Instructor's Guide – Case Based Learning (CBL) and Clinical Judgment (CJ) Template

Case: <u>Title of Case</u>

CASE OVERVIEW

This instructor's guide is designed for a 2-case CBL intervention during an in-person learning session in a nursing course designed to foster clinical judgment skills.

Brief Description of Case: Briefly describe the scenario

Participant Activities: Participants will need to review relevant information to identify potential problems as well as appropriate collaborative (medical and nursing) interventions for the client(s) in the case. Relevant information is in the form of identified resources provided by the instructor/facilitator.

Pre-Intervention Activities: In preparation for this intervention, participants will be asked to complete a preparatory assignment with identified resources provided by the instructor/facilitator.

Instructor/Facilitator Guidelines:

For each case, the instructor will provide an outline of how participants will progress through the tasks. The instructor will ask participants to form small groups of 2-3, where they will review the information provided and answer the questions that correspond to each part (Part I or II) of the case. The instructor will ask participants to begin with Part I, providing approximately 10 minutes for participants to complete the questions in Part I. After this task is completed, the instructor will lead a debriefing of each part addressing the objectives below. The debriefing is scheduled to last approximately 15 minutes, after which participants will be directed to Part II and repeat the process. The last question in Part II of each case is a reflective question, designed to be answered as the last component of the reflection discussion activities.

The questions for each objective can be applied to both cases, as the objectives for each case are the same. Answers may vary depending on each client's situation, but the guide is applicable to both clients.

CASE OBJECTIVES

After analyzing and discussing this case, undergraduate nursing students will be able to:

- 1. Describe pathophysiology, etiology, and risk factors of ...
- 2. Consider collaborative interventions of importance to a client with ...
- 3. Implement therapeutic communication skills to address any educational needs of the client.
- 4. Reflect on decision making strategies used to guide the client's care.

DEBRIEFING GUIDELINES

Objective #1: Describe pathophysiology, etiology, and risk factors of ...

Participants will be asked to complete the questions in Part I of the case in small groups. Part I of the case provides data regarding the client's history and initial laboratory results. The questions specifically address symptoms related to the pathophysiology of ..., as well as possible etiologies related to each client's history, and potential risk factors.

When the small groups complete the tasks in Part I, ask them to return to the larger group for intentional reflection and discussion. In facilitating this discussion, the instructor will guide students in examining how their responses correlate to the objectives. The instructor can intentionally identify how the following questions relate to steps in the clinical judgment model, as noted in parentheses after each question.

Use the following questions (or the questions from your case) to guide the discussion to correlate the questions in Part I to this objective:

- What data did you notice that affects the client's current health and may be helpful in diagnosis? [Noticing/Assessing/Identifying Cues]
- Are any of these symptoms more important than others? [Noticing/Analyzing Cues]
- Are any of the lab values relevant to the client's problems? Why? [Noticing/Interpreting/Analyzing Cues]
- Is there any additional data you would find helpful? Why? [Noticing/Analyzing Cues]
- Are there any data points that can be identified as risk factors for specific disease processes? [Interpreting/Analyzing Cues]

After the discussion for Part I is complete, ask participants to meet again in their small subgroups to complete Part II. Allow approximately 10-15 minutes to complete the questions in Part II, and then ask them to return to the larger group for another intentional reflection and discussion session. At this point, the instructor will guide participants in examining how their responses correlate to the objectives. Again, the instructor can intentionally identify how the following questions relate to the steps in the clinical judgment model, as noted in parentheses after each question.

Use the following questions to correlate the discussion to this objective:

- Why do we need to know about the client's assessment/history? [Interpreting/Analyzing Cues]
- How would you explain the hypothesis/diagnosis to the client? [Interpreting/Prioritizing Hypotheses, Responding/Generating Solutions]
- What medical diagnoses did you consider for the client? Why? [Interpreting/Prioritizing Hypotheses]
- What nursing diagnoses would be important for the client? Why? [Interpreting/Prioritizing Hypotheses]

Objective #2: Consider collaborative interventions of importance to a client with ...

During the Part II intentional reflection and discussion timeframe, the instructor will continue to encourage participants to link case material to each objective. When identifying how collaborative interventions would support the client's health needs, keep in mind that there are a wide range of interventions of possible benefit to the client. It will be important to focus on what is most relevant for the client at this time.

