



Report to Congress: Unified Payment for Medicare-Covered Post-Acute Care

Analysis and development of the prototype Unified PAC
prospective payment system called for in the IMPACT Act

Appendix H

Complete Results of Prototype Analyses

July 2022

Report to Congress: Unifying Payment for Medicare-Covered Post-Acute Care

Table H-1. Base Payment Weights by Unified PAC Clinical Group (UPCG) and PAC Case Mix Group (P-CMG) - 2017 through 2020

Unified PAC Clinical Group (UPCG)	PAC Case-Mix Group (P-CMG)		2017	2018	2019	2020	2017-2019
	Assignment Rule 1	Assignment Rule 2					
MMTA: Cardiac	1	Motor Function >= 11	0.259	0.252	0.271	0.251	0.261
	2	Motor Function < 11	0.305	0.304	0.320	0.288	0.309
MMTA: Endocrine	1	Motor Function >= 10	0.252	0.254	0.266	0.247	0.257
	2	Motor Function < 10	0.296	0.294	0.318	0.281	0.303
MMTA: Gastrointestinal/Genitourinary	1	Motor Function >= 11	0.224	0.228	0.236	0.231	0.230
	2	Motor Function < 11	0.272	0.273	0.286	0.273	0.279
MMTA: Infections	1		0.266	0.266	0.263	0.266	0.262
MMTA: Respiratory	1	Motor Function >= 14	0.238	0.231	0.241	0.234	0.237
	2	Motor Function < 14	0.286	0.283	0.294	0.274	0.287
MMTA: Surgical Aftercare	1	Motor Function >= 11	0.199	0.194	0.202	0.204	0.198
	2	Motor Function < 11	0.233	0.228	0.239	0.232	0.233
MMTA: Other	1		0.249	0.253	0.259	0.246	0.253
Lower Extremity Fracture (Including with Joint Replacement)	1	Motor Function >= 11	1.382	1.400	1.441	1.588	1.408
	2	Motor Function < 11	1.663	1.668	1.741	1.847	1.691
	3	Motor Function < 8	1.815	1.868	1.964	2.072	1.881
Major Joint Replacement Without Lower Extremity Fracture	1	Motor Function >= 12	0.981	0.960	1.016	1.150	0.988
	2	Motor Function < 12	1.082	1.070	1.130	1.275	1.092
	3	Motor Function < 9	1.325	1.303	1.413	1.516	1.343
Orthopedic Surgery (Not Joint Replacement)	1	Motor Function >= 13	1.254	1.179	1.300	1.452	1.265
	2	Motor Function < 13	1.506	1.414	1.550	1.689	1.517
	3	Motor Function < 10	1.751	1.649	1.811	1.963	1.770
Trauma	1	Motor Function >= 11	1.454	1.449	1.510	1.656	1.472
	2	Motor Function < 11	1.757	1.752	1.817	1.872	1.775
	3	Motor Function < 8	2.010	1.985	2.097	2.157	2.030
Limb Loss	1	Lower	1.926	1.929	2.020	2.218	1.961
	2	Upper	1.719	1.722	1.735	2.071	1.732
Orthopedic (Other)	1	Motor Function >= 11	1.245	1.212	1.277	1.407	1.239
	2	Motor Function < 11	1.476	1.437	1.504	1.600	1.462
	3	Motor Function < 8	1.664	1.663	1.769	1.868	1.686
Stroke	1	Motor Function >= 11	1.535	1.546	1.617	1.779	1.571
	2	Motor Function < 11	2.037	2.063	2.140	2.242	2.087
	3	Motor Function < 8	2.465	2.532	2.597	2.703	2.539
Non-Traumatic Brain Dysfunction	1	Motor Function >= 11	1.333	1.354	1.413	1.561	1.367
	2	Motor Function < 11	1.699	1.781	1.807	1.958	1.761
	3	Motor Function < 8	2.184	2.379	2.412	2.629	2.322
Spinal Dysfunction	1	Motor Function >= 11	1.576	1.491	1.639	1.779	1.569
	2	Motor Function < 11	2.106	2.069	2.183	2.437	2.134
	3	Motor Function < 8	3.364	3.024	3.136	3.738	3.191
Traumatic Brain Injury	1	Motor Function >= 11	1.390	1.390	1.487	1.553	1.422
	2	Motor Function < 11	1.698	1.714	1.788	1.874	1.732
	3	Motor Function < 8	2.131	2.175	2.324	2.241	2.211

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Table H-1. Base Payment Weights by Unified PAC Clinical Group (UPCG) and PAC Case Mix Group (P-CMG) - 2017 through 2020 (continued)

