

**Table 1. Preliminary CMS-HCC Model Community and Institutional Relative Factors for the CMS-HCC Risk Adjustment Model**

Variable		Community	Institutional
<b>Female</b>			
0-34 Years		0.201	1.198
35-44 Years		0.211	0.973
45-54 Years		0.270	0.938
55-59 Years		0.334	1.005
60-64 Years		0.402	1.010
65-69 Years		0.295	1.268
70-74 Years		0.357	1.174
75-79 Years		0.448	1.059
80-84 Years		0.553	0.945
85-89 Years		0.694	0.857
90-94 Years		0.835	0.723
95 Years or Over		0.861	0.546
<b>Male</b>			
0-34 Years		0.124	1.191
35-44 Years		0.127	0.916
45-54 Years		0.186	0.933
55-59 Years		0.275	0.975
60-64 Years		0.319	1.108
65-69 Years		0.295	1.423
70-74 Years		0.365	1.467
75-79 Years		0.454	1.426
80-84 Years		0.557	1.360
85-89 Years		0.700	1.283
90-94 Years		0.869	1.102
95 Years or Over		1.054	0.972
<b>Medicaid and Originally Disabled Interactions with Age and Sex</b>			
Medicaid_Female_Aged		0.155	0.069
Medicaid_Female_Disabled		0.087	0.069
Medicaid_Male_Aged		0.181	0.069
Medicaid_Male_Disabled		0.088	0.069
Originally Disabled_Female		0.245	0.014
Originally Disabled_Male		0.167	0.014
<b>Disease Coefficients</b>		<b>Description Label</b>	
HCC1	HIV/AIDS	0.482	1.951
HCC2	Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock	0.548	0.589
HCC6	Opportunistic Infections	0.451	0.353
HCC8	Metastatic Cancer and Acute Leukemia	2.546	1.233
HCC9	Lung and Other Severe Cancers	0.997	0.691
HCC10	Lymphoma and Other Cancers	0.689	0.422
HCC11	Colorectal, Bladder, and Other Cancers	0.325	0.303
HCC12	Breast, Prostate, and Other Cancers and Tumors	0.158	0.203
HCC17	Diabetes with Acute Complications	0.378	0.486

<b>Variable</b>		<b>Community</b>	<b>Institutional</b>
HCC18	Diabetes with Chronic Complications	0.378	0.486
HCC19	Diabetes without Complication	0.121	0.186
HCC21	Protein-Calorie Malnutrition	0.731	0.409
HCC22	Morbid Obesity	0.374	0.594
HCC23	Other Significant Endocrine and Metabolic Disorders	0.251	0.289
HCC27	End-Stage Liver Disease	0.947	1.110
HCC28	Cirrhosis of Liver	0.409	0.359
HCC29	Chronic Hepatitis	0.257	0.359
HCC33	Intestinal Obstruction/Perforation	0.318	0.394
HCC34	Chronic Pancreatitis	0.293	0.098
HCC35	Inflammatory Bowel Disease	0.310	0.326
HCC39	Bone/Joint/Muscle Infections/Necrosis	0.510	0.349
HCC40	Rheumatoid Arthritis and Inflammatory Connective Tissue Disease	0.383	0.360
HCC46	Severe Hematological Disorders	1.165	0.814
HCC47	Disorders of Immunity	0.534	0.532
HCC48	Coagulation Defects and Other Specified Hematological Disorders	0.258	0.168
HCC54	Drug/Alcohol Psychosis	0.431	0.055
HCC55	Drug/Alcohol Dependence	0.431	0.055
HCC57	Schizophrenia	0.503	0.319
HCC58	Major Depressive, Bipolar, and Paranoid Disorders	0.339	0.319
HCC70	Quadriplegia	1.265	0.667
HCC71	Paraplegia	1.078	0.552
HCC72	Spinal Cord Disorders/Injuries	0.522	0.287
HCC73	Amyotrophic Lateral Sclerosis and Other Motor Neuron Disease	0.982	0.376
HCC74	Cerebral Palsy	0.046	-
HCC75	Myasthenia Gravis/Myoneural Disorders and Guillain-Barre Syndrome/Inflammatory and Toxic Neuropathy	0.418	0.308
HCC76	Muscular Dystrophy	0.579	0.220
HCC77	Multiple Sclerosis	0.570	-
HCC78	Parkinson's and Huntington's Diseases	0.708	0.178
HCC79	Seizure Disorders and Convulsions	0.291	0.147
HCC80	Coma, Brain Compression/Anoxic Damage	0.585	0.106
HCC82	Respirator Dependence/Tracheostomy Status	1.558	1.814
HCC83	Respiratory Arrest	0.822	1.198
HCC84	Cardio-Respiratory Failure and Shock	0.338	0.453
HCC85	Congestive Heart Failure	0.377	0.235
HCC86	Acute Myocardial Infarction	0.282	0.528
HCC87	Unstable Angina and Other Acute Ischemic Heart Disease	0.264	0.528
HCC88	Angina Pectoris	0.145	0.485
HCC96	Specified Heart Arrhythmias	0.302	0.269
HCC99	Cerebral Hemorrhage	0.347	0.221

<b>Variable</b>		<b>Community</b>	<b>Institutional</b>
HCC100	Ischemic or Unspecified Stroke	0.325	0.221
HCC103	Hemiplegia/Hemiparesis	0.596	0.062
HCC104	Monoplegia, Other Paralytic Syndromes	0.406	0.062
HCC106	Atherosclerosis of the Extremities with Ulceration or Gangrene	1.449	0.908
HCC107	Vascular Disease with Complications	0.420	0.308
HCC108	Vascular Disease	0.306	0.110
HCC110	Cystic Fibrosis	0.427	0.373
HCC111	Chronic Obstructive Pulmonary Disease	0.355	0.373
HCC112	Fibrosis of Lung and Other Chronic Lung Disorders	0.281	0.266
HCC114	Aspiration and Specified Bacterial Pneumonias	0.689	0.292
HCC115	Pneumococcal Pneumonia, Empyema, Lung Abscess	0.205	0.292
HCC122	Proliferative Diabetic Retinopathy and Vitreous Hemorrhage	0.208	0.443
HCC124	Exudative Macular Degeneration	0.343	0.171
HCC134	Dialysis Status	0.488	0.521
HCC135	Acute Renal Failure	0.488	0.521
HCC136	Chronic Kidney Disease (Stage 5)	0.230	0.521
HCC137	Chronic Kidney Disease, Severe (Stage 4)	0.230	0.302
HCC157	Pressure Ulcer of Skin with Necrosis Through to Muscle, Tendon, or Bone	2.551	1.076
HCC158	Pressure Ulcer of Skin with Full Thickness Skin Loss	1.371	0.446
HCC161	Chronic Ulcer of Skin, Except Pressure	0.549	0.318
HCC162	Severe Skin Burn or Condition	0.422	0.336
HCC166	Severe Head Injury	0.585	0.106
HCC167	Major Head Injury	0.167	-
HCC169	Vertebral Fractures without Spinal Cord Injury	0.509	0.233
HCC170	Hip Fracture/Dislocation	0.458	-
HCC173	Traumatic Amputations and Complications	0.272	0.125
HCC176	Complications of Specified Implanted Device or Graft	0.580	0.535
HCC186	Major Organ Transplant or Replacement Status	0.913	0.528
HCC188	Artificial Openings for Feeding or Elimination	0.667	0.609
HCC189	Amputation Status, Lower Limb/Amputation Complications	0.798	0.480
<b>Disease Interactions</b>			
CANCER_IMMUNE	Cancer*Immune Disorders	0.971	-
CHF_COPD	Congestive Heart Failure*Chronic Obstructive Pulmonary Disease	0.265	0.226
CHF_RENAL	Congestive Heart Failure*Renal Disease	0.325	-
COPD_CARD_RESP_FAIL	Chronic Obstructive Pulmonary Disease*Cardiorespiratory Failure	0.467	0.518
DIABETES_CHF	Diabetes*Congestive Heart Failure	0.187	0.194
SEPSIS_CARD_RESP_FAIL	Sepsis*Cardiorespiratory Failure	0.219	-

