

**California State University, Stanislaus School of Nursing**  
**NURS 2910, 4810**  
**Plan of Care Evaluation**

**Patient Data**

Demographics	Gender: F Age: 47 Height: 149.86 Weight: 56.9 Primary language: English Spirituality: Catholic Code Status: DNR			
Vital signs	T: 36.8 HR: 57 RR: 18 BP: 104/59 O2sat: 100 Pain: Ø Pain scale type: Numeric scale			
Admitting Dx	NSTEMI			
PMHx	Anemia, thrombocytopenia, HTN, coronary vasospasm			
PSHx				
Surgery	Surgery this admission: Ø		POD: Ø	
	Advance directive: Ø	Isolation: r/o c. diff	VS Frequency: q4hr	
Diet order: heart healthy	Activity order: elevate HOB 30 degree	Vascular access: RT antecubital	IVF: Ø	
Oxygen therapy: Ø	Foley: Ø	Feeding tube: Ø	Glucose checks: Ø	
VTE prophylaxis: Ø	Drains/tubes: Ø	Wounds/dressings: Ø	Telemetry: Yes	
Restraints: Ø	Safety issues: Low risk for fall	Braden: 21	D/C plan: Home	

**Pathophysiology: required – evidence-based reference(s) and citation(s).**

Acute coronary syndrome (ACS) can be divided into categories of STEMI (ST- segment elevation myocardial infarction), NSTEMI, and unstable angina. The patient presented in this care plan was diagnosed with NSTEMI, which carries less harm to the heart as compared to STEMI because this condition is often caused by a nonocclusive thrombus. Patient's history of hypertension contributes to the presence of NSTEMI because HTN over a long period of time results in cardiac hypertrophy. Particularly, when the left ventricular wall is thickened, the oxygen demand will be increased. My patient's history of anemia and low RBC findings contribute to the myocardial ischemia predisposed by her HTN. Inadequate perfusion to the heart results in myocardial injury. In this case, my patient's troponin level has been consistently recorded at a dangerously high level. To help managing my patient's heart condition, medications administered are mostly geared toward treating underlying conditions: ferrous sulfate (iron supplementation) for anemia, amlodipine and atorvastatin for hypertension. Isosorbide mononitrate is also administered for angina prevention as it leads to vasodilation, decreased preload, and decreased myocardial oxygen demand.

Harding, M. M., Kwong, J., Roberts, D., Hagler, D., & Reinisch, C. (2019). *Lewis's Medical-Surgical Nursing: Assessment and Management of Clinical Problems*. Elsevier Health Sciences.

### Lab and Diagnostic Test Data

LABS	Normal Range (Fill in Hospital Norms)	RESULT 1 5/10 @0637	RESULT 2 5/9 @ 0452	RESULT 3 5/8 @1421	Reason for abnormal lab values related to patient care & nursing implications	
<b>CBC</b>						
• WBC	4- 10	9.1	10.1 (H)	12.9 (H)		
• RBC	4.3 - 5.-9	4.34	4.29	4.62		
<b>Hemoglobin (Hgb)</b>	13.6- 17	10.5 (L)	10.4 (L)	11.0 (L)	r/t patient's anemia. Could also be r/t to hemorrhage.	Monitor vital signs and oxygen saturation. Encourage iron rich food. Teach about risk of dizziness and weakness.
<b>Hematocrit (Hct)</b>	39- 49	32.6 (L)	31.9 (L)	34.5	r/t patient's anemia. Could also be r/t to hemorrhage.	Monitor vital signs and oxygen saturation. Encourage iron rich food. Teach about risk of dizziness and weakness.
• MCV	80- 99					
• MCH	25- 35					
• MCHC	32-36					
• RDW	11.4- 14.6					
<b>PLT COUNT</b>	150- 400	29 *(!)	42 (L)	49 (L)	r/t patient's thrombocytopenia.	Minimize patient's risk of injury, including falls, bleeding, and infection.
<b>WBC DIFF</b>						
<b>NEUTROPHIL %</b>	36-66	75(H)			Could be r/t infection or tissue damage.	
<b>BANDS %</b>						