Unified PAC Clinical Group (UPCG)	PAC Case-Mix		2017	2018	2019	2020	2017-2019
	Group (P-CMG)	Assignment Rule 1					
Neurological (Other)	1	Motor Function >= 11	1.452	1.451	1.509	1.675	1.466
	2	Motor Function < 11	1.772	1.794	1.845	1.992	1.797
	3	Motor Function < 8	1.947	1.995	2.043	2.165	1.986
Respiratory	1	Motor Function >= 15	1.251	1.226	1.314	1.461	1.265
	2	Motor Function < 15	1.554	1.541	1.627	1.767	1.576
	3	Motor Function < 11	1.886	1.876	1.996	2.085	1.921
Cardiovascular	1	Motor Function >= 14	1.161	1.162	1.219	1.352	1.180
	2	Motor Function < 14	1.415	1.418	1.484	1.661	1.439
	3	Motor Function < 11	1.715	1.735	1.783	1.874	1.745
Behavioral Health	1		0.248	0.251	0.262	0.246	0.248
Coma	1		2.015	2.033	2.086	2.351	2.060
Invasive Ventilator	1		2.216	2.356	2.490	2.843	2.350
Gastrointestinal & Hepatobiliary	1		1.452	1.462	1.568	1.714	1.497
Infections	1	HIV/AIDS	2.456	2.339	2.456	2.727	2.451
	2	Hepatitis	1.638	1.565	1.683	1.589	1.638
	3	Septicemia	1.716	1.667	1.792	2.002	1.734
	4	Other	1.818	1.801	1.916	2.124	1.852
Kidney & Urinary	1		1.612	1.631	1.676	1.791	1.654
Skin	1		1.372	1.459	1.420	1.636	1.402
Cancer	1	Breast	1.588	1.693	1.669	1.943	1.682
	2	GI	1.532	1.623	1.670	1.815	1.635
	3	Respiratory	1.414	1.488	1.582	1.718	1.522
	4	Skin	1.599	1.773	1.842	1.918	1.763
	5	Endocrine	1.435	1.477	1.436	1.688	1.474
	6	Blood	1.545	1.694	1.715	1.855	1.679
	7	Bone/Soft Tissue	1.717	1.803	1.815	2.064	1.815
	8	Other	1.582	1.651	1.696	1.863	1.672
Transplant	1	Heart	1.825	1.830	2.121	2.167	1.922
	2	Liver	1.898	1.705	2.164	2.075	1.893
	3	Lung	2.316	1.793	2.462	2.665	2.176
	4	Kidney/Pancreas	1.376	1.491	2.008	1.751	1.591
	5	Bone Marrow	1.565	1.470	1.854	1.788	1.609
	6	Other	1.954	1.694	2.195	2.936	1.917
Hematological	1		1.921	1.701	1.551	1.789	1.756
Other	1		1.410	1.395	1.453	1.630	1.422
COVID-19	1					1.838	

Table H-2. Base Payment Weights for Special Populations (Decedents and Short Stays) - 2017 through 2020

Unified PAC Clinical Group (UPCG)	PAC Case-Mix Group (P-CMG)	2017	2018	2019	2020	2017-2019
MMTA: Cardiac	Short Stays	0.130	0.129	0.130	0.141	0.130
	Decedents	0.252	0.251	0.257	0.248	0.253
MMTA: Endocrine	Short Stays	0.135	0.132	0.140	0.148	0.135
	Decedents	0.289	0.297	0.267	0.254	0.283
MMTA: Gastrointestinal/Genitourinary	Short Stays	0.112	0.112	0.118	0.125	0.114
	Decedents	0.234	0.218	0.219	0.237	0.224
MMTA: Infections	Short Stays	0.117	0.115	0.121	0.128	0.117
	Decedents	0.212	0.215	0.231	0.226	0.219
MMTA: Respiratory	Short Stays	0.126	0.125	0.127	0.133	0.126
	Decedents	0.247	0.248	0.258	0.217	0.251
MMTA: Surgical Aftercare	Short Stays	0.102	0.104	0.106	0.120	0.104
	Decedents	0.237	0.221	0.251	0.223	0.236
MMTA: Other	Short Stays	0.119	0.113	0.114	0.123	0.115
	Decedents	0.246	0.292	0.240	0.201	0.257
Lower Extremity Fracture (Including with Joint Replacement)	Short Stays	0.408	0.425	0.436	0.611	0.423
	Decedents	1.172	1.212	1.159	1.329	1.190
Major Joint Replacement Without Lower Extremity Fracture	Short Stays	0.378	0.390	0.420	0.578	0.394
	Decedents	1.302	1.313	1.199	1.449	1.277
Orthopedic Surgery (Not Joint Replacement)	Short Stays	0.396	0.412	0.434	0.648	0.414
	Decedents	1.131	1.173	1.206	1.424	1.172
Trauma	Short Stays	0.716	0.691	0.723	1.024	0.711
	Decedents	1.198	1.331	1.285	1.558	1.268
Limb Loss	Short Stays	0.522	0.491	0.550	0.738	0.521
	Decedents	1.267	1.386	1.217	1.863	1.302
Orthopedic (Other)	Short Stays	0.479	0.482	0.516	0.634	0.491
	Decedents	1.135	1.149	1.159	1.380	1.149
Stroke	Short Stays	0.472	0.485	0.503	0.663	0.486
	Decedents	1.195	1.269	1.268	1.437	1.243
Non-Traumatic Brain Dysfunction	Short Stays	0.354	0.327	0.403	0.552	0.362
	Decedents	1.148	1.264	1.378	1.348	1.254
Spinal Dysfunction	Short Stays	0.316	0.534	0.825	0.409	0.535
	Decedents	3.509	1.019	1.231	1.677	1.852
Traumatic Brain Injury	Short Stays	0.333	0.375	0.388	0.521	0.365
	Decedents	1.030	1.039	1.034	1.214	1.034
Neurological (Other)	Short Stays	0.462	0.474	0.496	0.568	0.477
	Decedents	1.155	1.230	1.205	1.319	1.198
Respiratory	Short Stays	0.169	0.187	0.194	0.205	0.182
	Decedents	1.042	1.017	1.153	1.218	1.070

Table H-2. Base Payment Weights for Special Populations (Decedents and Short Stays) - 2017 through 2020 (continued)

Unified PAC Clinical Group (UPCG)	PAC Case-Mix Group (P-CMG)	2017	2018	2019	2020	2017-2019
Cardiovascular	Short Stays	0.273	0.288	0.305	0.404	0.287
	Decedents	1.018	1.029	1.054	1.234	1.035
Behavioral Health	Short Stays	0.113	0.116	0.122	0.114	0.117
	Decedents	0.256	0.239	0.270	0.172	0.256
Coma	Short Stays	0.205	0.226	0.577	0.316	0.298
	Decedents	0.849	0.902	0.984	1.250	0.902
Invasive Ventilator	Short Stays	0.266	0.281	0.198	0.247	0.255
	Decedents	1.984	1.950	2.091	2.250	2.014
Gastrointestinal & Hepatobiliary	Short Stays	0.226	0.237	0.259	0.270	0.240
	Decedents	1.050	1.024	1.173	1.316	1.080
Infections	Short Stays	0.232	0.219	0.236	0.290	0.230
	Decedents	1.113	1.139	1.145	1.315	1.135
Kidney & Urinary	Short Stays	0.179	0.192	0.196	0.200	0.189
	Decedents	1.014	1.057	1.123	1.298	1.063
Skin	Short Stays	0.652	0.687	0.672	0.942	0.670
	Decedents	1.272	1.320	1.301	1.498	1.299
Cancer	Short Stays	0.355	0.370	0.343	0.356	0.358
	Decedents	1.031	1.076	1.228	1.272	1.107
Transplant	Short Stays	0.602	0.518	0.563	1.066	0.563
	Decedents	2.156	1.696	2.119	2.261	1.932
Hematological	Short Stays	0.222	0.190	0.172	0.187	0.199
	Decedents	1.367	1.172	1.049	1.319	1.220
Other	Short Stays	0.345	0.342	0.352	0.504	0.347
	Decedents	1.029	1.029	1.083	1.188	1.047
COVID-19	Short Stays				0.365	
	Decedents				0.937	

Table H-3. Comorbidity Group Adjustment Factors by Unified PAC Clinical Group (UPCG) - 2017 through 2020

Unified PAC Clinical Group (UPCG)	2017					2018				
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 1	Group 2	Group 3	Group 4	Group 5
MMTA: Cardiac	1.000	1.097	1.153	1.206	1.287	1.000	1.104	1.156	1.206	1.288
MMTA: Endocrine	1.000	1.165	1.247	1.314	1.414	1.000	1.132	1.187	1.284	1.368
MMTA: Gastrointestinal/Genitourinary	1.000	1.134	1.186	1.223	1.301	1.000	1.114	1.171	1.209	1.317
MMTA: Infections	1.000	1.062	1.137	1.204	1.327	1.000	1.051	1.128	1.201	1.305
MMTA: Respiratory	1.000	1.091	1.146	1.229	1.312	1.000	1.088	1.173	1.240	1.308
MMTA: Surgical Aftercare	1.000	1.130	1.212	1.295	1.487	1.000	1.128	1.239	1.330	1.491
MMTA: Other	1.000	1.131	1.181	1.240	1.347	1.000	1.109	1.146	1.228	1.332
Lower Extremity Fracture (Including with Joint Replacement)	1.000	1.095	1.126	1.161	1.169	1.000	1.090	1.137	1.155	1.169
Major Joint Replacement Without Lower Extremity Fracture	1.000	1.045	1.107	1.204	1.372	1.000	1.067	1.134	1.219	1.404
Orthopedic Surgery (Not Joint Replacement)	1.000	1.119	1.166	1.169	1.199	1.000	1.150	1.222	1.263	1.293
Trauma	1.000	1.046	1.066	1.071	1.126	1.000	1.082	1.099	1.107	1.147
Limb Loss	1.000	1.022	1.080	1.113	1.225	1.000	1.062*	1.062*	1.100	1.215
Orthopedic (Other)	1.000	1.088	1.151	1.193	1.226	1.000	1.108	1.173	1.217	1.256
Stroke	1.000	1.062	1.088	1.107	1.162	1.000	1.054	1.073	1.094	1.143
Non-Traumatic Brain Dysfunction	1.000	1.106	1.214	1.261	1.416	1.000	1.101	1.152	1.262	1.355
Spinal Dysfunction	1.000	1.100	1.167*	1.167*	1.209	1.000	1.092	1.127*	1.127*	1.238
Traumatic Brain Injury	1.000	1.054	1.122	1.162	1.290	1.000	1.023	1.106	1.147	1.259
Neurological (Other)	1.000	1.040*	1.048*	1.064	1.098	1.000	1.031	1.043	1.066	1.092
Respiratory	1.000	1.038	1.061	1.069	1.114	1.000	1.048	1.066	1.066	1.106
Cardiovascular	1.000	1.049	1.084	1.123	1.161	1.000	1.052	1.086	1.124	1.145
Behavioral Health	1.000	1.141	1.238	1.337	1.401	1.000	1.089	1.204	1.268	1.342
Coma	1.000	1.018	1.050	1.085	1.450	1.000*	1.000*	1.003	1.072	1.308
Invasive Ventilator	1.000	1.113	1.218	1.421	1.737	1.000	1.067	1.168	1.367	1.653
Gastrointestinal & Hepatobiliary	1.000	1.090	1.135	1.172	1.207	1.000	1.094	1.137	1.165	1.229
Infections	1.000	1.041	1.074	1.093	1.170	1.000	1.043	1.064	1.111	1.187
Kidney & Urinary	1.000	1.057	1.079	1.083	1.127	1.000	1.050	1.074	1.085	1.127
Skin	1.000	1.077	1.111	1.157	1.236	1.000	1.064	1.117	1.150	1.209
Cancer	1.000	1.110	1.145	1.226	1.284	1.000	1.066	1.100	1.167	1.217
Transplant	1.000	1.084	1.192	1.283	1.611	1.000	1.244*	1.244*	1.375	1.538
Hematological	1.000	1.060	1.110	1.162	1.163	1.000	1.023	1.030	1.088	1.163
Other	1.000	1.100	1.167	1.214	1.305	1.000	1.093	1.148	1.209	1.323
COVID-19										

