April 2, 2007

NOTE TO: All Medicare Advantage Organizations and Other Interested Parties

SUBJECT: Announcement of Calendar Year (CY) 2008 Medicare Advantage Capitation Rates and Payment Policies

In accordance with section 1853(b)(1) of the Social Security Act (the Act), we are notifying you of the annual Medicare Advantage (MA) capitation rate for each MA payment area for 2008, and the risk and other factors to be used in adjusting such rates. Attached is a spreadsheet containing the capitation rate tables for CY 2008. Also included is a spreadsheet which shows the statutory component of the regional benchmarks. The rates are posted on the Centers for Medicare & Medicaid Services (CMS) web site at http://www.cms.hhs.gov/MedicareAdvtgSpecRateStats/ under Ratebooks and Supporting Data.

Enclosure I shows the final estimates of the increase in the National Per Capita MA Growth Percentage for 2008. As discussed in Enclosure I, the final estimate of the increase in the National Per Capita MA Growth Percentage for combined aged and disabled beneficiaries is 5.71 percent. Since these estimates are all larger than 2 percent, these growth rates will be used as the minimum update percentage in calculating the 2008 rates. The CMS has decided not to rebase the county fee-for-service (FFS) rates for 2008. Therefore, all 2008 non-ESRD capitation rates increase a uniform amount over 2007 rates, reflecting application of the National Per Capita MA Growth Percentage and the change in budget neutrality (BN) factor discussed in Enclosure III.

Enclosure II provides a set of tables that summarizes many of the key Medicare assumptions used in the calculation of the National Per Capita MA Growth Percentage.

Section 1853(b)(4) of the Act requires CMS to release county-specific per capita FFS expenditure information on an annual basis, beginning with March 1, 2001. In accordance with this requirement, FFS data for CY 2005 is being posted on the above website at this time as well.

We received 34 comments from 16 organizations and individuals in response to CMS' request for comments on the Advance Notice of Methodological Changes for CY 2008 MA Capitation Rates (Advance Notice), published on February 16, 2007. Enclosure III presents our responses to the issues raised in the comments related to the Advance Notice. Enclosure IV contains the updated ESRD CMS-HCC risk adjustment factors effective CY 2008.

Questions can be directed to:
Sol Mussey at (410) 786-6386 for Enclosures I and II
Anne Hornsby (410) 786-1181 and Rebecca Paul at (410) 786-0852 for Enclosure III and IV.

/ s /
Abby L. Block
Director
Center for Beneficiary Choices

/ s /
Paul Spitalnic, A.S.A., M.A.A.A.
Director
Parts C & D Actuarial Group
Office of the Actuary

Enclosures

Enclosure I

Final Estimate of the Increase in the National Per Capita Growth Percentages for 2008

The first table below shows the National Per Capita MA Growth Percentages (NPCMAGP) used to determine the minimum update percentages for 2008. Adjustments of 1.24 percent, 2.08 percent, 7.08 percent and 1.33 percent for aged, disabled, ESRD, and combined aged and disabled, respectively, are included in the NPCMAGP to account for corrections to prior years estimates as required by section 1853(c)(6)(C). The combined aged and disabled increase is used in the development of the risk-adjusted ratebook.

The second table below shows the monthly actuarial value of the Medicare deductible and coinsurance for 2007 and 2008. In addition, for 2008, the actuarial value of deductibles and coinsurance is being shown for non-ESRD only, since the plan bids will not include ESRD benefits in 2008. These data were furnished by the Office of the Actuary.

Increase in the National Per Capita MA Growth Percentages for 2008

	Prior Increases	Current Increases			NPCMAGP for 2008 With Sec.1853(c)(6)(C) adjustment[1]
	2003 to 2007	2003 to 2007	2007 to 2008	2003 to 2008	
Aged	26.77%	28.34%	4.23%	33.78%	5.53%
Disabled	29.03%	31.71%	4.85%	38.10%	7.03%
ESRD[2]	20.93%	29.49%	-0.39%	28.99%	6.66%
Aged+Disabled	26.99%	28.68%	4.32%	34.24%	5.71%

[1]Current increases for 2003 to 2008 divided by the prior increases for 2003 to 2007.

[2]Starting in 2008, increases for ESRD will reflect an estimate of the increase for dialysis-only beneficiaries.

Monthly Actuarial Value of Medicare Deductible and Coinsurance for 2007 and 2008

	2007	2008	Change	2008 non-ESRD
Part A Benefits	$33.19	$36.71	10.6%	$35.26
Part B Benefits[3]	102.39	105.69	3.2%	98.99
Total Medicare	135.58	142.40	5.0%	134.25

[3]Includes the amounts for outpatient psychiatric charges.

Medical Savings Account (MSA) Plans. The maximum deductible for current law MSA plans for 2008 is $10,050.

Enclosure II

Key Assumptions and Financial Information

The USPCCs are the basis for the National Per Capita MA Growth Percentages. Attached is a table that compares the published United States Per Capita Costs (USPCC) with current estimates for 2000 to 2008. In addition, this table shows the current projections of the USPCCs through 2010. In prior years, information in these tables was presented back to 1997. Since the passage of the MMA, formula changes in the law do not require the use of the USPCCs back to 1997 for the purpose of calculating the 2008 rates (e.g., the area-specific rate is not tabulated for years after 2004 and no adjustments to prior years' estimates are allowed for years before 2004 for calculating the minimum update percentage).

We are also providing an attached set of tables that summarizes many of the key Medicare assumptions used in the calculation of the USPCCs. Most of the tables include information for the years 2000 through 2010. All of the information provided in this enclosure applies to the Medicare Part A and Part B programs. Caution should be employed in the use of this information. It is based upon nationwide averages, and local conditions can differ substantially from conditions nationwide.

None of the data presented here pertain to the Medicare prescription drug benefit.

Comparison of Current Estimates of the USPCC with Published Estimates

PART A:

Calendar Year	Aged			Disabled			Aged and Disabled		
	Current Estimate	Published Estimate	Ratio	Current Estimate	Published Estimate	Ratio	Current Estimate	Published Estimate	Ratio
2000	$263.29	$286.18	1.087	$218.77	$230.48	1.054	$257.31	$278.61	1.083
2001[1]	$283.70	$288.62	1.017	$234.57	$235.50	1.004	$276.93	$281.25	1.016
2001[2]	$283.70	$298.43	1.052	$234.57	$242.00	1.032	$276.93	$290.59	1.049
2002	$297.99	$294.46	0.988	$247.83	$242.06	0.977	$290.89	$287.10	0.987
2003	$302.46	$290.50	0.960	$251.43	$234.89	0.934	$294.96	$282.50	0.958
2004	$317.80	$326.78	1.028	$264.28	$271.69	1.028	$309.66	$318.43	1.028
2005	$340.27	$348.28	1.024	$285.26	$291.45	1.022	$331.68	$339.49	1.024
2006	$346.43	$351.38	1.014	$300.74	$295.15	0.981	$339.20	$342.67	1.010
2007	$367.71	$370.34	1.007	$325.23	$318.17	0.978	$360.95	$362.06	1.003
2008	$385.61	$385.61	1.000	$344.31	$344.31	1.000	$379.02	$379.02	1.000
2009	$403.96	--	--	$363.94	--	--	$397.52	--	--
2010	$422.56	--	--	$383.27	--	--	$416.18	--	--

PART B:

Calendar Year	Aged			Disabled			Aged and Disabled		
	Current Estimate	Published Estimate	Ratio	Current Estimate	Published Estimate	Ratio	Current Estimate	Published Estimate	Ratio
2000	$199.19	$218.78	1.098	$183.35	$195.91	1.069	$197.23	$216.03	1.095
2001[1]	$219.71	$217.57	0.990	$206.72	$191.99	0.929	$218.06	$214.32	0.983
2001[2]	$219.71	$223.83	1.019	$206.72	$198.69	0.961	$218.06	$220.63	1.012
2002	$233.02	$244.17	1.048	$226.12	$218.23	0.965	$232.12	$240.76	1.037
2003	$250.74	$232.24	0.926	$246.45	$211.58	0.859	$250.16	$229.47	0.917
2004	$276.69	$263.39	0.952	$274.68	$252.74	0.920	$276.41	$261.89	0.947
2005	$296.95	$281.90	0.949	$295.62	$272.79	0.923	$296.75	$280.58	0.946
2006	$322.89	$311.28	0.964	$309.39	$316.82	1.024	$320.89	$312.09	0.973
2007	$342.29	$334.02	0.976	$330.54	$343.76	1.040	$340.52	$335.47	0.985
2008	$354.44	$354.44	1.000	$343.26	$343.26	1.000	$352.75	$352.75	1.000
2009	$369.71	--	--	$358.65	--	--	$368.02	--	--
2010	$385.38	--	--	$375.33	--	--	$383.83	--	--

PART A & PART B:

Calendar Year	Aged			Disabled			Aged and Disabled		
	Current Estimate	Published Estimate	Ratio	Current Estimate	Published Estimate	Ratio	Current Estimate	Published Estimate	Ratio
2000	$462.48	$504.96	1.092	$402.12	$426.39	1.060	$454.54	$494.64	1.088
2001[1]	$503.41	$506.19	1.006	$441.29	$427.49	0.969	$494.99	$495.57	1.001
2001[2]	$503.41	$522.26	1.037	$441.29	$440.69	0.999	$494.99	$511.22	1.033
2002	$531.01	$538.63	1.014	$473.95	$460.29	0.971	$523.01	$527.86	1.009
2003	$553.20	$522.74	0.945	$497.88	$446.47	0.897	$545.12	$511.97	0.939
2004	$594.49	$590.17	0.993	$538.96	$524.43	0.973	$586.07	$580.32	0.990
2005	$637.22	$630.18	0.989	$580.88	$564.24	0.971	$628.43	$620.07	0.987
2006	$669.32	$662.66	0.990	$610.13	$611.97	1.003	$660.09	$654.76	0.992
2007	$710.00	$704.36	0.992	$655.77	$661.93	1.009	$701.47	$697.53	0.994
2008	$740.05	$740.05	1.000	$687.57	$687.57	1.000	$731.77	$731.77	1.000
2009	$773.67	--	--	$722.59	--	--	$765.54	--	--
2010	$807.94	--	--	$758.60	--	--	$800.01	--	--