<b>LYMPHOCYTE%</b>	24-44	25				
<b>MONOCYTE %</b>	0-10	4				
<b>CHEMISTRY</b>						
<b>Sodium</b>	136- 145	137	141	137		
<b>Potassium</b>	3.5- 5	4.1	3.6	3.5		
<b>Chloride</b>	97- 107	105	107	105		
<b>CO<sub>2</sub>(bicarb)</b>	22- 29	27	26	23		
<b>BUN</b>	9.8-20.1	9.8	10.2	11.9		
<b>Creatinine</b>	0.6-1.1	0.7	0.7	0.8		
<b>GFR</b>	≥ 60	≥ 60	≥ 60	≥ 60		
<b>Glucose</b>	70- 105	89	98	102		
<b>Calcium</b>	8.5- 10.5	8.6	8.5	8.7		
<b>Iron</b>			35			
<b>Transferrin</b>			247			
<b>Iron/ Transferrin</b>						
<b>Phosphorus</b>	2.7-4.5					
<b>Magnesium</b>	1.6-2.6	2.0				
<b>Lactate</b>	0.5-1					
<b>Serum Ketones</b>						
<b>HbA1C</b>	<5.7					
<b>LIVER PANEL</b>						
<b>Total protein</b>	6.5-8.4		6.5	6.9		
<b>Albumin</b>	< 3.5- 5		3.6	3.7		

<b>Bilirubin Total</b>	0.1- 1.2		0.5	0.6		
<b>Alk phosphatase</b>	40 - 150					
<b>HDL</b>	> 59					
<b>LDL</b>	<100					
<b>AST</b>	5 – 34		41(H)	29	Could be r/t liver disease, structural heart disease, and cardiometabolic risk factors.	
<b>ALT</b>	0- 55		18	18		
<b>Lipase</b>	40-150		75			
<b>Amylase</b>						
<b>Ammonia</b>						
<b>Cholesterol</b>						
<b>Triglycerides</b>						
<b>Lactate</b>						
<b>Serum Ketones</b>						
<b>CARDIAC PANEL</b>						
<b>CPK</b>						
<b>CPK-MB</b>						
<b>Troponin</b>	<0.013	1.894 (!)	5.856 (!)	0.288 (H)	r/t myocardial injury, demand ischemia, and recent heart attack.	Troponin is released into the blood following a cardiac injury.
<b>Myoglobin</b>						
<b>BNP</b>						
<b>COAGULATION</b>						
<b>PT</b>	9.4-12.5		13.7 (H)	13.7 (H)	Elevated PT could be r/t patient's thrombocytopenia and anemia.	High PT means it takes longer time for coagulation, so need to minimize

						patient's risk of injury, including falls, bleeding, and infection.
<b>INR ratio</b>			1.2	1.2		
<b>PTT</b>	25.1-36.5			30.6		
<b>Fibrin level</b>						
<b>Fibrinogen</b>						
<b>Anti Factor Xa</b>						
<b>Bleeding time</b>						
<b>D-Dimer</b>						
<b>Drug levels</b>						
<b>UA collection type</b>						
<b>Urine color</b>	Yellow					
<b>Urine appearance</b>	Clear					
<b>Specific gravity</b>	1.001-1.035					
<b>Urine Ph</b>	4.7- 8.0					
<b>Urine glucose</b>	Negative					
<b>Urine bilirubin</b>	Negative					
<b>Urine blood</b>	Negative					
<b>Urine Ketones</b>	Negative					
<b>Urine Nitrites</b>	Negative					
<b>Urine Protein</b>	0-3					
<b>Urine Leukocytes</b>	0-3					
<b>URINE MICRO</b>						

<b>WBC HPF</b>	< 5/ hpf					
<b>RBC HPF</b>	< 5/ hpf					
<b>Nitrate HPF</b>						
<b>Epithelial</b>						
<b>Bacteria</b>						
<b>Mucous</b>						
<b>CULTURES</b>						
URINE CULTURE						
Urine Tox screen						
<b>CSF</b>						
• WBC						
• RBC						
• Glucose						
• Protein						
• Culture						
<b>Blood Cultures</b>						
<b>Stool Cultures</b>						
<b>Sputum Cultures</b>						
<b>Nasal Cultures</b>						
<b>ABG(FIO<sub>2</sub> + device)</b>						
<b>pH</b>						
<b>PO2</b>						
<b>PCO2</b>						