Note: Constraints applied (shown in Red and marked with an asterisk) to ensure monotonicity of comorbidity groups within UPGC.

Table H-3. Comorbidity Group Adjustment Factors by Unified PAC Clinical Group (UPCG) - 2017 through 2020 (continued)

Unified PAC Clinical Group (UPCG)	2019					2020				
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 1	Group 2	Group 3	Group 4	Group 5
MMTA: Cardiac	1.000	1.084	1.108	1.140	1.225	1.000	1.090	1.130	1.153	1.251
MMTA: Endocrine	1.000	1.126	1.164	1.207	1.278	1.000	1.131	1.188	1.220	1.292
MMTA: Gastrointestinal/Genitourinary	1.000	1.091	1.147	1.187	1.257	1.000	1.075	1.132	1.170	1.241
MMTA: Infections	1.000	1.140	1.166	1.242	1.351	1.000	1.065	1.112	1.193	1.272
MMTA: Respiratory	1.000	1.110	1.149	1.197	1.274	1.000	1.086	1.143	1.194	1.276
MMTA: Surgical Aftercare	1.000	1.150	1.205	1.308	1.486	1.000	1.136	1.216	1.305	1.443
MMTA: Other	1.000	1.139	1.149	1.211	1.273	1.000	1.095	1.149	1.203	1.299
Lower Extremity Fracture (Including with Joint Replacement)	1.000	1.082	1.122	1.165	1.168	1.000	1.090	1.145	1.146	1.172
Major Joint Replacement Without Lower Extremity Fracture	1.000	1.066	1.127	1.217	1.413	1.000	1.095	1.161	1.268	1.446
Orthopedic Surgery (Not Joint Replacement)	1.000	1.108	1.160	1.203	1.240	1.000	1.111	1.180	1.236	1.239
Trauma	1.000	1.042	1.066	1.115	1.134	1.000	1.057	1.088	1.139	1.157
Limb Loss	1.000	1.046	1.091	1.137	1.213	1.000	1.072	1.099	1.135	1.159
Orthopedic (Other)	1.000	1.097	1.145	1.188	1.228	1.000	1.100	1.157	1.208	1.257
Stroke	1.000	1.045	1.078	1.086	1.142	1.000	1.061	1.074	1.085	1.120
Non-Traumatic Brain Dysfunction	1.000	1.089	1.162	1.251	1.361	1.000	1.116	1.129	1.220	1.308
Spinal Dysfunction	1.000	1.185*	1.185*	1.350*	1.350*	1.000	1.011	1.056	1.167	1.255
Traumatic Brain Injury	1.000	1.087	1.089	1.147	1.264	1.000	1.076	1.128	1.202	1.272
Neurological (Other)	1.000	1.050	1.055	1.075	1.105	1.000	1.049	1.059	1.078	1.113
Respiratory	1.000	1.032	1.048	1.059	1.101	1.000	1.037	1.062	1.074	1.122
Cardiovascular	1.000	1.061	1.093	1.136	1.173	1.000	1.049	1.081	1.104	1.146
Behavioral Health	1.000	1.118	1.164	1.244*	1.244*	1.000	1.097	1.157	1.180	1.234
Coma	1.000	1.121	1.129*	1.129*	1.273	1.000	1.116*	1.116*	1.116*	1.199
Invasive Ventilator	1.000	1.061	1.168	1.332	1.616	1.000	1.074	1.121	1.301	1.512
Gastrointestinal & Hepatobiliary	1.000	1.086	1.145	1.198	1.248	1.000	1.099	1.136	1.182	1.225
Infections	1.000	1.031	1.085	1.116	1.200	1.000	1.074	1.106	1.119	1.159
Kidney & Urinary	1.000	1.074	1.082	1.116	1.169	1.000	1.045	1.091	1.108	1.154
Skin	1.000	1.089	1.161	1.180	1.219	1.000	1.101	1.148	1.196*	1.196*
Cancer	1.000	1.105	1.115	1.158	1.221	1.000	1.039	1.109	1.177	1.239
Transplant	1.000	1.064*	1.064*	1.285	1.322	1.000	1.131	1.353*	1.353*	1.590
Hematological	1.000	1.090	1.095	1.125	1.170	1.000	1.107*	1.107*	1.134	1.185
Other	1.000	1.096	1.153	1.234	1.332	1.000	1.108	1.171	1.245	1.357
COVID-19						1.000	1.132	1.190	1.275	1.348