[1]Applies to M+C ratebook for January to February, 2001
[2]Applies to M+C ratebook for March to December, 2001

Comparison of Current Estimates of the USPCC with Published Estimates- continued

PART A:

Calendar Year	ESRD Current Estimate	ESRD Published Estimate	Ratio
2000	$1,311.80	$1,443.13	1.100
2001[1]	$1,423.77	$1,541.76	1.083
2001[2]	$1,423.77	$1,597.34	1.122
2002	$1,450.00	$1,435.62	0.990
2003	$1,555.07	$1,596.58	1.027
2004	$1,662.06	$1,685.25	1.014
2005	$1,587.07	$1,759.90	1.109
2006	$1,619.29	$1,717.97	1.061
2007	$1,753.14	$1874.54	1.069
2008	$1,855.03	$1855.03	1.000
2009	$1,950.63	--	--
2010	$2,045.63	--	--

PART B:

Calendar Year	ESRD Current Estimate	ESRD Published Estimate	Ratio
2000	$1,678.28	$2,436.13	1.452
2001[1]	$1,885.07	$1,875.57	0.995
2001[2]	$1,885.07	$1,921.53	1.019
2002	$2,000.07	$2,014.79	1.007
2003	$2,032.89	$1,847.53	0.909
2004	$2,182.58	$2,552.18	1.169
2005	$2,494.71	$2,739.99	1.098
2006	$2,730.52	$2,454.98	0.899
2007	$2,892.85	$2,470.81	0.854
2008	$2,773.04	$2,773.04	1.000
2009	$2,921.90	--	--
2010	$3,069.59	--	--

PART A & PART B:

Calendar Year	ESRD Current Estimate	ESRD Published Estimate	Ratio
2000	$2,990.08	$3,879.26	1.297
2001[1]	$3,308.84	$3,417.33	1.033
2001[2]	$3,308.84	$3,518.87	1.063
2002	$3,450.07	$3,450.41	1.000
2003	$3,587.96	$3,444.11	0.960
2004	$3,844.64	$4,237.43	1.102
2005	$4,081.78	$4,499.89	1.102
2006	$4,349.81	$4,172.95	0.959
2007	$4,645.99	$4,345.35	0.935
2008	$4,628.07	$4,628.07	1.000
2009	$4,872.53	--	--
2010	$5,115.22	--	--

[1]Applies to M+C ratebook for January to February, 2001
[2]Applies to M+C ratebook for March to December, 2001

Summary of Key Projections Under Present Law[1]

Part A

Year	Calendar Year CPI Percent Increase	Fiscal Year PPS Update Factor	FY Part A Total Reimbursement (Incurred)
2000	3.5	1.1	–0.8
2001	2.7	3.4	7.9
2002	1.4	2.8	8.1
2003	2.2	3.0	2.9
2004	2.6	3.4	7.9
2005	3.5	3.3	8.9
2006	3.4	3.7	5.1
2007	1.9	3.4	7.4
2008	2.4	3.8	7.7
2009	2.7	4.0	7.3
2010	2.8	3.9	7.0

Part B[2]

Calendar Year	Physician Fee Schedule		Part B Hospital	Total
	Fees	Residual[3]		
2000	5.5	3.6	–0.8	10.4
2001	4.8	4.1	12.5	9.7
2002	–4.8	6.1	–1.4	6.1
2003	1.7	4.5	5.3	6.9
2004	1.5	6.0	11.0	9.8
2005	1.5	3.5	10.7	7.5
2006	0.2	5.1	13.5	7.9
2007	0.0	5.4	9.9	5.4
2008	–9.9	7.1	10.0	3.0
2009	–5.0	6.5	9.7	3.8
2010	–5.4	3.7	9.1	3.8

[1]Percent change over prior year.
[2]Percent change in charges per Aged Part B enrollee.
[3]Residual factors are factors other than price, including volume of services, intensity of services, and age/sex changes.

Medicare Enrollment Projections Under Present Law (In Millions)

Non-ESRD

Calendar Year	Part A		Part B	
	Aged	Disabled	Aged	Disabled
2000	33.700	5.223	32.421	4.590
2001	33.904	5.417	32.582	4.747
2002	34.080	5.619	32.713	4.915
2003	34.427	5.929	33.027	5.187
2004	34.837	6.249	33.282	5.459
2005	35.241	6.524	33.584	5.719
2006	35.715	6.707	33.948	5.914
2007	36.436	6.893	34.241	6.066
2008	37.169	7.055	34.832	6.217
2009	37.911	7.276	35.448	6.405
2010	38.607	7.494	36.013	6.590

ESRD Part A

Calendar Year	Part A			
	Aged	Disabled	299I[1]	Total
2000	0.136	0.108	0.089	0.333
2001	0.144	0.114	0.092	0.349
2002	0.151	0.119	0.095	0.366
2003	0.160	0.124	0.098	0.383
2004	0.167	0.130	0.102	0.399
2005	0.175	0.134	0.106	0.416
2006	0.183	0.138	0.109	0.430
2007	0.190	0.141	0.112	0.443
2008	0.197	0.144	0.114	0.456
2009	0.204	0.148	0.116	0.468
2010	0.209	0.152	0.118	0.479

ESRD Part B

Calendar Year	Part B			
	Aged	Disabled	299I	Total
2000	0.138	0.104	0.082	0.324
2001	0.145	0.109	0.085	0.338
2002	0.153	0.113	0.088	0.354
2003	0.161	0.118	0.090	0.369
2004	0.168	0.123	0.091	0.381
2005	0.176	0.127	0.093	0.396
2006	0.183	0.130	0.095	0.408
2007	0.190	0.133	0.097	0.420
2008	0.197	0.135	0.098	0.431
2009	0.203	0.139	0.099	0.442
2010	0.209	0.143	0.101	0.452

[1] Individuals who qualify for Medicare based on ESRD only.

Part A Projections Under Present Law [1]

Calendar Year	Inpatient Hospital		SNF		Home Health		Managed Care		Hospice: Total Reimbursement (in Millions)	
	Aged	Disabled	Aged	Disabled	Aged	Disabled	Aged	Disabled	Aged	Disabled
2000	2,218.26	2,385.85	310.23	104.90	99.05	70.38	593.36	269.74	2,772	146
2001	2,406.91	2,595.68	376.02	129.04	121.53	64.75	571.77	255.43	3,575	188
2002	2,586.77	2,777.00	412.54	145.12	130.82	69.84	523.26	216.79	4,410	232
2003	2,639.34	2,830.01	421.23	150.31	132.98	72.04	522.57	217.07	5,429	286
2004	2,723.57	2,949.25	474.43	174.72	143.43	78.01	569.12	236.94	6,501	342
2005	2,827.79	3,102.93	518.86	196.28	151.84	83.07	675.66	302.44	7,532	396
2006	2,753.70	3,101.38	520.61	202.05	154.50	86.83	825.25	482.05	8,473	446
2007	2,873.93	3,311.31	541.40	215.47	160.25	92.35	944.37	566.88	9,169	483
2008	2,961.13	3,463.58	567.47	230.68	169.02	99.33	1,044.68	633.78	9,853	519
2009	3,034.11	3,606.42	585.36	243.32	175.71	105.43	1,174.83	721.01	10,600	558
2010	3,124.53	3,756.36	600.08	253.84	181.61	110.71	1,294.14	800.84	11,394	600

[1]Average reimbursement per enrollee on an incurred basis, except where noted.

Part B Projections Under Present Law[1]

Calendar Year	Physician Fee Schedule		Part B Hospital		Durable Medical Equipment	
	Aged	Disabled Non-ESRD	Aged	Disabled Non-ESRD	Aged	Disabled Non-ESRD
2000	1,003.19	951.69	238.98	290.69	118.54	184.47
2001	1,131.49	1,064.17	326.94	400.14	137.14	215.29
2002	1,177.47	1,109.73	333.67	423.49	158.40	261.50
2003	1,263.24	1,191.06	378.12	470.59	182.16	302.43
2004	1,393.90	1,312.21	433.20	545.30	180.69	300.46
2005	1,454.70	1,371.79	487.49	618.30	179.68	301.83
2006	1,464.55	1,369.29	547.41	675.06	186.89	320.05
2007	1,469.46	1,385.02	588.91	739.00	188.72	331.44
2008	1,419.75	1,349.25	644.63	815.64	193.52	343.85
2009	1,372.97	1,320.87	698.61	894.65	185.11	334.03
2010	1,320.86	1,282.47	756.00	976.89	189.75	346.37

Calendar Year	Carrier Lab		Other Carrier		Intermediary Lab	
	Aged	Disabled Non-ESRD	Aged	Disabled Non-ESRD	Aged	Disabled Non-ESRD
2000	58.89	58.02	201.38	195.17	46.25	59.31
2001	64.86	63.70	239.97	231.14	47.73	64.78
2002	70.96	71.15	286.95	281.69	55.38	74.69
2003	76.42	75.62	337.20	350.32	60.27	79.99
2004	82.38	82.39	362.49	398.36	65.27	88.16
2005	87.01	87.62	372.15	431.45	69.70	96.46
2006	89.30	90.80	375.20	404.39	75.22	103.46
2007	91.96	95.30	407.45	448.48	77.85	109.03
2008	95.52	99.70	449.82	493.62	79.28	111.96
2009	100.21	105.74	491.69	540.61	83.18	118.88
2010	105.36	112.12	536.44	589.57	87.48	126.17

Calendar Year	Other Intermediary		Home Health		Managed Care	
	Aged	Disabled Non-ESRD	Aged	Disabled Non-ESRD	Aged	Disabled Non-ESRD
2000	117.91	108.13	129.45	99.19	531.83	221.42
2001	138.59	114.61	125.20	104.59	498.03	189.91
2002	173.74	143.90	131.98	110.78	494.67	205.08
2003	179.79	137.99	139.32	117.10	481.20	199.56
2004	205.79	167.35	159.59	133.74	537.12	233.85
2005	237.06	187.72	183.43	155.76	626.96	262.95
2006	246.89	206.72	187.05	161.83	865.42	354.84
2007	268.58	232.80	196.33	172.46	996.79	424.87
2008	256.99	223.48	207.64	185.23	1,086.52	467.30
2009	266.49	234.09	216.34	196.82	1,215.77	527.71
2010	276.85	245.65	224.17	206.88	1,334.28	586.00

[1]Average reimbursement per enrollee on an incurred basis.

Claims Processing Costs as a Fraction of Benefits

Calendar Year	Part A	Part B
2000	0.002195	0.014790
2001	0.001862	0.013223
2002	0.001496	0.011708
2003	0.001849	0.011194
2004	0.001676	0.010542
2005	0.001515	0.009540
2006	0.001245	0.007126
2007	0.001245	0.007126
2008	0.001245	0.007126
2009	0.001245	0.007126
2010	0.001245	0.007126

Approximate Calculation of the USPCC and the National MA Growth Percentage for Aged Beneficiaries

The following procedure will approximate the actual calculation of the USPCCs from the underlying assumptions for the contract year for both Part A and Part B.

Part A:
The Part A USPCC for aged beneficiaries can be approximated by using the assumptions in the tables titled "Part A Projections Under Present Law" and "Claims Processing Costs as a Fraction of Benefits." Information in the "Part A Projections" table is presented on a calendar year per capita basis. First, add the per capita amounts for the aged over all types of providers (excluding hospice). Next, multiply this amount by 1 plus the loading factor for administrative expenses from the "Claims Processing Costs" table. Then, divide by 12 to put this amount on a monthly basis. The last step is to multiply by 0.97454 to get the USPCC for the aged non-ESRD. This final factor of 0.97454 is the relationship between the total and non-ESRD per capita reimbursements in 2008. This factor does not necessarily hold in any other year.

Part B:
The Part B USPCC can be approximated by using the assumptions in the tables titled "Part B Projections Under Present Law" and "Claims Processing Costs as a Fraction of Benefits." Information in the "Part B Projections" table is presented on a calendar year per capita basis. First, add the per capita amounts for the aged over all types of providers. Next, multiply by 1 plus the loading factor for administrative expenses and divide by 12 to put this amount on a monthly basis. Then multiply by 0.95253 to get the USPCC for the aged non-ESRD.

The National Per Capita MA Growth Percentage:
The National Per Capita MA Growth Percentage for 2008 (before adjustment for prior years' over/under estimates) is calculated by adding the USPCCs for Part A and Part B for 2008 and then dividing by the sum of the current estimates of the USPCCs for Part A and Part B for 2007.

Enclosure III. CMS' Responses to Public Comments

Summary of Enclosure III
CMS received 34 comments from 16 organizations and individuals on the February 16, 2007 Advance Notice of Methodological Changes for CY 2007 MA Capitation Rates. Our responses to comments are organized as follows:

Section A. Estimate of the National Per Capita MA Growth Percentage for Calendar Year 2008
Section B. Impact of the Budget Neutrality (BN) Factor on MA Rates
Section C: MA Coding Intensity Adjustment
Section D: Updates to the Risk Adjustment Methodology, including the FFS Normalization Factor
Section E: Operational Policy Issues

Key Changes from the Advance Notice
Enclosure I provides the final estimate of the National MA growth trend, and the maximum deductible for MSA plans for 2008, which also is the 2008 out-of-pocket maximum for MSA demonstrations plans.

Enclosure III, Section C announces the policy decision on the MA coding intensity adjustment for 2008.

Enclosure III, Section D announces a change for PACE organizations from a 4-year to a 5-year transition to the revised frailty factors.

Enclosure III, Section E announces that we will delay until 2009 the transition to a valid ICD-9 code set. This section also provides clarification on Medicaid status reporting.

As in past years, policies proposed in the Advance Notice that are not modified or retracted in the Rate Announcement become effective in the upcoming payment year, as set forth in the Advance Notice. Clarifications in the Announcement supersede materials in the Advance Notice.

Section A. Estimate of the National Per Capita MA Growth Percentage for Calendar Year 2008

As mentioned in Enclosure I, the final estimate of the 2008 MA growth trend for combined aged and disabled beneficiaries is 5.71 percent, which is higher than the preliminary estimate of 4.1 percent announced February 16, 2007 in the Advance Notice. The President's Budget baseline was used for the preliminary estimate, and a more recent baseline was used for the final estimate.

The manner in which the Tax Relief and Health Care Act (TRHCA) of 2006 structured the physician fee schedule increase affected the revised 2007 trend and the 2008 trend. About 1 percent of the 2.6 percent increase in the 2007 trend is due to the physician fee schedule update, because the previously expected -5 percent adjustment for 2007 was eliminated. However, this 1 percent increase is offset by a reduction in the 2008 trend change. That is, under the TRHCA the 2007 increase has no effect on the 2008 physician fee schedule, which is different than how physician fee schedule increases have been structured in prior legislation. For 2008, the current law baseline reflects a -10 percent update for physician fees. The net impact of this -10 percent update on the overall USPCC is about a 2 percent decrease in the trend.

Comment: Three commenters asked why the preliminary estimate of the 2008 national MA growth percentage is so low. The commenters felt that the underlying trend change from 2007 to 2008 understates expected increases in health care costs. One of these commenters claimed that there is a pattern of CMS' understating trends, noting specifically that the trend change for 2008 is significantly lower than the four prior years and that trend changes for the past four years have been underestimated, requiring subsequent adjustments to prior years' estimates. The other two commenters also expressed concern about the downward adjustment to prior years' estimates for 2004, 2005, and 2006, and asked for explanation of these adjustments. All three commenters requested that CMS provide a detailed explanation of the 2008 national MA growth percentage.

Response: The 2008 trend may seem low because of the impact of the physician fee schedule increase on the MA national growth trend, explained above. We do not believe there is a pattern in underestimating trends and below we describe CMS' process for generating trend estimates.

OACT is required annually to model Medicare expenditure growth based on current law and assumptions from the President's budget. Assumptions from these sources are combined with modeling assumptions OACT has developed (e.g., population demographic trends, medical cost trends, etc.) to produce Medicare growth estimates. The assumptions used in the Medicare models are discussed in detail in the annual Trustees Reports, found on the CMS website at http://www.cms.hhs.gov/ReportsTrustFunds/01_Overview.asp.

To develop the MA growth trend for 2008, OACT first had to conduct the annual historical reconstruction of Medicare expenditures done in the fall of each year. Given time lags in claims processing (from providers to claims processors to CMS systems), OACT must project the preliminary and final estimates of the 2008 national MA growth trend without any claims data for 2007, less than 50 percent of the claims data for 2006, and about 97 percent of claims data for 2005. (Similarly, last year's historical reconstruction for the 2007 MA growth trend was based on data reported through June 2005. Hence, OACT had no data for 2006 and 2007, less than 50 percent of the data for 2005, and about 97 percent of the data for 2004.) A change of half a percent for estimates in years 2004 to 2006 is quite reasonable in light of the fact that estimates for the most recent years typically have very little reported claims data. Finally, OACT must project the 2008 trend in early 2007, in time for the Advance Notice and Rate Announcement, and any delay in conducting the historical reconstruction would make it impossible to meet the statutory deadline of the first Monday in April for release of the MA capitation rates.

The final estimates (which include adjustments to prior years' estimates) of the MA national growth percentage have been reasonably accurate. For example:

- The final estimate for 2004 was 6.1 percent compared to the revised 2004 estimate in this Announcement of 7.5 percent. (The final estimate originally published for 2004 was the first estimate of the impact of the MMA legislation on the Medicare growth trend.)
- The final estimate for 2005 was 6.6 percent compared to the revised 2005 estimate in this Announcement of 7.2 percent;
- The final estimate for 2006 was 4.8 percent compared to the revised 2006 estimate in this Announcement of 5.0 percent; and
- The final estimate for 2007 was 7.1 percent compared to the revised 2007 estimate of 6.3 percent in this Announcement.

Impact of physician fee schedule updates. For 2004 and 2005, the final estimates included the actual updates for physicians for those years. However, for 2006 and 2007, the legislated physician updates occurred after the MA rates were announced. Therefore, the final estimate for 2006 would have been about 1 percent higher if the physician update had been legislated before the 2006 rate announcement. For 2007, the impact of the physician update on the final estimates as originally published reflected a "canceling out" effect, because the 2006 physician update fix was incorporated in the 2007 update as an adjustment for prior years growth rate, and the physician update fix for 2007 was not yet law at the time the 2007 rates were released. Finally, as discussed above, the structure of the update in the TRHCA affected the final estimate of the 2008 growth trend differently than in prior years.

Adjustments to prior years' estimates. As the law provides, CMS must adjust the national MA growth rates for prior years' over- and under-estimates of the national MA growth trend. This is accomplished by comparing the latest baseline projection of Medicare per capita expenses (data in Enclosure II) to prior baseline projections. Baseline projections are prepared each year by OACT for use in the President's budget and the Trustees Report. Projections are prepared by type of service and type of Medicare beneficiary, and are aggregated over all services to get the appropriate per capita amount increases. OACT's projection methodology is basically the same as has been used for years. A description of the projection methodology can be found in an appendix of the annual Trustees' Report.

Enclosure II of this announcement includes tables with underlying assumptions for the USPCC growth rates. Comparing these tables with tables in prior announcements can give interested parties a sense of which factors have changed in recent years and therefore contribute to the revisions of prior year estimates.

In terms of future year growth trend estimates, each year in the Rate Announcement, the estimated USPCCs for out-years are published in the first table in Enclosure II. This year estimates through 2010 are shown. Future estimates of growth trends can be tabulated by dividing one year's USPCC by the USPCC for the prior year.

Comment: One commenter argued that Section 1853(c)(1)(C) of the Social Security Act ("minimum percentage increase") represents Congressional intent that, after all calculations are

made, MA payments should be raised a minimum of 2 percent in every county. The commenter believed that Congress designed the determination of MA payment rates with this guaranteed minimum 2 percent increase as a protection against the reality of health care inflation and so that Medicare beneficiaries receive protection from significant changes in their benefits year-over-year.

Response: Section 5301 of the DRA defines how CMS must calculate the MA capitation rates, beginning with CY 2007. (Keep in mind that the statutory provisions address rates, not payment amounts.) The DRA directs that the minimum percentage increase be applied to the capitation rates before the application of the BN factor. That is, the first step in calculating the county rates for the upcoming year is to back-out the BN factor for the previous year before applying the minimum percentage increase and then applying the estimate of the BN factor for the upcoming year. In addition, the DRA also provides the Secretary with authority to make adjustments to the capitation rates to accommodate new or updated risk adjustment methodologies. As a result, the statutory formula for computing capitation rates does not guarantee that the county capitation rates will be at least 2 percent greater than the capitation rates (including the BN factor) from the prior year.

