Case Study 4 Session 8 AQ-IQ IRF-PRO LAB

Coder Summary:

DRG: 280 Acute myocardial infarction, discharged alive w MCC

Admitting Diagnosis:

I25.10 Athscl heart disease of native coronary artery *wlo* ang pctrs

Principal Diagnosis:

I25.10 Athscl heart disease of native coronary artery *wlo* ang pctrs (DRG)

Secondary Diagnoses:

E78.4 . Other hyperlipidemia

I35.0 Nonrheumatic aortic (valve) stenosis

R53.81 Other malaise

F03.90 Unspecified dementia without behavioral disturbance

R06.02 Shortness of breath

R05 Cough

J69.0 Pneumonitis due to inhalation of food and vomit (DRG) (MCC)

N17.9 Acute kidney failure, unspecified (CC)

I21.19 STEMI involving oth coronary artery of inferior wall (DRG) (MCC)

Pre-Admission Screening:

IGC: 16-Debility

Etiology: Myocardial infarction

Date of screening: 6/11/24

90 y/o male came to the ED on 6/6/24. Patient reported for week prior to admission he was having intermittent chest pains, describing them as a dull precordial pain, not radiating, accompanied with shortness of breath. He had been taking sublingual nitroglycerin with relief of the pain. Patient has a history of CAD. On admission to ED patient continued with complaints of shortness of breath, chest pain and nausea. EKG findings of diffuse ST depressions with ST elevations in lead AVR. Dr. Robinson performed an emergency cardiac catheterization on 6/6/24.

Comorbidities: hypertension, hyperlipidemia, CAD, congestive heart failure, aspiration pneumonia, renal insufficiency, dyslipidemia, weakness, CABG

Motor Score 34

History & Physical/Post Admission Physician Evaluation

REASON FOR CONSULTATION: To coordinate a multidisciplinary cardiac rehabilitation program following an acute posterior wall MI, to improve activities of daily living, self-care, functional mobilities, and safety awareness.
HISTORY OF PRESENT ILLNESS: [Patient] is an 90-year-old retired oncologic surgeon with a past history of CAD, status post CABG in 2021, hypertension, hyperlipidemia, carotid stenosis, status post endarterectomy, and mild dementia, who was in his usual state of good health until 6/6/2024, during his 90th birthday party with family, he developed substernal chest pressure. He did not share with his family that he was suffering at that time from mild discomfort; however, over the subsequent 24 hours, his chest pressure increased and became accompanied by nausea and shortness of breath. He denies emesis, pain radiation to the jaw nor upper extremities, diaphoresis nor palpitations. He alerted his family of his worsening symptoms, at which time, EMS was called and the patient was transported to [Hospital] for immediate evaluation. The patient was taken to the catheterization lab for coronary artery catheterization by [Dr L-] where right posterior coronary artery stenosis was found and for which a drug-eluting stent was placed. During the procedure, the findings also included a left ventricular ejection fraction of 55, severe aortic stenosis, and moderate-to-severe mitral regurgitation. Notably, prior to and during the procedure, the patient became hypotensive, reason to be secondary to cardiogenic shock and he was treated aggressively with pressors and post-procedurally transferred to the ICU for further care. Over the subsequent days, the patient has gradually improved and not complained of any recurrence of chest discomfort nor shortness of breath. He has been treated conservatively for a suspected partial small bowel obstruction and associated small bowel ileus, also with continued radiographic and clinical evidence of resolution. The patient has had remobilization efforts initiated in the acute care setting, which have included OT and PT where deficits were noted and consequently, he has been referred, and admitted to, [REHAB] in an effort to improve his activities of daily living, self-care, mobility, and safety awareness.

MEDICATIONS: Include aspirin, Plavix, Coreg, DuoNeb, Pepcid, nitroglycerin and Flomax.

REVIEW OF SYSTEMS:

GENERAL: The patient denies recent fever, chills, night sweats, or unexplained weight loss.

HEENT: Denies vertigo, tinnitus, otalgia, odynophagia, dysphagia, dysphasia, odontalgia, or neck pain.

CARDIAC: As per HPI.

LUNGS: The patient reportedly suffered a suspected mild aspiration peri-procedurally with pulmonary infiltrate, treated with intravenous antibiotics. The patient does complain of a minimally frequent nonproductive cough in recent days. He notices the cough is worse during the night or then the day. He denies a history of sinusitis nor recurrent sinus discomfort nor postnasal drip.

GASTROINTESTINAL: Denies nausea, vomiting, diarrhea nor constipation. He has resumed a regular diet and has a very good appetite. He denies abdominal pain, melena nor hematochezia.

GENITOURINARY: Denies dysuria, frequency, urgency nor hematuria. He has minimal urinary hesitancy, reportedly due to benign prostatic hypertrophy.

MUSCULOSKELETAL: The patient denies myalgias, arthralgias nor any joint deformities.

NEUROLOGIC: The patient has a fairly remote history of a TIA. Otherwise, denies history of stroke, focal

neurologic deficit, nor tremor.

INTEGUMENT: The patient denies rashes, bruising, nor any unusual lumps or bumps. Denies skin breakdown.

PSYCHOLOGIC: The patient denies a history of depression. He verbalizes an optimistic outlook toward the near future and in particular, with respect to participating in the acute inpatient rehabilitation program for which he is admitted.

PHYSICAL EXAMINATION:

VITAL SIGNS: Temperature 97.7, heart rate 78, blood pressure 150/64, current weight is 65 kg.

GENERAL: The patient is a well-developed, well-nourished, Hispanic gentleman in no acute distress. He is very cooperative and pleasant throughout the entire encounter.

HEENT: Normocephalic, atraumatic. Pupils equally round and reactive to light. Extraocular motions intact. No nystagmus. Oropharynx with moist mucosa and intact dentition, without obvious visible dental caries. The

patient has no tenderness to palpation over the facial sinuses.

NECK: Trachea midline.