Note: Constraints applied (shown in Red and marked with an asterisk) to ensure monotonicity of comorbidity groups within UPGC.

Table H-3. Comorbidity Group Adjustment Factors by Unified PAC Clinical Group (UPCG) - 2017 through 2020 (continued)

Unified PAC Clinical Group (UPCG)	2017-2019				
	Group 1	Group 2	Group 3	Group 4	Group 5
MMTA: Cardiac	1.000	1.098	1.135	1.165	1.251
MMTA: Endocrine	1.000	1.146	1.205	1.273	1.366
MMTA: Gastrointestinal/Genitourinary	1.000	1.115	1.166	1.192	1.270
MMTA: Infections	1.000	1.098	1.156	1.229	1.342
MMTA: Respiratory	1.000	1.098	1.149	1.194	1.288
MMTA: Surgical Aftercare	1.000	1.136	1.215	1.301	1.488
MMTA: Other	1.000	1.129	1.165	1.235	1.319
Lower Extremity Fracture (Including with Joint Replacement)	1.000	1.095	1.135	1.160	1.167
Major Joint Replacement Without Lower Extremity Fracture	1.000	1.056	1.122	1.213	1.397
Orthopedic Surgery (Not Joint Replacement)	1.000	1.104	1.155	1.188	1.217
Trauma	1.000	1.056	1.077	1.097	1.133
Limb Loss	1.000	1.041	1.079	1.121	1.214
Orthopedic (Other)	1.000	1.107	1.157	1.201	1.249
Stroke	1.000	1.045	1.071	1.092	1.144
Non-Traumatic Brain Dysfunction	1.000	1.098	1.175	1.257	1.376
Spinal Dysfunction	1.000	1.126	1.145	1.179	1.264
Traumatic Brain Injury	1.000	1.055	1.108	1.158	1.269
Neurological (Other)	1.000	1.032	1.052	1.071	1.101
Respiratory	1.000	1.039	1.057	1.063	1.105
Cardiovascular	1.000	1.052	1.085	1.126	1.168
Behavioral Health	1.000	1.122	1.195	1.300	1.340
Coma	1.000	1.015	1.055	1.089	1.358
Invasive Ventilator	1.000	1.083	1.186	1.376	1.672
Gastrointestinal & Hepatobiliary	1.000	1.088	1.131	1.168	1.218
Infections	1.000	1.044	1.071	1.099	1.169
Kidney & Urinary	1.000	1.052	1.063	1.080	1.128
Skin	1.000	1.072	1.127	1.161	1.223
Cancer	1.000	1.085	1.097	1.162	1.218
Transplant	1.000	1.137	1.171	1.326	1.499
Hematological	1.000	1.058	1.079	1.124	1.153
Other	1.000	1.096	1.155	1.216	1.316
COVID-19					

Note: Constraints applied (shown in Red and marked with an asterisk) to ensure monotonicity of comorbidity groups within UPGC.

Table H-4. PAC Setting Adjustment Factors by Unified PAC Clinical Group (UPCG) - 2017 through 2020

Unified PAC Clinical Group (UPCG)	2017					2018				
	IRF	SNF	HHA	LTCH	LTCH-SN	IRF	SNF	HHA	LTCH	LTCH-SN
MMTA: Cardiac	-	-	1.000	-	-	-	-	1.000	-	-
MMTA: Endocrine	-	-	1.000	-	-	-	-	1.000	-	-
MMTA: Gastrointestinal/Genitourinary	-	-	1.000	-	-	-	-	1.000	-	-
MMTA: Infections	-	-	1.000	-	-	-	-	1.000	-	-
MMTA: Respiratory	-	-	1.000	-	-	-	-	1.000	-	-
MMTA: Surgical Aftercare	-	-	1.000	-	-	-	-	1.000	-	-
MMTA: Other	-	-	1.000	-	-	-	-	1.000	-	-
Lower Extremity Fracture (Including with Joint Replacement)	1.000	0.901	0.214	1.950	1.483	1.000	0.876	0.206	1.658	1.308
Major Joint Replacement Without Lower Extremity Fracture	1.000	0.730	0.191	2.165	1.876	1.000	0.753	0.183	2.157	1.844
Orthopedic Surgery (Not Joint Replacement)	1.000	0.967	0.207	2.297	1.837	1.000	0.946	0.199	2.027	1.768
Trauma	1.000	0.804	0.198	2.115	1.699	1.000	0.800	0.193	2.067	1.904
Limb Loss	1.000	0.833	0.223	2.085	1.807	1.000	0.817	0.214	2.061	1.816
Orthopedic (Other)	1.000	0.889	0.206	2.551	2.230	1.000	0.884	0.194	2.733	2.244
Stroke	1.000	0.781	0.207	1.528	1.062	1.000	0.771	0.204	1.452	1.179
Non-Traumatic Brain Dysfunction	1.000	0.784	0.208	1.512	1.558	1.000	0.757	0.203	1.414	1.677
Spinal Dysfunction	1.000	0.721	0.179	1.495	4.292	1.000	0.808	0.216	1.305	-
Traumatic Brain Injury	1.000	0.751	0.202	1.552	1.434	1.000	0.747	0.194	2.017	1.207
Neurological (Other)	1.000	0.787	0.200	1.948	1.340	1.000	0.785	0.196	2.034	1.479
Respiratory	1.000	0.760	0.201	1.903	1.599	1.000	0.760	0.183	1.983	1.702
Cardiovascular	1.000	0.807	0.257	2.305	1.940	1.000	0.800	0.255	2.413	1.991
Behavioral Health	-	-	1.000	-	-	-	-	1.000	-	-
Coma	1.000	0.879	0.242	2.801	2.471	1.000	0.790	0.227	3.000	2.632
Invasive Ventilator	1.000	0.933	0.205	2.183	2.020	1.000	0.918	0.185	2.218	2.092
Gastrointestinal & Hepatobiliary	1.000	0.793	0.198	2.442	2.031	1.000	0.787	0.201	2.472	2.024
Infections	1.000	0.764	0.159	1.986	1.697	1.000	0.787	0.165	2.096	1.722
Kidney & Urinary	1.000	0.804	0.170	2.063	1.431	1.000	0.793	0.175	2.165	1.314
Skin	1.000	0.941	0.256	2.597	2.266	1.000	0.894	0.239	2.530	2.047
Cancer	1.000	0.670	0.202	1.630	1.689	1.000	0.652	0.199	2.043	1.576
Transplant	1.000	0.654	0.194	1.611	1.408	1.000	0.752	0.205	1.864	1.906
Hematological	1.000	0.640	0.145	1.333	1.316	1.000	0.747	0.216	2.041	1.499
Other	1.000	0.834	0.212	2.436	1.966	1.000	0.845	0.213	2.414	1.861
COVID-19	-	-	-	-	-	-	-	-	-	-

Note: "-" indicates no cases.

Table H-4. PAC Setting Adjustment Factors by Unified PAC Clinical Group (UPCG) - 2017 through 2020 (continued)

Unified PAC Clinical Group (UPCG)	2019					2020				
	IRF	SNF	HHA	LTCH	LTCH-SN	IRF	SNF	HHA	LTCH	LTCH-SN
MMTA: Cardiac	-	-	1.000	-	-	-	-	1.000	-	-
MMTA: Endocrine	-	-	1.000	-	-	-	-	1.000	-	-
MMTA: Gastrointestinal/Genitourinary	-	-	1.000	-	-	-	-	1.000	-	-
MMTA: Infections	-	-	1.000	-	-	-	-	1.000	-	-
MMTA: Respiratory	-	-	1.000	-	-	-	-	1.000	-	-
MMTA: Surgical Aftercare	-	-	1.000	-	-	-	-	1.000	-	-
MMTA: Other	-	-	1.000	-	-	-	-	1.000	-	-
Lower Extremity Fracture (Including with Joint Replacement)	1.000	0.846	0.204	1.822	1.462	1.000	0.777	0.177	2.028	1.630
Major Joint Replacement Without Lower Extremity Fracture	1.000	0.739	0.174	2.539	2.361	1.000	0.696	0.159	2.198	2.231
Orthopedic Surgery (Not Joint Replacement)	1.000	0.891	0.197	2.054	1.830	1.000	0.786	0.176	1.962	1.924
Trauma	1.000	0.761	0.197	1.911	1.284	1.000	0.699	0.173	1.773	1.507
Limb Loss	1.000	0.779	0.206	2.193	1.684	1.000	0.693	0.180	2.203	1.918
Orthopedic (Other)	1.000	0.870	0.194	2.650	2.238	1.000	0.777	0.165	2.623	2.423
Stroke	1.000	0.750	0.203	1.522	1.711	1.000	0.658	0.170	1.619	1.742
Non-Traumatic Brain Dysfunction	1.000	0.758	0.209	1.457	1.491	1.000	0.680	0.182	1.564	1.198
Spinal Dysfunction	1.000	0.710	0.167	2.058	4.502	1.000	0.557	0.188	3.782	2.344
Traumatic Brain Injury	1.000	0.717	0.197	1.715	1.204	1.000	0.687	0.179	2.180	1.573
Neurological (Other)	1.000	0.767	0.198	2.430	1.587	1.000	0.678	0.172	2.098	1.635
Respiratory	1.000	0.737	0.187	1.990	1.764	1.000	0.685	0.150	1.954	1.788
Cardiovascular	1.000	0.773	0.263	2.289	1.997	1.000	0.693	0.250	2.383	2.061
Behavioral Health	-	-	1.000	-	-	-	-	1.000	-	-
Coma	1.000	0.763	0.224	3.015	2.530	1.000	0.642	0.181	3.011	2.879
Invasive Ventilator	1.000	0.865	-	2.232	2.258	1.000	0.783	-	2.278	2.100
Gastrointestinal & Hepatobiliary	1.000	0.734	0.201	2.360	1.781	1.000	0.692	0.172	2.272	1.980
Infections	1.000	0.729	0.170	1.992	1.753	1.000	0.653	0.152	1.954	1.814
Kidney & Urinary	1.000	0.749	0.176	2.154	1.349	1.000	0.699	0.145	2.057	1.521
Skin	1.000	0.891	0.254	2.634	2.118	1.000	0.765	0.206	2.358	2.043
Cancer	1.000	0.651	0.194	1.919	1.880	1.000	0.597	0.177	1.973	2.063
Transplant	1.000	0.659	0.182	1.823	1.879	1.000	0.530	0.129	1.273	1.596
Hematological	1.000	0.765	0.175	2.378	1.639	1.000	0.662	0.160	2.907	2.349
Other	1.000	0.806	0.217	2.452	1.874	1.000	0.695	0.177	2.250	2.019
COVID-19	-	-	-	-	-	1.000	0.545	0.131	1.945	1.500

Note: "-" indicates no cases.

Table H-4. PAC Setting Adjustment Factors by Unified PAC Clinical Group (UPCG) - 2017 through 2020 (continued)

Unified PAC Clinical Group (UPCG)	2021				
	IRF	SNF	HHA	LTCH	LTCH-SN
MMTA: Cardiac	-	-	1.000	-	-
MMTA: Endocrine	-	-	1.000	-	-
MMTA: Gastrointestinal/Genitourinary	-	-	1.000	-	-
MMTA: Infections	-	-	1.000	-	-
MMTA: Respiratory	-	-	1.000	-	-
MMTA: Surgical Aftercare	-	-	1.000	-	-
MMTA: Other	-	-	1.000	-	-
Lower Extremity Fracture (Including with Joint Replacement)	1.000	0.874	0.208	1.815	1.418
Major Joint Replacement Without Lower Extremity Fracture	1.000	0.740	0.183	2.318	1.988
Orthopedic Surgery (Not Joint Replacement)	1.000	0.935	0.201	2.127	1.815
Trauma	1.000	0.788	0.196	2.033	1.676
Limb Loss	1.000	0.810	0.214	2.112	1.781
Orthopedic (Other)	1.000	0.883	0.199	2.635	2.233
Stroke	1.000	0.767	0.205	1.506	1.248
Non-Traumatic Brain Dysfunction	1.000	0.766	0.207	1.463	1.578
Spinal Dysfunction	1.000	0.745	0.187	1.702	4.359
Traumatic Brain Injury	1.000	0.737	0.197	1.744	1.279
Neurological (Other)	1.000	0.780	0.198	2.122	1.435
Respiratory	1.000	0.751	0.191	1.958	1.673
Cardiovascular	1.000	0.794	0.258	2.337	1.967
Behavioral Health	-	-	1.000	-	-
Coma	1.000	0.817	0.231	2.921	2.546
Invasive Ventilator	1.000	0.904	0.193	2.204	2.105
Gastrointestinal & Hepatobiliary	1.000	0.772	0.199	2.424	1.966
Infections	1.000	0.757	0.164	2.023	1.716
Kidney & Urinary	1.000	0.782	0.173	2.123	1.375
Skin	1.000	0.910	0.250	2.585	2.167
Cancer	1.000	0.657	0.198	1.859	1.715
Transplant	1.000	0.690	0.193	1.759	1.652
Hematological	1.000	0.698	0.173	1.882	1.458
Other	1.000	0.831	0.214	2.435	1.912
COVID-19	-	-	-	-	-

Note: "-" indicates no cases.

