

UNC Health UNCMC Comprehensive Stroke Center

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HCAHPS and Press Ganey Stroke DRG codes reports

Press Ganey and HCAHPS Reports

- UNC uses Press Ganey
- Can design reports by month or quarter
- We pick the lowest performing 2-3 measures
- Press Ganey sorted by patient populations, Stroke DRG codes.
- We input the reports into tableau for the graphs
- Patient Satisfaction is reported quarterly at our Stroke Multidisciplinary Team meetings.

MS-DRG codes for Stroke

- **061:** Acute ischemic stroke with use of thrombolytic agent and major complication code (MCC)
- **062:** Acute ischemic stroke with use of thrombolytic agent and complication code (CC)
- **063:** Acute ischemic stroke with use of thrombolytic agent without CC or MCC
- **064:** Intracranial hemorrhage or cerebral infarction with MCC
- **069:** Transient cerebral ischemic attack, unspecified

Other codes that can be used depending on your stroke patient population

Other stroke-related ICD-10 codes:

•G3289

Other specified degenerative disorders of nervous system, including brain stem stroke syndrome, cerebellar stroke syndrome, pure motor lacunar syndrome, and pure sensory lacunar syndrome

•I6000

Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation

•G450

Vertebro-basilar artery syndrome, including transient cerebral ischemic attack, middle cerebral artery syndrome, anterior cerebral artery syndrome, and posterior cerebral artery syndrome

Patient Engagement Project 2024



3 performance measures selected 2024

- Communication about medicines domain performance
- Staff describe medication side effects
- Tell you what new medications was for
- Stroke Unit and Neuro ICU developed the medication education cards in conjunction with the Pharmacy team.
- Cards are laminated and placed in every room on the unit.
- Physicians, Residents, Nurses, Pharmacy and the patient can access the cards and ask questions when needed.
- Data validated thru unit specific Press Ganey reports for Stroke DRG codes.
- Goal is 75% each quarter.

Stroke Unit

Medication Education Cards

Blood Pressure Medications		
Medication	Indication	Side Effects
Labetalol (Normodyne)	High blood pressure, atrial fibrillation	Dizziness, signs of an allergic reaction, nausea
Hydralazine (Apressoline)	High blood pressure	Headache, diarrhea, vomiting

Amlodipine (Norvasc)	High blood pressure, chronic angina (chest pain)	Peripheral edema, fatigue
Lisinopril (Prinivil)	High blood pressure, heart failure with reduced ejection fraction, acute coronary syndrome	Persistent cough, angioedema, signs of kidney problems (decr
Losartan (Cozaar)		
Metoprolol (Lopressor)	Atrial fibrillation, acute coronary syndrome, heart failure with reduced ejection fraction, chronic chest pain, tachycardia	Bradycardia, dizziness, fatigue
Carvedilol (Coreg)	High blood pressure, atrial fibrillation, heart failure with reduced ejection fraction, chronic chest pain	Dizziness, fatigue, diarrhea, he
Clonidine (Catapres)	High blood pressure, ICU-acquired agitation	Dry mouth, rash (patch only), c headache, abdominal pain, cor

Cholesterol Medications		
Atorvastatin (Lipitor)	Lowers bad cholesterol (LDL) and triglycerides and raises good cholesterol (HDL), helps lower the risk of heart attack or stroke	Joint pain, diarrhea, nausea, vc
Pravastatin (Pravachol)		
Ezetimibe (Zetia)		

Anticoagulants/Blood Thinner/Antiplatelets		
Heparin	Treat or prevent blood clots	Bleeding: vomiting blood, emesis that looks coffee ground, hematuria, black/red/tarry stools, bleeding from gums/vagina, excessive bruising, allergic reaction
Enoxaparin (Lovenox)		
Apixaban (Eliquis)	Treat or prevent blood clots, atrial fibrillation	
Rivaroxaban (Xarelto)		
Aspirin	Lower the risk of heart attack or stroke, prevent thrombosis of cardiac bypass grafts and vascular, cardiac, or brain stents	Minor bleeding, stomach upset, GI ulcers, shortness of breath
Ticagrelor (Brilinta)		
Clopidogrel (Plavix)		

Miscellaneous Medications		
Medication	Indication	Side Effects
Desmopressin (DDAVP)	Diabetes Insipidus, hemophilia A, von Willebrand disease, nocturnal polyuria, antiplatelet reversal	Low sodium, headache, trouble focusing, confusion, weakness, seizures, muscle weakness/cramps, restlessness, GI upset, vomiting
Nimodipine (Nimotop)	Prevents delayed cerebral ischemia/neurological deficits in ruptured aneurysms	Slow/abnormal heartbeat, dizziness, shortness of breath, arm or leg swelling
Amantadine (Symmetrel)	Promotes wakefulness in traumatic brain injury, stroke, and other neurological injuries	Dry nose or mouth, constipation, decreased appetite, nausea, abnormal dreams, trouble sleeping, agitation
Pyridostigmine (Mestinon)	Treatment of Myasthenia gravis	Abdominal pain, diarrhea, drooling, nausea, vomiting, sweating, increased urinary frequency
Olanzapine (Zyprexa)	Management of agitation, mood disorders	Orthostatic hypotension, dizziness, drowsiness, dry mouth, constipation, nausea, vomiting, headache, increased appetite
Quetiapine (Seroquel)		Fatigue, headache, dry mouth, constipation, nausea, vomiting, increased appetite

Antibiotics		
Medication	Indication	Side Effects
Antibiotics such as (but not limited to): Cefazolin (Ancef) Cefepime (Maxipime) Vancomycin (Vancocin) Ceftriaxone (Rocephin) Piperacillin/Tazobactam (Zosyn) Ampicillin/Sulbactam (Unasyn)	Treats infections such as (but not limited to): surgical sites, bloodstream infections, osteomyelitis, pneumonia, urinary tract infections (UTI), meningitis	Skin rash, diarrhea, excess yeast production (mouth/vaginal area), nausea/vomiting, itching

Steroids		
Dexamethasone (Decadron)	Treatment of autoimmune disorders, myasthenia gravis, multiple sclerosis, adrenal insufficiency, swelling in the brain/body, allergic reactions	Hyperglycemia (high blood sugar), general fatigue, nausea, restlessness, trouble sleeping
Methylprednisolone (Solu-Medrol)		
Prednisone		

Muscle Relaxants	
Treat muscle spasms	Drowsiness, dizziness, weakness, headache, low blood pressure

Antiseizure	
Treat seizures, anxiety/agitation, high intracranial pressure, sedation	New or worse behavior/mood changes, headache, hallucinations, confusion, restlessness, drowsiness, dizziness, change in vision, memory loss/problems, respiratory depression, allergic reaction
Treats seizures and epilepsy	Drowsiness, suicidal ideations, changes in mood, hallucinations, allergic reaction
	Bradycardia, heart block, drowsiness, dizziness, nausea, double vision, chest pain, abnormal eye movements, allergic reaction
	Drowsiness, dizziness, confusion, swollen/sore gums, swollen/purple color of arms/legs (IV formulations), tremor, unusual eye movements, abnormal heart rate

Lamotrigine (Lamictal)	Treats seizures, bipolar disorder	Nausea, dizziness, tremor, rash, headache, fever, dry mouth, stuffy nose, sore throat, insomnia
Topiramate (Topamax)	Treats seizures, headaches/migraines	Drowsiness, changes in cognition/memory impairment, weight loss, nausea, numbness in hands/feet, headache, double vision
Valproic Acid/Divalproex Sodium (Depakote)	Treats seizures and mood disorders	Dizziness, drowsiness, diarrhea, nausea, hair loss, tinnitus, double vision, tremor
Gabapentin (Neurontin)	Treats neuropathic pain and seizures	Drowsiness, dizziness, fatigue, double vision, tremors, unusual eye movements

Neuro ICU

Medication Education Cards

Miscellaneous Medications		
Medication	Indication	Side Effects
Desmopressin (DDAVP)	Diabetes Insipidus, hemophilia A, von Willebrand disease, nocturnal polyuria, antiplatelet reversal	Low sodium, headache, trouble focusing, confusion, weakness, seizures, muscle weakness/cramps, restlessness, GI upset, vomiting
Nimodipine (Nimotop)	Prevents delayed cerebral ischemia/ neurological deficits in ruptured aneurysms	Slow/abnormal heartbeat, dizziness, shortness of breath, arm or leg swelling
Amantadine (Symmetrel)	Promotes wakefulness in traumatic brain injury, stroke, and other neurological injuries	Dry nose or mouth, constipation, decreased appetite, nausea, abnormal dreams, trouble sleeping, agitation
Fever Reduction		
Acetaminophen (Tylenol)	Fever reduction, mild pain	Dark urine, tiredness, decreased appetite, GI upset, light colored stools, vomiting, yellow skin/eyes, difficulty urinating, severe skin reaction (Stevens Johnsons/toxic epidermal necrolysis)
Anticoagulants/Blood Thinner/Antiplatelets		
Heparin	Treat or prevent blood clots	Bleeding: vomiting blood, emesis that looks coffee ground, hematuria, black/red/tarry stools, bleeding from gums/vagina, excessive bruising, allergic reaction
Argatroban		
Enoxaparin (Lovenox)		
Apixaban (Eliquis)	Treat or prevent blood clots, atrial fibrillation	Minor bleeding, stomach upset, GI ulcers, shortness of breath
Rivaroxaban (Xarelto)		
Aspirin	Lower the risk of heart attack or stroke, prevent thrombosis of cardiac bypass grafts and vascular, cardiac, or brain stents	
Ticagrelor (Brilinta)		
Clopidogrel (Plavix)		
Cholesterol Medications		
Atorvastatin (Lipitor)	Lowers bad cholesterol (LDL) and triglycerides and raises good cholesterol (HDL), helps lower the risk of heart attack or stroke	Joint pain, diarrhea, nausea, vomiting
Pravastatin (Pravachol)		
Steroids		
Dexamethasone (Decadron)	Treatment of autoimmune disorders, myasthenia gravis, multiple sclerosis, adrenal insufficiency, swelling in the brain/body, allergic reactions	Hyperglycemia (high blood sugar), general fatigue, nausea, restlessness, trouble sleeping
Methylprednisolone (Solu-Medrol)		
Prednisone		
Sedation		
Medication	Indication	Side Effects
Propofol (Diprivan)	Sedation, anesthesia for surgery, status epilepticus	Bradycardia, hypotension, severe stomach pain, GI upset, vomiting, headache, dizziness, changes in vision difficulty breathing, trouble with coordination, allergic reaction
Dexmedetomidine (Precedex)	Sedation, management of agitation	Bradycardia, hypotension, heart block, sweating/fever
Quetiapine (Seroquel)	Management of agitation, mood disorders	Fatigue, headache, dry mouth, constipation, nausea, vomiting, increased appetite

Antiseizure		
Medication	Indication	Side Effects
Lorazepam (Ativan)	Treat seizures, anxiety/agitation, high intracranial pressure, sedation	New or worse behavior/mood changes, headache, hallucinations, confusion, restlessness, drowsiness, dizziness, change in vision, memory loss/problems, respiratory depression, allergic reaction
Midazolam (Versed)		
Levetiracetam (Keppra)	Treats seizures and epilepsy	Drowsiness, suicidal ideations, changes in mood, hallucinations, allergic reaction
Lacosamide (Vimpat)		Bradycardia, heart block, drowsiness, dizziness, nausea, double vision, chest pain, abnormal eye movements, allergic reaction
Phenytoin (Dilantin) Fosphenytoin (Cerebyx)		Drowsiness, dizziness, confusion, swollen/sore gums, swollen/purple color of arms/legs (IV formulations), tremor, unusual eye movements, abnormal heart rate
Lamotrigine (Lamictal)	Treats seizures, bipolar disorder	Nausea, dry mouth, stomach pain
Topiramate (Topamax)	Treats seizures, headaches/migraines	Drowsiness, impaired hands/feet
Valproic Acid/Divalproex (Depakote)	Treats seizures and mood disorders	Dizziness, tinnitus, drowsiness
Gabapentin (Neurontin)	Treats neuropathic pain and seizures	Drowsiness, unusual eye movements
Antibiotics		
Antibiotics such as (but not limited to): Cefazolin (Ancef) Cefepime (Maxipime) Vancomycin (Vancocin) Ceftriaxone (Rocephin) Piperacillin/Tazobactam (Zosyn) Ampicillin/Sulbactam (Unasyn)	Treats infections such as (but not limited to): surgical sites, bloodstream infections, osteomyelitis, pneumonia, urinary tract infections (UTI), meningitis	Skin rash, (mouth/vagina)
Muscle Relaxants		
Baclofen (Lioresal)	Treat muscle spasms	Drowsiness, low blood pressure
Tizanidine (Zanaflex)		
Methocarbamol (Robaxin)		
Diazepam (Valium)		
Medication Reversal		
Phytonadione/Vitamin K (Mephyton)	Reverse warfarin; supplement vitamin K	Flushing, red skin, excessive bleeding
Prothrombin Complex Concentrate (PCC) (Kcentra)	Reverse warfarin, apixaban, rivaroxaban	Blood clot
Andexanet Alfa (Andexxa)	Reverse apixaban and rivaroxaban	Blood clot
Naloxone (Narcan)	Reverse the effects of opioids	Severe headache, seizures, trouble breathing
Flumazenil	Reverse the effects of benzodiazepines	Seizures, shakiness

Blood Pressure Medication	
Medication	Indication
Clevidipine (Cleviprex)	Moderate to severe hypertension
Nicardipine (Cardene)	Moderate to severe hypertension
Labetalol (Normodyne)	High blood pressure
Hydralazine (Apresoline)	High blood pressure
Amlodipine (Norvasc)	High blood pressure (chronic)
Lisinopril (Prinivil)	High blood pressure, reduced ejection fraction
Losartan (Cozaar)	High blood pressure
Metoprolol (Lopressor)	Atrial fibrillation, heart failure with chronic chest pain
Carvedilol (Coreg)	High blood pressure, heart failure with reduced ejection fraction
Clonidine (Catapres)	High blood pressure

Norepinephrine and Vasopressors	
Medication	Indication
Norepinephrine (Levophed)	Moderate to severe hypotension
Phenylephrine (Neo-Synephrine)	
Vasopressin (Vasotrist)	Moderate to severe hypotension

Sedation and Anesthesia	
Medication	Indication
Dopamine	Symptomatic bradycardia

****Signs of an allergic reaction, like rash; hives; itching; red, swollen, blistered, or peeling skin with or without swelling; trouble breathing, swallowing, or talking; unusual hoarseness; or swelling of the mouth, face, lips, or throat have been life-threatening.**

Blood Pressure Medications		
Medication	Indication	Side Effects
Clevidipine (Cleviprex)	Moderate to severe high blood pressure	Inability to urinate, blood in urine, weight gain, abnormal heart rate, dizziness, confusion, vision changes, headache, GI upset, allergic reaction
Nicardipine (Cardene)	Moderate to severe high blood pressure	Dizziness, fainting, abnormal heart rate, chest pain (new or worsening), SOB, swelling in extremities
Labetalol (Normodyne)	High blood pressure, atrial fibrillation	Dizziness, signs of an allergic reaction, nausea
Hydralazine (Apresoline)	High blood pressure	Headache, diarrhea, vomiting
Amlodipine (Norvasc)	High blood pressure, chronic angina (chest pain)	Peripheral edema, fatigue
Lisinopril (Prinivil)	High blood pressure, heart failure with reduced ejection fraction, acute coronary syndrome	Persistent cough, angioedema/swelling, dizziness; signs of kidney problems (decreased or dark urine)
Losartan (Cozaar)		
Metoprolol (Lopressor)	Atrial fibrillation, acute coronary syndrome, heart failure with reduced ejection fraction, chronic chest pain, tachycardia	Bradycardia, dizziness, fatigue
Carvedilol (Coreg)	High blood pressure, atrial fibrillation, heart failure with reduced ejection fraction, chronic chest pain	Dizziness, fatigue, diarrhea, headache
Clonidine (Catapres)	High blood pressure, ICU-acquired agitation	Dry mouth, rash (patch only), dizziness, drowsiness, headache, abdominal pain, constipation
Vasopressors		
Norepinephrine (Levophed)	Moderate to severe hypotension	Headache, dizziness, fainting, change in vision, abnormal heart rate, anxiety, numbness/tingling, SOB, weight gain to arms and legs, allergic reaction
Phenylephrine (Neo-Synephrine)		
Vasopressin (Vasotrist)	Moderate to severe hypotension, diabetes insipidus	Unexplained bruising or bleeding, severe stomach pain, chest pain/pressure, abnormal heart rate, SOB, weight gain, swelling in extremities, inability to urinate, change in skin color (black/purple), skin sores, allergic reaction.
Inotropes		
Dopamine (Intropin)	Symptomatic bradycardia (low heart rate), moderate to severe hypotension, inotropic support (weak heart)	Headache, abnormal or fast heart rate, SOB, dizziness, fainting, chest pain/pressure, cool/pale extremities, change in skin color (black/purple), GI upset, vomiting, change in vision, allergic reaction
Dobutamine (Dobutrex)	Heart failure, inotropic support (weak heart)	Headache, abnormal or fast heart rate, fever, pain/irritation at IV site, allergic reaction

Patient Engagement Project 2025



Unit Stroke Champs & Carolina Quality Coordinator Project

Developing questionnaire for stroke patients and caregivers



QR code for easy use and 365 Microsoft forms includes analytics



Stroke Champs and CQC round on unit and show patients how to access the form.



Examples of Stroke Specific questions

- What are the Signs and Symptoms of Stroke
- When would you call 9-1-1
- Patient zip code – outreach opportunities



Next steps working to add questionnaire to UNC MyChart



STROKE SURVIVOR & CAREGIVER EVENT APRIL 12, 2025

We are pleased to announce our 5th Annual Stroke Survivor and Caregiver event. This event connects Stroke Survivors and Caregivers in our local region. Please register for this **free event** using the links or QR codes included in this flyer. Presentation will include life after stroke, stroke research and health and wellness. Breakfast, lunch and snacks will be provided for registered attendees. Event location included with registration. This event is supported by UNC Stroke Patient Advisory Council, UNC Center of Nursing Excellence, UNC Comprehensive Stroke Center and regional vendors.

UNC
HEALTH



If you have any questions, please reach out to Sherene Bitar
cell: 919-451-9293 email: sherene.bitar@unchealth.unc.edu

Stroke Survivors,
Caregivers, and
Volunteers.

Look for the **Start Now**
button when registering



Other links:

Vendor Registration



General Donations



- Free to any stroke survivor or caregiver.
- Event will be in Morrisville North Carolina
- Address provided with registration.
- Please distribute

UNCMC Core Stroke Team



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