

SURGERY VIGNETTE
Small Bowel Obstruction Interactive Simulation B

Cover Page

Q1: Facility ID	Q2: Facility Name	Q4b: Time simulation started (HH:MM)
Q3: Observer number	Q4a: Today's date (DD/MM/YYYY) __ / __ / ____	__ : __ AM/PM
Q4c: Result		
<input type="checkbox"/> Interview done	<input type="checkbox"/> Partially completed	
<input type="checkbox"/> Person in charge refused interview	<input type="checkbox"/> Person in charge is out	

THIS TEST IS TO BE ADMINISTERED TO A HEALTH WORKER FROM SURGERY SERVICES. EACH FOLIO (SET OF PAPERS) CORRESPONDS TO ONE HEALTH WORKER ONLY. IF YOU ADMINISTER THIS TEST TO SEVERAL HEALTH WORKERS, YOU NEED A NEW FOLIO FOR EACH HEALTH WORKER. ALSO BE SURE TO RECORD THE STAFF ID NUMBER OF THE HEALTH WORKER ANSWERING THIS TEST, BY REFERRING TO THE STAFF ROSTER TO OBTAIN THE STAFF ID NUMBER.

CHECK THE STAFF ROSTER AND SEE IF THE HEALTH WORKER IS RECORDED AS HAVING GIVEN CONSENT FOR THE RESEARCH. IF NOT YOU MUST READ THE FULL CONSENT FORM AND OBTAIN HIS/HER SIGNATURE. IF YES, REMIND HIM/HER USING THE TEXT BELOW.

Q5a: Has the health worker previously signed a consent form? Yes → go to Q6a No -> go to Q7a

Q6a: ASK HEALTH WORKER: I would like to ask you some questions about your knowledge of a specific medical case. Your answers will remain confidential, we will not share the result of this interview and it will not have any impact on your work or the assessment of your performance. Do I have your permission to administer this questionnaire?

Yes → go to Q8a No, consent is not given → observation of this health worker must END; if available, approach another health worker for participation.

Q7a: READ FULL CONSENT SCRIPT TO HEALTH WORKER AND OBTAIN SIGNATURE. Did the health worker sign the form?

Yes → go to Q8a No, consent is not given → observation of this health worker must END; if available, approach another health worker for participation.

Q8a Staff Roster ID number	Q9a Gender	Q10a: Health Worker Category Code (see below for codes)
	<input type="checkbox"/> Male <input type="checkbox"/> Female	

READ THE FOLLOWING TO THE HEALTH WORKER:

I will start asking you questions about your knowledge now. Please answer the following questions to the best of your knowledge. Most of the questions I will be asking you will require multiple responses from you. Please provide all responses that come to mind. I will probe sometimes to help you remember some more information. I may also ask you to demonstrate certain actions during the course of this interview. Finally, if you need me to repeat the question, just let me know.

Health Worker Category Codes				
1. MD-Obstetrician/Gynecologist	2. MD-Neonatologist	3. MD-Surgeon	4. MD- Family Physician	5. MD - Pediatrician
6. Physician's Assistant	7. Nurse midwife	8. Bachelor and Science of Nursing Nurse	9. Diploma Nurse	10. Nurse with Associate Degree
11. Licensed Practical Nurse	12. Certified midwife	13. Midwife	14. Nurse aide	96. Other, please specify:

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Management of Small Bowel Obstruction (Surgical)

THE FOLLOWING QUESTIONS CORRESPOND TO A CLINICAL CASE SCENARIO THAT THE HEALTH WORKER COULD EXPECT TO OBSERVE IN THE HOSPITAL. READ THE CASE SCENARIOS AND QUESTIONS EXACTLY AS THEY ARE WRITTEN. **DO NOT READ THE OPTIONS OF ANSWERS.** FOR CERTAIN QUESTIONS, MULTIPLE ANSWERS ARE POSSIBLE; IN THIS CASE, CIRCLE ALL ANSWERS GIVEN BY THE HEALTH WORKER. AFTER THE HEALTH WORKER HAS FINISHED ANSWERING THE QUESTION, ASK "ANYTHING ELSE?" IF ADDITIONAL ANSWERS ARE GIVEN AT THAT TIME, MAKE DUE RECORD OF THEM ON THE SURVEY FORM. BE CAREFUL TO FOLLOW THE SKIPS AS THEY ARE MARKED. MAKE SURE THE HEALTH WORKER CANNOT SEE THE FORM YOU ARE FILLING.

ATTENTION: IN THE "INFORMATION" COLUMN, THERE IS INFORMATION ON THE CURRENT STATE OF THE PATIENT. THIS INFORMATION HAS TO BE PROVIDED, **IF AND ONLY IF** THE CLINICIAN SAYS HE WOULD ASK THE QUESTION OR PERFORM THE ACTION LISTED. IF THE CLINICIAN DOES NOT MENTION HE WILL ASK THE QUESTION OR PERFORM THE ACTION, THEN THE RESULT OF THAT QUESTION OR ACTION **SHOULD ABSOLUTELY NOT** BE SHARED WITH THE HEALTH WORKER.

