

# Novel Coronavirus Disease (COVID-19)

## UNFOLDING Reasoning

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**John Taylor, 68 years old**

<b>Primary Concept</b>			
<b>Immunity</b>			
<b>Interrelated Concepts (In order of emphasis)</b>			
<ul style="list-style-type: none"> <li>• Clinical judgment</li> <li>• Communication</li> </ul>			
<b>NCLEX Client Need Categories</b>	<b>Covered in Case Study</b>	<b>NCSBN Clinical Judgment Model</b>	<b>Covered in Case Study</b>
Safe and Effective Care Environment		Step 1: Recognize Cues	✓
<ul style="list-style-type: none"> <li>• Management of Care</li> </ul>	✓	Step 2: Analyze Cues	✓
<ul style="list-style-type: none"> <li>• Safety and Infection Control</li> </ul>	✓	Step 3: Prioritize Hypotheses	✓
Health Promotion and Maintenance	✓	Step 4: Generate Solutions	✓
Psychosocial Integrity	✓	Step 5: Take Action	✓
Physiological Integrity		Step 6: Evaluate Outcomes	
<ul style="list-style-type: none"> <li>• Basic Care and Comfort</li> </ul>			
<ul style="list-style-type: none"> <li>• Pharmacological and Parenteral Therapies</li> </ul>	✓		
<ul style="list-style-type: none"> <li>• Reduction of Risk Potential</li> </ul>	✓		
<ul style="list-style-type: none"> <li>• Physiological Adaptation</li> </ul>	✓		

# Part I: Initial Nursing Assessment

## Present Problem:

John Taylor is a 68-year-old African-American male with a history of type II diabetes and hypertension. He came to the emergency department (ED) triage window because he felt crummy, complaining of a headache, runny nose, feeling weaker, “achy all over” and hot to the touch and sweaty the past two days. When he woke up this morning, he no longer felt hot but began to develop a persistent “nagging cough” that continued to get worse throughout the day. John is visibly anxious and asks, “Do I have that killer virus that I hear about on the news?”

## Personal/Social History:

John lives in a large inner-city that has had over three thousand confirmed cases of COVID-19. He has been married to Maxine, his wife of 45 years, and is a retired police officer and active in his local church.

### 1. What data from the histories are **RELEVANT** and must be **NOTICED** as clinically significant by the nurse?

*(NCSBN: Step 1 Recognize cues/NCLEX: Reduction of Risk Potential)*

RELEVANT Data from Present Problem:	Clinical Significance:
RELEVANT Data from Social History:	Clinical Significance:

### 2. What additional clarifying questions does the triage nurse need to ask John to determine if his cluster of physical symptoms is consistent with COVID-19?

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### 3. Based on the clinical data collected, identify what measures need to be immediately implemented using the [following clinical pathway](#).

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### 4. What type of isolation precautions does the nurse need to implement if COVID-19 is suspected? What specific measures must be implemented to prevent transmission?

Type of Isolation:	Implementation Components:

## Part II: Patient Care Begins in the ED:

John is brought back to a room. As the nurse responsible for his care, you collect the following clinical data:

Current VS:	P-Q-R-S-T Pain Assessment:	
<b>T:</b> 100.3 F/38.8 C (oral)	<b>Provoking/Palliative:</b>	“moving makes it worse”
<b>P:</b> 118 (regular)	<b>Quality:</b>	“achy”
<b>R:</b> 22 (regular)	<b>Region/Radiation:</b>	“all over”
<b>BP:</b> 164/88 <b>MAP:</b> 113	<b>Severity:</b>	5/10
<b>O2 sat:</b> 92% room air	<b>Timing:</b>	continuous

### 1. What VS data are **RELEVANT** and must be **NOTICED** as clinically significant by the nurse?

(NCSBN: Step 1 Recognize cues/NCLEX: Reduction of Risk Potential/Health Promotion and Maintenance)

RELEVANT VS Data:	Clinical Significance:	Nursing Intervention (if needed):

### 2. What body system(s) will you assess most thoroughly performing a **FOCUSED** assessment based on the primary/priority problem? Identify correlating specific nursing assessments.

(NCLEX: Reduction of Risk Potential/Physiologic Adaptation)

PRIORITY Body System:	PRIORITY Nursing Assessments:
<i>Respiratory</i>	

Current FOCUSED Nursing Assessment:	
GENERAL SURVEY:	Appears anxious, body tense
NEUROLOGICAL:	Alert & oriented to person, place, time, and situation (x4), generalized weakness
HEENT:	Head normocephalic with symmetry of all facial features. Lips, tongue, and oral mucosa pink and moist.
RESPIRATORY:	Breath sounds fine dry crackles bilat. with diminished aeration on inspiration and expiration in all lobes anteriorly, posteriorly, and laterally, non-labored respiratory effort, episodic non-productive cough
CARDIAC:	No edema, heart sounds regular, pulses strong, equal with palpation at radial/pedal/post-tibial landmarks, brisk cap refill. Heart tones audible and regular, S1 and S2 noted over A-P-T-M cardiac landmarks with no abnormal beats or murmurs. No JVD noted at 30-45 degrees.
ABDOMEN:	Deferred
GU:	Deferred
INTEGUMENTARY:	Skin hot, dry, intact, normal color for ethnicity. Skin integrity intact, skin turgor elastic, no tenting present.

3. What assessment data is **RELEVANT** and must be **NOTICED** as clinically significant by the nurse?

(NCSBN: Step 1 Recognize cues/NCLEX: Reduction of Risk Potential Reduction of Risk Potential/Health Promotion & Maintenance)

RELEVANT Assessment Data:	Clinical Significance:

4. Interpreting clinical data collected, what problems are possible? Which problem is the **PRIORITY**? Why?

(NCSBN: Step 2: Analyze cues/Step 3: Prioritize hypotheses/NCLEX: Management of Care)

Problems:	Priority Problem:	Rationale:

1. What nursing priority(ies) and goal will guide how the nurse **RESPONDS** to formulate a plan of care? (NCSBN: Step 4 Generate solutions/Step 5: Take action/NCLEX: Management of Care)

<b>Nursing PRIORITY:</b>			
<b>GOAL of Care:</b>			
<b>Nursing Interventions:</b>	<b>Rationale:</b>	<b>Expected Outcome:</b>	

[KR1]

### Caring and the “Art” of Nursing

6. What is the patient likely experiencing/feeling right now in this situation? What can you do to engage yourself with this patient’s experience, and show that they matter to you as a person? (NCLEX: Psychosocial Integrity)

What Patient is Experiencing:	How to Engage:

[KR2]

The ED physician assesses John and orders the following:

### Collaborative Care: Medical Management

7. State the rationale and expected outcomes for the medical plan of care. (NCLEX: Pharm. and Parenteral Therapies)

Care Provider Orders:	Rationale:	Expected Outcome:
Contact-Airborne-Droplet precautions  Influenza swab  COVID-19 swab (only if influenza neg)  Chest x-ray  Complete blood count (CBC)  Metabolic panel (BMP)  Lactate  Nasal cannula titrate to keep O2 sat >90% <sup>[KR3]</sup>		

8. Which orders do you implement first? Why? (NCLEX: Management of Care)

Care Provider Orders:	Order of Priority:	Rationale:
<ul style="list-style-type: none"> <li>• Contact-Airborne-Droplet precautions</li> <li>• COVID-19 swab</li> <li>• Nasal cannula titrate to keep O2 sat &gt;95%</li> </ul>		

## Part III: Interpreting Diagnostic Data

The following diagnostic results just posted in the electronic health record:

### Radiology Reports:

**What diagnostic results are RELEVANT and must be NOTICED as clinically significant by the nurse?**

(NCSBN: Step 1 Recognize cues/NCLEX: Reduction of Risk Potential/Reduction of Risk Potential/Physiologic Adaptation)

Radiology: Chest X-Ray	
Results:	Clinical Significance:
Diffuse bilateral pulmonary infiltrates	

### Lab Results:

Hematology (CBC)								
	WBC	HGB	PLTS	% Neuts	% Lymphs	% Monos	% Eosin	Bands
Norms:	(4.5-11.0 mm <sup>3</sup> )	(12-16 g/dL)	(150-450x 10 <sup>3</sup> /μl)	(55-70)	(20-40)	(2-8)	(1-4)	(3-5%)
Current:	3.5	12.8	224	92	8	0	0	0

Metabolic Panel (BMP)										
	Na	K	Cl	CO2	AG	Gluc	Ca	BUN	Creat	GFR
	135-145 mEq/L	3.5-5.0 mEq/L	101-111 mmol/L	20-29 mmol/L	(7-16 mEq/L)	64-110 mg/dL	8.5-10.2 mg/dL	10-20 mg/dL	0.8-1.2 mg/dL	>60 mL/min
Current:	141	3.9	105	16		178		18	1.10	>60

Misc.				
	Influenza	COVID-19	Lactate (Ven)	
	Neg	Neg	(0.5-2.2 mmol/L)	
Current:	Neg	Pos	1.9	

[KR4]

**What lab results are RELEVANT and must be NOTICED as clinically significant by the nurse?**

(NCSBN: Step 1 Recognize cues/NCLEX: Reduction of Risk Potential/Reduction of Risk Potential/Physiologic Adaptation)

RELEVANT Lab(s):	Clinical Significance:	TREND: Improve/Worsening/Stable:

There has been no change in John's status in the ED and is currently stable. He is being admitted to the general med/surg floor for observation.

To ensure a hand-off that will promote safe patient care to the next nurse, communicate a concise SBAR that captures the essence of John's status and summarizes the excellent care you have provided!

**S**ituation:

Name/age:

**BRIEF** summary of primary problem:

Day of admission/post-op #:

**B**ackground:

Primary problem/diagnosis:

**RELEVANT** past medical history:

**A**ssessment:

Most recent vital signs:

**RELEVANT** body system nursing assessment data:

**RELEVANT** lab values:

How have you advanced the plan of care?

Patient response:

**INTERPRETATION** of current clinical status (stable/unstable/worsening):

**R**ecommendation:

Suggestions to advance the plan of care: