Simulation 2: Pain Management



This image was created with the assistance of DALL-E 2

Estimated Run Time: 15 minutes

Adapted for Student Population: Undergraduate

Setting: Acute Care **Patient Population:** Adult



Learning Objectives

General Objectives:

- 1. Performs priority nursing actions based on clinical assessment findings
- 2. Communicates with the patient using an empathetic and nonjudgmental approach
- 3. Utilizes evidence-based practice regarding opioid substitution therapy and acute pain management
- 4. Uses SBAR to communicate appropriately with other healthcare team members in a timely, organized manner using a patient-centered approach

Simulation Scenario Objectives:

- 1. Analyzes pertinent data to plan the healthcare for the consumer's health and/or the situation (AMERSA Standard 1)
- 2. Delivers care for clients with OUD utilizing evidence-based practice and best practice principles in a manner that preserves consumer autonomy, dignity, rights, values, and beliefs (AMERSA Standards 4, 7, 9)
- 3. Prioritizes and implements the identified care plan to meet the needs of patient and family experiencing substance use disorder (AMERSA Standard 5)
- 4. Utilizes evidence-based knowledge to guide practice in the prevention, identification, and treatment of substance use disorders (AMERSA Standard 5)

Psychomotor Skills Required of Participants Prior to Simulation

- Effective communication skills
- Assessment of the adult patient, including symptoms of withdrawal
- OUD/SUD withdrawal signs/symptoms and evidence-based care
- COWS assessment tool

Cognitive Activities Required of Participants Prior to Simulation

(textbooks, lecture notes, articles, websites, etc.)

National Institute on Drug Abuse. (n.d.). *Words matter*. National Institutes of Health. https://nida.nih.gov/sites/default/files/words matter handout.pdf

The National Alliance of Advocates for Buprenorphine Treatment. (2011). *Clinical opiate withdrawal scale (COWS)*. http://www.naabt.org/documents/cows induction flow sheet.pdf

No Stigma Simulation Design Template

(Revised 2/25/24)

Simulation 2: Pain Management

Date: **File Name:** Kevin Dos Santos **Discipline:** Nursing **Student Level:** Undergraduate

Expected Simulation Run Time: 15 minutes

Location: Medical floor

Today's Date:

Guided Reflection Time: 45 minutes

Location for Reflection:

Brief Description of Patient

Kevin is a 32-year-old male admitted to the floor for cellulitis to the anterior aspect of his left forearm. He is restless and complains of arm pain, nausea, and overall fatigue.

Kevin has a 5-year history of substance use disorder. He reports using intravenous heroin routinely and occasionally uses some of his friend's meds to avoid withdrawal. He estimates 2-3 bags of heroin every day. He was admitted for opioid use disorder treatment in the past, last inpatient admission was 8 months prior. Kevin has no health insurance, and reports he was unable to afford additional outpatient therapy or medication for opioid use disorder.

Name: Kevin Dos Santos **Pronouns:** He/Him

Date of Birth: 06/03/ **Age:** 32

Sex Assigned at Birth: Male **Gender Identity:** Male

Sexual Orientation: Heterosexual Marital Status: Single

Weight: 152 lbs (69 kg) Height: 5'9"

Racial Group: Multiracial **Language:** English **Religion:** Catholic

Employment Status: Unemployed **Insurance Status:** None **Veteran Status:** None

Support Person: Partner **Support Phone:** (999) 867-5309

Allergies: Sulfa **Immunizations:** Up to date, Covid x1

Attending Provider/Team: Dr. Alicia Mendes

Home Medications: Not taking any at this time

Past Medical History: Asthma; Depression; Anxiety; PTSD from sexual assault; Methicillin sensitive staphylococcus aureus; Hepatitis C; Infective endocarditis; Sepsis

History of Present Illness: Patient was admitted to the medical floor for a left forearm abscess, fever, and chills x6 days. He was seen 3 days ago in the ED where the abscess was incised and drained, and a wick inserted. A bulky dressing is currently in place. It is clean, dry, and intact. He is prescribed IV antibiotics. His WBC count is 15.7. He is afebrile. He reports nausea, abdominal pain, and general malaise.

Social History: Resides at men's shelter; Tobacco (2ppd) x10 years; Alcohol socially, mainly weekends; Intravenous heroin use x7 years, last 4-6 hours ago

Primary Medical Diagnosis: Left forearm abscess; Sepsis

Surgeries/Procedures & Dates: Appendectomy; Femur fracture MVC (2011); Biological aortic valve prosthesis (2018)

Setting/Environment

Emergency Department	☐ ICU
X Medical-Surgical Unit	OR / PACU
Pediatric Unit	Rehabilitation Unit
Maternity Unit	Home
Behavioral Health Unit	Outpatient Clinic
	Other:

Equipment/Supplies (choose all that apply to this simulation)

Simulated Patient/Manikins Needed: standardized patient

- Patient sim manikin or standardized patient
- Nurse learner/student
- Family member actor (elective)
- Off-going nurse handoff for coverage actor or faculty

Recommended Mode for Simulator: script/training for SP

Healthy adult

Other Props & Moulage

Equipment Attached to Manikin/Simulated	Equipment Available in Room:
Patient:	Bedpan/urinal
X ID band	02 delivery device (type)
X IV tubing with primary line fluids running at	Foley kit
100 mL/hr	Straight catheter kit
X Secondary IV line running at 50 mL/hr	☐ Incentive spirometer
X IVPB with Cefazolin 2g running at 50 mL/hr	Fluids
X IV pump	☐ IV start kit
PCA pump	☐ IV tubing
Foley catheter withmL output	☐ IVPB tubing
□ 02	☐ IV pump
Monitor attached	Feeding pump
X Other: bulky kerlex dressing to forearm	Crash cart with airway devices and
X COWS protocol	emergency medications
X Patient chart/paper or electronic	☐ Defibrillator/pacer
	Suction
Other Essential Equipment:	Other:
Medications and Fluids:	
Oral Meds:	
☐ IV Fluids:	
IVPB:	

IV Push:	
☐ IM or SC:	
Roles	
X Nurse 1	Observer(s)
X Nurse 2	Recorder(s)
Nurse 3	X Family member #1
X Provider (physician/advanced practice nurse)	Family member #2
phone communication	Clergy
Other healthcare professionals:	Unlicensed assistive personnel
(pharmacist, respiratory therapist, etc.)	Other:

Guidelines/Information Related to Roles

Information on behaviors, emotional tone, and what cues are permitted should be clearly communicated for each role. A script may be created from scenario progression outline.

Pre-Briefing/Briefing

Prior to report, participants will need pre-briefing/briefing. During this time, faculty/facilitators should establish a safe container for learning, discuss the fiction contract and confidentiality, and orient participants to the environment, roles, time allotment, and objectives.

The purpose of this simulation is to allow learners an opportunity to role model addressing biases and barriers to providing pain management for individuals with OUD and their family.

Simulation Pre-Briefing*:

- 1. Welcome participant
- 2. Let participant know the objective of today
- 3. Let participant know what's going to happen today
 - a. Pre-simulation survey and consent
 - b. Simulation during which the student will engage with the mannequin/teacher/patient in such a way that will address the issue of stigma in some capacity
 - i. Let participant know you are looking for engagement with the mannequin (if applicable) as if the mannequin is a 'real human' (Note: this is known as the fiction contract)
 - 1. The educator will do all she/he is able to create a scenario that is as real as possible within the limitations of the simulated environment
 - ii. Describe role the participant will play
 - 1. Nurse
 - iii. Describe roles within the simulation
 - 1. Student nurse
 - 2. Nurse handing off report
 - 3. Family member
 - iv. Describe the setting
 - 1. Inpatient MS
 - c. Debriefing with educator during which you'll review the simulation and discuss learning opportunities
 - i. Reinforce the concept of simulation as a learning environment
 - 1. Missteps/errors/oversights etc. are puzzles to be solved, not punishable
 - d. Post-simulation survey if indicated
- 4. Reinforce the concept that the simulation is a safe environment
 - a. Participant will be observed and recorded but no personal identifiers will be used

^{*}Note: Pre-Brief is based on NLN Pre-Briefing Checklist

Report Students Will Receive Before Simulation (Use SBAR format)

Address mother and include in SBAR:

"Hi Andrea. I'm Shannon, one of the other nurses. Have I met you yet? No.

Nice to meet you.

Nice to meet you too.

So, you know, we're taking care of Kevin here. I just wanted to give you a quick little history..."

Time:	9 pm
Person providing report:	Off-going nurse needs coverage as she transports a patient. Student receives an SBAR hand off.
Situation:	"Kevin is a 32-year-old. He is a new admission from the ED for left forearm cellulitis with elevated WBC count, fever, and SIRS. IV antibiotics are infusing. He has been complaining a ton about pain and nausea and feeling tired. He's been a drug addict for like 5 years and he's been using fentanyl. Sometimes he uses his friends' drugs, he's just he's such a mess. I feel like we've seen him so many times before."
Background:	"I didn't bother asking him about previous treatment. You know, he's here. We're just going to take care of his abscess. He was in the ED 3 days ago, and they did an incision and drainage and cleaned it out. They gave him antibiotics, but he didn't even fill the prescription. Supposedly it was too expensive and so now we've got him, and he's got a dressing we just changed. He's got IV antibiotics, his white count is a little high, he has no fever, but he's a complainer. He keeps complaining about everything. And what else? We gave him Tylenol about half an hour ago, so that should be enough for his pain anyway. So that's his info, OK? And then you've got his labs and his MAR here. OK, so there you go. Good luck to you."
	If asked any other questions during report: Patient has a 6-day history of cellulitis getting worse with outpatient management because he did not fill his outpatient antibiotic prescription. Patient is an IV drug user and the infection is related to injecting. He presented to the ED earlier today with worsening cellulitis, fever, and general malaise. WBC count was 15.7. Admitted for IV antibiotics, awaiting blood culture results. He received 4 mg of suboxone in the ED at 6pm.

Assessment:	Patient reports pain at infection site 7/10, HA, abd pain, and general malaise. Vital signs are: HR 110, BP 134/88, RR 20, 0₂ Sat 96%, temp 99.7F. Patient appears uncomfortable.
Recommendation:	Revaluate pain and vital signs, patient may need medication for pain.

Scenario Progression Outline

Patient Name: Kevin Dos Santos DOB: 06/03/__

Timing	Manikin/SP Actions	Expected Interventions	May Use the Following
(approx.)		_	Cues
0-5 min	Brief report to oncoming RN. Patient lying in bed, appears uncomfortable.	include COWS).	Patient: "She said a lot of things. Yeah, but I'm in pain. My arm is killing me. I really
	Reports arm pain 7/10. Cramps, headache,	Review COWS protocol.	feel bad, my arm hurts. I think I may get sick."
	nausea, and generalized discomfort. VS:	Recognize need for withdrawal intervention.	"My head hurts, my stomach keeps cramping,
	BP: 134/88 P: 110 R: 20	Communicate with the	and I really can't bear this pain."
	T: 99.7 O2 Sat: 96%		Family: "I hate to see him like this. He is really uncomfortable."
			If asked about prescriptions Patient: "You know, I don't have insurance and I was hanging out with friends."
5-10 min	Patient states in an exhausted and stressed voice: "Is there anything that can help my arm	Explores evidence-based plans for pain management	Patient: "I hate to keep
	pain? I hate asking, it just is really hurting."	Communicates with provider for pain	Patient starts to dry heave.
	, ,	medication.	Family: "Is it ok for him to take pain medication, that's
		Obtains Toradol and Zofran orders.	what started all the problems?"
			If asked about previous inpatient treatment Patient: "Yeah, no, I've tried man. I put my mom through
		Listens intently to patient	hell, you know. I was impatient like 8 months

		Medicates patient while addressing the neurobiological factors in OUD as a chronic illness.	ago. They had me in a rehab." Family: "He just can't seem
			to beat it. He's been through multiple programs."
			"I hate that he is controlled
			by those drugs. He tries
			hard to quit but can't beat it."
10-15 min	Asks questions and	Reevaluates COWS and	If student does not discuss
	responds to the nurse	pain score.	referral
			Patient: "I don't know what
		Explores patient's	I'm going to do next. I'm all
		readiness to seek OUD	out of chances."
		treatment.	
			Family: "This is so hard to
		Offers referral/resources	live with. My heart breaks
		for patient and family	for him and none of my
		regarding support and	family or friends
		treatment options.	understand."

Additional cues depending on how scenario progresses:

Patient: "Well, it's just been an addiction for a long time, and I can't bite the cravings sometimes. You know? I don't want to be like this, and I don't want to go through all these awful feelings and being sick. Who would want this?"

Family: "This is just, it's really hard to live with, you know? So my heart just breaks for him. And none of my family and friends really understand."

"I have some friends, but you know, they don't really understand. They'll say to me, why do you just keep trying? Why do you let him back?"

Debriefing/Guided Reflection

Note to Faculty: We recognize that faculty will implement the materials we have provided in many different ways and venues. Some may use them exactly as written and others will adapt and modify. Some may choose to implement materials and initiate relevant discussions around this content in the classroom or clinical setting in addition to providing a simulation experience. We have designed this scenario to provide an enriching experiential learning encounter that will allow learners to accomplish the listed objectives and spark rich discussion during debriefing. Learner actions and responses observed by the debriefer should be specifically addressed using a theory-based debriefing methodology (e.g., Debriefing with Good Judgment, Debriefing for Meaningful Learning, PEARLS). Remember to also identify important concepts or curricular threads that are specific to your program. There are a few main themes that we hope learners will bring up during debriefing, but if they do not, we encourage you to introduce them.

- 1. How did caring for this patient make you feel (internal stigma)?
- 2. Who is this patient to you (therapeutic rapport)?
- 3. What are your main concerns (prioritization)?

Themes to consider for this scenario:

- 1. Opioid withdrawal
- 2. Pain management
- 3. Therapeutic communication
- 4. Interprofessional resources
- 4. How did you feel about your ability to work through the simulation (empowerment)?
- 5. If you were able to do this again, how could you have handled the situation differently?
- 6. Do you feel his opioid use disorder impacted the quality of care he received (external stigma)?
- 7. Are there other resources or team members that would be important in this patient's care (interprofessional collaboration; social determinates)?
- 8. Is there anything else you would like to discuss?

Physician Orders

Dos Santo	os, Kevin	CC: Wound recheck	Allergies: Sulfa		
Preferred	Name: Kevin	Encounter date:			
DOB: 06/0	03/	PCP: None			
Sex: Male					
MRN: 123	3000045				
Today	Admit to Dr. Mendes	service. Admit to telemetry bed.			
	Diagnosis: cellulitis				
	Continuous cardiac m	onitoring			
	Diet: House				
	Labs:				
	CBC with diff, CMP, A	PTT, PT, blood culture x2, lactic a	cid		
	Imaging:				
	XR chest 1 view portal				
	Ultrasound Left Forea	rm			
	Medications:				
	Sodium chloride 0.9%	bolus 1,000mL, intravenous, one	ce		
cefazolin (Ancef) 2,000mg, intravenous, every 8 hours					
acetaminophen (Tylenol) 1000mg, po, every 6 hours as needed for mild pain					
up to 4 grams daily					
Initiation of Buprenorphine for Opioid Use Disorder					
	1 ' '	one (Suboxone) 4/1 mg, sublingu			
		day 1, then 8/2mg, sublingual, o	every 12 hours for 2		
	weeks.				
	Nursing:	winh and IV			
	Insert and maintain pe	eriprieral IV			
	Vital signs Q 4 hours Notify MD if SBP < 90r	mm H a			
	I&O every 8 hours	IIIIIng			
	, , , , , , , , , , , , , , , , , , ,	shift or more frequent if soiled			
	<u> </u>	silit of more frequent if solled			
	COWS Protocol				
 					

Orders Received After Communicating with Provider

Dos Santos, Kevin Preferred Name: Kevin DOB: 06/03/ Sex: Male MRN: 123000045		CC: Wound recheck Encounter date: PCP: None	Allergies: Sulfa			
Today						
	Medications:					
	ketorolac (Toradol) 10mg, IV, every 6 hours prn for moderate pain 5-7/10					
	ondansetron (Zofran) 4mg, po/IV, every 4 – 6 hours as needed					
	loperamide (Lomotil) 4mg, po, every 4 hours as needed					

Medication Administration Record

MEDICATION ORDER	8/2/ <u> </u>	_/_/_	_/_/_
SCHEDULED			
cefazolin (Ancef) 2,000mg, intravenous, every 8 hours 0600 1400 2200			
buprenorphine/naloxone (Suboxone) 4/1 mg, sublingual, every 2 hours to a maximum of 32mg for day 1 0600 0800 1000 1200 1400 1800			
buprenorphine/naloxone (Suboxone) 8/2mg, sublingual, every 12 hours for 2 weeks 0900 2100			
ONE TIME ONLY			
Sodium chloride 0.9% bolus 1,000mL, intravenous, once			
PRN MEDICATIONS			
acetaminophen (Tylenol) 1000mg, po, every 6 hours as needed for mild pain up to 4 grams daily	09:30 SH		

Vital Sign Flowsheet

TIME	TEMP	PULSE	RESP	ВР	SPO2	GLUCOSE	PAIN	INITIALS
0000								
0400								
0800								
1200								
1600								
2000	99.7	110	20	134/88	96	-	7/10	JDV
2400								

Clinical Opiate Withdrawal Scale (COWS) Protocol

Patient's Name:	Date and Time/
Reason for this assessment:	
Resting Pulse Rate:beats/minute	GI Upset: over last 1/2 hour
Measured after patient is sitting or lying for one minute	0 no GI symptoms
0 pulse rate 80 or below	1 stomach cramps
1 pulse rate 81-100	2 nausea or loose stool
2 pulse rate 101-120	3 vomiting or diarrhea
4 pulse rate greater than 120	5 multiple episodes of diarrhea or vomiting
Sweating: over past 1/2 hour not accounted for by	Tremor observation of outstretched hands
room temperature or patient activity.	0 no tremor
0 no report of chills or flushing	1 tremor can be felt, but not observed
1 subjective report of chills or flushing	2 slight tremor observable
2 flushed or observable moistness on face	4 gross tremor or muscle twitching
3 beads of sweat on brow or face	
4 sweat streaming off face	
Restlessness Observation during assessment	Yawning Observation during assessment
0 able to sit still	0 no yawning
1 reports difficulty sitting still, but is able to do so	1 yawning once or twice during assessment
3 frequent shifting or extraneous movements of legs/arms	2 yawning three or more times during assessment
5 unable to sit still for more than a few seconds	4 yawning several times/minute
Pupil size	Anxiety or Irritability
0 pupils pinned or normal size for room light	0 none
1 pupils possibly larger than normal for room light	1 patient reports increasing irritability or anxiousne
2 pupils moderately dilated	2 patient obviously irritable or anxious
5 pupils so dilated that only the rim of the iris is visible	4 patient so irritable or anxious that participation the assessment is difficult
Bone or Joint aches If patient was having pain	Gooseflesh skin
previously, only the additional component attributed	0 skin is smooth
to opiates withdrawal is scored	3 piloerrection of skin can be felt or hairs standing
0 not present	on arms
1 mild diffuse discomfort	5 prominent piloerrection
2 patient reports severe diffuse aching of joints/muscles	
4 patient is rubbing joints or muscles and is unable to sit still because of discomfort	
Runny nose or tearing Not accounted for by cold	
symptoms or allergies	Total Score
0 not present	
1 nasal stuffiness or unusually moist eyes	The total score is the sum of all 11 i
2 nose running or tearing	Initials of person
4 nose constantly running or tears streaming down cheeks	completing assessment:

Score: 5-12 = mild; 13-24 = moderate; 25-36 = moderately severe; more than 36 = severe withdrawal

This version may be copied and used clinically.

Journal of Psychoactive Drugs

Volume 35 (2), April - June 2003

Source: Wesson, D. R., & Ling, W. (2003). The Clinical Opiate Withdrawal Scale (COWS). *J Psychoactive Drugs*, 35(2), 253–9.

Lab		
COMPLETE BLOOD COUNT WITH DIFFERENTIAL		Reference Range
	08/02/ 15:46	
White Blood Cell (WBC)	15.7	4.0 - 10.0 k/uL
Red Blood Cell (RBC)	4.42	4.5 - 5.5 M/uL
Hemoglobin (HGB)	12.6	12 - 17 g/dL
Hematocrit (HCT)	36.2	36 - 51%
MCV	89	80 - 100 fl
MCH	31	31 - 37 g/dL
MCHC	34.8	32 - 36 g/dL
RBC Distribution Width	42.4	12.2 - 16.1
Platelet	290	150,000 - 350,000 uL or mm ³
Neutrophils (%)	81.6	34.0 - 67.9
Lymphocytes (%)	24.7	21.8 - 53.1
Monocytes (%)	7.7	5.3 - 12.2
Eosinophils (%)	0	0.8 - 7
Basophils (%)	0.8	0.1 - 1.2
2435 priii3 (70)	0.0	0.1 1.1
BASIC METABOLIC PANEL		Reference Range
DASIC WILLIADOLIC I AIVEL	08/02/ 15:46	Reference Range
Sodium	147	135 - 147 mmol/L
Potassium	3.5	3.5 - 5.2 mmol/L
Chloride	100	95 - 107 mmol/L
Co2	23	22 - 30 mmol/L
Urea Nitrogen (BUN)	54	7 - 20 mg/dL
Creatinine	2.1	0.5 - 1.2 mg/dL
Glucose	135	60 - 110 mg/dL
Lactate	5.2	< 2.2 mmol/L
	,	
URINALYSIS		Reference Range
	08/02/ 7:56	
Color	Amber	Pale to dark yellow, amber
рН	7.3	5 - 8
Specific Gravity	1.020	1.002 - 1.035
Protein	Trace	Negative/Trace
Glucose	Negative	Negative
Ketones	Negative	Negative
Nitrites	Negative	Negative
Bilirubin	Negative	Negative
Blood	Negative	Negative
Leukocyte	Negative	Negative
Urobilinogen	0.3	0.2 - 1.0 Ehr U/L

Faculty References

(references, evidence-based practice guidelines, protocols, or algorithms used for this scenario, etc.)

American Society of Addiction Medicine. (2020). *The ASAM national practice guideline for the treatment of opioid use disorder: 2020 focused update*. https://www.asam.org/quality-care/clinical-guidelines/national-practice-guideline

Association for Multidisciplinary Education and Research in Substance Use and Addiction. (2019, March). Specific disciplines addressing substance use: AMERSA in the 21st century – 2018 update. https://amersa.org/wp-content/uploads/AMERSA-Competencies-Final-31119.pdf

Centers for Disease Control and Prevention. (n.d.). *Effective communication in treating substance use disorders*. https://www.cdc.gov/opioids/addiction-medicine/training/effective-communication.html

Mateu-Gelabert, P., Sandoval, M., Meylakhs, P., Wendel, T., & Friedman, S. R. (2010). Strategies to avoid opiate withdrawal: Implications for HCV and HIV risks. *International Journal of Drug Policy*, *21*(3), 179–185. https://doi.org/10.1016/j.drugpo.2009.08.007

Strayer, R. J., Hawk, K., Hayes, B. D., Herring, A. A., Ketcham, E., LaPietra, A. M., Lynch, J. J., Motov, S., Repanshek, Z., Weiner, S. G., & Nelson, L. S. (2020). Management of opioid use disorder in the emergency department: A white paper prepared for the American Academy of Emergency Medicine. *The Journal of Emergency Medicine*, *58*(3), 522-546. https://doi.org/10.1016/j.jemermed.2019.12.034

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