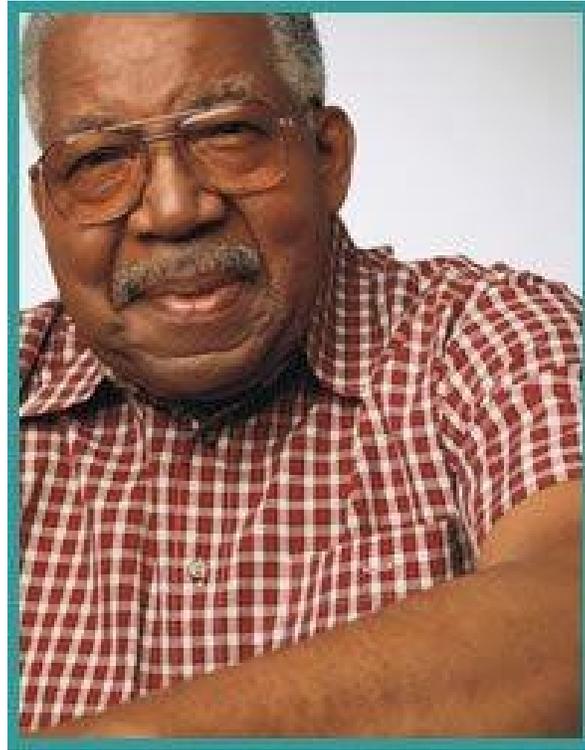


# Part I: Emergency Department (ED)

## Unfolding Reasoning



**John Taylor, 68 years old**

<b>Primary Concept</b>			
<b>Infection/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	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>• Management of Care</li> <li>• Safety and Infection Control</li> </ul>	<input type="checkbox"/>	Step 2: Analyze Cues	<input type="checkbox"/>
Health Promotion and Maintenance	<input type="checkbox"/>	Step 3: Prioritize Hypotheses	<input type="checkbox"/>
Psychosocial Integrity	<input type="checkbox"/>	Step 4: Generate Solutions	<input type="checkbox"/>
Physiological Integrity		Step 5: Take Action	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>• Basic Care and Comfort</li> <li>• Pharmacological and Parenteral Therapies</li> <li>• Reduction of Risk Potential</li> <li>• Physiological Adaptation</li> </ul>	<input type="checkbox"/>	Step 6: Evaluate Outcomes	<input type="checkbox"/>

# Initial Triage Assessment in ED

## Present Problem:

John Taylor is a 68-year-old African-American male with a history of type II diabetes and hypertension who came to the emergency department (ED) triage window because he felt crummy; complaining of a headache, runny nose, feeling more weak, “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 worsen throughout the day. He has difficulty “catching his breath” when he gets up to go the bathroom. 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 metropolitan area that has had over three thousand confirmed cases of COVID-19. He has been married to Maxine, his wife of 45 years and is 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:
<ul style="list-style-type: none"><li>Name: John Taylor</li><li>68 yo</li><li>African American</li><li>Male</li><li>PMH: Type II diabetes and hypertension</li></ul>	<ul style="list-style-type: none"><li>68 years of age. Age weakens the immune system, and this could result in possible respiratory infection.</li><li>PMH: Type II diabetes and hypertension</li><li>Chief complaints of headache, runny nose, weakness, aches, hot in touch, sweaty.</li><li>Noticeable cough</li></ul>
RELEVANT Data from Social History:	Clinical Significance:
<ul style="list-style-type: none"><li>Lives in large area</li><li>Married</li><li>Retired PO</li><li>Active in church</li></ul>	<ul style="list-style-type: none"><li>The large area he resides in has had over 3,00 confirmed COVID cases.</li></ul>

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

- Have you or anyone in your household been tested for COVID-19
- Have you or anyone in your household visited or received treatment in a hospital, nursing home, long-term care, or other health care facility in the last 30 days
- Have you or anyone in your household traveled in the U.S (our outside the U.S) in the past 21 days
- Have you been experiencing any of the following: Sore throat, cough, chills, body aches, loss of taste or smell, fever > 100 degrees Fahrenheit?
- Have you received a COVID test the last 14 days? If so, was it negative?

