



# 23

## Taking the Next Steps: Critical Thinking

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### LEARNING OBJECTIVES

*After studying Chapter 23 in the textbook and completing this section of the workbook, students should be able to:*

1. Discuss the process of data analysis.
2. Describe barriers to critical thinking in reaching diagnostic conclusions.
3. Identify terms associated with data analysis and problem identification.
4. Discuss the role of additional testing in the clinical examination process.
5. Describe what is meant by *patient management plan*, and explain where it fits with critical thinking and clinical examination.

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### TEXTBOOK REVIEW

**Chapter 23 Taking the Next Steps: Critical Thinking (pages 847-854)**

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### CONTENT REVIEW QUESTIONS

#### Multiple Choice

*Circle the correct answer for each of the following questions.*

1. Unless a life-threatening situation exists, the best guide to determining the priority for the patient's condition should be based on:
  - a. intuition.
  - b. probability and utility.
  - c. the use of algorithms.
  - d. the examiner's initial favorite hypothesis.

2. When determining a need for additional examination, testing, or procedures, one should consider that they should be done:
  - a. to obtain as much data as possible.
  - b. to attempt to get data that might be associated with multiple problems.
  - c. only when it is absolutely necessary.
  - d. if they relate to the examiner's hypothesis.
3. After an examiner has identified and confirmed a problem, the next step is to:
  - a. assess the data collected.
  - b. formulate a clinical opinion.
  - c. conduct further assessment.
  - d. determine the management plan.
4. The use of a computer could potentially be detrimental to the examiner because:
  - a. it may become a substitute for critical thinking.
  - b. computer dysfunction makes it unreliable.
  - c. the computer is limited in the amount of data it can interpret.
  - d. the level of skill needed to run a diagnostic computer program is beyond the computer skills of most examiners.
5. In order to identify problems based on clinical examination, it is helpful to organize the data:
  - a. by dividing data into normal and abnormal findings.
  - b. by body systems.
  - c. by chief complaints.
  - d. in the order the data was collected.
6. Each of the following could become a barrier to the critical thinking process *except* for the examiner's:
  - a. feelings.
  - b. attitudes.
  - c. values.
  - d. objectivity.
7. Which statement best characterizes a belief that supports a sound decision-making process?
  - a. The underlying problem is always related to the chief complaint.
  - b. Rare problems tend to have unusual presentations.
  - c. Common problems occur commonly, whereas rare ones occur rarely.
  - d. A diagnosis should be made quickly to enhance patient confidence.
8. Lab tests should be used to:
  - a. confirm a presumed diagnosis.
  - b. develop a list of potential problems.
  - c. rule out all possible causes of symptoms and clinical findings.
  - d. assist the examiner only when the data does not point to a specific problem.

## Terminology Review

### Matching

Match each example with the correct term in the right column. Use each choice only once.

Example	Term
9. _____ The examiner notes a positive Homan's sign in the absence of thrombophlebitis.	a. Bayes' formula
10. _____ Based on observations made, the examiner correctly concludes that a patient does not have renal disease.	b. false negative
11. _____ The patient does not demonstrate tenderness at McBurney's point, and does not have appendicitis.	c. false positive
12. _____ A numeric value is assigned, predicting the probability that a patient with negative findings does not have a given illness or condition.	d. negative predictive value
13. _____ A diagnosis of hepatitis B is made on a patient based on his symptoms and the population of IV drug abusers of which he is part.	e. positive predictive value
14. _____ The examiner correctly concludes that a patient has chronic hypoxia based on the patient's presentation.	f. sensitivity
15. _____ A patient with cholecystitis has a positive Murphy's sign.	g. specificity
16. _____ The examiner notes normal findings on a patient with cancer of the prostate.	h. true positive
17. _____ With acute myocardial infarction, 90% of patients demonstrate diaphoresis.	i. true negative

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## CONCEPTS APPLICATION

### Activity 1

Complete the following table by listing the body systems that might be involved with each of the symptoms described. Choose body systems from those listed in the box. All symptoms have more than one possible body system involvement; answers can be used more than once.

<b>Body Systems</b>						
auditory	cardiovascular	gastrointestinal	integumentary	musculoskeletal	neurologic	respiratory visual

<i>Symptoms</i>	<i>Body Systems That Might Be Involved</i>
Chest pain	
Headaches	
Abdominal pain	
Pain in the legs	

**Activity 2**

*Complete the following table by listing possible problems associated with the examination data provided.*

<i>Examination Data</i>	<i>Possible Problems</i>
<p>54-year-old female with jaundice, abdominal pain, nausea, weight loss. Has pain to abdominal palpation; positive bowel sounds. Liver slightly enlarged; admits to alcohol use.</p>	
<p>66-year-old male with chief complaint of breathing difficulty. Has increased respiratory rate, low-grade fever, rales, productive cough; increased tactile fremitus bilaterally.</p>	
<p>13-week-old infant girl with fever, irritability, poor eating. Infant is dehydrated and has a temperature of 103.7° F; abdomen soft.</p>	
<p>19-year-old female college student with chief complaint of pain when urinating. Describes frequency and urgency. Patient has temperature of 100.4° F; Has constant pain in pelvic area; positive pain with fist percussion over left flank.</p>	