Table H-5. Rural Adjustment Factors by Unified PAC Clinical Group (UPCG) - 2017 through 2020

Unified PAC Clinical Group (UPCG)	2017	2018	2019	2020	2021
MMTA: Cardiac	1.137	1.178	1.172	1.163	1.160
MMTA: Endocrine	1.112	1.154	1.155	1.122	1.135
MMTA: Gastrointestinal/Genitourinary	1.185	1.201	1.210	1.165	1.197
MMTA: Infections	1.125	1.186	1.179	1.181	1.165
MMTA: Respiratory	1.158	1.164	1.172	1.169	1.163
MMTA: Surgical Aftercare	1.170	1.185	1.194	1.181	1.183
MMTA: Other	1.149	1.206	1.184	1.141	1.179
Lower Extremity Fracture (Including with Joint Replacement)	1.122	1.134	1.139	1.120	1.130
Major Joint Replacement Without Lower Extremity Fracture	1.181	1.181	1.201	1.178	1.185
Orthopedic Surgery (Not Joint Replacement)	1.146	1.153	1.161	1.133	1.153
Trauma	1.143	1.144	1.192	1.142	1.159
Limb Loss	1.090	1.128	1.093	1.079	1.102
Orthopedic (Other)	1.128	1.154	1.156	1.143	1.143
Stroke	1.128	1.138	1.137	1.143	1.133
Non-Traumatic Brain Dysfunction	1.130	1.102	1.149	1.118	1.126
Spinal Dysfunction	1.109	1.000*	1.191	1.161	1.088
Traumatic Brain Injury	1.183	1.159	1.148	1.124	1.160
Neurological (Other)	1.108	1.119	1.140	1.102	1.121
Respiratory	1.083	1.089	1.096	1.078	1.088
Cardiovascular	1.106	1.121	1.126	1.107	1.117
Behavioral Health	1.140	1.140	1.124	1.113	1.137
Coma	1.000*	1.000*	1.000*	1.000*	1.000*
Invasive Ventilator	1.118	1.000*	1.039	1.038	1.044
Gastrointestinal & Hepatobiliary	1.091	1.094	1.076	1.065	1.087
Infections	1.065	1.086	1.072	1.059	1.074
Kidney & Urinary	1.109	1.102	1.114	1.097	1.108
Skin	1.112	1.125	1.110	1.109	1.114
Cancer	1.099	1.105	1.111	1.087	1.104
Transplant	1.080	1.070	1.165	1.000*	1.111
Hematological	1.155	1.091	1.186	1.097	1.149
Other	1.106	1.119	1.105	1.090	1.109
COVID-19	-	-	-	1.000*	-

Note: Constraints applied (shown in Red and marked with an asterisk) to ensure Rural adjustment factors are always greater than or equal to 1.0.

Note: "-" indicates no cases.

Notes:

- 1) IRF = Inpatient Rehabilitation Facility, SNF = Skilled Nursing Facility, LTCH = Long-Term Care Hospital, HHA = Home Health Agency, PAC = Post-Acute Care, MMTA = Medication Management, Teaching, and Assessment.
- 2) Unit of payment (i.e., unit of analysis for calibration of payment weights) is the PAC "stay." A stay may span more than one PAC claim.
- 3) Payment weights calibrated using all PAC Claims from a 50% random sample of PAC users within each year. Independent samples drawn from each year.
- 4) HHA claims aggregated to "stays" defined as sequences of HHA episodes representing a continuous course of care. Stays beginning with a recertification (indicating the sequence has additional claims in the prior year) were dropped.
- 5) LTCH stays include both stays paid under the LTCH PPS and under the site-neutral LTCH payment policy.
- 6) "Short stays" defined as length of stay of 3 calendar days or fewer for IRF, SNF, and LTCH, and 4 visits or fewer for HHA.
- 7) "Decedents" defined as the beneficiary being deceased upon discharge from the PAC stay.
- 8) Cost outliers (PAC stay total cost >3 SD from the mean within UPCG, P-CMG, and PAC Provider Type) were excluded from these statistics.
- 9) Total cost of the PAC stay is adjusted to account for geographic variation in wages using the CMS wage-index and labor share for each geographic area and PAC setting in each year.
- 10) Adjustment factors for Comorbidity Group, PAC Setting, and Rural Area estimated using generalized linear model with log link function and gamma distribution with a dependent variable of Total Cost of the PAC stay. Separate models are estimated for each UPCG and control for P-CMG. Separate adjustment factors are estimated for LTCH stays paid under the LTCH PPS and stays paid under the site-neutral LTCH payment policy.
- 11) Base payment weight calculated as the relative average "Adjusted Cost" of PAC stays assigned to the UPCG and P-CMG shown. Adjusted cost is calculated by estimating adjustment factors for Comorbidity Group, PAC Setting, and Rural Areas and dividing total claim cost by the corresponding values for the PAC stay.
- 12) Final payment weight (not shown) is calculated by multiplying the PAC stay's base payment weight by its corresponding Comorbidity, PAC Setting, and Rural Adjustment factors. Special populations (i.e., short stays, decedents) are always assigned to Comorbidity Group 1.

Source: RTI International Analysis of Medicare Claims and Administrative Data – 2017 to 2020

RTI Program Reference: UPAC_BS0040