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

- Provide a mask
- Private room
- Contact/Droplet precautions
- Order a COVID test
- Vitals (check O2 sat)

**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:
Droplet	<ul style="list-style-type: none"> <li>· Gloves</li> <li>· Mask (N95)</li> <li>· Gown</li> <li>· Face shield</li> </ul>

**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> 20 (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 Reduction of Risk Potential/Health Promotion and Maintenance)

<b>RELEVANT VS Data:</b>	<b>Clinical Significance:</b>
All vital signs listed above are of important. <ul style="list-style-type: none"> <li>• 100.3 F Oral</li> <li>• 164/88 BP</li> <li>• 118 P</li> <li>• 20R</li> <li>• 92% O2</li> </ul>	<ul style="list-style-type: none"> <li>• Infection Baseline?</li> <li>• Patient Airway</li> </ul>

**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)

<b>PRIORITY Body System:</b>	<b>PRIORITY Nursing Assessments:</b>
<ul style="list-style-type: none"> <li>• Respiratory</li> </ul>	<ul style="list-style-type: none"> <li>• Inspect Patient</li> <li>• Measure/Monitor O2</li> <li>• Listen to lung sounds</li> </ul>

<b>Current FOCUSED Nursing Assessment:</b>	
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)

<b>RELEVANT Assessment Data:</b>	<b>Clinical Significance:</b>
<ul style="list-style-type: none"> <li>• Visually anxious</li> <li>• Crackles bilaterally</li> <li>• Nonproductive cough</li> <li>• Generalized weakness</li> <li>• Skin is hot to touch.</li> </ul>	<ul style="list-style-type: none"> <li>• Elevated pulse and BP</li> <li>• Fluid in lungs</li> <li>• Fall risk</li> <li>• Possible infection</li> <li>• Developing a fever due to infection</li> </ul>

**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:
<ul style="list-style-type: none"> <li>Pneumonia</li> <li>COVID-19</li> <li>Influenza</li> <li>Bronchitis</li> </ul>	<ul style="list-style-type: none"> <li>COVID-19</li> </ul>	<ul style="list-style-type: none"> <li>Extremely infectious</li> <li>Can be lethal</li> </ul>

**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>	<ul style="list-style-type: none"> <li><b>Airway</b>, breathing, and circulation</li> </ul>	
<b>GOAL of Care:</b>	<ul style="list-style-type: none"> <li>Elevating O2 level to &gt;95%</li> </ul>	
<b>Nursing Interventions:</b>	<b>Rationale:</b>	<b>Expected Outcome:</b>
<ul style="list-style-type: none"> <li>Provide O2</li> <li>Cough and deep breathe</li> <li>Elevate the bed to high fowlers position</li> <li>Provide incentive spirometer</li> </ul>	<ul style="list-style-type: none"> <li>Increase air profusion in the lungs</li> </ul>	<ul style="list-style-type: none"> <li>Increase O2 sat</li> </ul>

**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:
<ul style="list-style-type: none"> <li>Anxiety</li> </ul>	<ul style="list-style-type: none"> <li>“You seem anxious”</li> <li>Explain the reasoning for the PPE</li> <li>Explain each step of care so there are no surprises for patient.</li> </ul>

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	<ul style="list-style-type: none"> <li>COVID is spread through droplet transmission</li> </ul>	<ul style="list-style-type: none"> <li>Prevent the spread of respiratory infection to others</li> <li>Will help diagnose</li> </ul>
Influenza swab	<ul style="list-style-type: none"> <li>Rules out/confirm influenza</li> </ul>	<ul style="list-style-type: none"> <li>Will help diagnose</li> </ul>
COVID-19 swab (only if influenza neg)	<ul style="list-style-type: none"> <li>Rules out/confirm influenza</li> </ul>	<ul style="list-style-type: none"> <li>Determine severity of the current issue.</li> </ul>
Chest x-ray	<ul style="list-style-type: none"> <li>Visualize possible fluid and look at the lungs</li> </ul>	<ul style="list-style-type: none"> <li>Determine severity of the current issue/ see if the disease is progressing</li> </ul>
Complete blood count (CBC)	<ul style="list-style-type: none"> <li>Check WBC for infection and Hemoglobin for oxygen flow in RBC</li> </ul>	<ul style="list-style-type: none"> <li>Hypoxia may be shown</li> </ul>
Metabolic panel	<ul style="list-style-type: none"> <li>Monitor CO2 in blood, glucose (Type II diabetes)</li> </ul>	<ul style="list-style-type: none"> <li>Lack of circulation could be shown</li> </ul>
Lactate	<ul style="list-style-type: none"> <li>To see how well O2 in being carried to the body's tissues and organs</li> </ul>	<ul style="list-style-type: none"> <li>Oxygen levels should be &gt; 92%</li> </ul>
Nasal cannula titrate to keep O2 sat >92%	<ul style="list-style-type: none"> <li>Keep body adequately oxygenated</li> </ul>	

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;92%</li> </ul>	<ul style="list-style-type: none"> <li>Contact-airborne- droplet precautions</li> <li>Nasal Cannula titrate to keep O2 sat &gt; 92%</li> <li>Covid-19 swab</li> </ul>	<ul style="list-style-type: none"> <li>Isolation is priority for anyone who may be infectious</li> <li>O2 to treat symptoms</li> <li>COVID-19 swab to confirm diagnosis and isolation procedures</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	<i>These changes are consistent with a viral pneumonia that is a common complication or progression of COVID-19.</i>
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**Lab Results:**

Hematology (CBC)								
	WBC	HGB	PLTS	% Neuts	% Lymphs	% Monos	% Eosin	Bands
Normal Range:	(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	84	11	0	0	5

Metabolic Panel										
	Na	K	Cl	CO2	AG	Gluc	Ca	BUN	Creat	GFR
Normal Range:	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	14	178	8.9	18	1.10	>60

Misc.				
	Influenza	COVID-19	Lactate (Ven)	
Normal Range:	Neg	Neg	(0.5-2.2 mmol/L)	
Current:	Neg	Pos	2.1	

**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:
<ul style="list-style-type: none"> <li>• Diffuse bilateral pulmonary infiltrates (+) COVID-19</li> <li>• WBC 3.5 mm<sup>3</sup></li> <li>• Neutrophils 84%</li> <li>• Lymphs 11%</li> <li>• Mono 0%</li> <li>• Esino 0%</li> <li>• CO2 16</li> <li>• Gluc 178</li> </ul>	<ul style="list-style-type: none"> <li>• Consistent with viral pneumonia, which is a complication from COVID</li> <li>• WBC Immune system weakened</li> <li>• Neutrophils and bands elevated. Possible sepsis.</li> <li>• CO2 elevated due to poor gas exchange</li> <li>• Glucose elevated (type II diabetes, anxiety/stress)</li> <li>•</li> </ul>



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!

## SBAR Handoff to MedSurg Nurse:

### Situation:

**Name/age:** John Taylor – 68yo

**BRIEF summary of primary problem:** Patient presents with Chief complaints of headache, runny nose, weakness, aches, hot in touch, sweaty.

### Background:

**Primary problem/diagnosis:** Viral pneumonia secondary to COVID-19

**RELEVANT past medical history:** Type II diabetes & hypertension

### Assessment:

**Most recent vital signs:** 100.6 F, 142/84, 112 P, 18R, 93% O2

**RELEVANT body system nursing assessment data:** Respiratory; crackles bilaterally in lungs, SOB, low O2

**RELEVANT lab values:** (+) COVID-19, diffuse pulmonary infiltrates

### How have you advanced the plan of care?

Give him O2, places on isolation

precautions

**Patient response:** Responded well, O2 sat

rising

### INTERPRETATION of current clinical

**status (stable/unstable/worsening):**

stable

**R**ecommendation:

**Suggestions to advance the plan of care:** Continue oxygen therapy, keep vitals stable, frequently assessing respiratory system, bring temperature down.