Use the following questions to help participants identify interventions most relevant to the client right now:

- What collaborative interventions would help meet the client's immediate needs? Why? [Responding/Generating Solutions/Take Actions]
- What collaborative interventions would help you respond to the client's long-term needs? Why? [Responding/Generating Solutions/Take Actions]
- What intervention would be considered as the most important response? Why? [Responding/Prioritizing Solutions/Take Actions]
- Based on your interpretation, how would you prioritize interventions on a need versus want scale to best respond to the client? [Interpreting, Responding/Prioritizing Solutions/Take Actions]
- Based on your interpretation, are there any interventions for this client not relevant at this time? Why? [Interpreting/Generating Solutions]
- What interventions can minimize long-term complications? [Interpreting, Responding/Generating Solutions/Take Actions]
- How would you know if the interventions improved the client's situation? [Reflecting/Evaluating Outcomes]

Objective #3: Implement therapeutic communication skills to address any educational needs of the client

During the discussion for Part II, specifically focus on therapeutic communication skills in potential conversations with the client. It is important to encourage participants to think about how stressful new medical diagnoses can be for clients to manage. Therapeutic communication skills are a valuable set of skills used throughout nursing practice. Repetition and role playing may be considered here if time allows.

Use the following questions to assist participants in selecting therapeutic communication choices in potential conversations with the client:

- How would you tailor your response to this client? [Responding/Take Actions]
- What would you consider the priority educational response for the client? Why? [Responding/Prioritizing Solutions]
- If you could only share two pieces of education with the client today, what would they be? Why? [Responding/Prioritizing Solutions/Take Actions]
- What communication tools would you think best for the client today? [Responding/Generating Solutions]

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- How would you follow-up with the client? [Responding/Take Actions/Evaluate Outcomes]
- Who might you consider adding to the client's treatment team? Why? [Responding/Generating Solutions]

Objective #4: Reflect on decision making strategies used to guide the client's care

To meet this objective, participants will complete the following questions as the last step of the reflection discussion. Allow participants to spend an appropriate amount of time to individually answer these questions. Encourage students to reflect on their learning, and how they can apply the practices implemented in the case to other cases. A discussion would be encouraged, but individual growth may be personal and more reflective if confidential. When opening a discussion, try to utilize clinical judgment model terms mentioned throughout the guide. The instructor can encourage students to review their reflection at a later point in time to identify areas of growth through the program. [Reflecting/Evaluate Outcomes]

- Reflect on your work with the client and answer the following questions:
 - What was your biggest success when working through this case?
 - What was the area you felt you could develop more when responding to a client with similar concerns?
 - o What is one thing you will do differently after participating in this process?
 - o How can you improve your ability to notice and interpret cues, respond, and evaluate your actions with clients?

Instructor's Guide – Case Based Learning (CBL) and Clinical Judgment (CJ)

Case: Renal Case Study SP 23

CASE OVERVIEW

This instructor's guide is designed for a 4-part CBL intervention during an in-person learning session in a nursing course designed to foster clinical judgment skills.

Brief Description of Case: In this scenario, T.B. is a 45-year-old male with a history of viral infections in college. His current complaints focus on acute versus chronic kidney disease which he potentially developed from a strep infection (leading to glomerulonephritis). He is currently experiencing acute on chronic kidney issues.

Participant Activities: Participants will need to review relevant information to identify potential problems as well as appropriate collaborative (medical and nursing) interventions for the client(s) in the case. Relevant information is in the form of identified resources provided by the instructor/facilitator.

Pre-Intervention Activities: In preparation for this intervention, participants will be asked to complete a preparatory assignment with identified resources provided by the instructor/facilitator.

Instructor/Facilitator Guidelines:

For each part, the instructor will provide an outline of how participants will progress through the tasks. The instructor will ask participants to form small groups of 2-3, where they will review the information provided about the case and answer the questions that correspond to each part of the case. The instructor will ask participants to begin with Part I, providing approximately 10 minutes for participants to complete the questions in Part 1. After this task is completed, the instructor will lead a debriefing of each part addressing the objectives below. The debriefing is scheduled to last approximately 15 minutes, after which participants will be directed to Part 2 and repeat the process. The process will be repeated for all 4 parts. The last question in Part 4 of the case is a reflective question, designed to be answered as the last component of the reflection discussion activities.

The questions for each objective can be applied to all parts of the case, as the objectives for each case are the same. Answers may vary depending on each client's situation, but the guide is applicable to all parts of the case.

CASE OBJECTIVES

After analyzing and discussing this case, undergraduate nursing students will be able to:

- 1. Discuss, analyze, and interpret common causes, manifestations and interprofessional management of glomerulonephritis and nephrotic syndrome. (Part 1 and 2)
- 2. Apply classification criteria of acute and chronic kidney disease. (Part 3)

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- 3. Analyze and interpret risk factors, manifestations and interprofessional management of acute and chronic kidney disease. (Part 3)
- 4. Evaluate nursing care of a client with kidney disease. (Part 4)
- 5. Reflect on clinical judgment skill development. (Part 4)

DEBRIEFING GUIDELINES

Objective #1: Discuss, analyze, and interpret common causes, manifestations and interprofessional management of glomerulonephritis and nephrotic syndrome. (Part 1 and 2)

Participants will be asked to complete the questions in Part 1 of the case in small groups. Part 1 of the case provides data regarding the client's history and initial laboratory results. The questions specifically address symptoms related to the pathophysiology of kidney disease, as well as possible etiologies related to each client's history, and potential risk factors.

When the small groups complete the tasks in Part 1, ask them to return to the larger group for intentional reflection and discussion. In facilitating this discussion, the instructor will guide students in examining how their responses correlate to the objectives. The instructor can intentionally identify how the following questions relate to steps in the clinical judgment model, as noted in parentheses after each question.

Use the following questions (or the questions from your case) to guide the discussion to correlate the questions in Part 1 to this objective:

- What data did you notice that affects the client's current health and may be helpful in diagnosis? [Noticing/Assessing/Identifying Cues]
- Are any of these symptoms more important than others? [Noticing/Analyzing Cues]
- Are any of the lab values relevant to the client's problems? Why? [Noticing/Interpreting/Analyzing Cues]
- Is there any additional data you would find helpful? Why? [Noticing/Analyzing Cues]
- Are there any data points that can be identified as risk factors for specific disease processes? [Interpreting/Analyzing Cues]

After the discussion for Part 1 is complete, ask participants to meet again in their small subgroups to complete Part 2. Allow approximately 10-15 minutes to complete the questions in Part 2, and then ask them to return to the larger group for another intentional reflection and discussion session. At this point, the instructor will guide participants in examining how their responses correlate to the objectives. Again, the instructor can intentionally identify how the following questions relate to the steps in the clinical judgment model, as noted in parentheses after each question.

Use the following questions to guide the discussion to correlate the discussion to this objective:

• Why do we need to know about the client's assessment/history? [Interpreting/Analyzing Cues]

- How would you explain the hypothesis/diagnosis to the client? [Interpreting/Prioritizing Hypotheses, Responding/Generating Solutions]
- What medical diagnoses did you consider for the client? Why? [Interpreting/Prioritizing Hypotheses]
- What nursing diagnoses would be important for the client? Why? [Interpreting/Prioritizing Hypotheses]

Objective #2: Apply classification criteria of acute and chronic kidney disease. (Part 3)

This section was added because of the objectives for this case. Sections can be added/removed/altered as needed to meet case objectives.

In this case, a review of classification of acute and chronic kidney disease is relevant to plan nursing care. One question specifically addresses this content in Part 3.

Objective #3: Analyze and interpret risk factors, manifestations and interprofessional management of acute and chronic kidney disease. (Part 3)

During the Part 3 intentional reflection and discussion timeframe, the instructor will continue to encourage participants to link case material to each objective. When identifying how collaborative interventions would support the client's health needs, keep in mind that there are a wide range of interventions of possible benefit to the client. It will be important to focus on what may be most relevant for the client at this time.

Use the following questions to help participants identify interventions most relevant to the client right now:

- What collaborative interventions would help meet the client's immediate needs? Why? [Responding/Generating Solutions/Take Actions]
- What collaborative interventions would help you respond to the client's long-term needs? Why? [Responding/Generating Solutions/Take Actions]
- What intervention would be considered as the most important response? Why? [Responding/Prioritizing Solutions/Take Actions]
- Based on your interpretation, how would you prioritize interventions on a need versus want scale to best respond to the client? [Interpreting, Responding/Prioritizing Solutions/Take Actions]
- Based on your interpretation, are there any interventions for this client not relevant at this time? Why? [Interpreting/Generating Solutions]
- What interventions can minimize long-term complications? [Interpreting, Responding/Generating Solutions/Take Actions]
- How would you know if the interventions improved the client's situation? [Reflecting/Evaluating Outcomes]

The following section was removed, as therapeutic communication skills were not an objective of this case. Sections can be removed/altered as needed to meet the objectives you select.

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During the discussion for Part II, specifically focus on therapeutic communication skills in potential conversations with the client. It is important to encourage participants to think about how stressful new medical diagnoses can be for clients to manage. Therapeutic communication skills are a valuable set of skills used throughout nursing practice. Repetition and role playing may be considered here if time allows.

Use the following questions to assist participants in selecting therapeutic communication choices in potential conversations with the client:

- How would you tailor your response to this client? [Responding/Take Actions]
- What would you consider the priority educational response for the client? Why? [Responding/Prioritizing Solutions]
- If you could only share two pieces of education with the client today, what would they be? Why? [Responding/Prioritizing Solutions/Take Actions]
- What communication tools would you think best for the client today? [Responding/Generating Solutions]
- How would you follow-up with the client? [Responding/Take Actions/Evaluate Outcomes]
- Who might you consider adding to the client's treatment team? Why? [Responding/Generating Solutions]

Objective #4: Evaluate nursing care of a client with kidney disease. (Part 4)

This section was added to meet the objectives of this case.

To meet this objective, participants will complete the question in Part 4 that reviews expected outcomes. Allow students to spend a few minutes in small groups to analyze the outcomes for this client. Bring the students back to a large group discussion and review expected outcomes and unexpected outcomes. Participants should be encouraged to explore unexpected outcomes, as this allows them to better prepare themselves for changes in condition. A question that can be used here is identifying the worst outcome for this client at the start of the assessment.

Use the following questions as a guide to facilitation this discussion:

- What is the worst thing that can happen to this client today?
- How would you know the client is not doing well?
- What would you watch for?
- What tools would you want to have readily available if the client's condition deteriorates?

Objective #5: Reflect on clinical judgment skill development. (Part 4)

To meet this objective, participants will complete the following questions as the last step of the reflection discussion. Allow participants to spend an appropriate amount of time to individually answer these questions. Encourage students to reflect on their learning, and how they can apply the practices implemented in the case to other cases. A discussion would be encouraged, but individual growth may be personal and more reflective if confidential. When opening a

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discussion, try to utilize clinical judgment model terms mentioned throughout the guide. The instructor can encourage students to review their reflection at a later point in time to identify areas of growth through the program. [Reflecting/Evaluate Outcomes]

- Reflect on your work with the client and answer the following questions:
 - o What was your biggest success when working through this case?
 - What was the area you felt you could develop more when responding to a client with similar concerns?
 - o What is one thing you will do differently after participating in this process?
 - How can you improve your ability to notice and interpret cues, respond, and evaluate your actions with clients?

Renal Case Study

Learning Outcomes

- 1. Discuss, analyze, and interpret common causes, manifestations and interprofessional management of glomerulonephritis and nephrotic syndrome. (Part 1 and 2)
- 2. Apply classification criteria of acute and chronic kidney disease. (Part 3)
- 3. Analyze and interpret risk factors, manifestations and interprofessional management of acute and chronic kidney disease. (Part 3)
- 4. Evaluate nursing care of a client with kidney disease. (Part 4)
- 5. Reflect on clinical judgment skill development. (Part 4)

Pre assignments

1. See pre-assignment worksheet

Scenario-Part 1

T.B. is a 45-year-old male who has presented to the clinic complaining of general feelings of malaise, fatigue, and lack of appetite. He works in a factory full time and has previously been very active. He enjoys playing several sports and lives with his wife and children, who are also very active.

When taking his history, T.B. reports that his symptoms have been present for the last six months, but in the last week he has felt progressively worse. He does report an occasional cough that is non-productive. He has also noted swelling in his lower extremities that has slowly worsened in the last two months. He has no other medical problems but remembers having many colds and sore throats during his years at college.

Assessment Data

Vital Signs

BP: 160/97 HR: 105 RR: 24 T: 99.2 F

O₂ sat: 91% RA

Laboratory Results

Blood test Results (taken Friday at 0800)

Sodium: 144 mEq/L Potassium: 5.8 mEq/L Chloride: 93 mEq/L

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Sodium Bicarbonate: 27 mEq/L

BUN: 81 mg/dL

Creatinine: 5.3 mg/dL Glucose: 145 mg/dL

GFR: 19

Urine test Results

Positive for erythrocytes/casts, protein and albumin

Discussion Questions

- 1. What assessment and laboratory data (*Noticing/Recognize Cues*) do you consider most relevant to T.B.'s health?
- 2. Are there any additional pieces of data (*Noticing/Recognize Cues*) you would want to have before analysis?
- 3. With the cues you have at this point, what would be your interpretation (*Interpreting/Analyze cues*) of T.B.'s current health? Provide a rationale for your response.

Scenario-Part 2

T.B.'s physical assessment, other than the data presented, is within normal limits. The provider recommends that T.B. go to the local emergency room for additional workup. T.B. and his wife arrive at the emergency room, and additional data/cues are collected.

Additional Assessment Data

Vital Signs

BP: 165/95 HR: 108 RR: 26 T: 99.3 F

O₂ sat: 88% RA

Laboratory Results

Blood test Results (taken Friday at 1200)

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WBC: 7.6 x 10⁹/L RBC: 2.2 x 10¹³/L Hgb: 7.7 g/dL Hct: 21.9%

Platelets: 280 x 10⁹/L

Imaging Results

Chest Xray: Bilateral infuse infiltrates, suggestive of pulmonary effusions/edema

Discussion Questions

- 4. What additional cues (*Interpreting/Analyze Cues*) do you consider most relevant? Provide rationale to support your response.
- 5. Based on the data (*cues*) and your analysis, what are some possible hypotheses (*Interpreting/Generate Hypotheses*) for T.B.? Link each hypothesis to the relevant supporting data.
- 6. Based on your hypotheses, which do you consider a priority? (*Interpreting/Prioritize Hypotheses*) Provide rationale for your response.

Scenario-Part 3

T.B. is admitted to hospital under the care of a hospitalist and a nephrologist. An indwelling catheter is placed. Collected urine is amber and cloudy, and output is less than 20 mL/hr. T.B. complains of increasing shortness of breath and swelling in his lower extremities.

Additional Assessment Data

Vital Signs

BP: 169/96 HR: 110 RR: 28 T: 99.3 F

O₂ sat: 92% on 2L Nasal Cannula

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Laboratory Results

Blood test Results (taken Friday at 1800)

Sodium: 144 mEq/L Potassium: 5.9 mEq/L Chloride: 93 mEq/L

Sodium Bicarbonate: 27 mEq/L

BUN: 99 mg/dL

Creatinine: 5.5 mg/dL Glucose: 145 mg/dL

GFR: 17

Imaging Results

Renal Ultrasound Impression: Both kidneys are significantly smaller in size compared to averages.

Discussion Questions

- 7. Based on the cues and your knowledge of kidney disease, how would you decide if T.B.'s diagnosis should be related to acute kidney injury or chronic kidney disease? (*Responding/Generate Solutions*) Provide rationale to support your response.
- 8. What interventions are most relevant for T.B. at this time (*Responding/Generate Solutions*)? Provide rationale for your response.
- 9. In what order would you complete the interventions (*Responding/Take Actions*)? Provide rationales for your response.
- 10. How would you know if your interventions have improved T.B.'s current status? How would you know if a change in action is warranted? What assessment cues would support your next steps (*Reflecting/Evaluate Outcomes*)?

Scenario-Part 4

T.B. has been admitted for more than 24 hours. His urine output is now averaging greater than 30 ml/hr and his urine can be described as dark yellow and cloudy. T.B. feels his shortness of breath has improved.

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Additional Assessment Data

Vital Signs

BP: 150/89 HR: 101 RR: 20 T: 98.7 F

O₂ sat: 98% on 2L Nasal Cannula

Laboratory results (taken Saturday at 0800)

Sodium: 143 mEq/L Potassium: 5.2 mEq/L Chloride: 98 mEq/L

Sodium Bicarbonate: 27 mEq/L

BUN: 45 mg/dL

Creatinine: 3.1 mg/dL Glucose: 115 mg/dL

GFR: 20

Discussion Questions

11. Is T.B. meeting the outcomes you expect (*Reflecting/Evaluate Outcomes*)? Would you say he is improving or not? Provide a rationale for your response.

Reflection

- 12. Reflect on your learning through this exercise (Reflecting).
 - What did you feel you did well?
 - What is one area that you felt you could have done better?
 - How do you feel your assessment and analysis skills will impact your future performance as a nurse?

•	Are there any activities you can do to develop how you notice and interpret data, respond with appropriate interventions, and evaluate your actions with clients?

Pre-Assignment Concepts Related to Glomerulonephritis through Chronic Kidney Disease

Please complete the following questions prior to our class discussion on Renal Pathophysiological Problems and Nursing Interventions. You are welcome to work with your peers. Credit will be given for completeness.

1. Define glomerulonephritis. Differentiate between acute and chronic glomerulonephritis by risk factors, symptoms, and treatment options.
2. Describe nephrotic syndrome, including causes and manifestations.
3. Give a simple definition of renal failure.
4. Differentiate between acute versus chronic renal failure.
5. What is the RIFLE classification and which type of renal failure is it used for?
6. How would you know what stage of End Stage Renal Failure (ESRD) someone has?
7. What treatment interventions would you implement for renal failure patients?
8. Describe the types of dialysis and what risks are associated with each.