NUR 215 Surgical Simulation

David Moore

52 year old Caucasian male (DOB 6/2/XX)

Ht: 72" Wt: 118 Kg

C/O "bloating", N/V, diarrhea and abdominal pain for three days prior to admission

Pt was admitted five days ago with bowel obstruction. CT on arrival showed a blockage in the transverse colon. MRI three days ago confirmed colon cancer.

NGT was placed on admission to low intermittent suction. It has drained an average of 300mL per shift, green fluid. Foley catheter, also placed on admission, drained an average of 600mL per shift, clear yellow urine. Triple lumen CVC line placed Right subclavian three days ago. TPN infused at 100mL per hr and Lipids 10%, 500mL at 50mL/hr daily.

Past Medical History: NIDDM, A Fib, Hypertension

Married, three living/healthy children, Long distance Truck driver, smoker (smokes 1 pack per day for 34 years), drinks one case of beer every weekend

Home Meds: Glyburide 5 mg PO daily, Lantus 36 units q hs, Coumadin 5 mg PO daily, Multi vitamin daily, ASA 325 mg daily

Current Meds: Vancomycin 1 GM q 12 hrs IV, Glyburide 5 mg PO daily, Lantus insulin 36 units q hs, Coumadin 5 mg PO daily, Multi vitamin daily, ASA 325 mg daily, Accu check q6h with Lispro sliding scale coverage

At 0600, TPN D/C'd and 0.9% NSS hung at 100mL/Hr. Foley emptied. NGT clamped. Accu check 154. Pt taken to OR.

In OR/PACU (0600 – 1700) EBL 1000mL. Received two units of Packed Cells and 5000 mL 0.9% NSS in OR. UOP 350 mL. Returned to floor at 1700.

Post-op orders: Transfuse 2 units packed cells. PCA pump with Morphine, basal dose 2 mg/hr, bolus 1 mg q 8 mins. PCA protocol. NGT to low intermittent suction. Foley to straight drainage. Bedrest today. BRPs starting tomorrow. Resume previous medications. Ostomy Nurse to follow.

***It is now 1900. You are working 1900 – 0700 and receiving shift report which includes:

> Pt is alert/oriented. Abdomen soft. No bowel sounds. Abdominal dressing C/D. NGT draining small amount green drainage. Colostomy bag has small amount of dark red drainage. Foley has small amount of dk amber urine. Pt is using PCA pump and denies pain at this time. Second unit of Packed Cells infused. 0.9% NSS open to flush after packed cells.

(Groups of 4 RN, LPN, Charge Nurse on unit, CNA)

Equipment Checklist		
Equipment that should be readily available for the scenario		
Personal		
☐ PPE (googles, gloves, etc)	☐	☐
X Stethoscope	☐	☐
X Penlight	☐	☐
☐ Reference Material	☐	☐
☐	☐	☐
Diagnostic		
X BP cuff on monitor	☐ Medical Records	☐
X Thermometer	☐ Physician Orders	☐
X SPO_2 monitor and probe	☐	☐
X ECG monitor	☐	☐
☐ Lab reports	☐	☐
Therapy		
X Oxygen source	**X** NGT to wall suction	☐
X Oxygen delivery adjunct	**X** colostomy bag on abdomen	☐
X NGT Suction	**X** foley catheter indwelling	☐
☐ IV Start Kit	☐	☐
☐ Crash Cart	☐	☐
Medications & IV Fluids		
X IV Lactated Ringers at KVO	**X** IV NSS with empty bag packed RBCs	☐
X PCA pump	☐	☐
X Medication Cart	☐	☐
X Blood sugar monitor	☐	☐
☐	☐	☐

Preparation of the Simulator
NGT to low suction. Colostomy bag on patient. Abdominal Dressing with sm amount red blood. IV of LR with PCA attached. Foley catheter with sm amount of dk amber "urine"

Number and Roles of Participants
One Instructor
Four or five students nurses

Scenario 1 (MI due to low H&H) Pt states "I'm having some chest pain".

Initial V.S.: Temp 97.0 F, Pulse 110, Resp 20, B/P 162/88, O2 sat 97%

Student should:

- ☐ Wash Hands, Introduce self, Identify the Patient
- ☐ Raise HOB
- ☐ Place O2
- ☐ Do V.S. including O2 Sat
- ☐ Pain assessment
- ☐ check for routine cardiac orders
- ☐ call for 12 Lead
- ☐ Call MD
  - Request cardiac orders (NTG, MS04,lab work(serial cardiac labs), transfer to monitored unit
- ☐ Stay with patient and provide support (Offer to call family, Pastor)

Scenario 2 (PE due to stasis of position in OR) Pt states "I just got this really sharp pain in my chest and I am having problems breathing"

Initial V.S.: Temp Temp 99.0 F, Pulse 110, Resp 28, B/P 162/88, O2 sat 84%

Student should:

- ☐ Wash Hands, Introduce self, Identify the Patient
- ☐ Raise HOB
- ☐ Place O2
- ☐ Do V.S. including O2 Sat
- ☐ Pain assessment
- ☐ call for 12 Lead
- ☐ Recognize the PT and INR are within normal limits (Pt. on Coumadin)
- ☐ Call MD
  - Request ABG's, CT Scan, transfer to monitored unit
- ☐ Stay with patient and provide support (Offer to call family, Pastor)

Scenario 3 (Hypoxic due to low H&H) Pt states "I'm really short of breath"

Initial V.S.: Temp 97.0 F, Pulse 110, Resp 28, B/P 162/88, O2 sat 90%

Student should:

- ☐ Wash Hands, Introduce self, Identify the Patient
- ☐ Raise HOB
- ☐ Place O2
- ☐ Do V.S. including O2 Sat
- ☐ Respiratory Assessment
- ☐ Call MD
  - Request ABG's, Increase in O2, CXR, Repeat H&H, transfusion
- ☐ Stay with patient and provide support (Offer to call family, Pastor)

Scenario 4 (Peritonitis due to leaking bowel) Pt states "My stomach hurts"

Initial V.S.: Temp 102.6 F, Pulse 110, Resp 28, B/P 162/88, O2 sat 96%

Student should:

- ☐ Wash Hands, Introduce self, Identify the Patient
- ☐ Do V.S. including O2 Sat
- ☐ Pain assessment
- ☐ Check wound site (dressing), abdomen (rigid), NGT for patency and drainage
- ☐ Call MD
  - Request CT scan, labs (CBC with diff)
  - Prepare for return to OR
- ☐ Stay with patient and provide support (Offer to call family, Pastor)

Scenario 5 (Neuro status change due to over sedation (PCA), or hypoglycemic due to diabetic medication, D/C TPN, and NPO)

Initial V.S.: Temp Temp 97.0 F, Pulse 60, Resp 8, B/P 102/58, O2 sat 90%

Student should:

- ☐ Wash Hands, Introduce self, Identify the Patient
- ☐ Place O2
- ☐ Do V.S. including O2 Sat
- ☐ Turn off PCA
- ☐ Do accu check
  - If low and responsive, give oral dextrose paste (NPO/NGT)
  - If low and unresponsive, call for D50 IV
  - Repeat blood sugar
- ☐ Rapid neuro assessment
- ☐ If blood sugar not the cause, administer Narcan per routine PCA orders
- ☐ Call MD
  - Request change in appropriate orders (PCA or insulin)
- ☐ Stay with patient and provide support (Offer to call family, Pastor)

Additional Potential Scenarios/Issues: Dehydration, Electrolyte imbalance, Kidney problems due to low H&H and low output during surgery, pneumonia due to smoking, stasis of secretions, and immobility during 12 hour surgery, DVT or lower extremity ulcer due to immobility during 12 hour surgery and diabetes, Psychosocial issues (colostomy, ?insurance, etc), _____

Pt: David Moore
MR# 215SRC01
Dr. Clark

Allegany College of Maryland School of Nursing
Medication Administration Record

LIST ALLERGIES: none

Medication **Start/Stop** **Dose** **Route** **Freq**	**0701-1500**	**1501-2300**	**2301-0700**
Vancomycin 1 GM IV q 12 hrs			
Glyburide 5 mg PO daily			
Lantus insulin 36 units q hs			
Coumadin 5 mg PO daily @ 1800			
Multi vitamin daily			
ASA 325 mg daily			
Accu check q6h with Humalog sliding scale coverage 141-180 2 units 261-300 8 units 181-220 4 units 301-350 10 units 221-260 6 units 351-400 12 units >400 Give 12 units and call MD			
PCA pump with Morphine, basal dose 2 mg/hr, bolus 1 mg q 8 mins. PCA protocol			

Signature	Init	Signature	Init	Signature	Init

REMINDER: ALL MEDICATION ORDERS REQUIRE DOSE, ROUTE, FREQUENCY AND INDICATION
DO NOT USE ABBREVIATIONS

DOCTORS ORDERS INTRAVENOUS PATIENT CONTROLLED ANALGESIA (PCA) ORDERS	CHECK OFF/ INITIALS
Narcotic infusion type: (50ml cassette in 0.9% Sodium Chloride injection) X Morphine PCA 2mg/ml ☐ Meperidine (Demerol®) PCA 10mg/ml ☐ Hydromorphone (Dilaudid®) PCA 1mg/ml	
1. Basal/continuous infusion rate: 2 mg/hour	
2. PCA/demand dose: 1 mg	
3. Lockout interval: 8 minute(s)	
4. Maximum doses/hour:	
5. Keep Intravenous open with Lactated Ringers at 100 mL/hour if no other Intravenous fluids running.	
6. Ampule of Naloxone (Narcan®) 0.4 mg/mL and 3 mL syringe readily available.	
7. Use patient analgesia monitoring sheet, if applicable.	
8. Check respiratory rate, blood pressure, level of sedation and analgesia, document every 15 minutes times four, every 30 minutes times two, every one hour times six, then every two hours until discontinued. If rate of administration is changed, observe patient, document findings as appropriate until patient is stable. Then resume every two hours. If respiratory rate less than or equal to 10/minute, or patient not easily awakened, give Naloxone (Narcan®) 0.2 mg intravenous. If no response in two minutes, may give second dose of 0.2mg Naloxone (Narcan®) intravenous and call Anesthesia.	
9. **For Itching:**	
a. Diphenhydramine (Benadryl®) 25 mg Intravenous every four hours as needed.	
b. If itching persists after 2 doses of Diphenhydramine (Benadryl®), give Nalbuphine (Nubain®) 2.5mg subcutaneous every six hours as needed.	
c. If itching continues after 2 doses of Nalbuphine (Nubain®), give Naloxone (Narcan®) 0.08 mg (1 mL) intravenous, (dilute 0.4 mg Naloxone (Narcan®) with 4 mL 0.9% Sodium Chloride in 5 mL syringe). May repeat once in 5 minutes.	
10. **For Nausea:**	
a. Ondansetron (Zofran®) 4 mg intravenous slowly, if no response, may repeat once in 30 minutes.	
b. If nausea persists after 2 doses of Ondansetron (Zofran®), give Metoclopramide (Reglan®) 10 mg intravenous slowly over 2 minutes, if no response, may repeat once in 3 hours.	
c. If nausea continues after 2 doses of Metoclopramide (Reglan®), give Prochlorperazine (Compazine®) 5 mg intravenous every four hours as needed.	
11. Do not give other narcotics or sedatives while patient is receiving this narcotic infusion.	
12. If there is a technical problem with PCA pump, call Intravenous Therapy.	
13. If patient complains of inadequate analgesia:	
a. Check intravenous site.	
b. Review PCA use with patient and make sure PCA working properly.	
c. Notify CRNA or anesthesiologist on call by beeper.	
14. 24 hours after PCA discontinued, discontinue all orders for Naloxone (Narcan®), Ondansetron (Zofran®), Prochlorperazine (Compazine®), Nalbuphine (Nubain®), Diphenhydramine (Benadryl®), and Metoclopramide (Reglan®). Call primary physician for further pain medication orders.	

Physician/Date/Time:	**Nurse/Date/Time:**	**Secretary/Date/Time:**

Full page of orders requires only one physician, one nurse and one clerical signature

Original to Patient's Chart **Fax to Pharmacy**

Pt: David Moore
MR# 215SRC01
Dr. Clark

Allegany College of Maryland
Post-Op Nursing 215
Cumberland, MD 21502

Lab Values

Date/ Time	Lab Test	Normal Value	Patient Results	Date/ Time	Lab Test	Normal Value	Patient Results
	CBC				Lytes		
Day of Surgery	WBC	4.8-10.8	18.4	Day of Surgery	Na	136-144	148
1700	RBC	4.2-5.4	3.2	1700	K	3.5-5.1	2.9
	HGB	12.0-16.0	9.6		CL	101-111	111
	HCT	37.0-47.0	28.8		CO2	23 -32	31
	Platelet	150-450	156		Glucose	70-110	68
	Diff				BUN	6- 20	20
	Bands	5-15	6.0		Creat	0.6 -1.2	1.3
	Segs	46-80	108		CA	8.6 10.3	8.6
	Mono	1-10	2		Phos	2.4 –4.7	3.0
	Lymphs	16-47	22		Alk Phos	38 - 126	42
					Total Protein	6.1 -7.9	5.8
	APTT	24.5-38.1	36.3		Albumin	3.5 –4.8	3.3
	PT	11.0-13.2	12.2		Tot Bilirubin	0.2 -1.0	0.5
	INR	1.0– 2.0	1.1		Direct Bilirubin	0 – 0.3	0.1
					AST	15 - 41	40
	Hgb A_{1C}	2.2-4.8	6.8		ALT	10 - 54	52
					LD	98 - 192	143
	Sputum Cx	Negative			Sed Rate	0 - 20	11

Pt: David Moore
MR# 215SRC01
Dr. Clark

Allegany College of Maryland
Post-Op Nursing 215
Physician Order Sheet

LIST ALLERGIES: None

Transfuse 2 units packed cells
PCA pump with Morphine, basal dose 2 mg/hr, bolus 1 mg q 8 mins
PCA protocol
NGT to low intermittent suction
Foley to straight drainage
Bedrest today. BRPs starting tomorrow
Resume previous medications
Ostomy Nurse to follow

Only one set of orders per page please. Once you sign, date and time, please cross through remaining line

Post-op- colostomy

David Moore

Scenario Overview:

Estimated Scenario time: 20 – 30 minutes
Guided Reflection time: 30 minutes

Target Group: NUR 215

Brief Summary:
This case presents a client with colon cancer who undergoes surgery for removal of cancer and creation of a colostomy. He was in surgery for 12 hours and had an estimated blood loss of 1000mL. He received 2 units of packed cells during surgery. He has been transferred back to a Medical/Surgical floor for post-op care. The student is expected to recognize patient issues and complaints and respond accordingly.

Learning Objectives:

- Evaluate patient assessment information including vital signs
- Identify variances from expected post-op outcomes
- Prioritize patient needs
- Implement therapeutic communication
- Implement direct communication and delegation skills with multidisciplinary team members

Assignment

1. What do you think is happening with this patient?

2. What do you think is the cause of this problem?

3. What actions should the RN do?

4. What can be delegated to the LPN? CNA? Charge nurse?

NUR 215 Post-Op Simulation (David Moore)

Scenario 1 (MI)

Student/Role: RN_____

LPN _____

CNA_____

Charge Nurse_____

Correct Treatment #1 (MI)

- ☐ Wash Hands, Introduce self, Identify the Patient
- ☐ Raise HOB
- ☐ Place O2
- ☐ Do V.S. including O2 Sat
- ☐ Pain assessment
- ☐ check for routine cardiac orders
- ☐ call for 12 Lead
- ☐ Call MD
  - Request cardiac orders (NTG, MS04,lab work(serial cardiac labs), transfer to monitored unit
- ☐ Stay with patient and provide support (Offer to call family, Pastor)

Comments:

NUR 215 Post-Op Simulation (David Moore)

Scenario 2 (PE)

Student/Role: RN_____

LPN _____

CNA_____

Charge Nurse_____

Correct Treatment #2 (PE)

Student should:

- ☐ Wash Hands, Introduce self, Identify the Patient
- ☐ Raise HOB
- ☐ Place O2
- ☐ Do V.S. including O2 Sat
- ☐ Pain assessment
- ☐ call for 12 Lead
- ☐ Recognize the PT and INR are within normal limits (Pt. on Coumadin)
- ☐ Call MD
  - Request ABG's, CT Scan, transfer to monitored unit
- ☐ Stay with patient and provide support (Offer to call family, Pastor)

Comments:

NUR 215 Post-Op Simulation (David Moore)

Scenario 3 (Hypoxia)

Student/Role: RN_____

LPN _____

CNA_____

Charge Nurse_____

Correct Treatment

- Wash Hands, Introduce self, Identify the Patient
- Raise HOB
- Place O2
- Do V.S. including O2 Sat
- Respiratory Assessment
- Call MD
  - Request ABG's, Increase in O2, CXR, Repeat H&H, transfusion
- Stay with patient and provide support (Offer to call family, Pastor)

Comments:

NUR 215 Post-Op Simulation (David Moore)

Scenario 4 (Peritonitis)

Student/Role: RN_____

LPN _____

CNA_____

Charge Nurse_____

Correct Treatment

- □ Wash Hands, Introduce self, Identify the Patient
- □ Do V.S. including O2 Sat
- □ Pain assessment
- □ Check wound site (dressing), abdomen (rigid), NGT for patency and drainage
- □ Call MD
  - Request CT scan, labs (CBC with diff)
  - Prepare for return to OR
- □ Stay with patient and provide support (Offer to call family, Pastor)

Comments:

NUR 215 Post-Op Simulation (David Moore)

Scenario 5 (Change in LOC)

Student/Role: RN_____

LPN _____

CNA_____

Charge Nurse_____

Correct Treatment

- ☐ Wash Hands, Introduce self, Identify the Patient
- ☐ Place O2
- ☐ Do V.S. including O2 Sat
- ☐ Turn off PCA
- ☐ Do accu check
  - If low and responsive, give oral dextrose paste (NPO/NGT)
  - If low and unresponsive, call for D50 IV
  - Repeat blood sugar
- ☐ Rapid neuro assessment
- ☐ If blood sugar not the cause, administer Narcan per routine PCA orders
- ☐ Call MD
  - Request change in appropriate orders (PCA or insulin)
- ☐ Stay with patient and provide support (Offer to call family, Pastor)

Comments: