

# COMPREHENSIVE ANALYSIS TOOL

## A GUIDE FOR DIAGNOSTIC REASONING

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**NOTE:** This tool is designed for *beginning students* caring for *adult patients*. It's NOT intended to replace *standard assessment tools*. Rather, it helps you to do in depth analysis to **draw conclusions** about the data recorded on them. While this guide prompts you to approach diagnosis systematically, it doesn't replace the need for independent judgment or ability to apply basic principles of diagnostic reasoning (available in *Applying Nursing Process: A Critical Thinking Tool* [Lippincott, In Press 2005]). Using this tool consistently will help you develop habits that prioritize your approach to diagnosis.

**Keeping a nursing focus—to maximize patient self-management, bio-psycho-social function, and quality of life**—this tool guides you through the process of thinking about nursing concerns. It incorporates principles from *Gordon's Functional Health Patterns and Maslow's Human Needs*, and considers *Healthy People 2010* recommendations (for example, screening for depression). It also prompts you to check for diseases often included in disease management programs. To help you prioritize, it lists questions according to things you need to think about *early* (for example, whether signs and symptoms are caused by a communicable disease). This tool and patient self-assessment tools are available for download free for personal or student use only at: [www.AlfaroTeachSmart.com](http://www.AlfaroTeachSmart.com) (click on **Publications**, then **Handouts**).

1. List admitting diagnoses and current major problems according to patient, family, and medical records.
2. Rule out presence of infection or communicable disease (check for fever, fatigue, pain, redness, heat, swelling, drainage, exposure to communicable disease or toxic substance; travel to foreign country).
3. Rule out whether patient signs and symptoms are actually medication problems. Consider all drugs taken (including over-the-counter and herbal remedies). Use **SODA** to jog your mind:
  - S**ide effects?
  - O**ver dosage?
  - D**rug Interactions?
  - A**llergy or **A**dverse reactions?
4. Rule out whether the patient's signs and symptoms are actually allergic responses or due to history of surgery or trauma. Check for patient history of the following:

<input type="checkbox"/> Arthritis or Back Pain	<input type="checkbox"/> Depression/mental health problems	<input type="checkbox"/> Thyroid Disease
<input type="checkbox"/> Asthma or other Lung Disease	<input type="checkbox"/> Diabetes	<input type="checkbox"/> Vascular/Circulation Problems
<input type="checkbox"/> Bleeding problems	<input type="checkbox"/> Hypertension	<input type="checkbox"/> Wound Healing Problems
<input type="checkbox"/> Cancer (Breast, Prostate, Other)	<input type="checkbox"/> Infection/HIV	<input type="checkbox"/> Surgery/trauma
<input type="checkbox"/> Congestive Heart Failure/ Heart Disease	<input type="checkbox"/> Obesity	<input type="checkbox"/> Other diseases/problems:

Neuro? Kidney? Skin?
5. Has there been significant weight loss or gain? (Consider as far back as 6 weeks. Remember that unexplained *weight loss* may indicate serious medical problems like cancer, or diabetes; unexplained *weight gain* may indicate serious kidney, heart, or thyroid disease).

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6. Determine smoking pattern and possible role in current problems:

Yes     Quit Smoking     Never Smoked    Packs per day \_\_\_\_

7. For pre-menopausal women (age < 55 years), rule out possibility of pregnancy (many drugs, diagnostic studies, or treatments affect the fetus).

8. Rule out whether there are problems (or risk factors for problems) with any of the following.

		(Circle those that apply)			
<input type="checkbox"/>	Breathing or coughing, or oxygenation?	Yes	No	AR <sup>1</sup>	Pos <sup>2</sup>
<input type="checkbox"/>	Blood pressure, pulse, bleeding, circulation?	Yes	No	AR	Pos
<input type="checkbox"/>	Pain, stiffness or discomfort?	Yes	No	AR	Pos
<input type="checkbox"/>	Body temperature or sweating?	Yes	No	AR	Pos
<input type="checkbox"/>	Ability to think or perceive environment?	Yes	No	AR	Pos
<input type="checkbox"/>	Communication (seeing, hearing, or speaking)?	Yes	No	AR	Pos
<input type="checkbox"/>	Eating, digestion, or nutrition?	Yes	No	AR	Pos
<input type="checkbox"/>	Bowel elimination?	Yes	No	AR	Pos
<input type="checkbox"/>	Urinary elimination?	Yes	No	AR	Pos
<input type="checkbox"/>	Dehydration, edema or electrolyte imbalance?	Yes	No	AR	Pos
<input type="checkbox"/>	Movement, range of motion, or activity intolerance?	Yes	No	AR	Pos
<input type="checkbox"/>	Rashes, skin problems, ulcers, or tissue perfusion?	Yes	No	AR	Pos
<input type="checkbox"/>	Sleeping?	Yes	No	AR	Pos
<input type="checkbox"/>	Infection (vulnerable or contagious to others)?	Yes	No	AR	Pos
<input type="checkbox"/>	Safety (risk for injury or falls; weakness or seizures)?	Yes	No	AR	Pos
<input type="checkbox"/>	Anxiety, coping, or managing stress?	Yes	No	AR	Pos
<input type="checkbox"/>	Drug or alcohol dependence?	Yes	No	AR	Pos
<input type="checkbox"/>	Growth and developmental challenges?	Yes	No	AR	Pos
<input type="checkbox"/>	Life style changes (eg, divorce, moving, new parent)?	Yes	No	AR	Pos
<input type="checkbox"/>	Roles, relationships, sexuality, or self esteem?	Yes	No	AR	Pos
<input type="checkbox"/>	Medication, treatment, or allergy management?	Yes	No	AR	Pos
<input type="checkbox"/>	Patient or family education needs?	Yes	No	AR	Pos
<input type="checkbox"/>	Difficulties at home or work?	Yes	No	AR	Pos
<input type="checkbox"/>	Ability to do desired, as well as necessary activities?	Yes	No	AR	Pos
<input type="checkbox"/>	Personal, religious, spiritual, cultural beliefs?	Yes	No	AR	Pos
<input type="checkbox"/>	Ethical issues?	Yes	No	AR	Pos
<input type="checkbox"/>	Socio-economic issues?	Yes	No	AR	Pos

**HOW TO PRIORITIZE:** Problems usually present in a cluster (patients rarely have only one problem). Before going on to the next page, study the above and consider *relationships* among the problems. For example, if pain is contributing to depression or movement problems, **pain** is a major problem. If you're unsure whether a problem is present, **collect more data**.

<sup>1</sup>AR = At Risk for problem (no signs and symptoms present, but risk factors are evident).  
<sup>2</sup>Pos = Possible problem (insufficient data, but you suspect a problem).

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### DEFINITIVE DIAGNOSIS

For each general problem you identified:

1. Rule out whether you need to refer the problem to a physician, APN, or other qualified healthcare professional for more in depth assessment.
2. Determine the **definitive diagnosis** (most specific, correct diagnosis), by comparing your patients signs and symptoms with the signs and symptoms of the diagnosis you suspect. For example, if you think your patient's urinary elimination problem is **urinary retention**, look up urinary retention in the Quick Reference section and compare your patient's signs and symptoms with the signs and symptoms listed under **urinary retention**.

### DETERMINING CAUSES AND CONTRIBUTING FACTORS

1. Determine the factors the patient identifies as causing or contributing to the problem(s). Consider patient's *own* words (if possible, discuss patient's self-assessment form with him).
2. Do a "second pass" on problems you identified on page 2, looking for contributing factors to the definitive diagnoses you identified above.

### DETERMINING PRIORITY PROBLEMS

To determine which problems you must address and which ones you'll refer, ask:

1. What are the major outcomes (desired results of care)?
2. Which of the identified problems or risk factors *must* be managed in order to achieve the overall outcomes of care?
3. Who is primarily accountable for care management of each problem?
  - ◊ Patient self-manages
  - ◊ Nurses manage independently
  - ◊ Nurses manage using protocols or standards
  - ◊ Physician or APN manages
  - ◊ Other:

### HEALTH PROMOTION

1. What daily activities would the person like to be doing, that he/she isn't doing?
2. Strongly encourage smoking cessation and weight management programs (give resources).
3. Is the person able to name helpful personal and community resources?
4. What health screening procedures have been done (eg, mammogram, colonoscopy)?
5. Based on age, history, and risk factors, are there screening procedures that you might explore with the patient?