

Nursing Process Tool Patient Scenario

Use this patient scenario to complete both the standard nursing process tool and the change of patient tool. Return the completed forms to the nursing office, 3331, and a faculty member will assess the tools and provide feedback to you. For dates, use present time, today's date as surgery date, the tomorrow is tomorrow's date, etc.

Charles Lewis, a 56 year old African American male, was admitted to the hospital this a.m. by Dr. Meeker. He is in room 3333. Admitting diagnosis is arterial peripheral vascular disease with gangrene of the right lower leg. He is scheduled for surgery at 3 p.m. for a below the knee amputation of the right leg.

On admission Mr. Lewis stated that a small sore on his right foot began 9 months ago. He does not know how he injured his foot. The area was treated with antibiotics and dressing changes by home health nurses, but would not heal. The ulcer is now 2 cm in length by 3 cm in width with a ½ cm depth, is blackish in color, and is draining green colored pus. He states the right leg is continually in pain from the knee to the foot with no relief from pain medication. The pain is a 6 on a scale of 1-10. He also states that he is unable to bear weight and uses a cane for support to enable him to continue to function. His WBC's on admission were 18,000 / mm³.

Mr. Lewis was diagnosed with diabetes type II in 1992 and hypertension in 1998. His past surgical history includes an appendectomy in 1982 and a vasectomy in 1989. He has been diagnosed with depression due to his limited mobility, and is taking Paxil daily. He is allergic to penicillin, walnuts, and adhesive tape.

Home medications include:

Prescribed Medications

Metformin 500 mg daily	Diovan 80 mg daily
Hydrochlorothiazide 25 mg daily	Paxil 40 mg daily
Tylenol #3 one tab. for pain in right leg q4h prn	Trental 400 mg twice a day

Over the counter

Maalox 30 ml for indigestion as needed	Ginseng one tablet daily
Multivitamin one tab. daily	

He takes his prescribed medications as ordered. All his prescribed medications except the Tylenol will be continued in the hospital.

Mr. Lewis's health habits include seeing his doctor yearly for a physical check up which includes a prostate exam. His last one was in July. He also had a colonoscopy last September. He visits his eye doctor yearly and had an eye and glaucoma exam in March. He has worn glasses for 10 years. He wears upper and lower dentures, sees the dentist yearly and his last visit was in April. Other health habits include attempting to follow an 1800 ADA (American Diabetic Assoc.), low sodium diet, but he states that he sometimes cheats. He does get a yearly flu shot which he received in December. He has smoked one pack of cigarettes a day since the age of 18. His last cigarette was at 6 a.m. this morning. He states he drinks on the average 5 beers a week. And the last time he had a beer was 3 days ago. He states he does not take illegal drugs. He does not exercise and watches TV all day and night. He does drive a car and always wears his seat belt. He sees a chiropractor monthly for spinal alignment. On admission Mr. Lewis was 5' 9" and weighed 200 lbs.

Family History

His father died at 65 years of age from coronary artery disease. His mother is still living and was diagnosed with hypertension. She had a stroke two years ago. His sister was diagnosed with breast cancer in 1990. His grandmother had diabetes

Preoperative Diagnostic Tests

Hematology	
RBC	4.8 million/mm ³
Hgb	16g/100 ml
Hct	38%
Platelets	400,000/mm ³
WBC	18,000/mm ³
Neutrophils	85%
Eosinophils	2%
Basophils	1%
Lymphocytes	52%
Monocytes	5%
Chemistry	
FBS	175 mg/dl
BUN	20 mg/dl
Creatinine	1.2 meq/dl
Potassium	3.0 meq/l
Sodium	140 meq/l
Chloride	106 meq
Calcium	9.5 mg/dl
Cholesterol	245 mg/dl
Pulse Oxygen Saturation	98%
Urinalysis	
pH	6.0
Specific gravity	1.045
	Negative for WBC's, RBC's, glucose, ketones or proteins
X-ray: Chest	Negative
EKG	Normal Sinus Rhythm

PHYSICAL ASSESSMENT

On admission his vital signs were: Temp: 100.6, Radial pulse 86 and regular, Respirations 12 and regular but shallow, BP left arm 138/84.

Mr. Lewis is alert and oriented to time, person, place and situation. He is able to explain the purpose for his hospitalization, even though he cannot believe he will be losing part of his leg. He continually states "Why me?" "I tried to do everything the doctor told me to do." He is calm but avoids eye contact especially when talking about the surgery and looks at the ceiling or out the window. He answers questions without hesitation and is able to concentrate on the interview for 30 minutes. He is able to remember past health history facts and talked about his birthday party he had a week ago. His wife confirmed the facts stated about his party. He speaks English and his speech is clear and easily understood. He wears glasses to read. He is able to read, write and understand English without any difficulty. He has no hearing problem. He follows commands without any difficulty.

PERLA is present and the size of the pupils is 3mm. His grip is strong and equal. He is able to distinguish between sharp/dull and cold/hot sensations on various body parts.