HEART: Regular rate and rhythm. The patient has a II/VI systolic murmur over the apex and I/VI systolic ejection murmur at the apex without radiation to the left axilla.

LUNGS: Clear to auscultation. There are no rhonchi nor rales appreciated.

ABDOMEN: Normoactive bowel sounds, nontender, nondistended. No masses appreciated to palpation in all 4 quadrants.

MUSCULOSKELETAL: No joint effusions nor joint deformities appreciated.

NEUROLOGIC: Cranial nerves II through XII are intact. Motor function in both upper extremities and lower extremities bilaterally are 4+/5. Sensation is intact to simple light touch in all 4 extremities. Deep tendon reflexes are intact. Negative Babinski's.

INTEGUMENT: No rashes nor skin breakdown. The patient has no groin hematoma. No appreciable bruising from his angiogram performed on 6/6/2024.

PSYCHOLOGIC: Patient's affect is bright. There is no evidence of depression or agitation. He is a fair historian; of note, his daughter was present during the history and physical examination to confirm and correct some

historical details.

LABORATORY DATA: As of 06/16/2024, WBC 7.9, hemoglobin 9.4, hematocrit 27 with 330,000 platelets. Serum sodium 134, potassium 3.8, creatinine 1.35, BUN 22 and glucose 122.

MOBILITIES: Patient is at a contact guard, supervision level for activities of daily living and ambulation. He required min assist to contact guard for sit to supine and edge of bed from straight leg sitting.

IMPRESSION:

1. Acute posterior wall myocardial infarction, 6/6/2024, status post right coronary artery stent placement with drug-eluting device.

2. Deconditioning and debilitation, secondary to disuse following:

#1 above.

Nonproductive cough.

Cardiogenic shock following:

Without residual deficits.

Functional abilities, no activities of daily living.

5. Suspected acute kidney injury with reportedly improving creatinine level since admission to acute care, 6/6/2024.

6. Mild dementia.

PLAN:

1. Comprehensive evaluations by physical therapy and occupational therapy for functional mobilities and activities of daily living, respectively. We will initiate and appropriately gradual reconditioning and strengthening program, status post acute myocardial infarction as well.

We will order Robitussin syrup 5 mL q.4 hours, per family request. We will initiate Naprosyn 375 mg p.o. q.12 hours p.r.n. low back pain (per family request) .

4. Routine bowel and bladder, monitoring and treatment, as necessary, medical management per attending, [Dr P-].

GOALS:

1. The patient will be independent with functional mobilities including gait, transfers and bed mobility, by the time of discharge.

2. Patient will become independent with activities of daily living including bathing, dressing, toileting by the time of discharge.

3. I will request a speech therapy consultation to evaluate the patient's higher level cognitive functions in view of the history of mild dementia, particularly as it pertains to safety awareness and carryover of learned information from therapy.

4. The patient will demonstrate appropriate safety awareness throughout.

Estimated length of stay, I would anticipate a length of stay of 7 days for the patient to achieve a safe and appropriate discharge back to the care of his family.

[Dr P-], thank you very much for allowing me the pleasure and privilege of participating in your patient's care. I will follow closely along to manage all aspects of his rehabilitation course.

Progress Note

SUBJECTIVE:

awake and alert, ambulating in hallway with PT, no new issues.

OBJECTIVE:

VITAL SIGNS:

Vital Signs:

	Last Charted:	24 Hr Minimum:	24 Hr Maximum:

Temp C Converted	36.6	(06/21 08:39)	35.7 (L)	(06/21 00:00)	36.6	(06/21 04:00)
TempF	97.9 (L)	(06/21 08:39)	96.2 (L)	(06/21 00:00)	98.2	(06/20 20:53)
Heart Rate	60	(06/21 09:31)	60	(06/21 08:39)	71	(06/20 20:53)
Resp Rate	18	(06/21 08:39)	16	(06/20 20: 15)	20	(06/21 07:25)
SBP	135	(06/21 09:31)	113	(06/21 04:00)	146 (H)	(06/20 20:53)

IMPRESSION & PLAN:

1. Acute posterior wall myocardial infarction, 6/6/2024, status post right coronary artery stent placement with drug-eluting device. cont therapy
2. Deconditioning and debilitation, secondary to disuse following:
#1 above. Cont therapy
3. Nonproductive cough. Better
A. Cardiogenic shock following: Without residual deficits.
B. Functional abilities, no activities of daily living.
4. Suspected acute kidney injury with reportedly improving creatinine level since admission to acute care, 6/6/2022
5. Mild dementia. ST
6. hyponatremia-mild

Discharge Summary: 6/25/24

Discharge diagnoses:

- Non-ST elevation MI, s/p percutaneous coronary intervention and stent placement.
- Hyperlipidemia
- AKI
- Debility
- Severe aortic stenosis

Discharge to home with family.

IGC:

ETIOLOGIC:

TIER:

60% QUALIFIER:

COMMENTS:

Coder Summary:

DRG: 307 Cardiac congenital & valvular disorders *wlo* MCC

Admitting Diagnosis:
I35.0 Nonrheumatic aortic (valve) stenosis
Principal Diagnosis:
I35.0 Nonrheumatic aortic (valve) stenosis (DRG)
Secondary Diagnoses:
I48.91 Unspecified atrial fibrillation
R41.0 Disorientation, unspecified
R09.02 Hypoxemia
N28.9 Disorder of kidney and ureter, unspecified
F32.9 Major depressive disorder, single episode, unspecified
F41.9 Anxiety disorder, unspecified
G47.00 Insomnia, unspecified
D64.9 Anemia, unspecified
R53.1 Weakness
G93.41 Metabolic Encephalopathy

Pre-Admission Screening

Etiology: Weakness; Severe aortic stenosis, aFIB, delirium

Date of screening: 3/10/24

Patient admitted to hospital on 3/1/24 with c/o intermittent chest pain overnight and through morning. EKG identified diffuse ST elevation. Cardiac catheterization done and showed false positive STEMI but critical aortic stenosis. Patient underwent aortic valve replacement on 3/3/24. S/p surgery, patient required ventilation and became confused, requiring restraints and a sitter. Patient also with course of aFib post op. Restraints have since been D/C'd, but patient continues to require a sitter. Patient started on diltiazem dip but continued to be in aFIB. Unsuccessful cardioversion 3/7/24. Patient has since had spontaneous conversion and is currently on anticoagulation therapy. Patient on 2 Floor and being treated for aFib and pain. At this time, patient medically cleared for transfer to rehab.

