

2012 Regional Technical Assistance Risk Score Calculation Workbook



Tuesday, August 7, 2012

Risk Adjustment





RISK SCORE CALCULATION WORKBOOK

Purpose

CMS uses the risk adjustment models to calculate a risk score for each beneficiary. Calculation of the risk score requires pulling data from many sources. This workbook provides examples for risk score calculation, including moderately complex, complex, and Part D examples.

Risk Score Calculation Scenarios

With these examples, the Monthly Membership Report (MMR) and Model Output Report (MOR) reports are provided for a beneficiary for the payment month that needs to be reconciled. Following the instructions in Section 3.2 of the Participant Guide, utilize the reports provided and the excerpts of the Payment Announcements provided in the Resource Guide to manually calculate the risk score.

Gather the required information from the reports that are provided for each scenario. Space is provided at the top of each worksheet to collect the relevant information. The few pieces of information that are not provided in the reports is already populated in the example, such as plan type and capitation rate.

Next, use the RAFT code to determine which model was used to calculate the beneficiary's risk score. To determine which model the beneficiary's RAFT code maps to use the job aid "Risk Adjustment Factor Type (RAFT) Codes/Default Risk Factor Codes Crosswalk to Model and Segment"

Use job aid "Part C Normalization and Coding Intensity Factors" to determine the normalization and coding intensity that apply to the calculation and to determine which Announcement year to refer to for the relative factors included in this calculation.

Each scenario in this workbook uses a different model to calculate the risk score. The table of relative factors for each model is available in the Resource Guide. Refer to the Figures section in the Resource Guide for the relative factors from the appropriate Announcements for these scenarios. This is where you will turn to collect the relative factors for the beneficiary's demographic and disease factors. The models used in these scenarios include:

- 2009 CMS-HCC Model for Community and Institutional Enrollees
- 2012 CMS-HCC Model for PACE Enrollees
- 2012 ESRD Model Functioning Graft Factors for Institutionalized Population
- 2013 CMS-HCC Model Relative Factors for Aged and Disabled New Enrollees
- 2013 RxHCC Model Relative Factors for Continuing Enrollees

After determining the relative factors for all of the demographic statuses and HCCs that are relevant to the beneficiary's risk score, use the calculations listed in Section 3.2.5 of the Participant Guide – Part C Risk Score Calculations -- to complete the example.





Risk Score Calculation – Scenario 1

Scenario 1 illustrates the fundamentals of risk score calculation, with no extra statuses and only a few HCCs. Use the risk score calculation guidance in Participant Guide Section 3.2 as a reference to calculate the risk score. Figures A and B display the reports used to calculate the beneficiary's risk score in Scenario 1.

Figure A – MIMR for Scenario

1RUN DATE:20120610 PAYMENT MONTH:201207	PL	MONTHLY MEMBERSHI LAN(H9999) PBP(001) SE	IP REPORT - NON DRUG EGMENT(000) SAMPLE REPORT	Ρ.	AGE: 1
0			REBATES		
BASIC PREMIUM	COST SHR REDUC	MAND SUPP BENEFIT	PART D SUPP BENEFIT	PART B BAS PRM REDUC PAR	T D BAS PRM REDUC
PART A \$0.00	\$00.00	\$0.00	\$0.00	\$0.00	\$0.00
PART B \$0.00	\$00.00	\$0.00	\$0.00	\$0.00	\$0.00
0 S		FLAGS		PAYMENTS/ADJUSTMENTS	
CLAIM E AGE STATE	ΡP	MF AD S CM	ATHS PAYMENT DATE	LAG FTYPEFACTORS	AMOUNT
NUMBER X GRP CNTY	ААНЕІ	CRODEEO MA	A B START END	FRAILTY-SCORE	MSP MSP
	ORROSN	NAARDFGUMC-			
SURNAME F DMG BIRTH	OTTSRS	HIIEOAHRSAE	PIP ADJ		
I RA DATE	ААВРDТ	CDLCNUPCPII	DCG REA FCTR-A FCTR-B	PART A PART B	TOTAL PAYMENT
999456789A M 8084 12345			1 1 201207 201207	C	\$0.00
EXAMPLE F 8084 19281(008 Y Y	0 D N	1.5050 1.5050	\$564.37 \$519.23	\$1083.60

Figure B – MOR for Scenario 1

1RUN DATE: 20 PAYMENT MONT	120610 H: 201207		RISK ADJUSTME PLAN: H9999 S	NT MODEL OUTPUT AMPLE MOR Repor	REPORT t			PA	AGE: RAPMO	1 RP1
0	LAST	FIRST				DATE OF				
HIC	NAME	NAME	I			BIRTH	SEX & AGE GROUP	ESRD		
999456789A	EXAMPLE	FIRST	0			19281008	Male80-84	Ν		
HCC DISEASE	GROUPS:	HCC010 Breast, H	Prostate, Color	ectal and Other	Cancers and Tumors					
		HCC019 Diabetes	without Compli	cation						
		HCC038 Rheumatoi	ld Arthritis an	d Inflammatory	Connective Tissue Dise	ease				
		HCC131 Renal Fai	ilure							









Scenario 1 Answer

HIC:	999456789A
Age:	80-84
Sex:	Μ
Medicaid:	<blank></blank>
OREC:	0
Frailty Indicator:	<blank></blank>
Part C LTI:	<blank></blank>
RAFT Code:	С
HCCs from MOR:	10, 19, 38, 131
Payment Year:	2012
Risk Adjustment Model	2009 CMS-HCC
Plan Monthly Capitated Payment:	\$720.00

	Factors
Normalization Factor:	1.079
Coding Intensity Factor:	0.0341
Frailty Factor:	0

	Status	Factors
Age/Sex Factor:	M 80-84	0.597
Medicaid Factor:	0	0
Disability Factor: 0		0
Sum of Demogra	0.597	

	Coefficients	Factors	
Disease HCCs:	10	0.208	
	19	0.162	
	38	0.346	
	131	0.368	
Sum of Disease Coefficients:		1.084	

1.681	0.597 + 1.084 = 1.681
1.558	1.681 / 1.079 = 1.5579 (rounded = 1.558)
1.505	_ 1.558 * (1-0.0341) = 1.5048 (rounded = 1.505)
N/A	_
\$1,083.60	1.505 * 720.00 = 1,083.60
	1.681 1.558 1.505 N/A \$1,083.60





Level 2 Risk Score Calculation – Scenario 2

Scenario 2 is a moderate example, with only two additional statuses to take into account. Figures C and D display the reports to be used to calculate the beneficiary's risk score in Scenario 2. While this example is for a PACE plan, the concepts of the calculations and reports apply to all MA plans.

		0			
1RUN DATE:20120610 PAYMENT MONTH:201207	M PLAN (H9	ONTHLY MEMBERSHIP F 999) PBP(001) SEGME	REPORT - NON DRUG ENT(000) SAMPLE REPORT		PAGE: 1
0			REBATES		
BASIC PREMIUM	COST SHR REDUC MA	ND SUPP BENEFIT PA	ART D SUPP BENEFIT	PART B BAS PRM REDUC PA	RT D BAS PRM REDUC
PART A \$0.00	\$00.00	\$0.00	\$0.00	\$0.00	\$0.00
PART B \$0.00	\$00.00	\$0.00	\$0.00	\$0.00	\$0.00
0 S	FLAG	S		PAYMENTS/ADJUSTMENTS	
CLAIM E AGE STATE	PP MF	AD S C MTHS	S PAYMENT DATE	LAG FTYPEFACTORS-	AMOUNT
NUMBER X GRP CNTY	AAHEI CR	ODEEO MAB	START END	FRAILTY-SCOR	E MSP MSP
	ORROSNNAA	RDFGUMC			
SURNAME F DMG BIRTH	OTTSRSHII	EOAHRSAPIP	ADJ		
I RA DATE	ААВРDТСDL	C N U P C P I DCG	REA FCTR-A FCTR-B	PART A PART B	TOTAL PAYMENT
999567891A F 6064 12345		1 1	1 201207 201207	C 0.083	\$0.00
EXAMPLE S 6064 1948102	27 ҮҮ ҮҮ	1 B N	1.5600 1.5600	\$585.00 \$538.20	\$1123.20