Breathing is unlabored but shallow. He is not using any accessory muscle to help him breathe. He denies any shortness of breath or a cough. His lungs are clear in all lobes with diminished breath sounds in the right lower lobe. Chest symmetry is equal. His breasts are symmetrical. He was taught to use the incentive spirometer and reached a volume of 1000cc. No breathing treatments or oxygen are ordered at this time and he is not in isolation. His pulse ox is 98% and his skin is light brown in color with pinkish tones noted.

Apical pulse is 86 and regular. S1 and S2 are audible. Radial pulses are 86 equal and +2 strength. Skin is clean, dry and warm to touch except for his right lower leg and foot, which are cool to touch and appear cyanotic and mottled.

Pedal pulse in right foot is nonpalpable but can be heard with the Doppler. The pedal pulse in the left foot is present and +2. 3+ edema in right lower leg and foot. No edema of left leg and foot. He complains of numbness and tingling in the right lower leg and foot. No hair is noted on the right lower leg and the skin is dry and scaly. Homan's sign is negative for both legs. His capillary refill is < 3 seconds, with slight tenting of the skin. No JVD is noted. No vascular bruits or fistulas noted.

Mr. Lewis is 5'9" tall and weighs 200 pounds. He states he has lost 20 pounds in the last 4 months due to lack of appetite. He has been on an 1800cal ADA, low sodium diet for about 18 months. He eats 50% for breakfast, 50% for lunch, and only 25% for dinner.

His mouth is clear of any lesions and the mucous membranes are moist and intact. He wears upper and lower dentures and denies any problems with swallowing. He does complain of some indigestion after eating Mexican food and takes Maalox to calm the burning sensation. His last bowel movement was yesterday, which he states was a large amount of formed dark brown stool. He states he has a bowel movement twice day. Bowel sounds are active in all 4 quadrants. Abdomen is soft, nondistended and he denies any pain. He has no problems with urination but states his urine has been a dark amber color and concentrated the last two days but no unusual odor was noted. He denies any burning or pain on urination and he has been circumcised. He denies bowel or bladder incontinence. He does not have an ostomy. He is not in any type of isolation at this time.

A dry gauze dressing was removed from his right lower leg to expose a sore approximately 2 cm in length by 3 cm wide and ½ cm deep. The wound bed is greenish black in color and is seeping green colored purulent drainage. The skin around the sore is edematous, red in color, warm and tender to touch.

He is able to do his own bath, feed himself and can turn himself in bed without difficulty. He has full ROM of all his extremities except for weakness in his right lower leg. The strength in all the other extremities is strong. He uses a cane to help him ambulate but needs a one person assist to get out of bed.

He has a doctor's order for activity ad lib. He wears a foot shield to protect the right foot when he ambulates and is able to walk 20 feet with a steady gait but bends forward as he walks. The pressure on his foot causes him pain. The pain is achy, throbbing and increases with walking but he has learned to cope because he has to work and support his family. He rates his pain a 7 using a 1-10 pain scale. He has had the pain in his foot for 9 months. He takes Tylenol#3 one tablet every 4 hours for the pain as needed. He says the pain is a 3 after taking the pain medication.

He does not sleep well at night because of the pain in his right foot. He averages 5 hours a night and takes Tylenol #3 at bedtime. He feels tired when he wakes up and naps during the day.

Mr. Lewis has an Associate Degree in Computer Science and has worked as a computer technician for the same company for 25 years. He has private insurance, which will cover his medical expenses. He has been married for 30 years and has 2 children.

He is very concerned about the amputation and the effects it will have on his family, occupation and financial situation. He does not know how he will cope since he is the breadwinner of the family and feels powerless in this situation. He expresses a lot of anxiety and fear about the surgery.

Mr. Lewis attends a Baptist church regularly and is active on the church council. He has no religious restrictions that will affect his care. He asks that his pastor be notified of his admission. Mr. Lewis has a living will and has appointed his wife durable power of attorney. He has tried to get his affairs in order before surgery.

FIRST DAY POST-OPERATIVE) - 2nd Day of Care

At 1200 on his first post-op day, Mr. Lewis's vital signs are Temp: 99.2 Respirations: 12 regular and shallow. Radial pulses: 88 and regular, +2 strength Apical pulse: 88 and regular. S1 and S2 are audible. BP: 150/88 in left arm.

He is alert and oriented and answers questions appropriately. PERLA is present and the pupils are 3mm in size. Grips are strong and equal. His is able to concentrate for only 10 minutes but his short and long term memories are intact. His sensation to touch and temperature are intact but he is restless. He does maintain eye contact when conversing with his family and hospital personnel.

He is short of breath and is using his abdominal muscles to help him breathe. He has crackles in the lower bases of both lungs and his incentive spirometer volume measures 500 ml's. His pulse Ox is at 90% and the doctor ordered oxygen at 2 L/min per nasal cannula. His chest is symmetrical with respirations. He has a moist nonproductive cough. His skin is warm, dry but pale in color. No tenting was noted.

His capillary refill is < 3 seconds.

Pedal pulse is present and palpable in left foot with +2 strength. Popliteal pulse is present in right leg with a +2 strength. No edema noted in lower extremities.

The temperature in both arms and left leg is equal and warm. The temperature of the right stump is warm to touch.

JVD is absent.

The mucous membranes of the mouth are moist, intact and free of lesions.

Mr. Lewis consumed 50% for breakfast.

Last 24 hour intake: oral 1000cc IV 3000cc

Output: 3000cc of urine and 150cc of liquid brown stool

Blood Glucose monitoring results are:

Day of surgery	0800	140 mg/dl	Post-op day 1	0800	118 mg/dl
	1200	150 mg/dl		1200	128 mg/dl
	1600	160 mg/dl			
	2100	140 mg/dl			

His IV of 1000 ml 0.9% Sodium Chloride with 20 meq KCL is infusing at 125 ml/hr in the left antecubital space was started in surgery, with a 21 gauge angiocath. The IV site is clean and dry with no swelling or redness. The transparent dressing is intact. I V tubing is dated tomorrow.

His abdomen is soft, non-tender with no distention. Bowel sounds present in all 4 quadrants. A #16 Foley catheter is draining clear yellow urine and is secured to his left thigh with tape. He has had no bowel movement today.

He has dry sterile gauze dressing on his right stump that has a bright reddish drainage the size of a quarter. A 5 inch long well approximated incision with a total of 10 intact staples noted on right stump. A Penrose drain is located on the left side of the incision, draining a small amount of sero-sanguineous drainage. There is a small amount of redness and swelling noted along incision edges. The skin around the drain site is intact and without irritation.

He has full ROM of his upper extremities and lower left extremity with limited ROM of the right extremity due to BKA and pain. He was able to ambulate with crutches and the assistance of 2 people. He has an unsteady gait with the crutches and ambulates about 15 feet but becomes tired after 5 minutes. He maintains an upright posture when ambulating. He is able to feed himself but needs assistance to bathe and turn in bed.

Mr. Lewis c/o pain in his right stump rating it an 8 (scale 1-10). He states the pain is sharp and stabbing and he sometimes feels like his lower leg is still attached. Any movement of his stump increases his pain.

Morphine 10mg is given IM every four hours as requested. States pain is a 4 after receiving pain medication.

He did not sleep last night due to the pain and feels tired.

He states he is worried about his financial future and losing his job. He states also that he feels helpless and has no control over his present position. His family visits every day and his wife and daughter have met with the social worker and discharge planner to prepare for his discharge.

Post operative orders

Metformin 500 mg po daily

Diovan 80 mg po daily

Hydrochlorothiazide 25 mg po daily

Paxil 40 mg po daily

Trental 400 mg po twice a day

Morphine 10 mg IM q4h as needed for pain

Continue 1800 calorie ADA, low sodium diet

Up in chair with assistance

BRP with assistance

Crutch training and ambulation with Physical Therapy 2x/day along with exercises to prevent contracture of right stump

To be fitted for prosthesis after stump has healed

Sterile dry dressing change to right stump every shift and prn – 4x4's, kerlix, ace bandage

Post operative diagnostic studies (first day)

Hematology	
RBC	4.6 million/mm ³
Hgb	12 g/100 ml
Hct	34%
Platelets	250,000
WBC	15,000 mm ³
Neutrophils	52%
Eosinophils	2%
Lymphocytes	46%
Monocytes	4%
Chemistry	
FBS	150 mg/dl
Potassium	4.0 meq/L
Sodium	140 meq/L
Chloride	106 meq/L
BUN	20 mg/dl
Urinalysis	
pH	6.0
Specific Gravity	1.015
	Urine negative for WBC's, RBC's, ketones, protein, and glucose
X-ray: Chest	Moisture noted in lower lung bases of both lungs

Discharge

Mr. Lewis is to be discharged to his home in four days.

Mr. Lewis resides in a small community with little crime and good police and fire protection. He lives in a two story dwelling with 2 bedrooms and bathroom upstairs, and a kitchen, family room, den and bathroom on the first floor. Mrs. Lewis is preparing for her husband's discharge by converting the den into a bedroom until Mr. Lewis is able to climb the stairs to get to his own bedroom. There are 2 steps up to the front and back door. His home has air conditioning, water, heat and telephone including a cordless phone.

The home health nurse will visit 2 x/week for two weeks after discharge to change the dressing and to teach Mrs. Lewis and their daughter the procedure. Mr. Lewis's daughter will also help with her father's care until he becomes more accepting of his situation.

He will continue using his crutches at home and his wife has attended the physical therapy sessions so she can help Mr. Lewis at home.

Arrangements have been made for physical therapy and prosthesis appointments and his wife will be driving him to the appointments.