Comorbidities: s/p aortic valve replacement, confusion, hypoxemia, renal insufficiency, anemia, insomnia, anxiety, depression

ADMISSION MOTOR SCORE: 41

History and Physical

DATE OF ADMISSION: 3/11/2024

HISTORY LEADING TO ADMISSION: {Patient} is admitted to inpatient rehabilitation for continued daily medical and nursing interventions with comprehensive intensive integrated and interdisciplinary rehabilitation services to minimize functional deficits and facilitate a direct community discharge following encephalopathy secondary to an aortic valve replacement surgery.

CHANGES IN THE PATIENT'S CONDITION SINCE THE PREADMISSION SCREENING: None.

HISTORY LEADING TO ADMISSION: {Patient} is an 84-year-old Caucasian male, right-handed, who was admitted to [Hospital A] 3/1/2024 with complaints of shortness of breath and chest pain. The patient had diffuse ST elevation. Cardiac catheterization was performed demonstrating critical aortic stenosis. The patient underwent aortic valve replacement on 3/3/2024.
Following the surgery, the patient has required ventilation. He developed encephalopathy with confusion requiring restraints and a sitter. The patient also had complications of atrial fibrillation postoperatively. The patient had unsuccessful cardioversion attempts to IV diltiazem and through electrical cardioversion, he has since spontaneously converted and is currently anticoagulated with warfarin. Besides atrial fibrillation, the patient has also had sternal pain complaints, difficulties with sleep, need for supplemental oxygen and pain difficulties related to his sternal incision.

PAST MEDICAL HISTORY: Significant for insomnia, anxiety, depression and degenerative joint disease involving the bilateral knees, left hip and left ankle.

Other providers involved in patient's care have included [Dr I] and [Dr E-].

MEDICAL DECISION MAKING LEADING TO IN-HOSPITAL REHABILITATION:
The patient is able to tolerate the intensity of rehabilitation services.

2. He has a documented need for daily medical supervision.
3. There is a need for 24-hour nursing care.
4. There is a need for 2 or more skilled therapy disciplines_
5. The patient is medically stable to participate in therapies.
6. He is emotionally stable to participate in therapies.
7. He has a potential for improvement and can benefit from a rehabilitation program.
8. He has an appropriate disposition after discharge from acute rehabilitation.
9. Patient has agreed to participate in the rehabilitation program.

EXPECTED FREQUENCY AND DURATION OF TREATMENT: The patient will receive at least 3 hours of therapy per day consisting initially of physical therapy 60 minutes, occupational therapy 60 minutes and speech and language pathology services 60 minutes.

ANTICIPATED DISCHARGE LOCATION: For this patient is home with his wife.

ESTIMATED LENGTH OF STAY: 10-12 days.

PROGNOSIS: Good to excellent.

EXPECTED FUNCTIONAL RECOVERY: will be at least assisted level of supportive management. Ideally. a supervised level of care.

ANTICIPATED INTERVENTIONS FOLLOWING INPATIENT REHABILITATION :
Home health services followed by outpatient cardiac rehabilitation. durable medical equipment needs or assistive and adaptive equipment addressed during the patient's rehabilitation stay.

SIGNIFICANT LABORATORY: Values include a WBC of 12.9 and hemoglobin of 9.4 on 3/16/2024.His INR on the same date was 2.1.

SIGNIFICANT RADIOLOGIC STUDIES: The patient's last chest x-ray was performed on 3/14/24, demonstrating improved right base aeration as well as improved vascular and interstitial prominence.

ALLERGIES: None known to medications.

CURRENT MEDICATIONS; Include amiodarone, ascorbic acid, aspirin, cholecalciferol, furosemide, metoprolol, multivitamin, warfarin, omega-3 polyunsaturated fatty acids, oxazepam, potassium chloride, quetiapine. Saccharomyces boulardii lyo, simvastatin and spironolactone .

HOME MEDICATIONS: Similar but without the amiodarone and warfarin. The patient was taking different medications for sleep and anxiety.

CODE STATUS: Full code.

WEIGHTBEARING STATUS: Full weightbearing; however, the patient must follow sternal precautions.

FAMILY HISTORY: Reviewed and noncontributory to the chief complaint.

SOCIAL HISTORY: The patient lives with his wife in [local area]. They have a single-story home without steps. The patient's wife will be available to provide support for the patient if necessary and they can afford a higher support if necessary.

TOBACCO USE: Denied.

ALCOHOL USE: 1 ounce of wine per day.

DRUG USAGE: Denied.
PREHOSPITALIZATION LEVEL OF FUNCTION: Independent.
THE PATIENT'S CURRENT LEVEL OF FUNCTION: He has required a 24-hour sitter.
He requires an overall minimal assist level of care.

REVIEW OF SYSTEMS: The patient wears reading glasses. He has bilateral hearing aids, but generally does not wear them. He does not have dentures. He denies any history of respiratory problems or gastrointestinal problems. He denies any difficulties with urination or defecation. He has had multiple joint pain complaints involving the bilateral knees, left hip and left ankle. He had a previous left ankle fracture. He wears orthotics in his shoes bilaterally. He denies any neurologic history. He has been treated in the past for anxiety as well as sleep difficulties and depression. He denies hematologic problems. He denies skin problems.

PHYSICAL EXAMINATION:
VITAL SIGNS: Oral temperature 36.6, heart rate 69, blood pressure 104/50, oxygen saturation 96 on 3 L of oxygen per minute.
GENERAL APPEARANCE: Elderly-appearing male, no acute distress.
HEENT: The patient has no specific abnormalities noted.
NECK: Without specific abnormalities.
RESPIRATORY; The patient is presently requiring 3 liters per minute of oxygen by nasal cannula. His lungs are clear to auscultation.
CARDIOVASCULAR: He is in regular rate and rhythm. He has strong pulses in all 4 extremities.

GENITOURINARY: Without specific abnormalities.
ABDOMEN: The patient's abdomen is soft. He has positive bowel sounds. There is no pain to palpation of his abdomen nor rebound tenderness.
SKIN: Patient has a well-healing sternal incision that is closed, clean, dry and intact without sutures or staples.
LYMPHATIC; Without edema in the left or right lower extremities.
MUSCULOSKELETAL: The patient has normal joint stability and normal joint range of motion. Tone is normal. Strength is grossly 4/5 and slightly weaker involving his right side.
NEUROLOGIC: Cranial nerves II through XII are intact. Strength testing as above. Dysphagia: None. Mental status: Orientation and memory are generally good, although the patient does have a fairly rapid decay in his intermediate memory. He has good attention and concentration. Speech and language are grossly normal. Sensation is grossly intact. Spasticity: None.
Ataxia: None. He has good balance and coordination. Reflexes are 2+ and intact diffusely.
PSYCHIATRIC: Without specific abnormalities.

ASSESSMENT AND DIAGNOSES:

IMPAIRMENTS:

1. Status post aortic valve replacement on 3/3/2024. The patient's sternal incision is healing well. He must follow sternal and cardiac precautions. The patient will continue on oxygen 3 L per minute by nasal prongs with gradual weaning as able associated with activity progression. The patient will remain anticoagulated with warfarin and remain on medications to prevent recurrence of atrial fibrillation. The patient will need active pain management to facilitate activity progression. He has required a sitter because of confusion. As the patient becomes more oriented and has improved memory with lack of sundowning, then the sitter will be able to be discontinued. The patient did not have these cognitive difficulties prior to his surgery. The patient could benefit by comprehensive and intensive physical, occupational and speech therapies to minimize the patient's functional deficits.
2. Atrial fibrillation. Patient currently is in normal sinus rhythm. He will continue on his current medications. [Dr I] of cardiology has been involved. The patient will continue with anticoagulation as directed by the pharmacy.
3. Active pain management. Patient will need facilitation of activity with active pain management; however the patient's opioids will need to be gradually weaned and discontinued, as they can contribute to his cognitive impairment.
4. Bowel management. The patient will need to demonstrate regular bowel movements without incontinence.
5. Bladder management. Patient will need to demonstrate good bladder emptying with small post void residuals not demonstrating urinary retention. He will also need to be continent of urination.
6. Sleep management. The patient has had reversal of his day and night sleep patterns, medications are being utilized as directed by [Dr E-] to facilitate normalization of his day and night sleep cycles. This reversal is contributing to his cognitive impairment and overall fatigue.
7. Mood management. Patient has a history of anxiety and depression. He will need to be closely monitored as recurrence and worsening of these conditions will interfere with his cognition and physical recovery.
8. Venous thromboembolism prophylaxis. Patient will continue on warfarin, sequential compression devices and have rapid remobilization. He is at great risk for development of deep venous thrombosis, pulmonary embolism and premature death.
9. Degenerative joint disease. Patient has a history of multiple joint involvement including the bilateral knees, left hip and left ankle that will need to be considered during his remobilization. The patient through rehabilitation techniques may have overall improvement in his broader management of his

degenerative joint disease.
10. Nutrition. Prealbumin level will be obtained. A dietary involvement will occur. Adequate nutrition is necessary for full participation in the patient's remobilization program.
11. Acute blood loss anemia. The patient's hemoglobin on 3/16/2024 was 9.4. His hemoglobin will continued to be monitored, further declines in his hemoglobin could warrant bleeding complications, GI complications and an increased risk for development of atrial fibrillation or organ system damage.

ACTIVITY LIMITATIONS:
1. Difficulties with basic activities of daily living.
2. Difficulties with instrumental activities of daily living.
3. Difficulties with mobility.
4. Difficulties with transfers.
5. Difficulties with ambulation.
6. Difficulties with cognition.

Comprehensive physical, occupational and speech therapies will be provided to the patient to minimize his functional deficits, He is admitted in overall minimal physical assist level of care.

PROGRESS NOTES
DATE OF SERVICE: 3/22/2024

SUBJECTIVE: Rounds were made at the bedside on 3/22. The patient feels better. He wants his oxygen off.

OBJECTIVE :
VITAL SIGNS: Blood pressure 90/56, heart rate 57.
HEENT: Unremarkable.
NECK: Without thyromegaly.
LUNGS: Clear.
CARDIAC: Shows 31, 52, no S3. Well-healing sternotomy_
ABDOMEN; +2 bowel sounds.
EXTREMITIES: Without edema.
NEUROLOGIC: More and more alert and less confused everyday.

REVIEW OF SYSTEMS: Negative for nausea, vomiting, diarrhea, fever, chills, liver, kidney, thyroid, skin, stroke, seizure, hematuria, dysuria, blood in the stool, visual, auditory, lymph nodes,. psychiatric, tongue.

LABORATORY DATA: White count 8.5, hematocrit 29.5, platelet count 318. INR 2.4.

IMPRESSION:
1. An 84-year-old with severe aortic stenosis, status post aortic valve replacement.
2. Hypoxemia on oxygen.
3, Confusion, improving.
4. Paroxysmal atrial fibrillation, on Coumadin, remaining in sinus rhythm now clinically.
5. Weakness, getting rehabilitation.

PROGRESS NOTES
DATE OF SERVICE: 03/23/2024

He is being readied for discharge.

OBJECTIVE:
VITAL SIGNS: Blood pressure 100/54, heart rate 67.
HEENT: Unremarkable.
NECK; Without thyromegaly.
LUNGS: Clear.
CARDIAC: Shows well-healing sternotomy, SI, S2, No S3.
ABDOMEN: +2 bowel sounds.
EXTREMITIES: Without edema.
NEUROLOGIC: Intact.
SKIN; Intact.

REVIEW OF SYSTEMS: Negative nausea, vomiting, diarrhea, fever, chills, liver, kidney, thyroid, skin, stroke, seizure, hematuria, dysuria, blood in the stool, visual, auditory, lymph nodes, psychiatric, tongue.

LABORATORY DATA: white count 8.S, hematocrit 29.5, platelet count 318. INR 2.4.

IMPRESSION: An 84-year-old with:
1. Status post aortic valve replacement for severe aortic stenosis.
2. Paroxysmal atrial fibrillation, remaining in sinus rhythm, on Coumadin.
3. Confusion, improved.
4. Weakness, improved.

DISPOSITION: For discharge today. Follow up in 1 week in the office for INR check.

PROGRESS NOTES
DATE OF SERVICE: 03/24/2024

SUBJECTIVE: Rounds were made at the bedside on 3/24. The patient denies chest pain or shortness of breath.

OBJECTIVE:
VITAL SIGNS: Blood pressure 124/64, heart rate 84, sinus rhythm.
HEENT: Unremarkable.
NECK: Without thyromegaly.
LUNGS: Clear.
CARDIAC: snows SI, S2, no 33.: well-healing sternotomy.
ABDOMEN: +2 bowel sounds.
EXTREMITIES: Without edema.
NEUROLOGIC; Intact.
SKIN: Intact

REVIEW OF SYSTEMS: Negative for nausea. vomiting, diarrhea, fever, chills, liver, kidney, thyroid, skin, stroke, seizure, hematuria, dysuria; blood in the stool, visual, auditory, lymph nodes, psychiatric, tongue.

LABORATORY DATA: White count 7.9, hematocrit 39.2, platelet count 189.

IMPRESSION:
1. Status post aortic valve replacement for aortic stenosis.
2. Paroxysmal atrial fibrillation, on Coumadin.
3. Confusion, improving.
4. Weakness, in rehabilitation.

PROGRESS NOTES
DATE OF SERVICE: 3/25/2024

SUBJECTIVE: Rounds were made at the bedside. The patient is participating in rehabilitation. He has incisional chest pain.

OBJECTIVE:
VITAL SIGNS: Blood pressure 98/48, heart rate 66.
HEENT: Unremarkable.
NECK: Without thyromegaly.
LUNGS: Clear.
CARDIAC: Shows SI, S2 regular. No S3, well-healing sternotomy.
ABDOMEN: +2 bowel sounds.
EXTREMITIES: Without edema.
NEUROLOGIC: Improved, is more alert.
SKIN: Otherwise intact.

REVIEW OF SYSTEMS: Negative for nausea, vomiting. diarrhea, fever, chills, liver, kidney, thyroid, skin, stroke, seizure, hematuria, dysuria, blood in the stool, visual, auditory, lymph nodes, psychiatric, tongue.

LABORATORY DATA: White count 8.5, hematocrit 29.7 and platelet count 247. INR 1.8 yesterday.

IMPRESSION: An 84-year-old with;
1. Status post aortic valve replacement for severe aortic stenosis, progressing well in rehabilitation. He has incisional chest pain. He has normal coronaries.
2. Paroxysmal atrial fibrillation, on Coumadin, goal INR 2-I
3. Confusion, improving.
4. Weakness, improving. Apparently, he says he is being discharged tomorrow.

Discharge Summary: 3/25/24

Date of admission: 3/16/24

Discharge diagnoses:

- Status post aortic valve replacement for severe aortic stenosis
- Paroxysmal atrial fibrillation, clinically remaining in sinus rhythm
- Active pain management
- Acute blood loss anemia/leukocytosis
- Weakness

Discharge to home with home health services.

IGC:

ETIOLOGIC:

TIER:

60% QUALIFIER:

COMMENTS:

Coder Summary:

DRG: 191 Chronic obstructive pulmonary disease w CC

Admitting Diagnosis:

J44.1 Chronic obstructive pulmonary disease w (acute) exacerbation

Principal Diagnosis:

J44.1 Chronic obstructive pulmonary disease w (acute) exacerbation (DRG)

Secondary Diagnoses:

J90 Pleural effusion, not elsewhere classified (CC) (DRG)
E46 Unspecified protein-calorie malnutrition (CC)
I27.2 Other secondary pulmonary hypertension
Z99.81 Dependence on supplemental oxygen
I27.81 Cor pulmonale (chronic)
E78.5 Hyperlipidemia, unspecified
E03.9 Hypothyroidism, unspecified
N40.0 Enlarged prostate without lower urinary tract symptoms
R32 Unspecified urinary incontinence
Z72.0 Tobacco use
Z96.653 Presence of artificial knee joint, bilateral
E66.9 Obesity, unspecified
Z68.37 Body mass index (BMI) 37.0-37.9, adult
E66.2 Morbid (severe) obesity with alveolar hypoventilation (CC)
J981.1 Atelectasis (CC)
M54.5 Low back pain
M25.512 Pain in left shoulder

Pre-Admission Screening:

Etiology: COPD with acute exacerbation

Date of screening: 2/29/24

95 y/o male admitted to acute hospital 1/31 with exacerbation of COPD, patient deteriorated and wound up on the ventilator. Patient transferred to Rehab on 2/8. Upon arrival he was wheezing, had shortness of breath with minimal exacerbation, cough with yellow sputum. Chest x-ray showed pulmonary vascular congestion with small bilateral pleural effusion. Diagnosed with aspiration pneumonia. By 2/25 he had no shortness of breath, diagnosed by cardiology with cor pulmonale and pulmonary hypertension. PO2 around 70. Patient back to acute and is evaluated to return to rehab,

Comorbidities: elevated BUN, steroid tapering, thrombocytopenia, obesity (BMI 37), dysphagia, BPH, hyperlipidemia, hypothyroidism, dermatitis, pressure ulcer stage 1 bridge of nose, urinary incontinence, hypoventilation, cor pulmonale.

Admission Motor Score =16

NO H&P

Progress Notes
DATE OF SERVICE:3/22/2025

SUBJECTIVE: Patient was seen and evaluated today. He denied any chest pain, reported baseline dyspnea on exertion and at rest. Denied any abdominal discomfort. Patient's wife was requesting to increase his Toviaz.

OBJECTIVE:
VITAL SIGNS: Temperature 97.5, heart rate 95, respirations 20, blood pressure 126/71.
GENERAL: Awake, alert, in no acute distress.
HEART: Regular rate and rhythm.
LUNGS: Clear to auscultation, but diminished in all lobes.
ABDOMEN: Soft, nontender.
EXTREMITIES: No edema.

IMPRESSION:

Debility.
1. Recent chronic obstructive pulmonary disease exacerbation secondary to aspiration-related pneumonia, status post treatment.
3. Obesity hypoventilation syndrome.

PLAN:
1. Continue comprehensive rehabilitation with physical, occupational, speech therapies.
2.We will increase patient's Toviaz to 6 mg at bedtime.
3.Continue use of BiPAP therapy as scheduled.
4.Continue Lovenox for DVT prophylaxis. Patient also to use sequential compression devices while in bed.
FUNCTIONAL ASSESSMENT: Minimal assistance with bed to chair to wheelchair transfers, minimal assistance with lower body dressing, minimal assistance with bathing, supervision with comprehension.

Progress Notes
DATE OF SERVICE: 03/23/2024

SUBJECTIVE: Patient seen and evaluated today. Denies any chest pain. Reports baseline shortness of breath. Does report left shoulder pain with therapeutic exercises.

OBJECTIVE:

VITAL SIGNS: Temperature 97.9, heart rate 92, respirations 20, blood pressure 100/66.

GENERAL: Awake, alert, in no acute distress.
CARDIOVASCULAR: Regular rate and rhythm.

LUNGS: Clear to auscultation bilaterally, but diminished.
ABDOMEN: Soft, nontender.

EXTREMITIES: No edema.

IMPRESSION:
1. Debility secondary to recent chronic obstructive pulmonary disease exacerbation from aspiration-related pneumonia.
2.Left shoulder pain.
3.Dyspnea at rest and on exertion secondary to chronic obstructive pulmonary disease.
4. Deficits in gait, balance, transfers, safety, self-care, endurance.
PLAN: Continue comprehensive therapies and medical management. No new changes to current treatment plan. We will initiate low-dose Lidoderm patch on Monday morning on his therapies.

[Dr H-]

Consultation 3/23/24
Reason for the consult: Hypoventilation Syndrome associated to morbid obesity and chest bellows disease.

Patient is a 94-year-old male who is admitted to rehabilitation for aggressive PT/OT He has been admitted previously to [HOSPITAL B-] for severe anasarca secondary to cor pulmonale.

He is obese, short and with large abdomen. He has been told that he snores. In fact, he was placed on CPAP at night and told to lose weight.

Today, he denies to me any significant discomfort. He is in good spirits.

His PMH is unremarkable. He quit smoking more than 30 years ago.

His ROS is significant for excessive sleepiness, orthopnea, PND, lower extremities edema, weight gain and decrease motility. He denies any GI, GU or CNS problems.

His physical examination shows an elderly male who looks much younger than stated age. His skin shows some chronic changes. His neck is short and fat. His ENT is Fujita grade IIIb. His lungs show poor air movement. His abdomen is large and impinge on his thoracic cage. His extremities show some edema. Neurologically, he is intact.

Vital Signs:	Last Charted:		**24** Hr Minimum:		**24** Hr Maximum:	
Heart Rate	*76*	*(03/04 18:48)*	76	(03/04 18:48)	*90*	*(03/04 13:42)*
Resp Rate	20	(03/04 03:39)	20	(03/03 23:56)	20	(03/03 23:56)
SSP	*115*	*(03/04 18:48)*	*112*	*(03/04 13:42)*	*115*	*(03/04 18:48)*
DSP	71	(03/04 18:48)	64	(03/04 13:42)	*71*	*(03/04 18:48)*

His ancillary tests are significant for metabolic alkalosis as compensatory mechanism.

Diagnosis:

Severe hypoventilaton syndrome
Severe pulmonary hypertension

Suggestions:

Patient must use CPAP every time he is on bed. In addition, it would be important to ensure that he has not history of chronic PTE by reviewing previous medical records. I will request US LE to rule out DVT.

Overall, patient is doing extremely well for his age and comorbidities. We will attempt to optimize his conditions as much as possible.

Discharge Summary: 3/23/24

Discharge diagnoses:

- Debility secondary to recent COPD exacerbation from aspiration-related pneumonia.
- Obesity, hypoventilation syndrome, on BiPAP therapy
- Deficits in gait, balance, transfers, safety, self-care and endurance.

Discharge to skilled nursing facility.

IGC:

ETIOLOGIC:

TIER:

60% QUALIFIER:

COMMENTS:

Case Study 7 SESSION 8 AQ-IQ IRF-PRO LAB

Coder Summary:

DRG: 193 Simple pneumonia & pleurisy w MCC

Admitting Diagnosis:
J18.9 Pneumonia, unspecified organism

Principal Diagnosis:
J18.9 Pneumonia, unspecified organism (DRG)
Secondary Diagnoses:
J90 Pleural effusion, not elsewhere classified (Ce)
E43 Unspecified severe protein-calorie malnutrition (MCe)
G80.1 Spastic diplegic cerebral palsy
M48.02 Spinal stenosis, cervical region
N39.0 Urinary tract infection, site not specified (Ce)
N32.81 Overactive bladder
110 Essential (primary) hypertension
E78.5 Hyperlipidemia, unspecified
K21.9 Gastro-esophageal reflux disease without esophagitis
R33.9 Retention of urine, unspecified
M62.838 Other muscle spasm
R53.81 Other malaise
R09.02 Hypoxemia
R26.9 Unspecified abnormalities of gait and mobility
K59.00 Constipation, unspecified
R53.1 Weakness
R52 Pain, unspecified
A41.52 Sepsis due to Pseudomonas (DRG) (MCe)

Pre-Admission Screening

Etiology: J18.9 Bilateral Pneumonia

Date of screening: 5/16/24

Patient is a 68-year-old male who was admitted to ED with diagnosis of septic shock due to pseudomonas, UTI, rhabdomyolysis, and neutropenia/thrombocytopenia as a result of the acute kidney injury. He has a history of Cerebral Palsy, HTN, hyperlipidemia, GERD and cervical stenosis. He was treated for the UTI with IV antibiotics. Discharged and then readmitted with worsening respiratory status, and diagnosed with bilateral multilobar pneumonia, hypoxia with bronchospasm, bilateral pleural effusions, severe protein malnutrition, prerenal azotemia with severe dehydration, as well as an upper extremity thrombus from the PICC line, however not DVT.

Comorbidities: Cerebral palsy, HTN, hyperlipidemia, GERD, cervical stenosis, recent history of UTI and rhabdo, femur fx (2011), G80.8-other cerebral palsy

Case Study 7 SESSION 8 AQ-IQ IRF-PRO

LAB ADMISSION MOTOR SCORE: 25

POST ADMISSION PHYSICIAN EVALUATION /History and Physical

DATE OF SERVICE:
05/17/2024

DATE OF ADMISSION:
05/16/2024

SERVICE:
Acute Rehab Unit.

CHIEF COMPLAINT:
Generalized weakness.

HISTORY OF PRESENT ILLNESS:
This patient is a very pleasant 68-year-old right-hand-dominant male with past medical history significant for spastic diplegia from cerebral palsy who had been originally admitted to [Hospital] on 05/04/2024 with a urinary tract infection and bacteremia and multilobar pneumonia who was treated with antibiotics and then subsequently discharged to [LTAC] and was noted to have worsening condition and readmitted to [Hospital], for which the diagnosis has not changed. patient was not started on any new antibiotics; however, the patient is having significant amount of weakness and deconditioning secondary to his prolonged hospital stay. He is at high risk for readmission. Patient was subsequently admitted to the Acute Rehab unit at [Hospital] for comprehensive inpatient therapy once medically stabilized.

PAST MEDICAL HISTORY:
overactive bladder, on Detrol; spastic diplegia; cerebral palsy; history of femur fracture;· hypertension; hyperlipidemia; and GERD.

PAST SURGICAL HISTORY:
Denies any previous surgeries.

FAMILY HISTORY:
Negative for any neuromuscular disease and is currently noncontributory to present illness.

SOCIAL HISTORY:
Denies any tobacco, alcohol or illicit drug use. currently lives alone in a single-story home with a ramp to enter the garage and the back and has a walk-in shower, grab bars, tub transfer bench and a standard manual wheelchair and a platform walker at home.

PREVIOUS LEVEL OF FUNCTION:
Patient was previously modified independent for ADLs and mobility and ambulates with bilateral lofstrand crutches with a reciprocal gait pattern per patient.

CURRENT LEVEL OF FUNCTION:
The patient currently requires maximal assist for his transfers and is currently unable to ambulate at this time.

REVIEW OF SYSTEMS:
The patient denies any current fevers, chills, nausea or vomiting. The patient is concerned about restarting Detrol. States that this contributed to his urinary tract infection, denies any dysuria at this moment. Otherwise, remainder of 14-point review of systems is negative.

ALLERGIES:
No known medication allergies.

MEDICATIONS:

please see medication reconciliation for complete listing of current medications, which is significant for Tylenol No.3, Lovenox, Lidoderm and pyridium.

PHYSICAL EXAMINATION:

Vital signs: Temperature 97.9, pulse 72, respirations 20, BP 135/84, 02 sats 94 on room air. General: Alert and oriented x 4, in no apparent distress. Head and neck: Normocephalic, atraumatic. PERRLA, EOMI. Mucous membranes are moist. Chest: Lungs are clear to auscultation bilaterally, no rhonchi, no wheezing. cardiovascular: s1 and s2 present. Regular rate and rhythm. NO murmurs, gallops or rubs. Abdomen: Protuberant, normal active bowel sounds throughout all 4 quadrants. Soft, nontender and nondistended, no hepatosplenomegaly. Extremities noted atrophic bilateral lower extremities with greatly diminished range of Motion at the hips, knees and ankles. only able to range the knees and ankles between 10 to 15 degrees passively. Skin: No rashes, no skin breakdown, no bruising. Neurologic: Cranial nerves II through XII are intact. sensation is intact to light touch in all dermatomes. Noted 5/5 strength to bilateral upper extremities, all muscle groups tested. Bilateral lower extremities demonstrate 2+ to 3/5, all muscle groups tested. Noted increased tone to bilateral lower extremities. Modified Ashworth scale 3 for hip flexors, hip extensors, knee flexors, knee extensors, ankle dorsiflexion and ankle plantar flexors. Reflexes are 1+ throughout. No clonus. Babinski equivocal. Hoffman's negative. coordination in bilateral upper extremities is intact. Noted equinovarus deformity on right lower extremity, more pronounced in the left lower extremity. Mood: Patient is in good spirits.

LABORATORY DATA:

Reviewed per the electronic medical records. Significant results include glucose of 98, creatinine of 0.73 and calcium of 8.4.

ASSESSMENT AND PLAN:

This patient is a very pleasant 68-year-old male with past medical history significant for spastic diplegia secondary to cerebral palsy who was admitted for multi lobar pneumonia and urinary tract infection and bacteremia, resulting in severe deconditioning and bilateral lower extremity weakness causing inability to ambulate and perform self-care tasks. The patient was subsequently admitted to the Acute Rehab Unit for comprehensive inpatient therapy aimed at restoring functional independence with goal of returning home to family. Patient has sisters who are very involved in his care.

1. The patient is appropriate for the Acute Rehab unit as the patient has demonstrated progress in therapies. He is able to tolerate 3 hours of daily therapy, and the patient will require close medical followup to prevent any complications. The patient is not safe to discharge home or to skilled nursing setting as the patient's multiple medical comorbidities require daily followup and medical management, and the patient is at risk for falls, complications and readmission. The physiatrist will see the patient daily for 5 to 7 days weekly for coordination of care with consulting physicians to ensure adequate pain control to allow participation in therapies, provide leadership for the multidisciplinary rehabilitation team and development of an individualized rehabilitation program.

2. The patient will continue on all transfer medications to include Tylenol NO.3 for pain control as well as Lidoderm patch. We will continue to adjust medications to allow participation in therapies. We will currently await therapy evaluations to address spastic diplegia and the need for titration of his baclofen, for which he has been on for several years. The current dose that he is on has allowed him to continue to ambulate with a reciprocal gait pattern using bilateral lofstrand crutches; however, given the amount of spasticity in his bilateral lower extremities, he may benefit from titration of this medication. Internal Medicine will continue to follow and manage the patient's chronic comorbid disorders.

3. PT was consulted to evaluate and treat the patient for goal of improving lower extremity strength, balance, transfers and ambulation. PT will see the patient daily for 90 to 120 minutes per day 5 to 6 days a week for duration of stay.

4. occupational Therapy is consulted to evaluate and treat the patient for goals of improving upper extremity strength, coordination, active assisted range of motion, ADLs, training with associated adaptive equipment and caregiver training. OT wll1 see the patient daily for 90 to 120 minutes per day 5 to 6 days a week for duration of stay.

S. Rehabilitation nursing will be available to the patient 24 hours daily for medication education, maintaining skin integrity, restoration of autonomous control of bowel and bladder management and provide a caregiver training.

6. psychology is consulted to evaluate cognitive function screen for depression and supportive counseling for serious illness and loss of autonomy

7. Social work will evaluate the patient for review of resource eligibility for community-based assistance, DME procurement and

discharge planning.
POTENTIAL REHABILITATION COMPLICATIONS:
1. Fall risk, for which bed alarm will be used as well as encouraging the patient to call for help prior to getting out of bed and transfers.
2. Patient is at risk for DVT, for Which she will continue on Lovenox and progressive mobility with therapies as well as TED hose.

REHABILITATION POTENTIAL:
Good for return home with family at supervision for ADLs and ambulation.
ESTIMATED LENGTH OF STAY: 13 days.

Progress Note

SEX: M

ADMISSION DATE: 05/16/2024

Progress Note

DATE OF SERVICE:
05/24/2024

CURRENT DIAGNOSES/PROBLEM LIST:
1. cerebral palsy.
2. Recent pseudomonas UTI with bacteremia.
3. Recent aspiration pneumonia.
4. Dysuria with urinary retention, resolved.
5. Hypertension.
6. cervical stenosis.
7. GERD.
8. Dyslipidemia.
9. spasticity .
10. Mild protein caloric malnutrition.
11. Debility following hospitalization.

SUBJECTIVE:
The patient is a 68-year-old male admitted for the past week in Acute Rehabilitation unit. The patient is making good progress. Today, the patient reports some mild cough, but denies use of any inhaled medications other than p.r.n. albuterol at home. States he was not on long-acting steroids or beta2-agonists previously. The patient's urinary retention and dysuria has completely resolved. The patient's weakness versus spasticity appears improved with use of p.r.n., baclofen rather than scheduled. He denies headaches, fevers, chills, sweats, nausea, vomiting, constipation, diarrhea. There is no chest pain, shortness breath or abdominal discomfort.

OBJECTIVE:
Vital signs: Temperature 97.5, blood pressure 110/71, heart rate 82, respiratory rate 18, 02 sat 94 on room air. General: He is alert and oriented male in no apparent distress. HEENT: Benign. Mucous membranes moist. Lungs: Clear to auscultation without wheezes or crackles. Heart: Regular rate and rhythm without appreciable murmur or extra sounds. Abdomen: soft, nontender, nondistended, bowel sounds active. Extremities: Without edema or calf tenderness.

LABORATORY DATA:
None.

ASSESSMENT AND PLAN:
1. Dysuria, urinary retention: This seems resolved with pyridium and VESIcare. care was discussed with patient's urologist, [Dr T-], earlier in the week. He is to follow up with [Dr T-] after discharge.
2. GERD: The patient being treated with PPI. No complaints today.

3. spasticity: The patient was concerned the use of round-the-clock baclofen was making him weak in PT. This has been changed to p.r.n. The patient reports good PT performance.
4. Mild protein caloric malnutrition: The patient with albumin of 2.6, but normal prealbumin. continue to encourage p.o.
5. Recent aspiration pneumonia: The patient will need to get a chest x-ray next month for followup.
6. Follow care: The patient's PCM ([Dr U-]) recently deceased. Case manager is helping patient locate a new primary care manager.
7. Debility: The patient doing well in rehabilitation with plans for probable discharge on Saturday.

Discharge Summary: 5/28/24
Date of admission: 5/16/24

Discharge diagnoses:

- Aspiration pneumonia, treated
- Debility with chronic weakness, cerebral palsy
- Urine retention
- Treated for a UTI sepsis
- Bilateral pleural effusions

Discharge to home with home health services.

IGC:

ETIOLOGIC:

TIER:

60% QUALIFIER:

COMMENTS: