Adult with Fever and Lethargy

The Case of T Forester

Part 2

Adaptation of California Simulation Alliance (CSA)

LEARNER COPY

ALL DATA IN THIS SCENARIO IS FICTITIOUS

SCENARIO OVERVIEW

Scenario Title:	Adult with Fever and Lethargy
Original Scenario Developer(s):	M, Ndondo RN, MN, CHSE, L Betts RN, MN, CHSE, T McCulloch RN, BScN, MA (Ed), T Owadally, BScN Year 4, D Gillis RN, BN, K Mack RN, BScN, MSNS Neves-Silva RN, BScN, MHSc,
Date - original scenario	July 2020
Validation:	
Revision Dates:	Fall 2023 J Schmid RN, MN, CHSE
Pilot testing:	Fall 2023

Estimated Scenario Time: 12-15 mins Debriefing time: 30-45 mins

Target group:
BScN Sem 7, 8
RPN – BScN Bridge

Core case: Fever and Lethargy

CNO: Entry-to-Practice Competencies for RN (2020)
Clinician:1.1, 1.2, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 1.13, 1.21, 1.23, 1.26, 1.27
Professional: 2.1, 2.2, 2.3, 2.4, 2.6, 2.10
Communicator: 3.1, 3.2, 3.3, 3.5, 3.7, 3.8
Collaborator: 4.1, 4.3, 4.5
Coordinator: 5.1, 5.2, 5.3, 5.7
Leader: 6.4, 6.6, 6.9
Advocate: 7.1, 7.2, 7.6, 7.9
Scholar: 9.1

NCLEX-RN BLUEPRINT (2023) (Important to review)
https://www.ncsbn.org/public-files/2023_RN_Test%20Plan_English_FINAL.pdf

Canadian Patient Safety Institute (CPSI, 2020)

Canadian Interprofessional Health Collaborative National Interprofessional Competency Framework (CIHC, 2010)

Best Practice Guidelines (RNAO)
Establishing a therapeutic relationship
Person and Family Centered Care
Strategies to Support Self-Management in Chronic Conditions: Collaboration with Clients

EVIDENCE BASE / REFERENCES (APA Format)
Adams, M.P., Urban, C.Q., Sutter, R.E., El-Hussein, M., & Osuji, J. (2021). *Pharmacology for nurses: A pathophysiological approach* (3rd Canadian ed.). North York, ON: Pearson.
Archer, P, & Harvey, G. (2019). I Potter, P. A., Perry, A. G., Stockert, P. & Hall, A. (6th Edition). *Canadian fundamentals of nursing* Toronto, ON: Mosby
College of Nurses of Ontario (2020). Entry to Practice Competencies for Registered Nurses. https://www.cno.org/globalassets/docs/reg/41037-entry-to-practice-competencies-2020.pdf
Centers for Disease Control and Prevention. (2020). *Sepsis.* Retrieved from https://www.cdc.gov/sepsis/index.html
Heart and Stroke (2020). *Canadian resuscitation and first aid guidelines*. Retrieved from https://cpr.heartandstroke.ca/s/article/2020-Guidelines?language=en_US
Jarvis, C., Browne, A., MacDonald-Jenkins, J. & Luctkar-Flude, M. (2019). Physical examination and health assessment (3rd Canadian ed.) Philadelphia, Saunders.
Potter, P., Perry, A., Stockert, P., Hall, A., Astle, B., Duggleby, W., (2018). Canadian Fundamentals of Nursing (6th Ed) Toronto, ON: Elsevier.
Tyerman, J., Cobbett S., M. M., Harding, M., Kwong, J., Roberts, D., Hagler, D., Reinisch C., (2022). Lewis's Medical-surgical nursing in Canada: Assessment and management of clinical problems (5th Ed.). Toronto, ON: Elsevier.
Lapum, J., St-Amant, O., Hughes, M., & Garmaise, J. (Eds.). (2020). *Introduction to communication in nursing*. https://pressbooks.library.ryerson.ca/communicationnursing/
McCance, K.L., & Huether, S.E. (2019). *Pathophysiology: The biologic basis for disease in adults and children* (8th ed.). St. Louis, MO: Elsevier.
National Early Warning Score 2 (NEWS2) © Royal College of Physicians December 2022 https://www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news-2
Surviving sepsis campaign: international guidelines for management of sepsis and septic shock 2021 https://link.springer.com/article/10.1007/s00134-021-06506-y
ED/ AMU Sepsis Screening & Action Tool https://sepsistrust.org/wp-content/uploads/2018/06/ED-adult-NICE-Final-1107.pdf

Brief Summary of Case

T. Forester is a 68-year-old paraplegic (T10 injury) X3 years following a motorcycle accident. Client is wheelchair bound but can perform some ADLs (activities of daily living) independently, including clean self-catheterization four times daily. Client lives alone in a small apartment and has a PSW come in twice a week for 1 hour to assist with showering and light housekeeping. Family visits regularly and helps with daily chores, changes coccyx dressing, etc. Client was brought into emergency this morning by a family member. For the last 48 hours client has been feeling unwell, lethargic and has had a temperature. Family became increasingly concerned this morning when client seemed slightly confused and sounded incoherent. Client was transferred from emergency to the medical unit at 1515hrs. In Emergency client's vital signs at 0930hrs were: T 39.1, HR 106, BP 128/88, RR 20, O2 sats 98% on room air. Client has generalized body aches and malaise. An IV of N/S at 75 cc/hr was initiated, indwelling foley catheter was inserted and a urine specimen was sent for C&S, and R&M (urine was concentrated and slightly cloudy). Routine bloodwork and blood cultures were sent to the lab. Covid screening completed, waiting for results. Client has a small stage 2 pressure injury on coccyx (approx. 2 cm diameter), managed with N/S cleaning and a hydrocolloid dressing changed every 72 hours and PRN. A wound swab for C&S was sent and a new dressing was applied. Wound looks clean, and wound bed is pink. Client was prescribed Acetaminophen and Ceftriaxone.

Since arrival to the medical unit client has received a bolus of normal saline 500 cc over 60 mins at approximately 1630 for BP of 94/55, HR of 128 and low urine output (<30cc/hr). Following the bolus BP has been between 100-110/70 and HR 98-104, urine output has been approximately 30 cc/hr, still concentrated. Client remains febrile, lethargic and more frequent episodes of disorientation. Client is increasingly restless and agitated. Covid screening was negative and CXR was normal, no fluid or signs of pneumonia. Client is now on routine precautions. It is now 19:15 and start of night shift.

CURRICULUM INTEGRATION

SCENARIO LEARNING OBJECTIVES		
Do What	With whom/ What	For What
Establish a therapeutic relationship and communicate effectively with the client and/or family	An adult client admitted to the medical unit with fever and lethargy	To demonstrate understanding of the importance of the nurse-client relationship in ensuring clients physical and emotional well-being To demonstrate understanding of the importance of creating a safe space for clients and families
Perform a focused assessment on an adult client with acute on chronic health issues	An adult client admitted to the medical unit with fever and lethargy	To demonstrate understanding of priority assessments relevant to the clients' presenting symptoms and needs To demonstrate understanding of actual and potential complications related to chronic and acute health issues To demonstrate ability to complete focused and comprehensive assessments that will enhance client care and ensure client safety and well being
Implement and evaluate appropriate interventions to ensure client safety and well-being	An adult client admitted to the medical unit with fever and lethargy	To demonstrate knowledge and application of client safety principles To demonstrate knowledge of actual and potential complications of infection To demonstrate safe and proper procedure for non-pharmacological and pharmacological interventions that enhance client safety and well being To recognize when a change in client's state arises and take appropriate actions To demonstrate the ability to effectively communicate utilizing I-SBAR

Learning Outcome Assessment / Rubric			
Competency (based on "What For")	Demonstrated attributes align with required competency	Demonstrated attributes need some improvement to align with required competency	Demonstrated attributes need major improvement to align with required competency
Create an initial plan of care to ensure client's safety and well-being (this can be done prior to the scenario and discussed with the facilitator)	1) Clear, logical and comprehensive plan for collection of appropriate assessment data for client with T10 spinal injury and signs of infection 2) Integrates client's health history, presenting diagnosis, and diagnostic test results into initial plan of care	1) Disorganized plan for collection of appropriate assessment data for client with T10 spinal injury and signs of infection 2) Partial integration of client's health history, presenting diagnosis, and diagnostic test results into initial plan of care	1) No plan for collection of assessment data 2) No integration of patient's health history, presenting diagnosis, and diagnostic test results into initial plan of care
Establish a therapeutic relationship with the client and/or support person using trauma informed therapeutic communication skills	1) Demonstrates active listening 2) Recognizes and acknowledges client's verbal and non-verbal cues 3) Appropriately uses verbal and non-verbal forms of communication 4) Communicates with client using language that is inclusive, respectful and that client can understand	1) Demonstrates some elements of active listening 2) Recognizes and acknowledges some verbal and non-verbal cues 3) Appropriately demonstrates some use of verbal and non-verbal communication 4) Communicates with client using language that is somewhat inclusive and respectful, but	1) Does not demonstrates active listening 2) Does not recognize nor acknowledge client's verbal and non-verbal cues 3) Does not demonstrate appropriate use of verbal and non-verbal communication 4) Does not communicate with the client in a manner that is inclusive or

	5) Establishes successful therapeutic relationship with client where client feels comfortable to share personal information	client has difficulty understanding 5) Partially establishes a therapeutic relationship with client where client shares some personal information	respectful or that the client is able to understand 5) Fails to establish a successful therapeutic relationship with the client and client does not share information
Perform a focused assessment on an adult client with ongoing alterations in health status	1) Chooses the appropriate system(s) to perform a focused assessment, and correctly assesses key areas 2) Correctly implements and executes use of assessment tool(s) 3) Demonstrates understanding of all assessment findings	1) Chooses some of the appropriate system(s) to perform a focused assessment, has difficulty assessing key areas 2) Implements and executes use of assessment tool(s) with errors 3) Demonstrates some understanding of the assessment findings	1) Chooses inappropriate or irrelevant system(s) to perform a focused assessment, misses key assessment areas 2) Incorrectly implements and executes use of assessment tool(s) 3) Does not demonstrate understanding of all assessment findings and does not respond accordingly
Utilize the nursing process to critically analyze assessment findings to aid in determining the appropriate course of action for an acutely ill client (Interventions *may* include oxygen, wound care,	1) Reacts and takes action appropriate to client's current status 2) Demonstrates ability to and rationalize assessment findings and subsequent actions 3) Adapts plan of care to client needs	1) Demonstrates some reaction and takes some actions in response to client's current status 2) Begins to demonstrate ability to rationalize findings 3) Adapts some elements of plan of care to meet client's needs	1) Does not react to or take appropriate actions in response to client's current status 2) Has difficulty rationalizing findings 3) Does not adapt plan of care to meet client's needs

medication, IV therapy)			
Demonstrate ability to provide safe and appropriate nursing interventions for an adult client with acute on chronic health issues	1) Correctly identifies and implements appropriate nursing interventions to enhance client safety and well being 2) Demonstrates safe and correct IV therapy management 3) Demonstrates safe and correct medication administration practices 4) Demonstrates safe and effective oxygen therapy management	1) Correctly identifies and implements some appropriate nursing interventions to enhance client safety and well being 2) Has difficulty demonstrating safe and correct IV therapy 3) Has difficulty demonstrating safe and correct medication administration practices 4) Has difficulty demonstrating safe and effective surgical wound management 5) Has difficulty demonstrating safe and effective oxygen management	1) Is unable to identify or implement appropriate nursing interventions to enhance client safety and well being 2) Is unable to demonstrate safe and correct IV therapy management 3) Is unable to demonstrate safe and correct medication administration practices 4) Is unable to demonstrate safe and effective surgical wound management 5) Is unable to demonstrate safe and effective oxygen management

Communicate and collaborate with health care team members to ensure client safety and wellbeing	1) Demonstrates knowledge and application of client safety principles 2) Recognizes appropriate time and team member to communicate findings to 3) Able to effectively utilize ISBAR tool to communicate with health care team (can be discussed in debrief)	1) Has difficulty identifying and applying client safety principles 2) Has difficulty identifying appropriate time and team member to communicate findings to 3) Has difficulty utilizing ISBARR tool effectively to communicate with health care team	1) Does not identify or apply client safety principles 2) Does not communicate findings or communicates findings at the inappropriate time 3) Cannot identify the appropriate health care team member to report to 4) Does not utilize ISBARR tool effectively to communicate with health care team

PRE-SCENARIO LEARNING
Therapeutic communication principles and techniques Vital signs and focused assessment Assessment tools (NEWS2, Primary Survey) Signs and symptoms of sepsis Management of a deteriorating patient Communication with the health care team members, ISBAR Safe and effective medication administration (including IV therapy) Scope of practice Infection prevention and control, PPE Safe and effective wound management Safe and effective urinary catheterization and care Safe and effective oxygen management

Patient/Client Profile				
Last name:	Forester		First name:	T
Gender: Any	Age: 68	Ht: 5'11	Wt: 185 lbs	Code Status: Full Code
Spiritual Practice: Catholic		Ethnicity: Caucasian		Primary Language: English
1. Past history				
T10 spinal injury x 3 years, Hypertension				
Primary Medical Diagnosis	Fever, Lethargy, Confusion, R/O Infection			

2. Review of Systems			
CNS	Disoriented to time, lethargic		
Cardiovascular	Sinus rhythm/sinus tach		
Peripheral vascular	None		
Pulmonary	Fine crackles in bases of lungs		
Renal/Hepatic	Foley inserted, U/O approx. 25cc/hr		
Gastrointestinal	Bowel sounds present x 4 quadrants		
Endocrine	Normal		
Heme/Coag	Normal		
Musculoskeletal	Paraplegic (T 10 Injury)		
Integument	Stage 2 pressure injury on coccyx, dressing clean and intact		
Developmental Hx	Normal		
Psychiatric Hx	Normal		
Social Hx	Widowed, 2 children, 3 grandchildren		
Alternative/ Complementary Medicine Hx			
Medication Allergies:	Penicillin	Reaction:	Hives, SOB
Food/other Allergies:	Peanuts	Reaction:	Anaphylaxis

Medications client is currently taking (since admission)	**Drug**	**Dose**	**Route**	**Frequency**
	Ramipril	5 mg	By mouth	Twice daily
	Acetaminophen	500-1000 mg	By mouth	Every 6hrs, PRN
	Ceftriaxone	1 GM	IV	Every 12 hours X 7 days

Laboratory, Diagnostic Study Results: Current or Pending					
Na: 147	K: 4.9	Glucose: 8.8	CRP: 18	BUN: 5.8	Cr: 120
Hgb: 131	WBC: 19.6	Plt: 188			
AST: 49	ALT: 33	ALP: 89	aPTT: 59	INR: 1.4	
pH:	PO2:	PCO2:	HCO3:	Lactate:	

Laboratory, Diagnostic Study Results: ABG's at 16:00					
pH: 7.35	PO2: 94	PCO2: 38	HCO3: 18	Lactate: 2.2	

Laboratory, Diagnostic Study Results (on admission)					
Na: 142	K: 4.0	Glucose: 6.6	CRP: 12	BUN: 3.1	Cr: 88
Hgb: 138	WBC: 14.1	Plt: 225		ABO Blood Type: B+	
AST: 27	ALT: 24	ALP: 65	aPTT: 27	INR: 0.9	

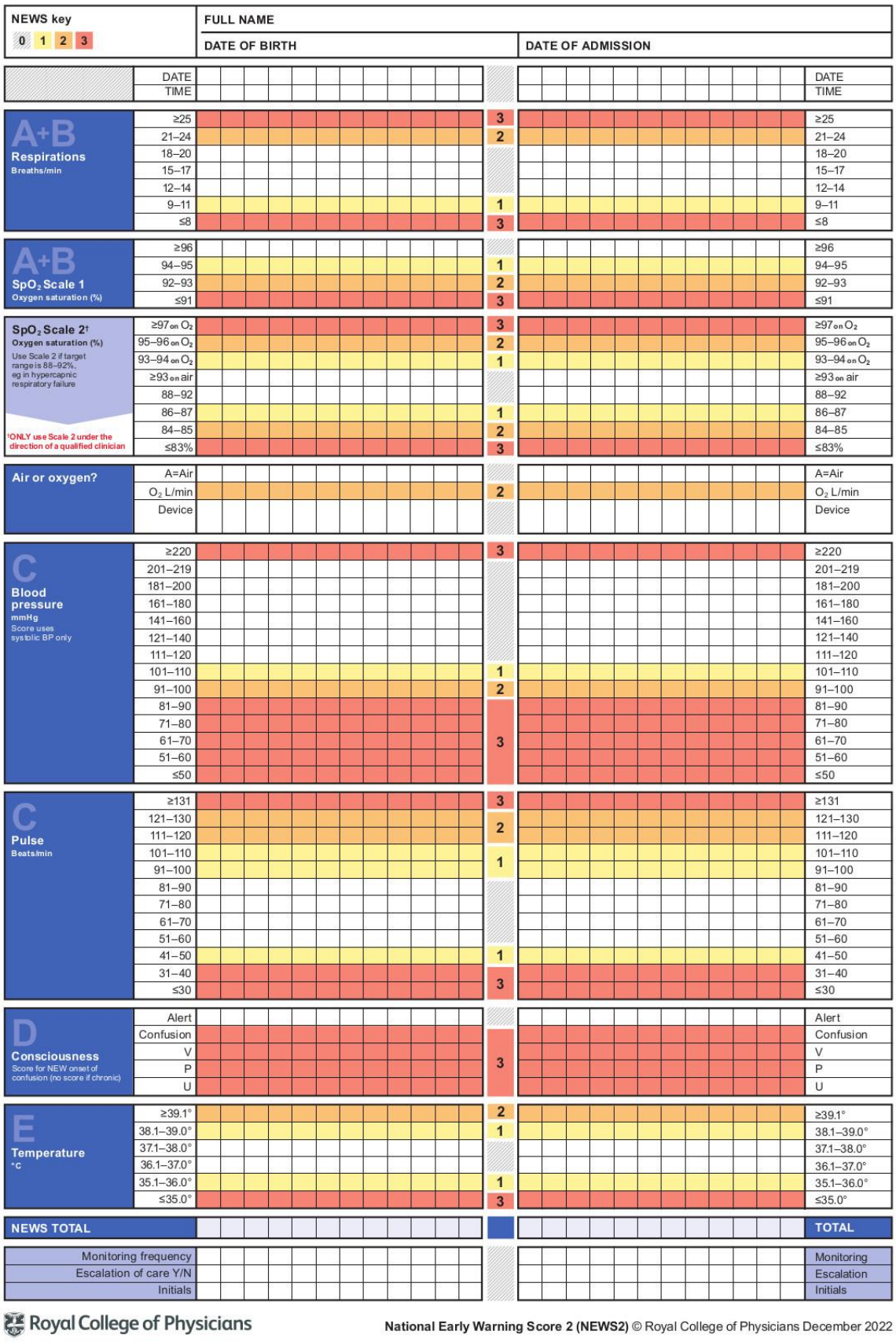
HEALTH CARE PROVIDER ORDERS

Client Name: Forester, T. **DOB: July 06** **Age: 68** **MRN#: 11223344**		**Diagnosis: Fever and Lethargy, r/o Infection**
Allergies: Penicillin, Peanuts		
Date	Time	**HEALTH CARE PROVIDER ORDERS AND SIGNATURE**
Today	1430	Admit to medicine
		Vital signs every 4 hours and PRN
		Normal saline bolus of 250 cc over 30 mins now- given at 10:30 - M. Johnson RN
		IV Normal Saline @ 75 cc/hr- Done
		Insert Foley Catheter - Done
		Urine R&M, C&S – Sent to lab
		CBC, Electrolytes, BUN, Cr, BG, LFT's – Sent to lab
		Blood cultures X 2 sets – Sent to lab
		Wound cultures – Sent to lab
		CXR- order entered
		Ramipril 5 mg by mouth twice daily – hold of SBP<90 mmHg
		Acetaminophen 500-1000 mg by mouth every 6 hours for pain or T> 38.5
		Notify MD if T>39.5
		Start Ceftriaxone 1 gram IV following Blood Cultures and 1 gram IV every 12 hours X 7 days
		Oxygen via NP to keep SpO2>94%
		DAT, AAT
		Follow client's usual bowel routine
		Hydrocolloid dressing to coccyx, clean with normal saline and change every 72 hours
		Monitor intake and output
		Dr. S. Jacobson
Today	1600	Give 500 cc Normal Saline over 60 minutes, then increase IV to 100 cc/hr
		Repeat CBC, Electrolytes, BUN, Cr, LFT's- sent
		ABG's now - sent and at 18:30
		Monitor Vital Signs Q 1 hour X 4 hours then reassess
		Dr. S. Jacobson

Multidisciplinary Notes

Client Name: Forester, T			**DOB: July 06** **MRN#:11223344**
Age: 68			
Date	Time	Discipline	**Clinical Notes**
Today	**1100**	**Physician**	Client is a 68-year-old with a T10 Spinal cord injury following a motorcycle accident 3 years ago. Client lives in an apartment and has help from family and PSW to manage at home. Client has been feeling unwell x 2 days and family member became concerned when client seemed more lethargic, slightly confused at times and brought client to ER. Client oriented to person and place but not to time. Client has a history of hypertension, on Ramipril 5 mg twice daily. Vital signs at 0930hrs: T 39.1, HR 106, BP 128/88, RR 20, O2 sats 98% on room air. Chest with fine crackles to bases bilaterally, abdomen soft to touch, bowel sounds present X4. Client self-catheterizes at home and had noticed decreased urine output. Stage II pressure injury on coccyx, managed with hydrocolloid dressing. Bloodwork and cultures (wound, blood and urine) to be obtained and sent to lab. CXR ordered. Normal saline bolus of 250 cc to be given. Plan to admit client to medicine for further observation. -- *Dr. S. Jacobson*
Today	**1515**	**RN Emerg**	Client arrived to emergency at 0900hrs this morning, accompanied by family member. Client has been feeling unwell for approx. 2 days with fevers, lethargy and body aches. Family member became concerned when client seemed confused at times and began saying things that did not make sense. **In ER: Vital signs at 0930hrs:** T 39.1, HR 106, BP 128/88, RR 20, O2 sats 98% on room air. Acetaminophen 1000 mg given at 09:45hrs. Chest with fine crackles to bases bilaterally, abdomen soft to touch, bowel sounds present X 4. Client typically self-catheterizes at home and had noticed slightly decreased urine output. Foley catheter inserted, urine concentrated, cloudy. U/O is approx. 30-40cc/hr. Normal saline 250 cc bolus over 30 mins given at 10:30, no noticeable increase in urine output. Known Stage II pressure injury on coccyx, dressed with hydrocolloid dressing, changed in ER, due to be changed in 72 hours or as needed. Wound looks pink, no drainage or odour noted. Bloodwork and cultures obtained and sent to lab; initial dose of Ceftriaxone given IV at 1200hrs following cultures. PIV infusing at 75 cc/hr.

			Vital signs at 1345: T- 38.1, HR 104, BP 110/70, RR 20, O2 sats 97-98% on room air. Client transferred to medicine unit. ----------M. Johnson, RN
Today	**1900**	**RN**	Received client from emergency at 1530, settled to bed. Over first hour on unit client's BP decreased from 105/70 to 94/55, HR increased from 108 to 128, U/O decreased less than 30 cc/hr and client was disoriented to time/place, diaphoretic and restless. T: 38.8, client given 1000 mg Acetaminophen at 1600. O2 sats decreased to 93% on room air, O2 increased to 4L np, O2 sats increased to 96%. Team notified and a 500 cc bolus of normal saline was ordered and given at approx. 16:30. Following the bolus client was less restless, more cooperative, BP increased to 110/78, HR decreased to 98, T 38.7. Vital signs taken at 18:30: T 38.1, HR 104, BP 110/70, RR 20, O2 sats 95% on 4L. Vitals to be done every hour for 4 hours then R/A. Repeat bloodwork was sent at 16:30 and results are in chart, ABG's were drawn and sent to lab by MD at 18:30, no results yet. L Jenson RN



NEWS key 0 1 2 3	FULL NAME		DATE OF BIRTH		DATE OF ADMISSION	
	DATE / TIME					DATE / TIME
A+B Respirations Breaths/min	≥25	3				≥25
	21–24	2				21–24
	18–20					18–20
	15–17					15–17
	12–14					12–14
	9–11	1				9–11
	≤8	3				≤8
A+B SpO_2 Scale 1 Oxygen saturation (%)	≥96					≥96
	94–95	1				94–95
	92–93	2				92–93
	≤91	3				≤91
SpO_2 Scale 2† Oxygen saturation (%) Use Scale 2 if target range is 88–92%, eg in hypercapnic respiratory failure †ONLY use Scale 2 under the direction of a qualified clinician	≥97 on O_2	3				≥97 on O_2
	95–96 on O_2	2				95–96 on O_2
	93–94 on O_2	1				93–94 on O_2
	≥93 on air					≥93 on air
	88–92					88–92
	86–87	1				86–87
	84–85	2				84–85
	≤83%	3				≤83%
Air or oxygen?	A=Air					A=Air
	O_2 L/min	2				O_2 L/min
	Device					Device
C Blood pressure mmHg Score uses systolic BP only	≥220	3				≥220
	201–219					201–219
	181–200					181–200
	161–180					161–180
	141–160					141–160
	121–140					121–140
	111–120					111–120
	101–110	1				101–110
	91–100	2				91–100
	81–90	3				81–90
	71–80					71–80
	61–70					61–70
	51–60					51–60
	≤50					≤50
C Pulse Beats/min	≥131	3				≥131
	121–130	2				121–130
	111–120					111–120
	101–110	1				101–110
	91–100					91–100
	81–90					81–90
	71–80					71–80
	61–70					61–70
	51–60					51–60
	41–50	1				41–50
	31–40	3				31–40
	≤30					≤30
D Consciousness Score for NEW onset of confusion (no score if chronic)	Alert					Alert
	Confusion	3				Confusion
	V					V
	P					P
	U					U
E Temperature °C	≥39.1°	2				≥39.1°
	38.1–39.0°	1				38.1–39.0°
	37.1–38.0°					37.1–38.0°
	36.1–37.0°					36.1–37.0°
	35.1–36.0°	1				35.1–36.0°
	≤35.0°	3				≤35.0°
NEWS TOTAL						**TOTAL**
Monitoring frequency						Monitoring
Escalation of care Y/N						Escalation
Initials						Initials

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