506	13.429	13.503	13.529
Central Nervous System Infections, Except Viral Meningitis .....	7.277	7.140	7.083	7.117	7.129
Viral or Unspecified Meningitis .....	4.996	4.730	4.621	4.562	4.550
Opportunistic Infections .....	9.672	9.549	9.501	9.508	9.511
Metastatic Cancer .....	25.175	24.627	24.376	24.491	24.526
Lung, Brain, and Other Severe Cancers, Including Pediatric Acute Lymphoid Leukemia .....	11.791	11.377	11.191	11.224	11.235
Non-Hodgkin's Lymphomas and Other Cancers and Tumors .....	6.432	6.150	6.018	5.983	5.970
Colorectal, Breast (Age < 50), Kidney, and Other Cancers .....	5.961	5.679	5.544	5.500	5.483
Breast (Age 50+) and Prostate Cancer, Benign/Uncertain .....	3.509	3.294	3.194	3.141	3.121
Brain Tumors, and Other Cancers and Tumors .....	1.727	1.559	1.466	1.353	1.315
Thyroid Cancer, Melanoma, Neurofibromatosis, and Other Cancers and Tumors .....	1.727	1.559	1.466	1.353	1.315
Pancreas Transplant Status/Complications .....	9.593	9.477	9.411	9.434	9.439
Diabetes with Acute Complications .....	1.331	1.199	1.120	1.000	0.957
Diabetes with Chronic Complications .....	1.331	1.199	1.120	1.000	0.957
Diabetes without Complication .....	1.331	1.199	1.120	1.000	0.957
Protein-Calorie Malnutrition .....	14.790	14.790	14.786	14.862	14.883
Mucopolysaccharidosis .....	2.225	2.199	2.120	2.071	2.052

# I. ACA Risk Adjustment - CSR Factors

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**TABLE 1—COST-SHARING REDUCTION ADJUSTMENT**

Household income	Plan AV	Induced utilization factor
<b>Silver Plan Variant Recipients</b>		
100–150 percent of FPL .....	Plan Variation 94 percent .....	1.12
150–200 percent of FPL .....	Plan Variation 87 percent .....	1.12
200–250 percent of FPL .....	Plan Variation 73 percent .....	1.00
>250 percent of FPL .....	Standard Plan 70 percent .....	1.00
<b>Zero Cost-Sharing Recipients</b>		
<300 percent of FPL .....	Platinum (90 percent) .....	1.00
<300 percent of FPL .....	Gold (80 percent) .....	1.07
<300 percent of FPL .....	Silver (70 percent) .....	1.12
<300 percent of FPL .....	Bronze (60 percent) .....	1.15

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TABLE 1—COST-SHARING REDUCTION ADJUSTMENT—Continued

# I. ACA Risk Adjustment - Example

30 year old man, silver plan, income at 150% of FPL

- Demographic factor: 0.187
- AIDS: 4.740
- CSR Factor: 1.12
- Risk Score:  $(0.187 + 4.740) \times 1.12 = 5.518$

Risk scores are normalized so that average score among plans in a given risk pool is 1.0

## II. Medicare Advantage Comparison

- CMS HCC risk adjustment methodology is similar to the ACA – but payment is not
- Prospective model (Medicare Advantage) vs Concurrent (ACA)
- CMS HCCs reflect relevant conditions for aging and disabled population
- For 2014-2015, CMS payment is based on two models: 2013 CMS HCC model and the 2014 CMS HCC model
- Payment is not budget neutral, and normalization factors as well as coding pattern adjustment is prescribed for any given payment year by CMS



## II. Medicare Advantage Example

For 2015, MA risk scores will be a 67%/33% blend of the 2013 and 2014 CMS HCC models respectively

- 30 year old male demographic factors:

2013 Model: 0.117                      2014 Model: 0.121

- Medicaid/Disabled Interaction:

2013 Model: 0.099                      2014 Model: 0.086

- Originally Disabled:

2013 Model: 0.160                      2014 Model: 0.163

- HIV/AIDS

2013 Model: 0.458                      2014 Model: 0.470

## II. Medicare Advantage Example

2015 Normalization and MA Coding Pattern Adjustment Factors:

- 2013 Model Norm: 0.992      2014 Model Norm: 0.978
- MA Coding adjustment: 5.16%

2013 Model Component:  $(0.117 + 0.099 + 0.160 + 0.458)/0.992 = 0.841$

2014 Model Component:  $(0.121 + 0.086 + 0.163 + 0.470)/0.978 = 0.859$

2015 Risk score =  $(0.67 \times 0.841 + 0.33 \times 0.859) \times (1 - 0.0516) = 0.803$

### III. Risk Adjustment vs. Risk Transfer

- Both CMS HCC and ACA risk adjustment models predict relative cost of members given demographics and diagnoses
- Payment under ACA for any risk pool will be budget neutral, meaning all plans (adjusted) risk scores will be normalized to a 1.0
- The Risk Transfer takes revenue from plans with a lower (relative) risk score and gives it to plans with a higher (relative) risk score
- Goal of Risk Transfer is to stabilize premiums and mitigate the impact of adverse selection

### III. Risk Adjustment vs. Risk Transfer - Simplified Example

	Risk Score	MMs	Normalized	Transfer
Plan 001	1.200	1,000	1.113	Receivable
Plan 002	1.050	2,500	0.974	Payable
Plan 003	0.950	2,000	0.881	Payable
Plan 004	1.250	1,000	1.159	Receivable
Plan 005	1.100	1,500	1.020	Receivable
Composite (1.0)	1.078	8,000	1.000	NA

# III. Risk Adjustment vs. Risk Transfer

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## Basic Form of the Payment Transfer Calculation

Adjusted Plan Risk Score - 1

Baseline Premium

Payment Transfer

Difference Between Plan Liability And Average Risk Pool Liability

Positive Transfers Are Payments  
Negative Transfers Are Charges

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## III. Risk Adjustment vs. Risk Transfer

Components of Risk Transfer formula:

- Plan risk score
- Plan AV value (vs. market average)
- Geographic cost factor
- Induced demand
- Allowable rating factors (e.g. age, tobacco use)