



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 G

Comorbidity Groups and Corresponding Exclusions from Unified PAC Clinical Groups

July 2022

Table G-1. Comorbidity Groups and Corresponding Exclusions from Unified PAC Clinical Groups

Comorbidity	Excluded From*
Anemia	Hematological
Other Blood	Hematological
Chronic rheumatic heart disease	Cardiovascular (+ MMTA)
Acute rheumatic heart disease	Cardiovascular (+ MMTA)
Endocarditis and endocardial disease	Cardiovascular (+ MMTA)
Myocarditis and cardiomyopathy	Cardiovascular (+ MMTA)
Pericarditis and pericardial disease	Cardiovascular (+ MMTA)
Essential hypertension	Cardiovascular (+ MMTA)
Hypertension with complications and secondary hypertension	Cardiovascular (+ MMTA)
Acute myocardial infarction	Cardiovascular (+ MMTA)
Coronary atherosclerosis and other heart disease	Cardiovascular (+ MMTA)
Acute pulmonary embolism	Cardiovascular (+ MMTA)
Pulmonary heart disease	Cardiovascular (+ MMTA)
Conduction disorders	Cardiovascular (+ MMTA)
Cardiac dysrhythmias	Cardiovascular (+ MMTA)
Cardiac arrest and ventricular fibrillation	Cardiovascular (+ MMTA)
Heart failure	Cardiovascular (+ MMTA)
Cerebral infarction	Stroke
Acute hemorrhagic cerebrovascular disease	Stroke
Sequela of hemorrhagic cerebrovascular disease	Stroke
Occlusion or stenosis of precerebral or cerebral arteries without infarction	Stroke
Other and ill-defined cerebrovascular disease	Stroke
Sequela of cerebral infarction and other cerebrovascular disease	Stroke
Peripheral and visceral vascular disease	Cardiovascular (+ MMTA)
Arterial dissections	Cardiovascular (+ MMTA)
Gangrene	Cardiovascular (+ MMTA)
Aortic; peripheral; and visceral artery aneurysms	Cardiovascular (+ MMTA)
Aortic and peripheral arterial embolism or thrombosis	Cardiovascular (+ MMTA)
Hypotension	Cardiovascular (+ MMTA)
Acute phlebitis; thrombophlebitis and thromboembolism	Cardiovascular (+ MMTA)
Chronic phlebitis; thrombophlebitis and thromboembolism	Cardiovascular (+ MMTA)
Post thrombotic syndrome and venous insufficiency/hypertension	Cardiovascular (+ MMTA)
Vasculitis	Cardiovascular (+ MMTA)
Postprocedural or postoperative circulatory system complication	Cardiovascular (+ MMTA)
Intestinal infection	Gastrointestinal & Hepatobiliary

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Comorbidity	Excluded From*
Gastroduodenal ulcer	Gastrointestinal & Hepatobiliary
Gastrointestinal and biliary perforation	Gastrointestinal & Hepatobiliary
Gastritis and duodenitis	Gastrointestinal & Hepatobiliary
Appendicitis and other appendiceal conditions	Gastrointestinal & Hepatobiliary
Peritonitis and intra-abdominal abscess	Gastrointestinal & Hepatobiliary
Biliary tract disease	Gastrointestinal & Hepatobiliary
Hepatic failure	Gastrointestinal & Hepatobiliary
Pancreatic disorders (excluding diabetes)	Gastrointestinal & Hepatobiliary
Gastrointestinal hemorrhage	Gastrointestinal & Hepatobiliary
Noninfectious hepatitis	Gastrointestinal & Hepatobiliary
Postprocedural or postoperative digestive system complication	Gastrointestinal & Hepatobiliary
Diseases of middle ear and mastoid (except otitis media)	
Diseases of inner ear and related conditions	
Thyroid disorders	MMTA: Endocrine
Diabetes mellitus without complication	MMTA: Endocrine
Diabetes mellitus with complication	MMTA: Endocrine
Diabetes mellitus, Type 1	MMTA: Endocrine
Diabetes mellitus, Type 2	MMTA: Endocrine
Diabetes mellitus, due to underlying condition, drug or chemical induced, or other specified type	MMTA: Endocrine
Obesity	MMTA: Endocrine
Fluid and electrolyte disorders	MMTA: Endocrine
Pituitary disorders	MMTA: Endocrine
Cornea and external disease	
Cataract and other lens disorders	
Glaucoma	
Uveitis and ocular inflammation	
Retinal and vitreous conditions	
Neuro-ophthalmology	
Oculofacial plastics and orbital conditions	
Blindness and vision defects	
Other Cancers/Neoplasms	Cancer
Nephritis; nephrosis; renal sclerosis	MMTA: Endocrine, Kidney and Urinary
Acute and unspecified renal failure	Kidney/Urinary
Chronic kidney disease	Kidney/Urinary
Infections	Infections
Septicemia	Infections
Coronavirus disease – 2019 (COVID-19)	

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Comorbidity	Excluded From*
Fractures and Dislocations	Orthopedic (All Groups)
Other wounds and injuries	Orthopedic (All Groups), TBI
Other wounds and injuries	Orthopedic (All Groups), Spinal Dysfunction
Other wounds and injuries	Orthopedic (All Groups)
Other wounds and injuries	Orthopedic (All Groups), Burns
Other wounds and injuries	Orthopedic (All Groups), Brain Dysfunction
Complications	
Complication of transplanted organs or tissue, initial encounter	
Schizophrenia spectrum and other psychotic disorders	Behavioral Health
Depressive disorders	Behavioral Health
Bipolar and related disorders	Behavioral Health
Anxiety and fear-related disorders	Behavioral Health
Obsessive-compulsive and related disorders	Behavioral Health
Suicidal Ideation/Self-Harm	Behavioral Health
SUD	Behavioral Health
Opioid-related disorders	Behavioral Health
Infective arthritis	
Osteomyelitis	
Rheumatoid arthritis and related disease	
Osteoarthritis	
Immune-mediated/reactive arthropathies	
Tendon and synovial disorders	
Musculoskeletal pain, not low back pain	
Spondylopathies/spondyloarthropathy (including infective)	
Osteoporosis	
Scoliosis and other postural dorsopathic deformities	
Systemic lupus erythematosus and connective tissue disorders	
Muscle disorders	
Musculoskeletal abscess	
Aseptic necrosis and osteonecrosis	
Traumatic arthropathy	
Neurogenic/neuropathic arthropathy	
Gout	
Crystal arthropathies (excluding gout)	
Postprocedural or postoperative musculoskeletal system complication	
Low back pain	
Head and Neck Cancers	Cancer

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Comorbidity	Excluded From*
Cardiac cancers	Cancer
GI Cancers	Cancer
Respiratory cancers	Cancer
Bone cancer	Cancer
Skin Cancers and Sarcoma	Cancer
Breast Cancers	Cancer
Female Reproductive Cancers	Cancer
Male Reproductive Cancers	Cancer
Urinary System Cancers	Cancer
Nervous System Cancers	Cancer
Endocrine Cancers	Cancer
Leukemia and Lymphoma	Cancer
Meningitis	Brain Dysfunction
Encephalitis	Brain Dysfunction
Parkinson`s disease	Neurological (Other)
Multiple sclerosis	Neurological (Other)
Cerebral palsy	Neurological (Other)
Paralysis (other than cerebral palsy)	Neurological (Other)
Epilepsy; convulsions	Neurological (Other)
Neurocognitive disorders	Neurological (Other)
Transient cerebral ischemia	Stroke
Coma; stupor; and brain damage	Comatose
CNS abscess	Neurological (Other)
Polyneuropathies	Neurological (Other)
Nerve and nerve root disorders	Neurological (Other)
Myopathies	Neurological (Other)
Nervous system pain and pain syndromes	Neurological (Other)
Postprocedural or postoperative nervous system complication	Neurological (Other)
Pneumonia (except that caused by tuberculosis)	Respiratory (+ MMTA)
Influenza	Respiratory (+ MMTA)
Chronic obstructive pulmonary disease and bronchiectasis	Respiratory (+ MMTA)
Asthma	Respiratory (+ MMTA)
Aspiration pneumonitis	Respiratory (+ MMTA)
Pleurisy, pleural effusion, and pulmonary collapse	Respiratory (+ MMTA)
Respiratory failure; insufficiency; arrest	Respiratory (+ MMTA)
Skin and subcutaneous tissue infections	Skin
Pressure ulcer of skin	Skin
Non-pressure ulcer of skin	Skin
Dysphagia	

Comorbidity	Excluded From*
Either bladder or bowel incontinence**	
Both bladder and bowel incontinence**	
Cognitive or expression impairment**	

Notes:

1. *Comorbidity groups adapted from AHRQ CCSR Version 2021.1.*
2. *Comorbidities flagged by mapping the first ten secondary diagnoses on the PAC Claim to corresponding CCSR groups.*
3. *A diagnosis code can map to more than one CCSR. All CCSRs mapped to secondary diagnoses were flagged as comorbidities.*
4. **Indicates that the comorbidity is not flagged on cases assigned to the UPCG shown.*
5. ***Additional groups added based on data on the PAC assessment instrument.*

Sources:

Clinical Classifications Software Refined (CCSR). Healthcare Cost and Utilization Project (HCUP). October 2021. Agency for Healthcare Research and Quality, Rockville, MD. www.hcup-us.ahrq.gov/toolssoftware/ccsr/ccs_refined.jsp
RTI International

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