Comment: Two commenters stated that CMS should annually rebase the FFS rates to better align funding increases with medical cost trends occurring in the counties, thus encouraging stability in the program.

Response: CMS is not rebasing FFS rates for 2008. Given that we rebased FFS rates for 2007 and that only those counties with above-average growth trends in FFS expenditures in the year(s) since CMS last rebased would be assigned the FFS rate, it is likely that only one year later there would be very few counties with above-average FFS growth trends (and above the minimum payment amounts, i.e., the implicit floors) large enough to put their FFS rate over their minimum percentage increase rate.

Comment: Two commenters state their concern that CMS has not made adjustments to estimates of Medicare per capita costs to reflect costs that would have been incurred if beneficiaries did not receive services from VA/DoD facilities, as provided for in section 1853(C)(1)(D)(iii). The commenters contend that failing to make such an adjustment has resulted in CMS underestimating FFS costs for five years (2004-2008). One commenter feels that CMS should have had the ability to make such an adjustment.

Response: Incorporating costs associated with Medicare-covered services provided to beneficiaries in VA and DoD facilities into the payment methodology is a multi-year project that will involve developing methods for matching coverage determinations, pricing of services, etc. Because we are not rebasing the FFS rates for 2008, this adjustment does not apply. We anticipate that this multi-year project will be completed by next year, which would allow us to have a better estimate of this adjustment for 2009.

Comment: One commenter recommended that CMS include an adjustment in the growth rate to account for new therapies that are covered through local coverage decisions similar to what CMS does for National Coverage Determinations (NCDs). For example, the commenter estimates that

the cost impact of new "wet" macular degeneration treatments covered under local coverage decisions is extremely significant and is not captured in the historical data used to develop the MA rate book. In a benefit year where such developments in technology are unusually numerous or costly, and are not offset by corresponding reductions in the cost of old technologies, the fact that there is at least a year lag in incorporating those costs into the rates and risk adjustors can have a serious detrimental impact on the rates for the lag year.

Response: Assumptions about new technologies are implicitly included in the National Per Capita Growth Trend. To the extent that new technologies have been ongoing for a number of years, the growth trends reflect a level of growth consistent with historical trends.

New technologies that apply on a local level are also implicit in the local average geographic adjustments which are determined in years that CMS rebases fee-for-service rates. It is virtually impossible to explicitly estimate the impacts of local coverage determinations (LCDs). The level of LCDs reflected in the historical years is the best approximation of the impact on local fee-for-service costs for the future.

Section B. Impact of the Budget Neutrality (BN) Factor on MA Rates

The final estimate of the National Per Capita MA Growth Percentage is not the only factor that determines the final capitation rates for a year. For 2008, because we are not rebasing the FFS rates or updating the aged/disabled risk adjustment model, the only other factor that affects the 2008 capitation rates is the budget neutral risk adjustment (BN) factor.

The DRA specifies the components that CMS must include in the estimate of budget neutral (BN) risk adjustment factor, and codifies the phase-out of the BN factor. As in prior years, the BN factor was estimated as the difference between aggregate payments to plans using 100 percent demographic payments and aggregate payments to plans using 100 percent risk adjustment payments, expressed as a percent of risk adjusted payments. For purposes of the calculation, CMS assumes that risk payments to plans will be at the local benchmarks, adjusted for each plan's risk score. CMS calculates a single BN factor for all MA plan enrollees.

The BN factor estimate for 2008 is 1.69 percent. This factor was calculated based on a full BN factor of 4.22 percent, multiplied by the BN phase-out percentage of 40 percent. As 2008 is the second year of the phase-out required by the DRA of 2005, 40 percent of the full BN factor is applied to the rates, as the same percentage for all counties.

Comment: One commenter recommended that when estimating the 2008 BN factor, CMS should use current enrollment data.

Response: The BN factor is an estimate of the difference in aggregate payments between the demographic-only model and the risk model, expressed as a percentage of the aggregate payments made in the risk model.

To estimate aggregate payments under both the demographic and risk models, we used demographic factors and risk scores for the July 2006 cohort, adjusted for more recent

enrollment patterns. We applied the demographic and risk scores and enrollment to pre-BN 2008 rates.

Comment: One commenter requested that CMS use data from the same time period to develop both the demographic and the risk rates.

Response: The demographic and risk rates used for tabulating the 2008 BN factor are all minimum percentage increase rates. Specifically, the 2007 demographic rates and the 2007 pre-BN risk rates were increased by the 2008 national MA growth percentage for aged and disabled beneficiaries in order to estimate 2008 MA program payments.

If the commenter is referring to the rebased 2007 FFS rates, we did use the same years of data for both demographic and risk FFS rates: each county's share of the national average per capita costs (based on 2001-2005 claims data) was applied to the projected 2007 $USPCC_{FFS}$ to get the county FFS rate.

Section C. MA Coding Intensity Adjustment

As required by the Deficit Reduction Act (DRA), we have analyzed whether there are coding pattern differences between Medicare Advantage and fee-for-service. As discussed in the Advance Notice, we conducted two studies to assess the extent of coding differences.

Persistence Analysis. The first study looked at how well Medicare Advantage and fee-for-service consistently identify beneficiaries with ongoing, chronic conditions from year to year. Because some beneficiaries have conditions that we know persist from year to year, e.g., diabetes, we would expect a beneficiary who has been identified as diabetic in one year to also be identified as diabetic in the following year. The intent of this analysis is to assess the extent to which any coding differences between MA and FFS can be attributed to a higher rate of year-to-year "persistence" in diagnosis coding in MA. In our analysis, we looked at beneficiaries enrolled in an MA plan over a two-year period (either 2004-2005 or 2005-2006) to see if diagnosis codes from the first year were reported in the following year. Our results indicated that by 2006 there were no notable differences in persistence coding between MA plans and FFS providers.

Disease Progression Analysis. For this second study, we looked separately at risk score trends for various groups of enrollees in MA and FFS: specifically, we looked at the risk scores of those who joined FFS or enrolled in MA plans ("joiners"), those who disenrolled from FFS (either due to death or because they enrolled in an MA plan) or from an MA plan (either due to death or because they returned to FFS) ("leavers"), and those who stayed in an MA plan from one year to the next or who stay in FFS ("stayers").

Findings Regarding Risk Score Trends. We found that, over the period from 2004–2006, MA risk scores increased faster than FFS risk scores. FFS risk scores increased approximately 2 percent per year, while MA risk scores increased approximately 4.5 percent per year. We found two dynamics that explained this differential growth in risk scores. The first dynamic was enrollment patterns.

- Joiners: The risk scores of those who enroll in MA plans are, on average, higher than the risk scores of those who enroll in FFS – new enrollees in FFS are largely newly-eligible beneficiaries who have just turned 65 years old; among new enrollees into MA plans, more than twice as many have switched from FFS than are newly-eligible for the program; and

- Leavers: Those who disenroll from MA plans -- either decedents or those who are switching to FFS – have an average risk score that is lower than the average risk scores of disenrollees from FFS, who are largely decedents.

With FFS losing higher risk beneficiaries than MA, and with MA enrolling higher risk beneficiaries than FFS, MA risk scores were pushed up at a faster rate than risk scores in FFS.

The second dynamic is related to those who stayed enrolled in an MA plan or in FFS from one year to the next ("stayers"). We looked specifically at the disease (HCC) portion of stayers' risk scores so that we could isolate the effect of coding and exclude the effect of demographic changes, such as aging, on risk scores. The disease portion of the MA stayers' risk scores increased more than the disease portion of those stayed in FFS.

We found that part of the difference in the increase between MA and FFS risk scores is due to the effect of different enrollment patterns in MA versus FFS and changes in the demographic characteristics of enrollees (such as aging into brackets with higher relative factors or obtaining Medicaid eligibility). We would not want to adjust payment for such factors since they are unrelated to coding patterns.

We also found that part of the differential increase in risk scores is due to the increase in the disease component of MA stayers' risk scores. However, we have not been able to measure the possible causes of this differential. For example, it is unclear how much of the increase in risk scores is due to changes in coding patterns versus changes in health status. In addition, to the extent that the increase is due to coding, it is unclear how much is due to catch-up (MA plans increasing their coding to "catch up" to the level of FFS) versus coding patterns that exceed FFS. This overall industry pattern can be seen to varying degrees on a plan-by-plan basis – some MA plans have experienced significantly high changes in the disease portion of the risk scores of the enrollees who stay enrolled in their plan while some have experienced very little.

Given that we cannot yet definitively attribute the difference in MA and FFS risk scores to underlying coding patterns differences, we will not make a coding intensity adjustment to MA payment for 2008. We will continue to study this issue, with particular focus on the plans that have experienced significant increases in risk scores, in an effort to determine what the appropriate adjustment might be for 2009 and 2010.

Comment: Several commenters thought it would be inappropriate to make adjustments related to activities that serve to improve beneficiaries' health and quality of life, and to coding patterns that are derived from the historical period 2004-2006, since coding patterns could have since changed. Commenters also suggested various factors that could explain differences in MA and

FFS coding patterns: selection bias, differences in local coding practices across particular markets, differences in the urban/rural mix of MA enrollment to beneficiaries in the fee-for-service program, emphasis placed by MA plans on preventive care and early diagnosis, techniques such as discharge planning, health risk assessments and medical management that contribute to improved care coordination, under-reporting of claims at start-up and subsequent improved coding practices. One commenter recommended that CMS release detailed methodology and data to support all coding pattern adjustments to MA rates and payments and provide MA plans with an opportunity to review and comment.

Response: We appreciate the input of the commenters. We look forward to future discussion regarding our ongoing analysis of differences in coding patterns between MA and FFS.

Section D. Updates to the Risk Adjustment Methodology, including the FFS Normalization Factor

FFS Normalization Factor for 2008.

The fee-for-service normalization factor for 2008 is 1.04. Because average predicted FFS expenditures increase after the model calibration year, CMS applies a FFS normalization factor to adjust beneficiaries' risk scores so that the average risk score is 1.0 in any particular year. The CMS-HCC model to be used in 2008 must be normalized to a 1.0 risk score for 2005 (calibration year).