<b>Variable</b>		<b>Community</b>	<b>Institutional</b>
ARTIF_OPENINGS_ PRESSURE_ULCER	Artificial Openings for Feeding or Elimination*Pressure Ulcer	-	0.289
ASP_SPEC_BACT_PNEUM_ PRES_ULCER	Aspiration and Specified Bacterial Pneumonias*Pressure Ulcer	-	0.507
COPD_ASP_SPEC_ BACT_PNEUM	Chronic Obstructive Pulmonary Disease*Aspiration and Specified Bacterial Pneumonias	-	0.327
SCHIZOPHRENIA_CHF	Schizophrenia*Congestive Heart Failure	-	0.217
SCHIZOPHRENIA_COPD	Schizophrenia*Chronic Obstructive Pulmonary Disease	-	0.399
SCHIZOPHRENIA_SEIZURES	Schizophrenia*Seizure Disorders and Convulsions	-	0.463
SEPSIS_ARTIF_OPENINGS	Sepsis*Artificial Openings for Feeding or Elimination	-	0.567
SEPSIS_ASP_SPEC_ BACT_PNEUM	Sepsis*Aspiration and Specified Bacterial Pneumonias	-	0.347
SEPSIS_PRESSURE_ULCER	Sepsis*Pressure Ulcer		0.536
<b>Disabled/Disease Interactions</b>			
DISABLED_HCC6	Disabled, Opportunistic Infections	0.462	-
DISABLED_HCC34	Disabled, Chronic Pancreatitis	0.562	-
DISABLED_HCC39	Disabled, Bone/Joint Muscle Infections/Necrosis	-	0.393
DISABLED_HCC46	Disabled, Severe Hematological Disorders	1.381	-
DISABLED_HCC54	Disabled, Drug/Alcohol Psychosis	0.339	-
DISABLED_HCC55	Disabled, Drug/Alcohol Dependence	-	-
DISABLED_HCC77	Disabled, Multiple Sclerosis	-	0.417
DISABLED_HCC85	Disabled, Congestive Heart Failure	-	0.452
DISABLED_HCC110	Disabled, Cystic Fibrosis	2.476	-
DISABLED_HCC161	Disabled, Chronic Ulcer of the Skin, Except Pressure Ulcer	-	0.441
DISABLED_HCC176	Disabled, Complications of Specified Implanted Device or Graft	0.516	-
DISABLED_PRESSURE_ULCER	Disabled, Pressure Ulcer	-	0.277

**Notes:**

1. The denominator is \$9050.01.
2. In the “disease interactions” and “disabled interactions,” the variables are defined as follows:
  - Sepsis = HCC 2.
  - Opportunistic Infections = HCC 6.
  - Cancer = HCCs 8-12.
  - Diabetes = HCCs 17, 18, 19.
  - Bone/Joint/Muscle Infections/Necrosis = HCC 39.
  - Immune Disorders = HCC 47.
  - Schizophrenia = HCC 57.
  - Multiple Sclerosis = HCC 77.
  - Seizure Disorders and Convulsions = HCC 79.
  - Cardiorespiratory Failure = HCCs 82-84.
  - Congestive Heart Failure = HCC 85.
  - Chronic Obstructive Pulmonary Disease = HCCs 110-111.
  - Aspiration and Specified Bacterial Pneumonias = HCC 114.
  - Renal Disease = HCCs 134-137.
  - Pressure Ulcer = HCCs 157-158. HCCs 159-160 are no longer included in the pressure ulcer interaction terms.
  - Chronic Ulcer of Skin, except Pressure = HCC 161.
  - Artificial Openings for Feeding or Elimination = HCC 188.

**Sources:**

RTI International analysis of 2010-2011 Medicare 100% data and RTI International analysis of 2010-2011 Medicare 100% institutional sample.

**Table 2. Preliminary CMS-HCC Model Relative Factors for Aged and Disabled New Enrollees**

	<b>Non-Medicaid &amp; Non-Originally Disabled</b>	<b>Medicaid &amp; Non-Originally Disabled</b>	<b>Non-Medicaid &amp; Originally Disabled</b>	<b>Medicaid &amp; Originally Disabled</b>
<b>Female</b>				
0-34 Years	0.694	0.935	-	-
35-44 Years	0.848	1.119	-	-
45-54 Years	0.931	1.284	-	-
55-59 Years	0.995	1.356	-	-
60-64 Years	1.151	1.470	-	-
65 Years	0.523	1.057	1.198	1.529
66 Years	0.516	1.005	1.259	1.683
67 Years	0.549	1.005	1.259	1.683
68 Years	0.584	1.005	1.259	1.683
69 Years	0.643	1.005	1.259	2.171
70-74 Years	0.690	1.009	1.259	2.171
75-79 Years	0.879	1.188	1.259	2.171
80-84 Years	0.997	1.469	1.259	2.171
85-89 Years	1.268	1.657	1.259	2.171
90-94 Years	1.268	1.657	1.259	2.171
95 Years or Over	1.268	1.657	1.259	2.171
<b>Male</b>				
0-34 Years	0.432	0.792	-	-
35-44 Years	0.625	1.049	-	-
45-54 Years	0.816	1.321	-	-
55-59 Years	0.866	1.503	-	-
60-64 Years	0.906	1.574	-	-
65 Years	0.527	1.192	0.895	1.641
66 Years	0.535	1.084	0.957	1.641
67 Years	0.595	1.238	0.957	2.218
68 Years	0.663	1.238	1.275	2.218
69 Years	0.696	1.238	1.275	2.218
70-74 Years	0.803	1.238	1.275	2.218
75-79 Years	1.062	1.423	1.275	2.218
80-84 Years	1.336	1.787	1.275	2.218
85-89 Years	1.545	1.938	1.275	2.218
90-94 Years	1.545	1.938	1.275	2.218
95 Years or Over	1.545	1.938	1.275	2.218

**Notes:**

1. For payment purposes, a new enrollee is a beneficiary who did not have 12 months of Part B eligibility in the data collection year. CMS-HCC new enrollee models are not based on diagnoses, but include factors for different age and gender combinations by Medicaid and the original reason for Medicare entitlement.
2. The denominator is \$9050.01.