Figure C – MMR for Scenario 2

Figure D – MOR for Scenario 2

1RUN DATE: 20 PAYMENT MONT	120610 H: 201207		RISK ADJUSTMENT MOD PLAN: H9999 SAMPLE	EL OUTPUT REPORT MOR Report			PZ	AGE: 1 RAPMORP1
0	LAST	FIRST			DATE OF			
HIC	NAME	NAME	I		BIRTH	SEX & AGE GROUP	ESRD	
999567891A	EXAMPLE	SECOND	E		19481027	Female60-64	Ν	
Medicaid Fem	ale Disabled (Ag	e<65)						
HCC DISEASE	GROUPS: HCC051 HCC057	Dementia W Schizophre	Jith Complications enia					



Scenario 2 Worksheet

HIC:	999567891A
Age:	
Sex:	
Medicaid:	
OREC:	
Frailty Indicator:	
Part C LTI:	
RAFT Code:	
HCCs from MOR:	
Payment Year:	
Risk Adjustment Model:	2012 PACE
Plan Monthly Capitated Rate:	\$720.00

No	rmalization Factor:	Factors		
Codir	Coding Intensity Factor: Frailty Factor:			
Age/Sex Factor: Medicaid Factor:	Status	Factors		
Disability Factor: Disease HCCs:	Coefficients	Factors		
Sum of Factors:	Demographic Fact +	ors + Diagnos	stic Coefficien =	ts = Raw Risk Score
Normalized Score:	Raw Risk Score / N	lormalization =	Factor = Norr	nalized Risk Score Rounded =
With Coding Intensity Factor:	Normalized Risk So	core (1 - Codi	ng Difference) =	Adjustment) = Risk Score Rounded =
With Frailty (if applicable) :	Risk score + Frailty +	/ Factor = Risł	k Score with F =	railty
Risk Adjusted Payment:	Risk Score X Mont	hly Capitatior	n Rate = Risk A	djusted Payment





Scenario 2 Answer

HIC:	999567891A
Age:	63
Sex:	F
Medicaid:	Y
OREC:	1
Frailty Indicator:	Y
Part C LTI:	<blank></blank>
RAFT Code:	C
HCCs from MOR:	51, 57
Payment Year:	2012
Risk Adjustment Model:	2012 PACE
Plan Monthly Capitated Payment:	\$720.00

	Factors
Normalization Factor:	1.051
Coding Intensity Factor:	0.0341
Frailty Factor:	0.083

	Status	Factors
Age/Sex Factor:	F 60-64	0.416
Medicaid Factor:	1	0.104
Disability Factor: 1		0 (age<65)
Sum of Demograph	0.520	

	Coefficients	Factors	
Disease HCCs:	51	0.616	
	57	0.471	
Sum of Dise	ase Coefficients	: 1.087	
Sum of all Factors:	1.607	0.520 + 1.087 = 1.607	
Normalized Score:	1.529	1.607 / 1.051 = 1.5290) (rounded = 1.529)

With Coding Intensity Factor:	1.477	1.529 * (1-0.0341) = 1.4768 (rounded = 1.477)
With Frailty:	1.560	1.477 + 0.083 = 1.560
Monthly Payment:	\$1,123.20	1.560 * 720.00 = 1,123.20



Level 3 Risk Score Calculation – Scenario 3

Scenario 3 requires retrieving multiple factors, refer to Section 3.2 for the risk score calculation process. Figures E and F display the reports used to calculate the beneficiary's risk score in Scenario 3.

Figure E – MMR for Scenario 3

1RUN DATE:20130610 PAYMENT MONTH:201307	PL	MONTHLY MEMBERSH LAN (H9999) PBP (001) SI	IP REPORT - NON DRUG EGMENT(000) SAMPLE REPORT	P	AGE: 1
			REBATES		
BASIC PREMIUM	COST SHR REDUC	MAND SUPP BENEFIT	PART D SUPP BENEFIT	PART B BAS PRM REDUC PAR	T D BAS PRM REDUC
PART A \$0.00	\$00.00	\$0.00	\$0.00	\$0.00	\$0.00
PART B \$0.00	\$00.00	\$0.00	\$0.00	\$0.00	\$0.00
0 S		FLAGS		PAYMENTS/ADJUSTMENTS	
CLAIM E AGE STATE	ΡP	MF AD S CI	MTHS PAYMENT DATE	LAG FTYPEFACTORS	AMOUNT
NUMBER X GRP CNTY	ААНЕІ	CRODEEO MA	A B START END	FRAILTY-SCORE	MSP MSP
	ORROSN	NAARDFGUMC ·			
SURNAME F DMG BIRTH	OTTSRS	HIIEOAHRSAI	PIP ADJ		
I RA DATE	AABPDT	C D L C N U P C P I I	DCG REA FCTR-A FCTR-B	PART A PART B	TOTAL PAYMENT
999678912A F 7074 12345			1 1 201307 201307	12	Ş0.00
EXAMPLE T 7074 193902	210 ҮҮ ҮҮ	Y 3 B N	3.2970 3.2970	\$1286.06 \$1087.78	\$2373.84
999678912A F 7074 12345	RISK ADJ FAC		6 6 201301 201306	I2	\$0.00
EXAMPLE T 7074 193902	210 ҮҮ ҮҮ	Y 3 B N	26 3.2970 3.2970	\$7716.33 \$6526.71	\$14243.04

Figure F – MOR for Scenario 3

1RUN DATE: 20 PAYMENT MONI	130610 H: 201307	RI PL	SK ADJUSTMENT MODEL OUTPU AN: H9999 SAMPLE MOR Repo	JT REPORT ort			1	PAGE: RAPMO	1 RP1
0	LAST	FIRST		DA	ATE OF				
HIC	NAME	NAME	I	B	IRTH	SEX & AGE GROUP	ESRD		
999678912A	EXAMPLE	THIRD	 F	 1:	9390210	Female70-74	 Ү		
Medicaid Fer	ale Aged	(Age>64)							
Uliginally L	ISabieu re	enale Aged (Age>04)							
HCC DISEASE	GROUPS:	HCCUI/ Diabetes wit	h Acute Complications						
		HCC085 Congestive H	eart Failure						
		HCC111 Chronic Obst	ructive Pulmonary Disease	2					
INTERACTIONS	:	CHF COPD							
		DIABETES_CHF							





Scenario 3 Worksheet			
HIC:	99967	'8912A	
Age:			
Sex:			
Medicaid:			
OREC:			
Frailty Indicator:			
Part C LTI:			
RAFT Code:			
HCCs from MOR:			
Payment Year:			
Risk Adjustment Model:			
Plan Monthly Capitated Rate:	\$72	0.00	
		Factors	
No	rmalization Factor:		_
Codir	ng Intensity Factor:		_
	Frailty Factor:		-
	Status	Factors	
Age/Sex Factor:			
Medicaid Factor:			_
Disability Factor:			
	Coefficients	Factors	
Disease HCCs:			-
			-
			-
			-
			-
			-
	Demographic Fee	have I Diagnostia	Coefficiente Dow Diels Coore
	Demographic Fac		COEfficients = Raw Risk Score
Sum of Factors:	+	=	
	Raw Risk Score / I	Normalization Fac	ctor = Normalized Risk Score
Normalized Score:	/	=	Rounded =
	Normalized Risk S	core (1 - Coding I	Difference Adjustment) = Risk Score
With Coding Intensity Factor:	X (1-	-) =	Rounded =
	Pick score + Frailt	v Eactor - Dick Sc	oro with Frailty
		y Factor = Risk Sc	ore with Franty
With Frailty (if applicable) :	+	=	
	Diele Coore V Marrie	hly Constation D-	to - Dick Adjusted Deursent
Diele Adjusted Device	KISK SCORE X MION	this Capitation Ra	ite = KISK Adjusted Payment
KISK AUJUSTED PAYMENT:	X		





Scenario 3 Answer

HIC:	99	9967	8912A	
Age:		70	-74	
Sex:		F		
Medicaid:		Ņ	Y	
OREC:			3	
Frailty Indicator:		<blacksquare </blacksquare 	ank>	
Part C LTI:		Ņ	Y	
RAFT Code:		I	2	
HCCs from MOR:	17, 85, 111, CH	F_CC	DPD, DIABETES_CHF	
Payment Year:		20	13	
Risk Adjustment Model:	2012 ESRI	D Fui	nctioning Graft	
Plan Monthly Capitated Payment:		\$72	0.00	
			Factors	
Ν	ormalization Fac	tor:	1.070	
Coc	ling Intensity Fac	tor:	0.0341	
	Frailty Fac	tor:	0.000	
	Status		Factors	
Age/Sex Factor:	F 70-74		0.947	
Medicaid Factor:	1		0.126	
Disability Factor:	3		0.026	
Sum of Demo	graphic Coefficie	nts:	1.099	
	Coefficients		Factors	
Disease HCCs:	17		0.434	
	85		0.226	
	111		0.323	
	CHF_COPD		0.159	
_	DIABETES_CHF		0.143	
_	Graft Factor		1.268	
Sum of I	Disease Coefficie	nts:	2.553	
Sum of all Factors:	3.652	1.09	99 + 2.553 = 3.652	
Normalized Score:	3.413	3.6	52 / 1.070 = 3.4130 (round = 3.413)	
-				
With Coding Intensity Factor:	3.297	3.4	13 * (1-0.0341) = 3.2966 (rounded = 3.2	97)
With Frailty:	N/A			
Monthly Payment:	\$2,373.84	3.2	97 * 720 = 2,373.84	





Level 3 Risk Score Calculation – Scenario 4

Scenario 4 requires the default risk factor to calculate a risk score for a new enrollee. Refer to Module 2, Section 2.6.3 of the Participant Guide for guidance on default enrollees. Figures G and H display the reports used to calculate the beneficiary's risk score in Scenario 4.

Figure G – MMR for Scenario 4

1RUN DATE:20130610 PAYMENT MONTH:201307	MONTHLY MEMBERSHIP PLAN(H9999) PBP(001) SEG	P REPORT - NON DRUG GMENT(000) SAMPLE REPORT		PAGE: 1
0		REBATES		
BASIC PREMIUM	COST SHR REDUC MAND SUPP BENEFIT	PART D SUPP BENEFIT	PART B BAS PRM REDUC	PART D BAS PRM REDUC
PART A \$0.00	\$00.00 \$0.00	\$0.00	\$0.00	\$0.00
PART B \$0.00	\$00.00 \$0.00	\$0.00	\$0.00	\$0.00
0 S	FLAGS		PAYMENTS/ADJUSTMENTS	
CLAIM E AGE STATE	PP MFADSCMT	THS PAYMENT DATE	LAG FTYPEFACTOR	RS AMOUNT
NUMBER X GRP CNTY	AAHEI CRODEEO MA	B START END	FRAILTY-SC	CORE MSP MSP
	O R R O S N N A A R D F G U M C			
SURNAME F DMG BIRTH	ΟΤΤSRSHIIEOAHRSAPΙ	IP ADJ		
I RA DATE	ΑΑΒΡΟΤΟΟΙΟΝΟΡΟΡΙΟΟ	CG REA FCTR-A FCTR-B	PART A PART B	TOTAL PAYMENT
999891234A F 6565 12345	1	1 201307 201307		\$0.00
EXAMPLE F 6565 1947102	27 YY 01 BN	0.4730 0.4730	\$177.38 \$163.18	\$340.56

Figure H – MOR for Scenario 4

1RUN DATE: 201	.30610	R	ISK ADJUSTMENT MODEL OUTPUT REPORT			PAGI	E: 1
PAYMENT MONTH	I: 201307	P	LAN: H9999 SAMPLE MOR Report			1	RAPMORP1
0	LAST	FIRST		DATE OF			
HIC	NAME	NAME	I	BIRTH	SEX & AGE GROUP	ESRD	



When an enrollee has a New Enrollee RAFT code or Default Risk Factor Code, the plan sponsor can check MARx to verify whether an enrollee has a full data collection year of diagnosis data collected under Medicare Part B. Figure I shows what MARx screen M232 could display for a beneficiary in default status during the payment month of July, 2013.

Enrollment Information for 08/07/2013						
Contract	Start	Start Drug Plan				
H9999	03/01/2013		Y			
Entitlement Information						
Part	Start		End	Option		
А	03/01/2013			E		
В	03/01/2013			Y		
Eligibility Information						
Part	Start		Enc	I		
D	03/01/2013					

Figure I – MARx Screen Beneficiary: Eligibility (M232) for HIC 999891234A

If a beneficiary has a full data collection year of Part B enrollment and a New Enrollee RAFT code or Default Risk Factor Code, then the plan may check for a change in beneficiary status that would cause a change in model used to calculate the risk score between model runs. Under these circumstances, depending on the timing, the beneficiary should have a full risk RAFT code assigned in the following model run.





Scenario 4 Worksheet			
HIC:	999891	L234A	_
Age:			_
Sex:			_
Medicaid:			_
OREC:			_
Frailty Indicator:			_
Part C LTI:			
RAFT Code:			
HCCs from MOR:			
Payment Year:			
Risk Adjustment Model:			
Plan Monthly Capitated Rate:	\$720	0.00	_
N	E	Factors	
N	ormalization Factor:		
Cod	Ing Intensity Factor:		
	Fraility Factor:		
	Status	Factors	
Age/Sex Factor:	Status	Tactors	
Medicaid Eactor:			
Disability Factor:		·	
Disability ractor.		·	
	Coefficients	Factors	
Disease HCCs.	coemeients	Tactors	
Discuse nees.			
	Demographic Facto	ors + Diagnostic Co	efficients - Raw Risk Score
	Demographic racto		emcients – Naw Nisk Score
Sum of Factors:	+	=	
	Raw Risk Score /No	ormalization Factor	r = Normalized Risk Score
Normalized Score:	/	=	Rounded =
		<u> </u>	
	Normalized Risk Sco	ore (1 - Coding Diff	erence Adjustment) = Risk Score
With Coding Intensity Factor:	X (1-) =	Rounded =
	Dick coore L Freilty	Factor - Dick Score	with Frailty
	RISK SCOLE + Frailly	Factor = RISK SCORE	e with Franty
With Frailty (if applicable) :	+	=	
	KISK Score X Month	ly Capitation Rate	= KISK Adjusted Payment
KISK AUJUSTED PAYMENT:	X		=





Scenario 4 Answer

HIC:	9998	391234A
Age:		65
Sex:		F
Medicaid:	<k< td=""><td>olank></td></k<>	olank>
OREC:	<t< td=""><td>olank></td></t<>	olank>
Frailty Factor:	<t< td=""><td>blank></td></t<>	blank>
Part C LTI:	<t< td=""><td>olank></td></t<>	olank>
RAFT Code:	1 ([Default)
HCCs from MOR:	Beneficiar	y Not on MOR
Payment Year:		2013
Risk Adjustment Model:	2013	CMS-HCC
Plan Monthly Capitated Payment:	\$7	20.00
		Factors
Nor	malization Factor	:1.028
Coding	g Intensity Factor	:0.0341
	Frailty Factor	:0.000
	Status	Factors
Age/Sex Factor:	F 65-65	0.504
Medicaid Factor:	0	0
Disability Factor:	0	0
Sum of Demogra	aphic Coefficients	: 0.504
	Coefficients	Factors
Disease HCCs:	N/A	0.000
Sum of Dis	ease Coefficients	: 0.000
Sum of all Factors:	0.504	
Normalized Score:	0.490	0 504 / 1 028 = 0 4902 (rounded = 0 490)
	0	
With Coding Intensity Factor:	0.473	0.490 * (1-0.0341) = 0.4732 (rounded = 0.473)
With Frailty:	N/A	



Risk Score Calculation – Scenario 5, Part D

Scenario 5 requires the use of the RxHCC model for a continuing enrollee. Refer to Module 3, Section 3.3.1 of the Participant Guide for guidance on the RxHCC score calculation. The job aid Part D Risk Adjustment Factor Codes maps the Part D Risk Adjustment Factor Codes to the appropriate segment of the RxHCC model. Figures J and K display the reports used to calculate the beneficiary's risk score in Scenario 5.

Figure J – MMR for Scenario 5

1RUN DATE:2013 PAYMENT MONT 0	30617 H:20130	7					PLA	и (X) и	MONTHI 9999) BASI(LY MEMBE PBP(001 C PREMIU	ERSHIP RE L) SEGMEN JM ³ ESTI	EPORT - I NT(001) S IMATED RE	DRUG SAMPLE REPORT SINSURANCE		PAGE:	1
0 CLAIM NUMBER	S E AGE X GRP	STATE CNTY		- P F A A	FLZ	AGS S 0	PAR - L L O I	T D D (E N	- C ADJ M REA	\$25.00 RA FCTF	R DAI START	90.0 PAYMENI ES END	S/ADJUSTMENTS LOW-INCOME COST SHARING PERCENTAGE	LOW-INCOME COST SHARING SUBSIDY		
SURNAME F I	DMG RA	BIRTH DATE	0 0 A -	T T A E	С Н З Р	R I C	IN NS CT	I A N I	A MTHS	5 DIRECI PAYME	F SUBSIDY ENT AMT	COVEF DIS	AGE GAP SCOUNT	TOTAL E	AYMENT	
999912345A EXAMPLE F	F 8084 8084	12345 19310213		YУ	ſN	в		NI	J 1	0.8970	201207 \$107.64	201207	000 \$0.00	\$0.00 \$0.00	\$82.64	

Figure K – MOR for Scenario 5

1RUN DATE: 20130613	RISK ADJUSTMENT MODEL OUTPUT REPORT		PAGE: 1
0 LAST HIC NAME	FIRST NAME	DATE OF I BIRTH SEX & AGE GROUP	KAFMODAA
999912345A EXAMPLE Originally Disabled B	FIFTH FIFTH FIFTH	F 19310213 Female80-84	
Originally Disabled A	Aged (Age>64)		
RXHCC DISEASE GROUPS:	RXHCC011 Prostate and Other Cancers and Tumors		
	RXHCC023 Disorders of Lipoid Metabolism		
	RXHCC087 Congestive Heart Failure		
	RXHCC089 Coronary Artery Disease		





Scenario 5 Worksheet			
HIC:	99992	12345A	_
Age:			_
Sex:			_
Disability:			_
LTI:			_
Low Income:			_
Part D RAFT Code:	D1 (Field 87 or	n MMR data file)	_
Rx-HCCs from MOR:			_
Payment Year:			_
Risk Adjustment Model:			_
Part D Monthly Rate:	\$12	20.00	_
		Factors	
N	ormalization Factor	:	
	Status	Factors	
Age/Sex Factor:			
Disability Factor:			
	Coefficients	Factors	
Disease RX-HCCs:			
		,	
	Demographic Fact	tors + Diagnostic Co	efficients = raw risk score
Sum of Factors:	+	=	
	Raw risk score / N	ormalization Factor	= normalized risk score
Normalized Score:		=	Rounded =
	/		
	Risk Score X Mont	hly Part D Rate = Ris	sk Adjusted Payment
Risk Adjusted Payment:	Х	=	





Scenario 5 Answer

HIC:	999	912345A	_
Age:		80-84	_
Sex:	F	emale	-
Disability:		Y	-
LTI:	<	blank>	_
Low Income:	<	blank>	_
Part D RAFT Code:		D1	_
Rx-HCCs from MOR:	11, 2	23, 87, 89	-
Payment Year:		2013	-
Model Segment:	2013 RxHCC C	ontinuing Enrollees	-
Direct Subsidy Monthly Rate:	\$	120.00	_
			-
		Factors	
No	ormalization Facto	or: 1.034	
	Status	Factors	
Age/Sex Factor:	Status F 80_84	Factors 0.404	
Age/Sex Factor: Disability Factor:	Status F 80_84 Y	Factors 0.404 0.070	
Age/Sex Factor: Disability Factor: Sum of Demog	Status F 80_84 Y graphic Coefficien	Factors 0.404 0.070 ts: 0.474	
Age/Sex Factor: Disability Factor: Sum of Demog	Status F 80_84 Y graphic Coefficien	Factors 0.404 0.070 ts: 0.474	
Age/Sex Factor: Disability Factor: Sum of Demog	Status F 80_84 Y graphic Coefficien Coefficients	Factors 0.404 0.070 ts: 0.474 Factors	
Age/Sex Factor: Disability Factor: Sum of Demog Disease Rx-HCCs:	Status F 80_84 Y graphic Coefficien Coefficients 11	Factors 0.404 0.070 ts: 0.474 Factors 0.031	
Age/Sex Factor: Disability Factor: Sum of Demog Disease Rx-HCCs:	Status F 80_84 Y graphic Coefficien Coefficients 11 23	Factors 0.404 0.070 ts: 0.474 Factors 0.031 0.104	
Age/Sex Factor: Disability Factor: Sum of Demog Disease Rx-HCCs:	Status F 80_84 Y graphic Coefficien Coefficients 11 23 87	Factors 0.404 0.070 ts: 0.474 Factors 0.031 0.104 0.163	
Age/Sex Factor: Disability Factor: Sum of Demog Disease Rx-HCCs:	Status F 80_84 Y graphic Coefficien Coefficients 11 23 87 89	Factors 0.404 0.070 ts: 0.474 Factors 0.031 0.104 0.163 0.155	
Age/Sex Factor: Disability Factor: Sum of Demog Disease Rx-HCCs: Sum of D	Status F 80_84 Y graphic Coefficient Coefficients 11 23 87 89 Disease Coefficien	Factors 0.404 0.070 ts: 0.474 Factors 0.031 0.104 0.163 0.155 ts: 0.453	
Age/Sex Factor: Disability Factor: Sum of Demog Disease Rx-HCCs: Sum of D	Status F 80_84 Y graphic Coefficien Coefficients 11 23 87 89 Disease Coefficien	Factors 0.404 0.070 ts: 0.474 Factors 0.031 0.104 0.163 0.155 ts: 0.453	
Age/Sex Factor: Disability Factor: Sum of Demog Disease Rx-HCCs: Sum of D Sum of Factors:	Status F 80_84 Y graphic Coefficients 11 23 87 89 Disease Coefficient 0.927	Factors 0.404 0.070 ts: 0.474 Factors 0.031 0.104 0.163 0.155 ts: 0.453 0.474 + 0.453 = 0.927	
Age/Sex Factor: Disability Factor: Sum of Demog Disease Rx-HCCs: Sum of Factors: Normalized Score:	Status F 80_84 Y graphic Coefficients 11 23 87 89 Disease Coefficient 0.927 (0.897 (Factors 0.404 0.070 ts: 0.474 Factors 0.031 0.104 0.163 0.155 ts: 0.453 0.474 + 0.453 = 0.927 0.927 / 1.034 = 0.8965	• (rounded = 0.897)