FOR EXAMPLE IN Q101, IF THE HEALTH WORKER SAYS S/HE WOULD ASK ABOUT THE MEDICAL HISTORY, THEN YOU HAVE TO ASK THEM "WHAT KIND OF HISTORY WOULD YOU ASK ABOUT?". IF THE HEALTH WORKER DOES NOT SAY HE WOULD ASK ABOUT THE MEDICAL HISTORY, THEN YOU MUST NOT ASK THEM WHAT KIND OF HISTORY THEY WOULD ASK ABOUT. STILL IN Q101, IF THE HEALTH WORKER SAYS S/HE WOULD ASK ABOUT OTHER SYMPTOMS, THEN YOU HAVE TO TELL THEM THE SYMPTOMS. IF THE HEALTH WORKER DOES NOT SAY HE WOULD ASK ABOUT OTHER SYMPTOMS, THEN YOU MUST NOT TELL THEM ABOUT THOSE. MAKE SURE THE HEALTH WORKER CANNOT READ IT ON THE FORM EITHER.

DO NOT READ OPTIONS ALOUD. FOR EACH OPTION, NOTE WHETHER THE HEALTH WORKER MENTIONED THIS ACTION OR NOT.

RECORD TIME OF BEGINNING OF THE SIMULATION (HH:MM) __ __ : __ __ AM/PM

Scenario: 40-year-old woman is admitted for stabbing abdominal pain, vomiting, abdominal distention and inability to pass flatus or stool for the last 12 hours.

Question	Yes	No	Information	Go to	Verify Present/ Not Present
Q101: What do you do to assess this woman?					
A. History taking	1	0	What kind of history would you ask about?		N/A
a. Does the patient have a chart?	1	0	Yes, the chart shows that she has had multiple abdominal surgeries, including an appendectomy, a total abdominal hysterectomy, a cholecystectomy, and most recently, an incisional hernia repair.		N/A
b. Ask patient if she has had any surgeries.	1	0	Patient responds: "Yes, I have had surgery on my stomach before, they took some things out."		N/A
c. Ask patient to describe the pain.	1	0	A strong pain, stabbing and paining all over the stomach.		N/A
d. Ask patient what other symptoms she has had.	1	0	Not moving bowels, no runny stomach (diarrhea), has been vomiting green/yellow, can't eat, skin has been hot at home (fever).		N/A
B. Physical examination	1	0	Please describe the things you would do.		N/A
a. I would examine the Vital Signs.	1	0	Heart Rate 110 Tachypnea 18 Temperature 38.9 degrees		N/A
b. I would look at her overall clinical status:	1	0	she is ill appearing, moaning in pain extremities are cool to the touch		N/A
c. I would palpate her abdomen	1	0	abdomen firm, rigid and distended with rebound tenderness and guarding		N/A
d. I would <i>listen</i> to her stomach	1	0	bowel sounds decreased and difficult to hear		N/A
e. I would check her eyes and mouth for signs of dehydration	1	0	Dry mucous membranes.		N/A
f. Examine rectum	1	0	No stool in rectal vault.		N/A
C. Lab tests			Please list the tests you would ask for.		
a. Full blood count (Complete blood count)	1	0			1 0

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i. Hemoglobin/HCT	1	0	Low: 24%, 8 gr/dl	1	0
ii. White Blood Cell (WBC)	1	0	Elevated count, 16,400	1	0
iii. Red Blood Cell (RBC)	1	0	Normal	1	0
iv. Platelets	1	0	Normal	1	0
b. Hemoglobin/HCT (alone)	1	0	Low: 24%, 8 gr/dl	1	0
c. Microscopy					
i. Malaria smear, M/S	1	0	Normal, Negative	1	0
ii. Malaria rapid diagnostic test (RDT)	1	0	Normal, Negative	1	0
d. Immunologic					
i. HIV rapid testing	1	0	Normal, Negative	1	0
ii. Hepatitis B (HBsAG) and Hepatitis C (HCV) tests	1	0	Normal, Negative	1	0
e. Chemistry panels (Automatic analyzer)					
i. AST and ALT (liver enzymes)	1	0	Normal	1	0
ii. Amylase and Lipase (pancreatic enzymes)	1	0	serum amylase and lipase markedly increased	1	0
iii. Chemistry (sodium, potassium, chloride, bicarbonate)	1	0	Normal	1	0
iv. BUN and creatinine (renal function)	1	0	Normal	1	0
v. Serum bilirubin	1	0	Normal	1	0
vi. Blood glucose, RBS (fasting or random)	1	0	Normal, 135 gr/dl	1	0
f. Blood gas analysis or Electrolyte Panel	1	0	Marked acidosis or low bicarbonate/acidosis (respectively)	1	0
g. Urinalysis, U/A	1	0	Normal, Negative	1	0
h. Pregnancy test, MTT	1	0	Normal, Negative	1	0
i. Imaging				1	0
i. RUQ Ultrasound	1	0	Normal	1	0
j. Other Tests and imaging	1	0	Normal	1	0
i. Other, specify: _____ _____ _____ _____	1	0		1	0
D. I would call for assistance from another person	1	0	Who?		N/A
a. Specify title _____			[ALSO ASK THEM IF THEY WOULD DO ANYTHING ELSE]		
Q102: What is your overall assessment of the woman's conditions (Stable, Guarded, Unstable, Critical, etc.) and what is her differential diagnosis?					
A. Overall assessment(CHECK ALL ANSWERS GIVEN)					
a. Stable	1	0			N/A
b. Guarded	1	0			N/A
c. Unstable	1	0			N/A
d. Critical	1	0			N/A
B. Differential diagnosis(CHECK ALL ANSWERS GIVEN)					
a. Dehydration	1	0			N/A
b. Small bowel obstruction	1	0			N/A
i. Unspecified possible cause	1	0			N/A
ii. Due to adhesions	1	0			N/A
iii. Due to cancer	1	0			N/A
iv. Due to hernia (incarcerated or strangulated)	1	0			N/A
v. Due to scarring from previous surgeries	1	0			N/A
c. Risk of bowel ischemia and necrosis	1	0			N/A
d. Constipation	1	0			N/A
e. Hernia	1	0			N/A

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f. Pancreatitis	1	0			N/A
g. Trauma	1	0			N/A
h. Other, specify: _____ _____	1	0			N/A
Q103: What immediate steps would you take?					
A. Call the attending physician	1	0		Q106	N/A
B. Call for consultation with surgeon	1	0		Q106	N/A
C. Resuscitate/Stabilize					
a. Immediate fluid resuscitation	1	0		Q106	N/A
b. Nasogastric decompression	1	0		Q106	N/A
c. Intravenous antibiotics	1	0		Q106	N/A
d. Foley catheter for urine output monitoring	1	0		Q106	N/A
D. Disposition				Q106	
a. Refer to other facility	1	0		Q106	N/A
b. Admit to ward	1	0		Q106	N/A
c. Put under close supervision/Intensive care	1	0		Q104b	N/A
d. Schedule a laparotomy	1	0		Q104b	N/A
e. Emergent laparotomy	1	0		Q104a	N/A
Q104a: (If recommending immediate laparotomy)					
1. What made you decide to perform a laparotomy?					
A. History of previous surgeries	1	0			N/A
B. Tachycardia, hypotension, tachypnea	1	0			N/A
C. Evidence of dehydration	1	0			N/A
D. Abdominal exam - peritonitis	1	0			N/A
E. Inability to pass stool for the past 12 hours	1	0			N/A
F. Lab results					
a. Low hemoglobin (possible internal bleeding)	1	0			N/A
b. Elevated WBC	1	0			N/A
2. What signs would have made you decide to observe the patient rather than perform the surgery?					
A. No tachypnea	1	0			N/A
B. No history of previous surgeries	1	0			N/A
C. No dehydration	1	0			N/A
D. Different lab results					
a. Normal hemoglobin	1	0			N/A
b. Normal WBC	1	0			N/A
Q104b: (If recommending observation or scheduling a laparotomy)					
1. What made you decide to put the patient under observation?					
A. Tenderness, rather than pain	1	0			N/A
2. What signs would have made you decide to perform an emergency surgery?					
A. Fever	1	0			N/A
B. Different HR	1	0			N/A
C. Less benign abdominal exam	1	0			N/A
D. Other lab results					
a. Hemoglobin/Hematocrit	1	0			N/A
b. WBC	1	0			N/A
E. Different history of surgeries	1	0			N/A
Q1056: What equipment or medicines would you have used in the management of this case that is either not present, or is not currently working in this facility?					

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A. Other, specify: _____ _____ _____ _____	1	0			1	0
Q1067: You mentioned the following laboratory tests as part of your examination [...] Can you verify that all of these tests are available at this facility right now?	<u>1</u>	<u>0</u>				
RECORD TIME OF END OF THE SIMULATION (HH:MM)	__ __ : __ __ AM/PM					
GO BACK TO EACH ITEM IN THE SIMULATION THAT REQUIRES A PIECE OF EQUIPMENT OR A MEDICATION AND VERIFY THAT THE EQUIPMENT OR MEDICATION IS PRESENT.						
PLEASE PROVIDE ANY FURTHER COMMENTS ON THE QUALITY OF CARE:						