Bicarbonate						
Oxygen Saturation						
Anion gap	5 – 14					
Tox Screen						
Therapeutic Drug Levels						
DIAGNOSTIC TESTS  ( ALL DIAGNOSTIC TESTS SHOULD BE HERE)						
ECG						
X ray						
Angiography						
Heart Cath. Lab						
CT Scans					CT chest 05/08 @1717  Findings: no evidence of pulmonary embolism. r/o coronary artery occlusions.	
MRI						
Endoscopy						
Nuclear Scan						

**Medications: Scheduled Meds**  
**\*\*\*add PRN meds if need to administer**

<b>Generic</b> <b>Trade Name</b> Drug classification <i>(Therapeutic &amp; Pharmacologic)</i>	Dose/Route Frequency Rate of Administration (if needed)	Action of Drug Purpose <b>(specific to Pt)</b>	Possible Side Effects	Nursing Considerations related to patient care and teaching (What to assess, when to hold, what to teach, etc. Anything other than the side effects that the hospitalized patient needs to know.)
<b>G: amLODIPine</b> <b>T: Norvasc</b> <b>Th: antihypertensives</b> <b>Ph: Ca<sup>2+</sup> channel blocker</b>	<b>5 mg PO Tab BID</b>	<b>Purpose:</b> systemic vasodilation to decrease BP <b>Action:</b> inhibit Ca <sup>2+</sup> into myocardial and vascular smooth muscle cells	<b>Possible side effects include:</b> -hypotension, bradycardia -peripheral edema -dizziness	<b>Monitor BP and pulse. Monitor intake and output ratios and daily weight to assess for signs of HF. Lab test considerations include total serum calcium concentrations.</b>  <b>Caution patient to change position slowly to minimize orthostatic hypotension.</b>
<b>G: Atorvastatin</b> <b>T: Lipitor</b> <b>Th: lipid-lowering agent</b> <b>Ph: HMG-CoA reductase inhibitor</b>	<b>40 mg PO Tab qHS</b>	<b>Purpose:</b> primary prevention of cardio disease in patient with type II diabetes. Lower cholesterol level	<b>Possible side effects include:</b> CNS: amnesia, confusion, dizziness, weakness CV: chest pain, peripheral edema	<b>Evaluate serum cholesterol and triglyceride levels before administration. Monitor CK levels if ptn develops muscle tenderness.</b>  <b>Do not skip or double up on missed doses. Avoid drinking grapefruit juice. Take medication with food for better drug absorption.</b>



		<b>Action:</b> Inhibit HMB-CoA reductase (for catalyzing early step of cholesterol synthesis)	GI: abd cramps, constipation, diarrhea, flatus, heartburn Derm: rashes	
<b>G:</b> ferrous sulfate (30% elemental iron) <b>T:</b> Feosol, Feratab <b>Th:</b> antianemics <b>Ph:</b> iron supplement	<b>325 mg PO Tab BID</b>	<b>Purpose:</b> treatment and prevention of iron deficiency anemia <b>Action:</b> supplement for the essential mineral found in hemoglobin; transported to bone marrow/liver to become iron store	<b>Possible side effects include:</b> GI: nausea, constipation, dark stools, epigastric pain	<b>Monitor hemoglobin and hematocrit levels before and during therapy. Iron levels can also be monitored to assess effectiveness of therapy.</b>  <b>Advise patient that stools may become dark green or black (expected finding). Instruct patient to follow diet high in iron (leafy green vegetables, lean red meats, dried beans/ peas).</b>
<b>G:</b> isosorbide mononitrate <b>T:</b> Imdur <b>Th:</b> antianginals <b>Ph:</b> nitrates	<b>60 mg PO Tab (extended-release) qDay</b>	<b>Purpose:</b> prophylactic management of angina pectoris <b>Action:</b> produce vasodilation. Decrease preload and myocardial oxygen demand.	<b>Possible side effects include:</b> CV: orthostatic hypotension, tachycardia Resp: paradoxical bradycardia CNS: Headache	<b>Assess for location, duration and intensity of anginal pain. Monitor BP and pulse routinely.</b>  <b>Advise patient to change positions slowly d/t orthostatic hypotension. Avoid activities requiring alertness d/t dizziness.</b>
<b>G:</b> potassium bicarbonate <b>T:</b> Effer-K <b>Th:</b> mineral and electrolyte <b>Ph:</b> supplement	<b>40 mEq PO Tab PRN</b>	<b>Purpose:</b> treat/prevent K <sup>+</sup> depletion <b>Action:</b> maintain acid-base balance, electrophysiologic balance of the cell	<b>Possible side effects include:</b> CV: arrhythmias, ECG changes GI: abd pain, n/v, diarrhea CNS: confusion, restlessness	<b>Assess for signs of hypokalemia (weakness, fatigue, U wave on ECG, arrhythmias) and hyperkalemia (slow, irregular heartbeat, peaked T waves, widened QRS complex)</b> <b>Monitor serum potassium before and during therapy.</b>  <b>Advise not to chew on the tablet. Teach about potassium rich food like banana, kiwi and pumpkin.</b>

**Nursing Diagnosis (ND) & Nursing Interventions Classifications/Evaluation (NIC)**

<b>ND</b>	<b>Interventions</b>	<b>Evaluation of Response</b>
<b>1. Ineffective cardiac tissue perfusion as evidenced by chest pain, low level of Hgb &amp; Hct</b>	<b>1. Monitor vital signs, cardiac rhythm, and lab values</b> <b>2. Offered and administered ferrous sulfate for iron supplementation</b> <b>3. Monitor for signs of chest pain</b>	<b>Patient has no complaint of chest pain at this moment. But her Hgb (10.5) and Hct (32.6) remains low as of 5/10 @ 0637. Patient's vital signs like BP (104/59) and HR (57) are within normal limits. Patient understands the use of ferrous sulfate and verbalize that she will report any signs of black/tarry stool.</b>
<b>2. Risk of decreased cardiac output related to history of hypertension</b>	<b>1. Monitor EKG findings.</b> <b>2. Monitor lab values of troponin</b> <b>3. Offer potassium bicarbonate PRN in case of hypokalemia</b>	<b>EKG reveals ST depression, which is consistent with her diagnosis of NSTEMI. Patient's troponin levels remains high (1.894) as of 5/10 @ 0637, which is likely to correspond to her demand ischemia.</b>
<b>3. Deficient knowledge of NSTEMI and angina as evidenced by failure to improve on previous regimen.</b>	<b>1. Reinforce explanations of risk factors, dietary restrictions.</b> <b>2. Teach about signs that require reduction of activity (elevated pulse, dyspnea, chest pain)</b> <b>3. Emphasize importance of follow-up care with HCP</b>	<b>Patient verbalizes understanding of condition, risk factors, potential complications. Patient reports that she was still performing high intensity exercises prior to this hospitalization, but now she understands that her condition comes with certain activity restrictions.</b>

- HEAD TO TOE NURSING ASSESSMENT (Date and Time)	
- <u>HEAD / NEURO</u>	-
- L.O.C.	- A&O x4. Clear thoughts, calm manner and articulation.
- Optical	- PERRLA. Able to track fingers. Negative corneal light reflex findings.
- Head and neck	- Full ROM; able to move w/o pain.
- Nose and Throat	- Clear oropharynx, pink mucosa. No complaint of sore throat.
- Gross and Fine Motor	- Able to hold utensils and feed herself. Able to ambulate and use bathroom w/o assistance.
- <u>RESPIRATORY</u>	-
- Pulmonary	- Clear lung sounds at all fields. No wheezing/ rub/ crackles.
- Breast and back	- Normal chest expansion.
- <u>CARDIO-VASCULAR</u>	-
- Cardiac	- Cap refill < 2 seconds. S1 and S2 sounds audible with no murmur.
- Central	- EKG reveals ST depression. No complaints of chest pain at this moment
- Peripheral	- Strong and regular BLL pulse, 2+/4.
- <u>GASTROINTESTINAL</u>	-
- Abdominal	- Soft, non-tender abdomen w/ no distention. No guarding/ rebound tenderness noted.
- Nutritional	- No nausea/ vomiting. Put on heart healthy diet.
- <u>GENITOURINARY</u>	-
- Pelvic and rectal	- Last BM was 5/8 with no dark discoloration.
- <u>MUSCULOSKELETAL</u>	- Full ROM in all extremities. 5+/5 strength from push/pull strength test of upper extremities.
- <u>INTEGUMENTARY</u>	-
- Skin / Hair	- Pink/ warm/ dry. No cyanosis/ pallor. No pitting edema/ tenting.

**SBAR Report:**

Patient is a 47 y/o female admitted for NSTEMI. Code status DNR. Her chief complaint was pressure at chest and weakness along her jaw and left arm. She reports that it was her "3<sup>rd</sup> hospitalization for chest pain this year." She has a past medical history of hypertension, anemia, thrombocytopenia and coronary vasospasm. Patient's vital signs are: T 36.58 BP 104/59, HR 57, RR 18, SpO2 100%. Patient is placed on heart healthy diet to meet her nutritional needs. EKG reveals ST depression, which is consistent with her Dx of NSTEMI. Lab test on 05/10/2021 @ 0637 reveals an elevated troponin level of 1.894. It has improved as compared to 5.856 troponin level noted on 5/9 0452. Another important finding from her lab is the extremely low levels of platelet counts. Her PLT count on 5/10 was 29. Physician has been notified for these finding and he recommends continue monitoring. Patient's CBC also reveals low levels of hemoglobin and hematocrit, so her anemia is managed by ferrous sulfate administration. CT scan of chest on 05/08 reveals no evidence of pulmonary embolism and unremarkable findings of coronary occlusions. Lastly, her WBC counts was 12.9 on 5/8 @1421, so she is put on contact isolation to rule out C. diff infection. I recommend closely monitoring patient for chest pain. EKG along with levels of troponin, platelet, and WBC also require close attention.

**Example guide for: Nursing Interventions Classification**  
**Evaluate Effects of Nursing Actions- Patient Response/Outcome,**  
**Documentation**

**(Done During Clinical)**

Chief Medical Diagnosis: Pancreatic CA/COPD

Priority Assessments: Pain, Distention, Bowel Sounds, I & O, Drainage, Abd  
Wound

<b>1. Nursing Care: Nutrition &amp; Lytes</b> <b>Outcome</b>	<b>Patient Response and</b>
<b>Nursing Actions (NIC)</b> Assess new lab values	No new lab values except as
shown below	NPO except ice and meds/output
Assess I & O	
650	
Mouth care with Nystatin wash	Like the taste, said it helped a lot
Ice chips	Sucked on for sore throat
Monitor NG, Check Drainage	350cc green bile
Monitor TPN	74 cc/hr., accucheck 122
Assess abdominal pain	Grimacing, moaning, "3", gave
MS at 0840	
Bowel sounds	Hypoactive
Distention	No, soft (Has NG)
Skin Turgor	Slight tenting. Dry skin: lubricate
with bath	
Monitor Drainage, t-tube	75 cc serosanguinous
Abdominal Incision	Intact, no redness edema
<b>2. Nursing Care: Pain</b>	
Assess pain with scale and mediate	3/10 on pain scale at 0840; 0900
is 0/10	
Administer Morphine prn pain	2 mg MS IVP given per orders
effective	
Positioning	Positioned in bed with pillows
Check noise, lighting	Decreased light and fell asleep
Back Rub	patient declined
<b>3. Nursing Care: Anxiety</b>	
Guided imagery	helped him relax during bath
Therapeutic communication,	
Especially distraction and	
Active listening	seemed to help during A.M. care
Back Rub	patient declined. Will offer with
pm care.	
Use Anticipatory Guidance	Cooperated
Use Therapeutic Touch	Seemed more relaxed
Teach Slow Breathing	Seemed to help