

# Virtual Patient Case Simulations for Undergraduate Nursing Education



DxR  
nursing  
**SELECT**



# Helping Students Reason Like Nurses

## Using and applying the CCC System

D <sub>x</sub> R Nursing SELECT	Key Clinical Judgment and Reasoning Skills
Chart Assessment Physical Assessment	Identify what is important Make appropriate choices
Nursing Diagnosis	Interpret patient data Identify patterns Use patient data to support their diagnoses Prioritize nursing diagnoses
Care Plans	Consider potential interventions Evaluate intervention's value and appropriateness Recognize inappropriate actions
Evaluation	Re-evaluate the patient's needs based on new data Identify new problems Recognize progress or lack of progress (improved, stable, unresolved) Adjust strategies to address current needs

# Nursing Diagnosis

Students support their nursing diagnosis choices with pertinent data collected in the patient assessment

The screenshot displays a nursing software interface for a patient named Joseph Robert Wentzel. The interface is divided into several sections:

- Header:** Includes the logo "DxR nursing SELECT", a patient photo, and patient details: "Joseph Robert Wentzel", "May 5 @ 12:00", and "Hospital Medical/Surgical Unit". A "Presenting Situation" button is also visible.
- Current Task:** A list of tasks: "1. Chart Assessment", "2. Physical Assessment", "3. Nursing Diagnoses" (highlighted), "4. Planning/Intervention", and "5. Evaluation".
- Navigation:** Tabs for "Dx Efficiency", "Nursing Diagnoses", "Links", "Instructions", and "Credits".
- Diagnosis Selection:** A section titled "Select each appropriate diagnosis..." with tabs for "All Diagnoses", "Search Diagnoses", and "My Diagnosis List". A list of diagnoses is shown under the "Physiological" category, including "Airway Clearance Impairment", "Autonomic Dysreflexia", "Bleeding Risk", "Blood Pressure Alteration", "Bowel Elimination Alteration", "Bowel Incontinence", "Breathing Pattern Impairment", "Cardiac Output Alteration", "Cardiovascular Alteration", "Constipation", and "Diarrhea".
- Assessment Data:** A section titled "Then select the items that confirm that diagnosis..." with tabs for "Initial Assessment", "Labs", "Medical Management", and "Physical Assessment". It displays data from the "Initial Assessment" tab, including:
  - "Initial Assessment → Admission Data → Reason for Seeking Medical Attention: 'Can't get my breath; chest stopped up.'" (highlighted with "CCC Diagnoses From Relevant Healthcare Patterns")
  - "Initial Assessment → Admission Vital Signs → BP: 146/88 mm Hg" (highlighted with "Pertinent Patient Assessment Data")
  - "Initial Assessment → Admission Vital Signs → RR: 104 apical" (highlighted with "From Chart & Physical")
  - "Initial Assessment → Admission Vital Signs → HR: 38" (highlighted with "From Chart & Physical")
  - "Initial Assessment → Admission Vital Signs → Temp: 100.0° F (37.8° C)" (highlighted with "From Chart & Physical")

# Care Planning & Implementation

Students select interventions to address the priority nursing diagnoses

The screenshot displays a nursing software interface. At the top left, it shows the 'DxR nursing SELECT' logo. The patient information section includes a photo of Joseph Robert Wentzel, dated May 5 @ 12:00, in the Hospital Medical/Surgical Unit, with a 'Presenting Situation' button. The 'Current Task' list includes: 1. Chart Assessment, 2. Physical Assessment, 3. Nursing Diagnoses, 4. Planning/Intervention (highlighted), and 5. Evaluation. There are 'Exit Task' and 'Task Complete' buttons. The main area is divided into 'Nursing Diagnoses' and 'Nursing Interventions'. Under 'Nursing Diagnoses', there are three categories: 'Approved Diagnoses', 'Functional: Activity Intolerance' (with outcomes like 'Able to ambulate desired distance with minimal or no dyspnea'), 'Functional: Body Nutrition' (with outcome 'Eats at least 75%'), and 'Functional: Fluid Volume Excess' (with outcomes like 'Demonstrates decrease in abdominal girth and pedal/ankle edema'). The 'Nursing Interventions' section prompts the user to 'Select an Approved Diagnosis from the list on the left.' Red text boxes are overlaid on the screen: 'CCC Criteria Diagnoses for this case & Patient Outcomes' is placed over the 'Approved Diagnoses' and 'Functional: Activity Intolerance' sections, and 'Potential Interventions for each Criteria Diagnosis' is placed over the 'Nursing Interventions' section.

**CCC Criteria Diagnoses for this case & Patient Outcomes**

**Potential Interventions for each Criteria Diagnosis**

# Benefits of CCC in D<sub>x</sub>R Nursing SELECT

- ✓ Easy to understand
- ✓ Chinese translation available
- ✓ Stable data set; no constant revision
- ✓ Includes interventions
- ✓ Developed in hospital setting
- ✓ Readily available; no high licensing fees