**Table 3. Preliminary CMS-HCC Model Relative Factors for New Enrollees in Chronic Condition Special Needs Plans (C-SNPs)**

	<b>Non-Medicaid &amp; Non-Originally Disabled</b>	<b>Medicaid &amp; Non-Originally Disabled</b>	<b>Non-Medicaid &amp; Originally Disabled</b>	<b>Medicaid &amp; Originally Disabled</b>
<b>Female</b>				
0-34 Years	1.343	1.523	-	-
35-44 Years	1.343	1.523	-	-
45-54 Years	1.504	1.902	-	-
55-59 Years	1.594	2.027	-	-
60-64 Years	1.697	2.100	-	-
65 Years	0.998	1.626	1.793	2.249
66 Years	0.998	1.626	1.793	2.249
67 Years	1.078	1.669	1.788	2.272
68 Years	1.078	1.669	1.788	2.272
69 Years	1.078	1.669	1.788	2.272
70-74 Years	1.267	1.821	1.987	2.509
75-79 Years	1.503	2.024	2.102	2.631
80-84 Years	1.709	2.218	2.393	2.804
85-89 Years	1.943	2.467	2.393	2.804
90-94 Years	1.943	2.467	2.393	2.804
95 Years or Over	1.943	2.467	2.393	2.804
<b>Male</b>				
0-34 Years	1.389	1.396	-	-
35-44 Years	1.389	1.396	-	-
45-54 Years	1.475	1.841	-	-
55-59 Years	1.602	2.037	-	-
60-64 Years	1.641	2.048	-	-
65 Years	1.022	1.717	1.716	2.251
66 Years	1.022	1.717	1.716	2.251
67 Years	1.086	1.774	1.774	2.331
68 Years	1.086	1.774	1.774	2.331
69 Years	1.086	1.774	1.774	2.331
70-74 Years	1.309	2.002	1.944	2.486
75-79 Years	1.534	2.094	2.064	2.707
80-84 Years	1.796	2.328	2.318	2.708
85-89 Years	2.067	2.590	2.318	2.708
90-94 Years	2.067	2.590	2.318	2.708
95 Years or Over	2.067	2.590	2.318	2.708

**Notes:**

1. For payment purposes, a new enrollee is a beneficiary who did not have 12 months of Part B eligibility in the data collection year. CMS-HCC new enrollee models are not based on diagnoses, but include factors for different age and gender combinations by Medicaid and the original reason for Medicare entitlement.
2. The relative factors in this table were calculated by estimating the incremental amount to the standard new enrollee risk model needed to predict the risk scores of continuing enrollees in C-SNPs.

**Source:** RTI analysis of 2010-2011 Medicare C-SNP community continuing enrollees.

**Table 4. Preliminary Disease Hierarchies for the CMS-HCC Model**

<b>Hierarchical Condition Category (HCC)</b>	<b>If the HCC Label is listed in this column...</b>	<b>...Then drop the HCC(s) listed in this column</b>
	<b>Hierarchical Condition Category (HCC) Label</b>	
8	Metastatic Cancer and Acute Leukemia	9,10,11,12
9	Lung and Other Severe Cancers	10,11,12
10	Lymphoma and Other Cancers	11,12
11	Colorectal, Bladder, and Other Cancers	12
17	Diabetes with Acute Complications	18,19
18	Diabetes with Chronic Complications	19
27	End-Stage Liver Disease	28,29,80
28	Cirrhosis of Liver	29
46	Severe Hematological Disorders	48
54	Drug/Alcohol Psychosis	55
57	Schizophrenia	58
70	Quadriplegia	71,72,103,104,169
71	Paraplegia	72,104,169
72	Spinal Cord Disorders/Injuries	169
82	Respirator Dependence/Tracheostomy Status	83,84
83	Respiratory Arrest	84
86	Acute Myocardial Infarction	87,88
87	Unstable Angina and Other Acute Ischemic Heart Disease	88
99	Cerebral Hemorrhage	100
103	Hemiplegia/Hemiparesis	104
106	Atherosclerosis of the Extremities with Ulceration or Gangrene	107,108,161,189
107	Vascular Disease with Complications	108
110	Cystic Fibrosis	111,112
111	Chronic Obstructive Pulmonary Disease	112
114	Aspiration and Specified Bacterial Pneumonias	115
134	Dialysis Status	135,136,137
135	Acute Renal Failure	136,137
136	Chronic Kidney Disease (Stage 5)	137
157	Pressure Ulcer of Skin with Necrosis Through to Muscle, Tendon, or Bone	158,161
158	Pressure Ulcer of Skin with Full Thickness Skin Loss	161
166	Severe Head Injury	80,167

**How Payments are Made with a Disease Hierarchy -- EXAMPLE:** If a beneficiary triggers Disease Groups 135 (Acute Renal Failure) and 136 (Chronic Kidney Disease (Stage 5)), then DG 136 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 organization’s payment will be based on HCC 135 rather than HCC 136.



**Table 5. Comparison of Current and Revised CMS-HCC Risk Adjustment Model HCCs**

V12 Model (with 70 HCC's)		V21 Model (revised; with 83 HCCs)		V22 Model (with 79 HCCs)		Category Short Name
HCC	Description	HCC	Description	HCC	Description	
HCC1	HIV/AIDS	HCC1	HIV/AIDS	HCC1	HIV/AIDS	Infection
HCC2	Septicemia/Shock	HCC2	Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock	HCC2	Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock	
HCC5	Opportunistic Infections	HCC6	Opportunistic Infections	HCC6	Opportunistic Infections	Neoplasm
HCC7	Metastatic Cancer and Acute Leukemia	HCC8	Metastatic Cancer and Acute Leukemia	HCC8	Metastatic Cancer and Acute Leukemia	
HCC8	Lung, Upper Digestive Tract, and Other Severe Cancers	HCC9	Lung and Other Severe Cancers	HCC9	Lung and Other Severe Cancers	
HCC9	Lymphatic, Head and Neck, Brain, and Other Major Cancers	HCC10	Lymphoma and Other Cancers	HCC10	Lymphoma and Other Cancers	
HCC10	Breast, Prostate, Colorectal and Other Cancers and Tumors	HCC11	Colorectal, Bladder, and Other Cancers	HCC11	Colorectal, Bladder, and Other Cancers	
		HCC12	Breast, Prostate, and Other Cancers and Tumors	HCC12	Breast, Prostate, and Other Cancers and Tumors	
HCC15	Diabetes with Renal or Peripheral Circulatory Manifestation	HCC17	Diabetes with Acute Complications	HCC17	Diabetes with Acute Complications	Diabetes
HCC16	Diabetes with Neurologic or Other Specified Manifestation	HCC18	Diabetes with Chronic Complications	HCC18	Diabetes with Chronic Complications	
HCC17	Diabetes with Acute Complications	HCC19	Diabetes without Complication	HCC19	Diabetes without Complication	
HCC18	Diabetes with Ophthalmologic or Unspecified Manifestation					
HCC19	Diabetes without Complication					
HCC21	Protein-Calorie Malnutrition	HCC21	Protein-Calorie Malnutrition	HCC21	Protein-Calorie Malnutrition	Metabolic
		HCC22	Morbid Obesity	HCC22	Morbid Obesity	
		HCC23	Other Significant Endocrine and Metabolic Disorders	HCC23	Other Significant Endocrine and Metabolic Disorders	
HCC25	End-Stage Liver Disease	HCC27	End-Stage Liver Disease	HCC27	End-Stage Liver Disease	Liver
HCC26	Cirrhosis of Liver	HCC28	Cirrhosis of Liver	HCC28	Cirrhosis of Liver	
HCC27	Chronic Hepatitis	HCC29	Chronic Hepatitis	HCC29	Chronic Hepatitis	
HCC31	Intestinal Obstruction/Perforation	HCC33	Intestinal Obstruction/Perforation	HCC33	Intestinal Obstruction/Perforation	Gastrointestinal
HCC32	Pancreatic Disease	HCC34	Chronic Pancreatitis	HCC34	Chronic Pancreatitis	

V12 Model (with 70 HCC's)		V21 Model (revised; with 83 HCCs)		V22 Model (with 79 HCCs)		
HCC33	Inflammatory Bowel Disease	HCC35	Inflammatory Bowel Disease	HCC35	Inflammatory Bowel Disease	Musculoskeletal
HCC37	Bone/Joint/Muscle Infections/Necrosis	HCC39	Bone/Joint/Muscle Infections/Necrosis	HCC39	Bone/Joint/Muscle Infections/Necrosis	
HCC38	Rheumatoid Arthritis and Inflammatory Connective Tissue Disease	HCC40	Rheumatoid Arthritis and Inflammatory Connective Tissue Disease	HCC40	Rheumatoid Arthritis and Inflammatory Connective Tissue Disease	
HCC44	Severe Hematological Disorders	HCC46	Severe Hematological Disorders	HCC46	Severe Hematological Disorders	Blood
HCC45	Disorders of Immunity	HCC47	Disorders of Immunity	HCC47	Disorders of Immunity	
		HCC48	Coagulation Defects and Other Specified Hematological Disorders	HCC48	Coagulation Defects and Other Specified Hematological Disorders	
HCC51	Drug/Alcohol Psychosis	HCC54	Drug/Alcohol Psychosis	HCC54	Drug/Alcohol Psychosis	Substance Abuse
HCC52	Drug/Alcohol Dependence	HCC55	Drug/Alcohol Dependence	HCC55	Drug/Alcohol Dependence	
HCC54	Schizophrenia	HCC57	Schizophrenia	HCC57	Schizophrenia	Psychiatric
HCC55	Major Depressive, Bipolar, and Paranoid Disorders	HCC58	Major Depressive, Bipolar, and Paranoid Disorders	HCC58	Major Depressive, Bipolar, and Paranoid Disorders	
HCC67	Quadriplegia, Other Extensive Paralysis	HCC70	Quadriplegia	HCC70	Quadriplegia	Spinal
HCC68	Paraplegia	HCC71	Paraplegia	HCC71	Paraplegia	
HCC69	Spinal Cord Disorders/Injuries	HCC72	Spinal Cord Disorders/Injuries	HCC72	Spinal Cord Disorders/Injuries	
HCC70	Muscular Dystrophy	HCC73	Amyotrophic Lateral Sclerosis and Other Motor Neuron Disease	HCC73	Amyotrophic Lateral Sclerosis and Other Motor Neuron Disease	Neurological
HCC71	Polyneuropathy	HCC74	Cerebral Palsy	HCC74	Cerebral Palsy	
HCC72	Multiple Sclerosis	HCC75	Polyneuropathy	HCC75	Myasthenia Gravis/Myoneural Disorders and Guillain-Barre Syndrome/Inflammatory and Toxic Neuropathy	
				HCC76	Muscular Dystrophy	
HCC73	Parkinson's and Huntington's Diseases	HCC76	Muscular Dystrophy	HCC76	Muscular Dystrophy	
HCC74	Seizure Disorders and Convulsions	HCC77	Multiple Sclerosis	HCC77	Multiple Sclerosis	
HCC75	Coma, Brain Compression/Anoxic Damage	HCC78	Parkinson's and Huntington's Diseases	HCC78	Parkinson's and Huntington's Diseases	
		HCC79	Seizure Disorders and Convulsions	HCC79	Seizure Disorders and Convulsions	
		HCC80	Coma, Brain Compression/Anoxic Damage	HCC80	Coma, Brain Compression/Anoxic Damage	

<b>V12 Model (with 70 HCC's)</b>		<b>V21 Model (revised; with 83 HCCs)</b>		<b>V22 Model (with 79 HCCs)</b>		
HCC77	Respirator Dependence/Tracheostomy Status	HCC82	Respirator Dependence/Tracheostomy Status	HCC82	Respirator Dependence/Tracheostomy Status	Arrest
HCC78	Respiratory Arrest	HCC83	Respiratory Arrest	HCC83	Respiratory Arrest	
HCC79	Cardio-Respiratory Failure and Shock	HCC84	Cardio-Respiratory Failure and Shock	HCC84	Cardio-Respiratory Failure and Shock	
HCC80	Congestive Heart Failure	HCC85	Congestive Heart Failure	HCC85	Congestive Heart Failure	Heart
HCC81	Acute Myocardial Infarction	HCC86	Acute Myocardial Infarction	HCC86	Acute Myocardial Infarction	
HCC82	Unstable Angina and Other Acute Ischemic Heart Disease	HCC87	Unstable Angina and Other Acute Ischemic Heart Disease	HCC87	Unstable Angina and Other Acute Ischemic Heart Disease	
HCC83	Angina Pectoris/Old Myocardial Infarction	HCC88	Angina Pectoris	HCC88	Angina Pectoris	
HCC92	Specified Heart Arrhythmias	HCC96	Specified Heart Arrhythmias	HCC96	Specified Heart Arrhythmias	
HCC95	Cerebral Hemorrhage	HCC99	Cerebral Hemorrhage	HCC99	Cerebral Hemorrhage	
HCC96	Ischemic or Unspecified Stroke	HCC100	Ischemic or Unspecified Stroke	HCC100	Ischemic or Unspecified Stroke	
HCC100	Hemiplegia/Hemiparesis	HCC103	Hemiplegia/Hemiparesis	HCC103	Hemiplegia/Hemiparesis	
HCC101	Cerebral Palsy and Other Paralytic Syndromes	HCC104	Monoplegia, Other Paralytic Syndromes	HCC104	Monoplegia, Other Paralytic Syndromes	
HCC104	Vascular Disease with Complications	HCC106	Atherosclerosis of the Extremities with Ulceration or Gangrene	HCC106	Atherosclerosis of the Extremities with Ulceration or Gangrene	Vascular
HCC105	Vascular Disease	HCC107	Vascular Disease with Complications	HCC107	Vascular Disease with Complications	
		HCC108	Vascular Disease	HCC108	Vascular Disease	
HCC107	Cystic Fibrosis	HCC110	Cystic Fibrosis	HCC110	Cystic Fibrosis	Lung
HCC108	Chronic Obstructive Pulmonary Disease	HCC111	Chronic Obstructive Pulmonary Disease	HCC111	Chronic Obstructive Pulmonary Disease	
HCC111	Aspiration and Specified Bacterial Pneumonias	HCC112	Fibrosis of Lung and Other Chronic Lung Disorders	HCC112	Fibrosis of Lung and Other Chronic Lung Disorders	
HCC112	Pneumococcal Pneumonia, Empyema, Lung Abscess	HCC114	Aspiration and Specified Bacterial Pneumonias	HCC114	Aspiration and Specified Bacterial Pneumonias	
		HCC115	Pneumococcal Pneumonia, Empyema, Lung Abscess	HCC115	Pneumococcal Pneumonia, Empyema, Lung Abscess	
HCC119	Proliferative Diabetic Retinopathy and Vitreous Hemorrhage	HCC122	Proliferative Diabetic Retinopathy and Vitreous Hemorrhage	HCC122	Proliferative Diabetic Retinopathy and Vitreous Hemorrhage	Eye
		HCC124	Exudative Macular Degeneration	HCC124	Exudative Macular Degeneration	
HCC130	Dialysis Status	HCC134	Dialysis Status	HCC134	Dialysis Status	Kidney
HCC131	Renal Failure	HCC135	Acute Renal Failure	HCC135	Acute Renal Failure	
HCC132	Nephritis	HCC136	Chronic Kidney Disease (Stage 5)	HCC136	Chronic Kidney Disease (Stage 5)	

V12 Model (with 70 HCC's)		V21 Model (revised; with 83 HCCs)		V22 Model (with 79 HCCs)		
		HCC137	Chronic Kidney Disease, Severe (Stage 4)	HCC137	Chronic Kidney Disease, Severe (Stage 4)	
		HCC138	Chronic Kidney Disease, Moderate (Stage 3)			
		HCC139	Chronic Kidney Disease, Mild or Unspecified (Stages 1-2 or Unspecified)			
		HCC140	Unspecified Renal Failure			
		HCC141	Nephritis			
HCC148	Decubitus Ulcer of Skin	HCC157	Pressure Ulcer of Skin with Necrosis Through to Muscle, Tendon, or Bone	HCC157	Pressure Ulcer of Skin with Necrosis Through to Muscle, Tendon, or Bone	Skin
HCC149	Chronic Ulcer of Skin, Except Decubitus	HCC158	Pressure Ulcer of Skin with Full Thickness Skin Loss	HCC158	Pressure Ulcer of Skin with Full Thickness Skin Loss	
HCC150	Extensive Third-Degree Burns	HCC161	Chronic Ulcer of Skin, Except Pressure	HCC161	Chronic Ulcer of Skin, Except Pressure	
		HCC162	Severe Skin Burn or Condition	HCC162	Severe Skin Burn or Condition	
HCC154	Severe Head Injury	HCC166	Severe Head Injury	HCC166	Severe Head Injury	Injury
HCC155	Major Head Injury	HCC167	Major Head Injury	HCC167	Major Head Injury	
HCC157	Vertebral Fractures w/o Spinal Cord Injury	HCC169	Vertebral Fractures without Spinal Cord Injury	HCC169	Vertebral Fractures without Spinal Cord Injury	
HCC158	Hip Fracture/Dislocation	HCC170	Hip Fracture/Dislocation	HCC170	Hip Fracture/Dislocation	
HCC161	Traumatic Amputation	HCC173	Traumatic Amputations and Complications	HCC173	Traumatic Amputations and Complications	
HCC164	Major Complications of Medical Care and Trauma	HCC176	Complications of Specified Implanted Device or Graft	HCC176	Complications of Specified Implanted Device or Graft	Complications
HCC174	Major Organ Transplant Status	HCC186	Major Organ Transplant or Replacement Status	HCC186	Major Organ Transplant or Replacement Status	Transplant
HCC176	Artificial Openings for Feeding or Elimination	HCC188	Artificial Openings for Feeding or Elimination	HCC188	Artificial Openings for Feeding or Elimination	Openings
HCC177	Amputation Status, Lower Limb/Amputation Complications	HCC189	Amputation Status, Lower Limb/Amputation Complications	HCC189	Amputation Status, Lower Limb/Amputation Complications	Amputation
<b>Community Model Interactions</b>						
D_HCC5	Disabled_Opportunistic Infections	D_HCC6	Disabled, Opportunistic Infections	D_HCC6	Disabled, Opportunistic Infections	<b>Disabled/ Disease Interactions</b>
D_HCC44	Disabled_Severe Hematological Disorders	D_HCC34	Disabled, Chronic Pancreatitis	D_HCC34	Disabled, Chronic Pancreatitis	

V12 Model (with 70 HCC's)		V21 Model (revised; with 83 HCCs)		V22 Model (with 79 HCCs)		
D_HCC51	Disabled_Drug/Alcohol Psychosis	D_HCC46	Disabled, Severe Hematological Disorders	D_HCC46	Disabled, Severe Hematological Disorders	
D_HCC52	Disabled_Drug/Alcohol Dependence	D_HCC54	Disabled, Drug/Alcohol Psychosis	D_HCC54	Disabled, Drug/Alcohol Psychosis	
D_HCC107	Disabled_Cystic Fibrosis	D_HCC55	Disabled, Drug/Alcohol Dependence	D_HCC55	Disabled, Drug/Alcohol Dependence	
		D_HCC110	Disabled, Cystic Fibrosis	D_HCC110	Disabled, Cystic Fibrosis	
		D_HCC176	Disabled, Complications of Specified Implanted Device or Graft	D_HCC176	Disabled, Complications of Specified Implanted Device or Graft	
INT1	DM_CHF	SEPSIS_	Sepsis*Cardiorespiratory Failure	SEPSIS_	Sepsis*Cardiorespiratory Failure	<b>Disease Interactions</b>
		CARD_		CARD_		
		RESP_FAIL		RESP_FAIL		
INT2	DM_CVD	CANCER_	Cancer*Immune Disorders	CANCER_	Cancer*Immune Disorders	
		IMMUNE		IMMUNE		
INT3	CHF_COPD	DIABETES_	Diabetes*Congestive Heart Failure	DIABETES_	Diabetes*Congestive Heart Failure	
		CHF		CHF		
INT4	COPD_CVD_CAD	CHF_COPD	Congestive Heart Failure*Chronic Obstructive Pulmonary Disease	CHF_COPD	Congestive Heart Failure*Chronic Obstructive Pulmonary Disease	
INT5	RF_CHF	CHF_	Congestive Heart Failure*Renal Disease	CHF_RENAL	Congestive Heart Failure*Renal Disease	
		RENAL		RENAL		
INT6	RF_CHF_DM	COPD_	Chronic Obstructive Pulmonary Disease*Cardiorespiratory Failure	COPD_	Chronic Obstructive Pulmonary Disease*Cardiorespiratory Failure	
		CARD_		CARD_		
		RESP_FAIL		RESP_FAIL		

### Institutional Model Interactions

D_HCC5	Disabled_Opportunistic Infections	D_HCC85	Disabled, Congestive Heart Failure	D_HCC85	Disabled, Congestive Heart Failure	<b>Disabled/ Disease Interactions</b>
D_HCC44	Disabled_Severe Hematological Disorders	D_PRESSURE_	Disabled, Pressure Ulcer	D_PRESSURE_	Disabled, Pressure Ulcer	
D_HCC51	Disabled_Drug/Alcohol Psychosis	D_HCC161	Disabled, Chronic Ulcer of the Skin, Except Pressure Ulcer	D_HCC161	Disabled, Chronic Ulcer of the Skin, Except Pressure Ulcer	
D_HCC52	Disabled_Drug/Alcohol Dependence	D_HCC39	Disabled, Bone/Joint Muscle Infections/Necrosis	D_HCC39	Disabled, Bone/Joint Muscle Infections/Necrosis	
D_HCC107	Disabled_Cystic Fibrosis	D_HCC77	Disabled, Multiple Sclerosis	D_HCC77	Disabled, Multiple Sclerosis	

V12 Model (with 70 HCC's)		V21 Model (revised; with 83 HCCs)		V22 Model (with 79 HCCs)		Disease Interactions
		D_HCC6	Disabled, Opportunistic Infections	D_HCC6	Disabled, Opportunistic Infections	
DM_CHF1	Diabetes_Congestive Heart Failure	CHF_COPD	Congestive Heart Failure*Chronic Obstructive Pulmonary Disease	CHF_COPD	Congestive Heart Failure*Chronic Obstructive Pulmonary Disease	
DM_CVD_	Diabetes_Cerebrovascular Disease	COPD_CARD_RESP_FAIL	Chronic Obstructive Pulmonary Disease *Cardiorespiratory Failure	COPD_CARD_RESP_FAIL	Chronic Obstructive Pulmonary Disease *Cardiorespiratory Failure	
CHF_COPD	Congestive Heart Failure_Chronic Obstructive Pulmonary Disease	SEPSIS_PRESSURE_ULCER	Sepsis*Pressure Ulcer	SEPSIS_PRESSURE_ULCER	Sepsis*Pressure Ulcer	
COPD_CVD_CAD_	Chronic Obstructive Pulmonary Disease_Cerebrovascular Disease_Coronary Artery Disease	SEPSIS_ARTIF_OPENINGS	Sepsis*Artificial Openings for Feeding or Elimination	SEPSIS_ARTIF_OPENINGS	Sepsis*Artificial Openings for Feeding or Elimination	
RF_CHF1	Renal Failure_Congestive Heart Failure	ART_OPENINGS_PRESSURE_ULCER	Artificial Openings for Feeding or Elimination*Pressure Ulcer	ART_OPENINGS_PRESSURE_ULCER	Artificial Openings for Feeding or Elimination*Pressure Ulcer	
RF_CHF_DM	Renal Failure_Congestive Heart Failure_Diabetes	DIABETES_CHF	Diabetes*Congestive Heart Failure	DIABETES_CHF	Diabetes*Congestive Heart Failure	
		COPD_ASP_SPEC_BACT_PNEUM	Chronic Obstructive Pulmonary Disease*Aspiration and Specified Bacterial Pneumonias	COPD_ASP_SPEC_BACT_PNEUM	Chronic Obstructive Pulmonary Disease*Aspiration and Specified Bacterial Pneumonias	
		ASP_SPEC_BACT_PNEUM_PRES_ULC	Aspiration and Specified Bacterial Pneumonias*Pressure Ulcer	ASP_SPEC_BACT_PNEUM_PRES_ULC	Aspiration and Specified Bacterial Pneumonias*Pressure Ulcer	
		SEPSIS_ASP_SPEC_BACT_PNEUM	Sepsis*Aspiration and Specified Bacterial Pneumonias	SEPSIS_ASP_SPEC_BACT_PNEUM	Sepsis*Aspiration and Specified Bacterial Pneumonias	
		SCHIZOPHRENIA_COPD	Schizophrenia*Chronic Obstructive Pulmonary Disease	SCHIZOPHRENIA_COPD	Schizophrenia*Chronic Obstructive Pulmonary Disease	
		SCHIZOPHRENIA_CHF	Schizophrenia* Congestive Heart Failure	SCHIZOPHRENIA_CHF	Schizophrenia*Congestive Heart Failure	

V12 Model (with 70 HCC's)	V21 Model (revised; with 83 HCCs)		V22 Model (with 79 HCCs)	
	SCHIZOPHRENIA_ SEIZURES	Schizophrenia*Seizure Disorders and Convulsions	SCHIZOPHRENIA _SEIZURES	Schizophrenia*Seizure Disorders and Convulsions

Source: RTI International.

**Table 6. Preliminary CMS RxHCC Model Relative Factors for Continuing Enrollees**

Continuing Enrollee (CE) RxHCC Model Segments

Variable	Disease Group	Community, Non-Low Income, Age>=65	Community, Non-Low Income, Age<65	Community, Low Income, Age>=65	Community, Low Income, Age<65	Institutional
<b>Female</b>						
0-34 Years		-	0.164	-	0.453	1.720
35-44 Years		-	0.359	-	0.656	1.682
45-54 Years		-	0.470	-	0.746	1.509
55-59 Years		-	0.499	-	0.746	1.467
60-64 Years		-	0.488	-	0.719	1.408
65-69 Years		0.331	-	0.522	-	1.455
70-74 Years		0.326	-	0.537	-	1.388
75-79 Years		0.329	-	0.531	-	1.318
80-84 Years		0.337	-	0.526	-	1.255
85-89 Years		0.337	-	0.501	-	1.177
90-94 Years		0.325	-	0.465	-	1.067
95 Years or Over		0.283	-	0.385	-	0.887
<b>Male</b>						
0-34 Years		-	0.165	-	0.476	1.657
35-44 Years		-	0.309	-	0.612	1.593
45-54 Years		-	0.422	-	0.678	1.521
55-59 Years		-	0.437	-	0.668	1.406
60-64 Years		-	0.439	-	0.634	1.329
65-69 Years		0.353	-	0.431	-	1.363
70-74 Years		0.346	-	0.460	-	1.318
75-79 Years		0.325	-	0.451	-	1.268
80-84 Years		0.302	-	0.451	-	1.217
85-89 Years		0.279	-	0.427	-	1.170
90-94 Years		0.269	-	0.418	-	1.080
95 Years or Over		0.265	-	0.413	-	0.949
<b>Originally Disabled Interactions with Sex</b>						
Originally Disabled_Female		0.054	-	0.110	-	0.047
Originally Disabled_Male		-	-	0.097	-	0.047
<b>Disease Coefficients</b>	<b>Description Label</b>					
RXHCC1	HIV/AIDS	2.129	2.715	2.429	2.756	1.220
RXHCC5	Opportunistic Infections	0.105	0.082	0.072	0.079	0.054
RXHCC8	Chronic Myeloid Leukemia	2.811	3.045	3.196	3.819	1.686
RXHCC9	Multiple Myeloma and Other Neoplastic Disorders	1.738	2.179	1.466	1.811	0.695
RXHCC10	Breast, Lung, and Other Cancers and Tumors	0.130	0.167	0.200	0.239	0.065



Variable	Disease Group	Community, Non-Low Income, Age>=65	Community, Non-Low Income, Age<65	Community, Low Income, Age>=65	Community, Low Income, Age<65	Institutional
RXHCC11	Prostate and Other Cancers and Tumors	0.011	0.021	0.072	0.030	0.026
RXHCC14	Diabetes with Complications	0.276	0.211	0.344	0.341	0.289
RXHCC15	Diabetes without Complication	0.184	0.151	0.255	0.261	0.204
RXHCC18	Diabetes Insipidus and Other Endocrine and Metabolic Disorders	0.402	1.012	0.358	0.815	0.115
RXHCC19	Pituitary, Adrenal Gland, and Other Endocrine and Metabolic Disorders	0.056	0.074	0.021	0.065	0.066
RXHCC20	Thyroid Disorders	0.046	0.093	0.056	0.110	0.047
RXHCC21	Morbid Obesity	0.045	-	0.038	0.026	0.094
RXHCC23	Disorders of Lipoid Metabolism	0.101	0.097	0.150	0.181	0.078
RXHCC25	Chronic Viral Hepatitis	0.138	0.171	0.285	0.190	0.016
RXHCC30	Chronic Pancreatitis	0.113	0.061	0.055	0.065	0.041
RXHCC31	Pancreatic Disorders and Intestinal Malabsorption, Except Pancreatitis	0.060	0.056	0.055	0.065	0.041
RXHCC32	Inflammatory Bowel Disease	0.289	0.216	0.210	0.397	0.122
RXHCC33	Esophageal Reflux and Other Disorders of Esophagus	0.088	0.074	0.136	0.151	0.069
RXHCC38	Aseptic Necrosis of Bone	0.063	0.115	0.061	0.196	0.122
RXHCC40	Psoriatic Arthropathy	0.338	0.460	0.736	1.252	0.558
RXHCC41	Rheumatoid Arthritis and Other Inflammatory Polyarthropathy	0.161	0.210	0.222	0.420	0.103
RXHCC42	Systemic Lupus Erythematosus, Other Connective Tissue Disorders, and Inflammatory Spondylopathies	0.133	0.210	0.165	0.255	0.101
RXHCC45	Osteoporosis, Vertebral and Pathological Fractures	0.042	0.126	0.121	0.156	-
RXHCC47	Sickle Cell Anemia	0.111	0.244	0.043	0.614	0.320
RXHCC48	Myelodysplastic Syndromes, Except High-Grade	0.259	0.389	0.316	0.321	0.343
RXHCC49	Immune Disorders	0.183	0.211	0.198	0.226	0.148
RXHCC50	Aplastic Anemia and Other Significant Blood Disorders	0.030	0.027	0.025	0.087	0.025
RXHCC54	Alzheimer`s Disease	0.453	0.229	0.245	0.151	-
RXHCC55	Dementia, Except Alzheimer`s Disease	0.232	0.127	0.100	0.020	-
RXHCC58	Schizophrenia	0.341	0.429	0.551	0.861	0.341
RXHCC59	Bipolar Disorders	0.301	0.310	0.355	0.564	0.291
RXHCC60	Major Depression	0.254	0.275	0.316	0.401	0.237
RXHCC61	Specified Anxiety, Personality, and Behavior Disorders	0.156	0.183	0.181	0.384	0.163
RXHCC62	Depression	0.118	0.142	0.122	0.215	0.134
RXHCC63	Anxiety Disorders	0.041	0.080	0.083	0.176	0.110

Variable	Disease Group	Community, Non-Low Income, Age>=65	Community, Non-Low Income, Age<65	Community, Low Income, Age>=65	Community, Low Income, Age<65	Institutional
RXHCC65	Autism	0.156	0.260	0.406	0.509	0.163
RXHCC66	Profound or Severe Mental Retardation/Developmental Disability	0.062	0.260	0.403	0.325	-
RXHCC67	Moderate Mental Retardation/Developmental Disability	0.022	0.100	0.271	0.231	-
RXHCC68	Mild or Unspecified Mental Retardation/Developmental Disability	0.022	0.018	0.134	0.097	-
RXHCC71	Myasthenia Gravis, Amyotrophic Lateral Sclerosis and Other Motor Neuron Disease	0.187	0.266	0.175	0.404	0.052
RXHCC72	Spinal Cord Disorders	0.058	0.112	0.046	0.050	-
RXHCC74	Polyneuropathy	0.083	0.167	0.084	0.154	0.079
RXHCC75	Multiple Sclerosis	0.858	1.384	0.837	2.004	0.327
RXHCC76	Parkinson's Disease	0.378	0.442	0.240	0.224	0.154
RXHCC78	Intractable Epilepsy	0.196	0.408	0.161	0.632	0.033
RXHCC79	Epilepsy and Other Seizure Disorders, Except Intractable Epilepsy	0.108	0.094	0.054	0.172	-
RXHCC80	Convulsions	0.049	0.053	0.040	0.121	-
RXHCC81	Migraine Headaches	0.096	0.167	0.122	0.126	0.102
RXHCC83	Trigeminal and Postherpetic Neuralgia	0.073	0.143	0.103	0.130	0.110
RXHCC86	Pulmonary Hypertension and Other Pulmonary Heart Disease	0.248	0.513	0.303	0.458	0.128
RXHCC87	Congestive Heart Failure	0.152	0.081	0.257	0.116	0.127
RXHCC88	Hypertension	0.143	0.067	0.244	0.113	0.076
RXHCC89	Coronary Artery Disease	0.180	0.097	0.169	0.066	0.031
RXHCC93	Atrial Arrhythmias	0.069	0.039	0.017	-	0.021
RXHCC97	Cerebrovascular Disease, Except Hemorrhage or Aneurysm	0.078	0.017	0.058	-	-
RXHCC98	Spastic Hemiplegia	0.159	0.187	0.070	0.133	0.035
RXHCC100	Venous Thromboembolism	-	0.035	-	0.088	0.022
RXHCC101	Peripheral Vascular Disease	0.054	0.051	0.102	0.060	-
RXHCC103	Cystic Fibrosis	0.237	1.285	0.272	1.778	0.163
RXHCC104	Chronic Obstructive Pulmonary Disease and Asthma	0.237	0.135	0.272	0.230	0.163
RXHCC105	Pulmonary Fibrosis and Other Chronic Lung Disorders	0.127	0.135	0.108	0.230	0.038
RXHCC106	Gram-Negative/Staphylococcus Pneumonia and Other Lung Infections	-	0.011	-	-	0.020

Variable	Disease Group	Community, Non-Low Income, Age>=65	Community, Non-Low Income, Age<65	Community, Low Income, Age>=65	Community, Low Income, Age<65	Institutional
RXHCC111	Diabetic Retinopathy	0.124	0.074	0.104	0.071	0.074
RXHCC113	Open-Angle Glaucoma	0.189	0.153	0.232	0.188	0.179
RXHCC120	Kidney Transplant Status	0.191	0.191	0.254	0.271	0.192
RXHCC121	Dialysis Status	0.131	0.196	0.240	0.522	0.203
RXHCC122	Chronic Kidney Disease Stage 5	0.111	0.126	0.138	0.156	0.104
RXHCC123	Chronic Kidney Disease Stage 4	0.111	0.126	0.124	0.156	0.104
RXHCC124	Chronic Kidney Disease Stage 3	0.090	0.126	0.101	0.156	0.062
RXHCC125	Chronic Kidney Disease Stage 1, 2, or Unspecified	0.039	0.060	0.034	0.060	0.030
RXHCC126	Nephritis	0.039	0.060	0.034	0.060	0.030
RXHCC142	Chronic Ulcer of Skin, Except Pressure	0.043	0.056	0.016	0.044	0.023
RXHCC145	Pemphigus	0.182	-	0.154	0.205	0.048
RXHCC147	Psoriasis, Except with Arthropathy	0.111	0.149	0.232	0.384	0.169
RXHCC156	Narcolepsy and Cataplexy	0.373	0.437	0.389	0.640	0.285
RXHCC166	Lung Transplant Status	0.825	0.747	0.891	1.017	0.199
RXHCC167	Major Organ Transplant Status, Except Lung, Kidney, and Pancreas	0.552	0.255	0.437	0.326	0.199
RXHCC168	Pancreas Transplant Status	0.191	0.191	0.254	0.229	0.192
<b>Non-Aged Disease Interactions</b>						
NonAged_RXHCC1	NonAged * HIV/AIDS	-	-	-	-	1.071
NonAged_RXHCC58	NonAged * Schizophrenia	-	-	-	-	0.306
NonAged_RXHCC59	NonAged * Bipolar Disorders	-	-	-	-	0.207
NonAged_RXHCC60	NonAged * Major Depression	-	-	-	-	0.117
NonAged_RXHCC61	NonAged * Specified Anxiety, Personality, and Behavior Disorders	-	-	-	-	0.101
NonAged_RXHCC62	NonAged * Depression	-	-	-	-	0.086
NonAged_RXHCC63	NonAged * Anxiety Disorders	-	-	-	-	0.015
NonAged_RXHCC65	NonAged * Autism	-	-	-	-	0.101
NonAged_RXHCC75	NonAged * Multiple Sclerosis	-	-	-	-	0.710
NonAged_RXHCC78	NonAged * Intractable Epilepsy	-	-	-	-	0.107
NonAged_RXHCC79	NonAged * Epilepsy and Other Seizure Disorders, Except Intractable Epilepsy	-	-	-	-	-
NonAged_RXHCC80	NonAged * Convulsions	-	-	-	-	-

**Note:** The 2011 denominator of \$1,182.35 used to calculate the 2013 RxHCC model factors is the national predicted average annual cost under the model.

**Source:** RTI Analysis of 100% 2011 PDE, 2010 Carrier NCH, 2010 Inpatient SAF, 2010 Outpatient SAF, 2011 HPMS, 2011 CME, 2010-2011 Denominator, and Part D Final Intermediate File.

**Table 7. Preliminary CMS RxHCC Model Relative Factors for New Enrollees, Non-Low Income**

Variable	Baseline – Not Concurrently ESRD, Not Originally Disabled	Concurrently ESRD, Not Originally Disabled	Originally Disabled, Not Concurrently ESRD	Originally Disabled, Concurrently ESRD
<b>Female</b>				
0-34 Years	0.488	0.524	-	-
35-44 Years	0.747	0.758	-	-
45-54 Years	0.943	1.166	-	-
55-59 Years	1.023	1.354	-	-
60-64 Years	1.047	1.389	-	-
65 Years	0.587	1.391	1.018	1.391
66 Years	0.630	1.391	1.018	1.391
67 Years	0.641	1.391	0.803	1.391
68 Years	0.663	1.391	0.803	1.391
69 Years	0.668	1.391	0.803	1.391
70-74 Years	0.642	1.391	0.642	1.391
75-79 Years	0.627	1.391	0.627	1.391
80-84 Years	0.515	1.391	0.515	1.391
85-89 Years	0.429	1.391	0.429	1.391
90-94 Years	0.231	1.391	0.231	1.391
95 Years or Over	0.231	1.391	0.231	1.391
<b>Male</b>				
0-34 Years	0.301	0.524	-	-
35-44 Years	0.586	0.758	-	-
45-54 Years	0.811	1.036	-	-
55-59 Years	0.862	1.226	-	-
60-64 Years	0.954	1.367	-	-
65 Years	0.632	1.450	0.918	1.450
66 Years	0.686	1.450	0.757	1.450
67 Years	0.696	1.450	0.757	1.450
68 Years	0.714	1.450	0.757	1.450
69 Years	0.713	1.450	0.757	1.450
70-74 Years	0.693	1.450	0.693	1.450
75-79 Years	0.636	1.450	0.636	1.450
80-84 Years	0.510	1.450	0.510	1.450
85-89 Years	0.379	1.450	0.379	1.450
90-94 Years	0.200	1.450	0.200	1.450
95 Years or Over	0.200	1.450	0.200	1.450

**Notes:**

1. The Part D Denominator used to calculate relative factors is \$1,182.35. This Part D Denominator is based on the combined PDP and MA-PD populations.
2. Originally Disabled is defined as originally entitled to Medicare by disability only (OREC = 1).
3. For new enrollees, the concurrent ESRD marker is defined as at least one month in the payment year of ESRD status—dialysis, transplant, or post-graft.

**Source:** RTI Analysis of 100% 2011 PDE, 2010 Carrier NCH, 2010 Inpatient SAF, 2010 Outpatient SAF, 2011 HPMS, 2011 CME, 2010-2011 Denominator, and Part D Final Intermediate File.

**Table 8. Preliminary CMS RxHCC Model Relative Factors for New Enrollees, Low Income**

Variable	Baseline – Not Concurrently ESRD, Not Originally Disabled	Concurrently ESRD, Not Originally Disabled	Originally Disabled, Not Concurrently ESRD	Originally Disabled, Concurrently ESRD
<b>Female</b>				
0-34 Years	0.965	1.570	-	-
35-44 Years	1.342	1.707	-	-
45-54 Years	1.400	1.817	-	-
55-59 Years	1.316	1.817	-	-
60-64 Years	1.249	1.803	-	-
65 Years	1.025	1.817	1.148	1.817
66 Years	0.719	1.817	0.822	1.817
67 Years	0.719	1.817	0.822	1.817
68 Years	0.719	1.817	0.822	1.817
69 Years	0.719	1.817	0.822	1.817
70-74 Years	0.733	1.817	0.798	1.817
75-79 Years	0.766	1.817	0.798	1.817
80-84 Years	0.824	1.817	0.824	1.817
85-89 Years	0.805	1.817	0.805	1.817
90-94 Years	0.682	1.817	0.682	1.817
95 Years or Over	0.682	1.817	0.682	1.817
<b>Male</b>				
0-34 Years	0.849	1.668	-	-
35-44 Years	1.171	1.740	-	-
45-54 Years	1.190	1.748	-	-
55-59 Years	1.087	1.635	-	-
60-64 Years	0.991	1.672	-	-
65 Years	0.835	1.553	0.887	1.553
66 Years	0.515	1.553	0.584	1.553
67 Years	0.515	1.553	0.584	1.553
68 Years	0.515	1.553	0.584	1.553
69 Years	0.515	1.553	0.584	1.553
70-74 Years	0.552	1.553	0.579	1.553
75-79 Years	0.576	1.553	0.576	1.553
80-84 Years	0.576	1.553	0.576	1.553
85-89 Years	0.576	1.553	0.576	1.553
90-94 Years	0.613	1.553	0.613	1.553
95 Years or Over	0.613	1.553	0.613	1.553

**Notes:**

1. The Part D Denominator used to calculate relative factors is \$1,182.35. This Part D Denominator is based on the combined PDP and MA-PD populations.
2. Originally Disabled is defined as originally entitled to Medicare by disability only (OREC = 1).
3. For new enrollees, the concurrent ESRD marker is defined as at least one month in the payment year of ESRD status—dialysis, transplant, or post-graft.

**Source:** RTI Analysis of 100% 2011 PDE, 2010 Carrier NCH, 2010 Inpatient SAF, 2010 Outpatient SAF, 2011 HPMS, 2011 CME, 2010-2011 Denominator, and Part D Final Intermediate File.