Comment: One commenter recommended that CMS reduce the FFS normalization factor to the 2007 level and continue to reduce this factor as the BN factor is phased-out. The commenter recognized that the Deficit Reduction Act of 2005 legislated inclusion of the FFS normalization adjustment, but noted that continuing high negative adjustments will negatively impact MA payments as budget neutral risk-adjustment is phased out.

Response: We are required by law to phase-out the BN factor. We also are required by law to apply a FFS normalization factor, and we have no authority to phase-out the FFS normalization factor. We do not believe there is a methodological rationale for phasing-out the FFS normalization factor because average FFS risk scores increase each year and we need to adjust risk scores back to an average 1.0 in the years following a model calibration year.

Frailty Adjustment: No Program-Wide Application of Frailty Adjustment

Comment: Several commenters expressed support for CMS' decision not to adopt the frailty adjustment program-wide at this time, with one noting the methodological problems associated with use of survey data for calculating payments for the entire program. The commenters encouraged CMS to continue conducting research and evaluation that could lead to refinement of the risk adjustment methodology for high-cost beneficiaries. Several commenters encouraged CMS to move forward with determining an appropriate industry-wide frailty adjuster. One commenter noted that implementing a frailty adjuster is significant to ensure that MA plans are

not penalized for enrolling a frailer, sicker population. Two commenters requested information on the impacts of data sources and calibration methodology on the updated frailty factors and requested a timetable for incorporating frailty into CMS-HCC Model.

Response: As noted in the Advance Notice, CMS is conducting research to refine the CMS-HCC model to better capture the costs of high-cost enrollees. As required by law, CMS would use any revision of the CMS-HCC model to pay all MA plans, including SNPs. CMS is committed to refining the CMS-HCC model to appropriately reflect the cost for all beneficiaries enrolled in MA plans, including high-cost beneficiaries, but cannot specify a date at this time.

Update to Frailty Factors for PACE and Certain Demonstrations

Comment: Several commenters wanted clarification of the decision to continue applying the frailty adjuster to the PACE program and not to SNPs that serve similar populations.

Response: CMS is continuing to pay PACE the frailty adjuster under section 1894(d)(2) of the Act, a provision that applies only to the PACE program and requires CMS to make payments taking into account frailty of their enrollees into account.

Under the rules that apply to SNPs absent the exercise of demonstration waiver authority, CMS is required to pay for SNP enrollees, and risk adjust payments for such enrollees, using the same statutory rules applicable to all coordinated care plans, per Section 1853(a)(3)(d) of the Act. The SNPs receiving frailty adjustments have been receiving these adjustments under demonstration waiver authority. As indicated in the Advance Notice, these SNPS are transitioning to regular MA-SNP status, and as of January 1, 2008, all demonstration waivers other than those required to provide for a phase-out of the frailty adjustment will end. As mentioned in the Advance Notice and the preceding response, CMS is working to refine the CMS-HCC model to better predict the cost of high-cost enrollees, which will allow CMS to apply any change in methodology program-wide on a budget neutral basis.

Comment: One commenter requested that CMS delay application of the updated frailty factors to PACE plans until at least 2009. Another commenter requested that PACE plans be given a one-year delay in the transition schedule or a five-year, rather than a four-year, transition period in order to have time to learn more about the revised frailty factors, to see the results of the BBA-mandated evaluation of the PACE program, and to provide more time for current and new PACE plans to adjust to their frailty scores based on the recalibrated model.

Response: In the Advance Notice, CMS announced that we have updated and refined the frailty adjustment factors currently applied to PACE plan payments. We also proposed to transition PACE plan payments to 100 percent of the revised frailty factors over a four-year period.

In response to concerns about the transition to the revised frailty factors, CMS will change the transition period for PACE plans to a five-year transition from a four-year transition. This extended transition will give PACE organizations additional time to be fully informed of the assumptions underlying the new model. While we understand PACE organizations' concerns

about the application of the revised factors, CMS must balance these concerns with the need to implement frailty factors that accurately reflect the differential in expected Medicare expenditures for PACE enrollees.

The extended transition schedule will mean that, for the remainder of 2007, PACE payments will be based 100 percent on the current factors, and for 2008 and beyond the transition schedule will be as follows:

- In 2008 (year 1): 90% of the current frailty factors and 10% of the revised frailty factors.
- In 2009 (year 2): 70% of the current frailty factors and 30% of the revised frailty factors.
- In 2010 (year 3): 50% of the current frailty factors and 50% of the revised frailty factors.
- In 2011 (year 4): 25% of the current frailty factors and 75% of the revised frailty factors.
- In 2012 (year 5): 100% of the revised frailty factors.

Comment: One commenter requested clarification regarding how the revised frailty factors will be used to calculate the organization-level frailty adjuster(s) for each PACE organization. Because there are now distinct frailty factors for non-Medicaid and Medicaid enrollees, the commenter asked whether CMS will calculate two organizational-level adjusters and if CMS will calculate a single frailty factor, how will it be weighted and using what data?

Response: The frailty adjuster, or contract-level frailty score, will continue to be annually calculated, based on results from the HOS-M survey, by weighting the frailty factor for each ADL level by the proportion of the contract's enrollees with that ADL level. Instead of four factors, the new model has eight factors: one factor for 5-6 ADLs and Medicaid eligible, one for 5-6 ADLs and not Medicaid eligible, etc. The weighted factors will be summed to get the contract-level frailty score.

Table III-1. Revised Frailty Factors*

ADL	Current Factor	Revised Model Factors	
		Non-Medicaid	Medicaid
0	–0.141	–0.089	–0.183
1-2	+0.171	+0.110	+0.024
3-4	+0.344	+0.200	+0.132
5-6	+1.088	+0.377	+0.188

*Same as the factors published in the Advance Notice.

Comment: One commenter noted that there are a variety of operational issues that will need to be addressed as the frailty adjustment phase-out is implemented and urged CMS to work closely with affected MA organizations in the development of guidance on these issues to ensure that practical considerations can be addressed.

Response: To resolve operational issues, we will be working closely with the MA organizations as they transition to full SNP status and the PACE organizations as they transition to the new frailty factors. In general, we foresee a continuation of our current operations. For example, we will continue to calculate the contract-level frailty score annually based on results from the HOS-

M survey. Contract-level frailty scores will be calculated using the appropriate factors and blended according to the schedule published in the February 16, 2007 Advance Notice for 2008 for the demonstrations transitioning to SNP status, and according to the schedule above for PACE organizations. For SHMO plans and the dual eligible demonstrations, this means that the published 2007 frailty factors will be used in calculating their contract-level frailty scores for any given year, and each contract score will be adjusted by the blend percentage. For PACE this means that we will calculate two contract-level frailty scores, using the current factors and new factors, and then blend the scores.

Refinement of Growth Trend for ESRD State Rates

Comment: One commenter requested that CMS develop dialysis/transplant rates at the county level (instead of the current State rates) in order to more accurately predict costs in different cost markets.

Response: We appreciate the commenters concern about the relationship of the ESRD State ratebook to various submarkets within a States. However, the number of ESRD Medicare beneficiaries nationwide is too small to calculate county-level rates.

Comment: One commenter asked if the growth trend includes only dialysis-related services or costs of all services of dialysis and transplant Medicare beneficiaries.

Response: The growth trend for dialysis beneficiaries, which is applied to State capitation rates, includes all Medicare expenditures for beneficiaries in dialysis status, including those months of dialysis expenditures for beneficiaries who subsequently had a transplant.

Comment: One commenter asks if the new ESRD State rates will be used for dialysis and transplants patients in 2008.

Response: Yes, we will continue to apply the State rates to payments for enrollees in dialysis and transplant status. Further information on the ESRD CMS-HCC risk adjustment model is available through the "Risk Adjustment Customer Support" link on the CMS website at http://www.cms.hhs.gov/MedicareAdvtgSpecRateStats/06_Risk_adjustment.asp#TopOfPage. This link is to CSSC Operations, and on their Training Page you will find the RAPS Participant Guide. Section 1.9 discusses ESRD payments under the risk adjustment model.

ESRD CMS-HCC Risk Adjustment Model

The ESRD dialysis normalization factor for 2008 is 3.9 percent. This normalization factor will be applied to the risk scores of beneficiaries in dialysis and transplant status, which will be determined under the recalibrated ESRD model. The normalized risk scores will then be applied to the blended ESRD State rates. (For functioning graft beneficiaries, we will continue to apply the FFS normalization factor applicable to the aged-disabled CMS-HCC model, which for 2008 is 1.04 as announced above.)

We will post software for the recalibrated ESRD model by June 2007 on the CMS website at athttp://www.cms.hhs.gov/MedicareAdvtgSpecRateStats/06_Risk_adjustment.asp#TopOfPage.

Comment: One commenter encouraged CMS to coordinate the recalibration of the ESRD model with the recalibration of the aged/disabled model.

Response: CMS agrees with the commenter and will make every effort to recalibrate and implement all portions of the CMS-HCC risk adjustment model in the same payment year.

Comment: One commenter requested that CMS use its discretion to ensure that risk factors in the CMS-HCC model reflect the cost of highly significant new technologies that Medicare has begun covering after the calibration of the model.

Response: The CMS-HCC model projects health expenditures in the payment year based on enrollees' demographic and diagnostic profiles in the previous year. The hierarchical condition categories (clusters of diagnoses) that are included in the model have been shown to be strong predictors of health expenditures. Changing the model to include different sets of HCCs is a significant undertaking that requires many months of research, including convening technical panels and quantitative costs analysis. Further, because risk adjustment models are predictive, and because real-time models are not possible given data submission timelines, there is an inevitable lag between model calibration (when the relative factors are established) and payment year. In addition, because the factors for each HCC and demographic factor are relative to one another, we must update all the factors at the same time. Please note that, because risk factors are relative to each other, a cost increase in one HCC may not result in an increase in the relative factor for that HCC if the underlying costs of other HCCs have increased more. We recalibrate periodically to take into account shifting patterns of diseases and their relative costs.

Section E: Operational policy issues

Reporting of Medicaid Status for Part C Payment

Comment: A number of commenters requested a transition process to move from use of plan-reported Medicaid status to the State MMA files. Several commenters have asked that CMS continue to allow plans to report Medicaid status for both existing and new Medicare enrollees until implementation of this new procedure is fully tested. Such proof and validation should include, for example, further review and comparisons of the MMA State files against plan submitted data to determine the extent to which the plan-submitted data captured omissions from the state files.

Response: For 2008, CMS will continue using plan-reported status (via "01" transactions) and the Third Party files while it adds Medicaid status information from the MMA State files for risk payments for full risk enrollees (those who have had 12 or more months of Part B in 2007), effectively providing a transition process in 2008.

As mentioned in the Advance Notice, CMS has undertaken a study to assess the completeness of the MMA State files by comparing the Medicare beneficiaries reported on the MMA State files to those reported by plans and on the Third Party files. There are 974,000 Medicaid beneficiaries on the MMA State files who were previously not reported to CMS on the Third Party Files or by MA plans. Of all the Medicare beneficiaries reported on one of the three sources, 96.1 percent are listed on the MMA State files.

Of those reported on the Third Party files, 96.6 percent are on the MMA State files. Because of the way the Third Party files have been constructed, individuals who are reported on the Third Party files because a State has paid their Part B premiums, but who are ineligible for title XIX, cannot be identified. For example, our conversations with one large state indicate that they pay Part B premiums for approximately 50,000 Medicare beneficiaries who are not eligible for title XIX. We believe that many of the individuals who have been reported solely on the Third Party files are in this category.

Of those reported solely by plans as dual eligible, the vast majority (93 percent) are in Puerto Rico. Because Puerto Rico does not submit MMA State files (or Third Party files), CMS is establishing a parallel reporting mechanism with Puerto Rico (see other comment below).

Comment: Several commenters had questions regarding submission of Medicaid status retrospectively. They asked if plans will be able to continue submitting retrospective adjustments to the Medicaid indicator. In addition, a number of commenters expressed support for and interest in learning about the exceptions process as soon as possible.

Response: To clarify what change will be made regarding plan-reported Medicaid status, information regarding Medicaid status submitted by plans via "01" transactions after December 31, 2007, will not be taken into account to calculate beneficiaries' risk factors. Please note that, since full risk enrollees' risk factors are calculated using data from the previous year, payment for full risk enrollees in 2008 will use Medicaid status submitted in 2007, including information submitted in "01" transaction. Since new enrollees' risk factors are calculated using Medicaid status in the concurrent year, payment for new enrollees in 2008 will not use information submitted via "01" transactions.

In place of the information obtained via "01" transactions, CMS will use the information from the MMA State files to indicate Medicaid status. States can, and do, submit information regarding retroactive Medicaid eligibility to CMS via the MMA State files.

In addition, the exceptions process will utilize the current Integrigard process, which allows plans to submit retroactive Medicaid status to CMS. CMS is exploring ways to make this process more accurate and will release draft guidance as soon as possible.

Please note that for Part C risk adjustment purposes, a beneficiary has to be Medicaid for a minimum of one month during the data collection year (the year prior to the payment year for full risk enrollees and the payment year for new enrollees) to receive the Medicaid factor. Since final risk scores are reconciled after the end of the payment year, Medicaid status only needs to

be reported within applicable reporting time periods to be incorporated into an enrollee's risk score.

Comment: One commenter expressed concern about the identification of dual eligible beneficiaries in the U.S. Territories, since dual eligibles in the Territories are not reported on the MMA State files and are only reported on the Third Party Buy-In files for selected Territories. This commenter requested that plans in the U.S. Territories continue to have the ability to report Medicaid status for Part C risk adjustment purposes until CMS can demonstrate that it has accurate data on dual eligible Medicare beneficiaries in the Territories.

Response: CMS is making changes to its systems to improve the identification of the dual eligibility status of Medicare beneficiaries in the U.S. Territories in order to make appropriate payments to MA (and PDP) plans in the Territories. The commenter is correct that Territories do not report data on the State MMA files, nor do all Territories' Medicaid beneficiaries appear on the Third Party Buy-In files. CMS is working closely with Puerto Rico to submit a file of their dual eligible beneficiaries and we will use this information to appropriately calculate Part C risk scores of MA enrollees in Puerto Rico. (Other Territories' Medicaid beneficiaries are reported on the Third Party Buy files and CMS will use the Medicaid beneficiaries listed on these files to properly pay enrollees in these other Territories.) We will calculate 2008 risk payments for MA full-risk enrollees in the Territories similarly to how we calculate such payments in other jurisdictions: the source of Medicaid status will continue to utilize plan-reported data (and Third Party data where we have it), with the addition of the data submitted to CMS from Puerto Rico. CMS will provide operational guidance on how MA organizations operating in the Territories can obtain information about the Medicaid status of their enrollees and such organizations will have access to the exceptions process discussed above.

Comment: One commenter asked if these changes in plan reporting of Medicaid status means that plans' outreach programs to dual eligibles would be eliminated.

Response: Changes in plan reporting of Medicaid status should not affect any plans' efforts to market to dual eligible Medicaid beneficiaries.

Clarification on Institutional Status under Part C CMS-HCC Models

Comment: One commenter asked for more details about the appeals process, noting that plans will need to be ready with systems in place should exceptions be identified that need to be reported.

Response: The notification regarding post-reconciliation changes in institutional status described in the Advance Notice is not an appeals process, but is a discussion of the timeframe within which plans should inform CMS that a beneficiary's institutional status may be incorrect for Part C risk payment. As stated in the Advance Notice, CMS encourages plans to track the institutional status of their members and reconcile this status with their payments throughout the payment year. As described in the Advance Notice, the beneficiary's final residence status (long term institutional (LTI) or community) for the payment year is not determined until final risk

adjustment payment reconciliation (approximately 6 months after the end of the payment year). MA organizations have 45 days from the receipt of the MMR containing the final risk adjustment reconciliation payment to inform CMS of any discrepancies in LTI status. CMS will consider payments based on LTI status final unless discrepancies are reported in this timeframe. This does not preclude MA organizations from reporting discrepancies between their member's residence status and CMS' reporting of the member's residence status at any time prior to the final risk adjustment reconciliation.

Comment: One commenter asked, in reference to the need to notify CMS within 45 days of final reconciliation of any discrepancies in Long Term Institutional Status between what is reported on the MMR and our own records of residency, if these discrepancies be sent to Integriguard or directly to CMS.

Response: In our risk adjustment training sessions (June and August 2007, and forthcoming through the customer service link on our website at http://www.cms.hhs.gov/MedicareAdvtgSpecRateStats/06_Risk_adjustment.asp#TopOfPage), we will include guidance on the elements required for reporting these discrepancies to CMS.

Standard set of ICD-9 Diagnosis Codes for Risk Adjustment

Comment: One commenter expressed support of CMS' issuance of a comprehensive list of acceptable codes for the CMS risk adjustment models, but noted that significant provider education will be needed in order for MA organizations to establish a data stream consistent with the issued list. The commenter recommended that CMS defer mandating use of the comprehensive list until the 2009 payment year. Another commenter asked for clarification about: (1) CMS's definition of valid ICD9 code; (2) how the list of valid codes will be phased in; and (3) what dates of service will be affected by this change. Finally, the commenter asked CMS to provide a list of the valid codes.

Response: We will defer until 2009 the mandate to submit a standard set of ICD-9 codes. In the Advance Notice we proposed to move in 2008 to a standard set of codes against which to validate the diagnoses received from plans into our Risk Adjustment System (RAS). We made the distinction between valid and acceptable codes:

- Valid codes are ICD-9-CM code sets for each fiscal year that are approved and published on the website of the National Center for Health Statistics (NCHS) at http://www.cdc.gov/nchs/icd9.htm.)
- Acceptable codes are those that RAS will accept.

Currently, there are more acceptable codes than valid codes because RAS is "flexible" (e.g., still accepts an old ICD-9 code that has been superseded by a later NCHS code, and does not send an error message to the plan, instead simply storing it).

The goal of this transition to a standard set of codes for a payment year is to synchronize the list of codes RAS accepts and stores with the list of valid codes. Having a standard set of codes for each year will make it easier for CMS and plans to manage risk adjustment processing, editing,

and error reporting. The list of currently acceptable codes can be found on our website at http://www.cms.hhs.gov/MedicareAdvtgSpecRateStats/06_Risk_adjustment.asp#TopOfPage.

Effective for 2009, the standard set of acceptable codes for a payment year is defined as that list of valid codes for the three fiscal years prior to the payment year, as described in Table III-2.

Table III-2. Phase-in Schedule for New Lists of Diagnosis Codes for Risk Adjustment

Year of Payment	Date of Service	Source of codes
2007	1/06 – 12/06	The list of codes published on our website at http://www.cms.hhs.gov/MedicareAdvtgSpecRateStats/06_Risk_adjustment.asp#TopOfPage (which lists acceptable codes by year)
2008	1/07 – 12/07	The list of codes published on our website at http://www.cms.hhs.gov/MedicareAdvtgSpecRateStats/06_Risk_adjustment.asp#TopOfPage (which lists acceptable codes by year)
2009	1/08 – 12/08	Valid diagnoses in Fiscal Years 2006, 2007, 2008
2010	1/09 – 12/09	Valid diagnoses in Fiscal Years 2007, 2008, 2009
2011	1/10 – 12/10	Valid diagnoses in Fiscal Years 2008, 2009, 2010

CMS will issue guidance as soon as possible with further detail on the transition to a standard set of codes for payment year 2009.

Enclosure IV Coefficients for CMS-HCC End Stage Renal Disease Model*

*Note: the following tables are identical to those published in the February 16, 2007 Advance Notice.

Enclosure IV Coefficients for CMS-HCC End Stage Renal Disease Model

Exhibit 1. Relative Factors for CMS-HSS ESRD Model

Table 1-1. Relative Factors for CMS-HCC ESRD Dialysis Model[1]

Risk factors are relative to average total Medicare expenditures per capita for dialysis patients[2].

Variable	Disease Group	Relative Factors
Age/Sex Groups		
Female		
0-34 Years		0.699
35-44 Years		0.699
45-54 Years		0.715
55-59 Years		0.746
60-64 Years		0.749
65-69 Years		0.813
70-74 Years		0.813
75-79 Years		0.831
80-84 Years		0.850
85 Years or Over		0.872
Male		
0-34 Years		0.614
35-44 Years		0.650
45-54 Years		0.675
55-59 Years		0.699
60-64 Years		0.722
65-69 Years		0.776
70-74 Years		0.776
75-79 Years		0.790
80-84 Years		0.790
85 Years or Over		0.826
Disease Group Factors		
HCC1	HIV/AIDS	0.235
HCC2	Septicemia/Shock	0.073
HCC5	Opportunistic Infections	0.051
HCC7	Metastatic Cancer and Acute Leukemia	0.189
HCC8	Lung, Upper Digestive Tract, and Other Severe Cancers	0.189
HCC9	Lymphatic, Head and Neck, Brain, and Other Major Cancers	0.160
HCC10	Breast, Prostate, Colorectal and Other Cancers and Tumors	0.058
HCC15	Diabetes with Renal or Peripheral Circulatory Manifestation	0.080
HCC16	Diabetes with Neurologic or Other Specified Manifestation	0.080
HCC17	Diabetes with Acute Complications	0.080
HCC18	Diabetes with Ophthalmologic or Unspecified Manifestation	0.080
HCC19	Diabetes without Complication	0.079
HCC21	Protein-Calorie Malnutrition	0.050
HCC25	End-Stage Liver Disease	0.259
HCC26	Cirrhosis of Liver	0.095
HCC27	Chronic Hepatitis	0.051
HCC31	Intestinal Obstruction/Perforation	0.057

HCC32	Pancreatic Disease	0.084
HCC33	Inflammatory Bowel Disease	0.088
HCC37	Bone/Joint/Muscle Infections/Necrosis	0.115
HCC38	Disease	0.077
HCC44	Severe Hematological Disorders[3]	0.000
HCC45	Disorders of Immunity	0.113
HCC51	Drug/Alcohol Psychosis[4]	0.000
HCC52	Drug/Alcohol Dependence[4]	0.000
HCC54	Schizophrenia	0.179
HCC55	Major Depressive, Bipolar, and Paranoid Disorders	0.123
HCC67	Quadriplegia, Other Extensive Paralysis	0.229
HCC68	Paraplegia	0.229
HCC69	Spinal Cord Disorders/Injuries	0.148
HCC70	Muscular Dystrophy[3]	0.000
HCC71	Polyneuropathy	0.056
HCC72	Multiple Sclerosis	0.087
HCC73	Parkinson's and Huntington's Diseases	0.038
HCC74	Seizure Disorders and Convulsions	0.094
HCC75	Coma, Brain Compression/Anoxic Damage	0.201
HCC77	Respirator Dependence/Tracheostomy Status	0.349
HCC78	Respiratory Arrest	0.156
HCC79	Cardio-Respiratory Failure and Shock	0.088
HCC80	Congestive Heart Failure	0.086
HCC81	Acute Myocardial Infarction	0.107
HCC82	Unstable Angina and Other Acute Ischemic Heart Disease	0.107
HCC83	Angina Pectoris/Old Myocardial Infarction	0.027
HCC92	Specified Heart Arrhythmias	0.061
HCC95	Cerebral Hemorrhage	0.058
HCC96	Ischemic or Unspecified Stroke	0.058
HCC100	Hemiplegia/Hemiparesis	0.088
HCC101	Cerebral Palsy and Other Paralytic Syndromes	0.040
HCC104	Vascular Disease with Complications	0.169
HCC105	Vascular Disease	0.059
HCC107	Cystic Fibrosis	0.078
HCC108	Chronic Obstructive Pulmonary Disease	0.078
HCC111	Aspiration and Specified Bacterial Pneumonias	0.123
HCC112	Pneumococcal Pneumonia, Emphysema, Lung Abscess	0.051
HCC119	Proliferative Diabetic Retinopathy and Vitreous Hemorrhage[3]	0.000
HCC130	Dialysis Status[7]	0.000
HCC131	Renal Failure[7]	0.000
HCC132	Nephritis[7]	0.000
HCC148	Decubitus Ulcer of Skin	0.182
HCC149	Chronic Ulcer of Skin, Except Decubitus	0.110
HCC150	Extensive Third-Degree Burns[5]	0.088
HCC154	Severe Head Injury	0.201
HCC155	Major Head Injury	0.022
HCC157	Vertebral Fractures without Spinal Cord Injury	0.035
HCC158	Hip Fracture/Dislocation	0.054
HCC161	Traumatic Amputation	0.073

HCC164	Major Complications of Medical Care and Trauma[3]	0.000
HCC174	Major Organ Transplant Status	0.199
HCC176	Artificial Openings for Feeding or Elimination	0.062
HCC177	Amputation Status, Lower Limb/Amputation Complications	0.073
Medicaid Interactions With Age and Sex		
Medicaid_Female_Disabled		0.051
Medicaid_Female_Aged		0.031
Medicaid_Male_Disabled		0.043
Medicaid_Male_Aged		0.069
Originally Disabled Interactions With Sex		
Female, 65+, Originally Entitled due to ESRD/ w or wo Disability		-0.054
Male, 65+, Originally Entitled due to ESRD/ w or wo Disability		-0.047
Female, 65+, Originally Entitled due to Disability (non-ESRD)		0.056
Male, 65+, Originally Entitled due to Disability (non-ESRD)		0.032
Disabled/Disease Interactions		
D_HCC5	Disabled_Opportunistic Infections	0.081
D_HCC44	Disabled_Severe Hematological Disorders	0.050
D_HCC45	Disabled_Disorders of Immunity[4]	0.000
D_HCC51	Disabled_Drug/Alcohol Psychosis	0.190
D_HCC52	Disabled_Drug/Alcohol Dependence	0.190
D_HCC107	Disabled_Cystic Fibrosis[5]	0.149
Disease Interactions[6]		
INT1	DM_CHF	0.020
INT2	DM_CVD	0.051
INT3	CHF_COPD[4]	0.000
INT4	COPD_CVD_CAD[3]	0.000

[1]This model is used for those enrollees who have a full year of base year claims data

[2]Mean Year 2003 Total Expenditures=$60,471. Mean is over all dialysis patients including those with Medicare as secondary payer.

[3]Coefficients of variables with unconstrained coefficients less than 0 were constrained to equal 0.

[4]Coefficients of variables with coefficients with t-statistics < 1.0 were constrained to equal 0.

[5]Coefficient was constrained to equal coefficient from the CMS-HCC Aged-Disabled Community Model (2002-2003 Calibration).

[6]The interaction DM_CHF_RF (where RF = renal failure) is the same in this population as DM_CHF because all sample members have renal failure. Hence, this three-way interaction is not included.

[7]These coefficients are set to zero because beneficiaries on whom the model is calibrated have renal failure and are in dialysis status.

Table 1-2. CMS-HCC Dialysis Model for New Enrollees[1]

Variable	Relative Factors
Age/Sex Groups	
Female	
0-34 Years	0.912
35-44 Years	0.943
45-54 Years	0.974
55-59 Years	1.020
60-64 Years	1.020
65-69 Years	1.134
70-74 Years	1.162
75-79 Years	1.218
80-84 Years	1.232
85 Years or Over	1.236
Male	
0-34 Years	0.754
35-44 Years	0.894
45-54 Years	0.911
55-59 Years	0.959
60-64 Years	0.977
65-69 Years	1.090
70-74 Years	1.118
75-79 Years	1.151
80-84 Years	1.151
85 Years or Over	1.191
Medicaid Interactions With Age and Sex	
Medicaid_Female_Disabled	0.100
Medicaid_Female_Aged	0.069
Medicaid_Male_Disabled	0.087
Medicaid_Male_Aged	0.114
Originally Disabled Interactions With Sex	
Originally Disabled_Female, Age Less than 65	0.237
Originally Disabled_Female	0.237
Originally Disabled_Male, Age Less than 65	0.211
Originally Disabled_Male	0.211

Notes:

[1]New enrollees are those enrollees who do not have a full year of base year claims data.

Mean Year 2003 Total Expenditures=$60,471. Mean is over all dialysis patients including those with Medicare as secondary payer.

Table 1-3. Transplant Calculations

Under the CMS-HCC risk adjustment system of payments for ESRD patients, payment for transplants is carved out of the payments for all ESRD patients. The payment factor for a transplant is based on the average Medicare costs for transplant admissions and the two months subsequent to discharge. When CMS is notified of a transplant, three monthly payments are made. Instead of a dialysis risk factor being the basis for payment in those months, a transplant factor is used and applied to the dialysis rate book. After the three months, payment is made at the functioning graft rate or at the dialysis rate, as appropriate.

Transplant Calculations

	Kidney Only Dollars	**Kidney Plus Pancreas Dollars**	**Kidney Only Relative Factor**	**Kidney Plus Pancreas Relative Factor**
Month 1	$32,558	$55,310	6.46	10.98
Month 2	$5,106	$7,434	1.01	1.48
Month 3	$5,106	$7,434	1.01	1.48
Total	$42,770	$70,178		

Note: To compute the relative factors, the national mean of annual dialysis patient costs was converted to a monthly amount and the transplant monthly costs were divided by this number.

Mean annual dialysis costs: $60,471
Costs per month: $5,039

Table 1-4.

CMS-HCC Community and Institutional Models for Functioning Graft [1]

Additional payment factors for functioning graft status are at bottom of table.

Variable	Disease Group	Community Relative Factor	Constraints[2]	Institutional Relative Factor	Constraints[2]
Age/Sex Groups					
Female					
0-34 Years		0.223		1.240	
35-44 Years		0.224		0.879	
45-54 Years		0.304		0.879	
55-59 Years		0.370		0.879	
60-64 Years		0.422		0.879	
65-69 Years		0.298		0.945	
70-74 Years		0.371		0.885	
75-79 Years		0.468		0.822	
80-84 Years		0.546		0.757	
85-89 Years		0.637		0.694	
90-94 Years		0.788		0.617	
95 Years or Over		0.783		0.482	
Male					
0-34 Years		0.107		1.059	
35-44 Years		0.167		0.822	
45-54 Years		0.197		0.842	
55-59 Years		0.297		0.916	
60-64 Years		0.401		0.970	
65-69 Years		0.330		1.140	
70-74 Years		0.416		1.093	
75-79 Years		0.520		1.093	
80-84 Years		0.617		1.056	
85-89 Years		0.744		1.033	
90-94 Years		0.830		0.895	
95 Years or Over		0.960		0.775	
Medicaid and Originally Disabled Interactions With Age and Sex[5]					
Medicaid_Female_Disabled		0.137		0.000	
Medicaid_Female_Aged		0.177		0.000	
Medicaid_Male_Disabled		0.090		0.000	
Medicaid_Male_Aged		0.202		0.000	
Female, 65+, originally entitled due to disability		0.232		0.000	
Male, 65+, originally entitled due to disability		0.181		0.000	
Disease Group Factors					
HCC1	HIV/AIDS	0.933		0.735	
HCC2	Septicemia/Shock	0.887		0.762	
HCC5	Opportunistic Infections	0.410		0.476	
HCC7	Metastatic Cancer and Acute Leukemia	1.648		0.568	
HCC8	Lung, Upper Digestive Tract, and Other Severe Cancers	1.648		0.568	
HCC9	Lymphatic, Head and Neck, Brain, and Other Major Cancers	0.771		0.402	

HCC10	Breast, Prostate, Colorectal and Other Cancers and Tumors	0.258		0.241	
HCC15	Diabetes with Renal or Peripheral Circulatory Manifestation	0.608		0.466	
HCC16	Diabetes with Neurologic or Other Specified Manifestation	0.452		0.466	
HCC17	Diabetes with Acute Complications	0.364		0.466	
HCC18	Diabetes with Ophthalmologic or Unspecified Manifestation	0.265		0.466	
HCC19	Diabetes without Complication	0.181		0.257	
HCC21	Protein-Calorie Malnutrition	0.820		0.395	
HCC25	End-Stage Liver Disease	0.996		0.768	
HCC26	Cirrhosis of Liver	0.519		0.363	
HCC27	Chronic Hepatitis	0.303		0.363	
HCC31	Intestinal Obstruction/Perforation	0.347		0.349	
HCC32	Pancreatic Disease	0.383		0.277	
HCC33	Inflammatory Bowel Disease	0.270		0.263	
HCC37	Bone/Joint/Muscle Infections/Necrosis	0.550		0.482	
HCC38	Rheumatoid Arthritis and Inflammatory Connective Tissue Disease	0.363		0.233	
HCC44	Severe Hematological Disorders	1.136		0.477	
HCC45	Disorders of Immunity	0.841		0.443	
HCC51	Drug/Alcohol Psychosis	0.250		0.000	
HCC52	Drug/Alcohol Dependence	0.250		0.000	
HCC54	Schizophrenia	0.515		0.347	
HCC55	Major Depressive, Bipolar, and Paranoid Disorders	0.370		0.308	
HCC67	Quadriplegia, Other Extensive Paralysis	0.961		0.337	
HCC68	Paraplegia	0.961		0.291	
HCC69	Spinal Cord Disorders/Injuries	0.511		0.152	
HCC70	Muscular Dystrophy	0.466		0.000	
HCC71	Polyneuropathy	0.324		0.253	
HCC72	Multiple Sclerosis	0.472		0.174	
HCC73	Parkinson's and Huntington's Diseases	0.547		0.089	
HCC74	Seizure Disorders and Convulsions	0.280		0.165	
HCC75	Coma, Brain Compression/Anoxic Damage	0.446	C1	0.000	
HCC77	Respirator Dependence/Tracheostomy Status	1.860		1.360	

HCC78	Respiratory Arrest	1.448		0.984	
HCC79	Cardio-Respiratory Failure and Shock	0.629		0.464	
HCC80	Congestive Heart Failure	0.395		0.231	
HCC81	Acute Myocardial Infarction	0.349		0.474	
HCC82	Unstable Angina and Other Acute Ischemic Heart Disease	0.332		0.474	
HCC83	Angina Pectoris/Old Myocardial Infarction	0.231		0.296	
HCC92	Specified Heart Arrhythmias	0.295		0.198	
HCC95	Cerebral Hemorrhage	0.366		0.175	
HCC96	Ischemic or Unspecified Stroke	0.303		0.175	
HCC100	Hemiplegia/Hemiparesis	0.410		0.065	
HCC101	Cerebral Palsy and Other Paralytic Syndromes	0.212		0.000	
HCC104	Vascular Disease with Complications	0.645		0.495	
HCC105	Vascular Disease	0.324		0.164	
HCC107	Cystic Fibrosis	0.398		0.327	
HCC108	Chronic Obstructive Pulmonary Disease	0.398		0.327	
HCC111	Aspiration and Specified Bacterial Pneumonias	0.761		0.644	
HCC112	Pneumococcal Pneumonia, Emphysema, Lung Abscess	0.233		0.188	
HCC119	Proliferative Diabetic Retinopathy and Vitreous Hemorrhage	0.278		0.527	
HCC130	Dialysis Status[3]	0.000		0.000	
HCC131	Renal Failure[3]	0.000		0.000	
HCC132	Nephritis	0.182		0.290	
HCC148	Decubitus Ulcer of Skin	1.167		0.474	
HCC149	Chronic Ulcer of Skin, Except Decubitus	0.463		0.239	
HCC150	Extensive Third-Degree Burns	0.818		0.000	
HCC154	Severe Head Injury	0.446	C1	0.000	
HCC155	Major Head Injury	0.182		0.000	
HCC157	Vertebral Fractures without Spinal Cord Injury	0.501		0.109	
HCC158	Hip Fracture/Dislocation	0.450		0.000	
HCC161	Traumatic Amputation	0.736		0.224	C1
HCC164	Major Complications of Medical Care and Trauma	0.299		0.219	
HCC174	Major Organ Transplant Status	0.362		0.362	
HCC176	Artificial Openings for Feeding or Elimination	0.758		0.843	
HCC177	Amputation Status, Lower Limb/Amputation Complications	0.653		0.224	C1

Disabled/Disease Interactions					
D_HCC5	Disabled_Opportunistic Infections	0.941		0.280	
D_HCC44	Disabled_Severe Hematological Disorders	0.551		0.419	
D_HCC51	Disabled_Drug/Alcohol Psychosis	0.801		0.425	
D_HCC52	Disabled_Drug/Alcohol Dependence	0.356		0.425	
D_HCC107	Disabled_Cystic Fibrosis	1.391		0.000	
Disease Interactions					
INT1	DM_CHF[4]	0.204		0.088	
INT2	DM_CVD	0.149		0.026	
INT3	CHF_COPD	0.216		0.194	
INT4	COPD_CVD_CAD	0.174		0.042	
INT5	RF_CHF[4]	0.248		0.000	
INT6	RF_CHF_DM[4]	0.664		0.203	
Graft Factors[6]					
Aged <65, with duration since transplant of 4-9 months		3.391		3.391	
Aged 65+, with duration since transplant of 4-9 months		3.391		3.391	
Aged <65, with duration since transplant of 10 months or more		1.152		1.152	
Aged 65+, with duration since transplant of 10 months or more		1.323		1.323	

[1]To determine payments for persons with functioning grafts, the computed risk score should be applied to the appropriate cell in the CMS-HCC county risk ratebook for the aged and disabled. For payment in any month, duration is measured from the month of transplant to the first day of that month. All coefficients except for the graft factors and HCC174 were constrained to the values estimates for the 2003 Calibration CMS-HCC Aged-Disabled Community Model.
[2]_____ means coefficients of HCCs are constrained to be equal, and C1 denotes a non-continguous constraint. For the community model C1=.446; for the institutional model C1=.224.

[3]Kidney failure and Dialysis status HCCs are not captured in the model for functioning graft beneficiaries. The cost of treating their transplanted kidney is captured instead in the post-graft factors. Should a post-graft patient have failure again they would return to dialysis status and be paid under the dialysis model.
[4]Diseases in interactions are:

DM is diabetes mellitus (HCCs 15-19)
CHF is congestive heart failure (HCC 80)
COPD is chronic obstructive pulmonary disease (HCC 108)
CVD is cerebrovascular disease (HCCs 95,96,100, and 101)
RF is renal failure (HCC 131)

Beneficiaries with the three-way interaction RF*CHF*DM are excluded from the two-way interactions DM*CHF and RF*CHF. Thus, the three-way interaction term RF*CHF*DM is not additive to the two-way interaction terms DM*CHF and RF*CHF. Rather, it is hierarchical to, and excludes these interaction terms. A beneficiary with all three conditions is not "credited" with the two-way interactions. All other interaction terms are additive.
[5]These HCCs are not present in the institutional model.
[6]The graft factors are additive, similar to any other factors in the CMS-HCC model. The factor is higher during the months immediately after transplant to account for a high level of monitoring and services.

Table 1-5. List Hierarchies for the CMS-HCC Model

DRAFT DISEASE HIERARCHIES		
Hierarchical Condition Category (HCC)	**If the Disease Group is Listed in This Column…**	**…Then Drop the Associated Disease Group(s) Listed in This Column**
	Disease Group Label	
5	Opportunistic Infections	112
7	Metastatic Cancer and Acute Leukemia	8,9,10
8	Lung, Upper Digestive Tract, and Other Severe Cancers	9, 10
9	Lymphatic, Head and Neck, Brain and Other Major Cancers	10
15	Diabetes with Renal Manifestations or Peripheral Circulatory Manifestation	16,17,18,19
16	Diabetes with Neurologic or Other Specified Manifestation	17,18,19
17	Diabetes with Acute Complications	18,19
18	Diabetes with Ophthalmologic or Unspecified Manifestations	19
25	End-Stage Liver Disease	26,27
26	Cirrhosis of Liver	27
51	Drug/Alcohol Psychosis	52
54	Schizophrenia	55
67	Quadriplegia/Other Extensive Paralysis	68,69,100,101,157
68	Paraplegia	69,100,101,157
69	Spinal Cord Disorders/Injuries	157
77	Respirator Dependence/ Tracheostomy Status	78,79
78	Respiratory Arrest	79
81	Acute Myocardial Infarction	82,83
82	Unstable Angina and Other Acute Ischemic Heart Disease	83
95	Cerebral Hemorrhage	96
100	Hemiplegia/Hemiparesis	101
104	Vascular Disease with Complications	105,149
107	Cystic Fibrosis	108
111	Aspiration and Specified Bacterial Pneumonias	112
130	Dialysis Status	131,132
131	Renal Failure	132
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154	Severe Head Injury	75,155
161	Traumatic Amputation	177

How Payments are Made with a Disease Hierarchy -- EXAMPLE: If a beneficiary triggers HCCs 148 (Decubitus Ulcer of the Skin) and 149 (Chronic Ulcer of Skin, Except Decubitus), then HCC 149 will be dropped. In other words, payment will always be associated with the HCC in column 1 if a HCC in column 3 also occurs during the same collection period. Therefore, the MA organization's payment will be based on HCC 148 rather than HCC 149.