

Forward Thinking and Pattern Recognition
require better problem representation

Bowen J. NEJM 2006;35:2217-25

Goal with problem representation

- Incorporate all significant symptoms and signs
 - Describe them as accurately as possible
 - Emphasize the most specific features
 - Avoid distraction by minor sx/signs or non specific markers of illness
 - Match the patient's presentation to classic disease descriptions*
- * Classic vs. Common: walk, then run

Steps to Problem Representation

- Step 1 : Processing
 - abstraction of patient complaints into medical language
- Step 2: Patient Illness Script
 - Combine those abstraction into a summative statement

Processing

- Translating lay language into more abstract and descriptive medical terminology to:
 - Activate memory stores: play as you practice
 - Seek information in medical resources
 - Support compare and contrast thinking
 - Increase efficiency and precision in diagnosis



Abstract Oppositional Descriptors

Duration

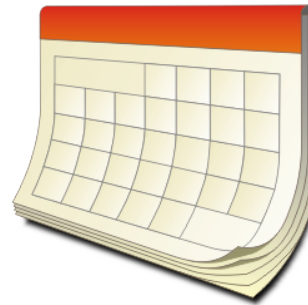
Process



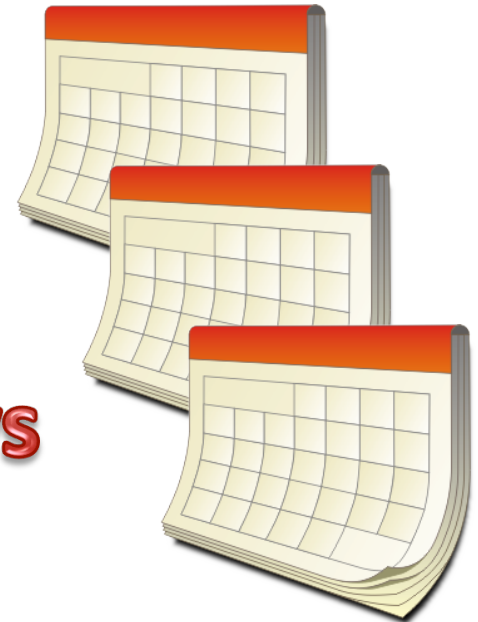
VS



VS



VS



HYPERACUTE

ACUTE

SUBACUTE

CHRONIC

UCSF

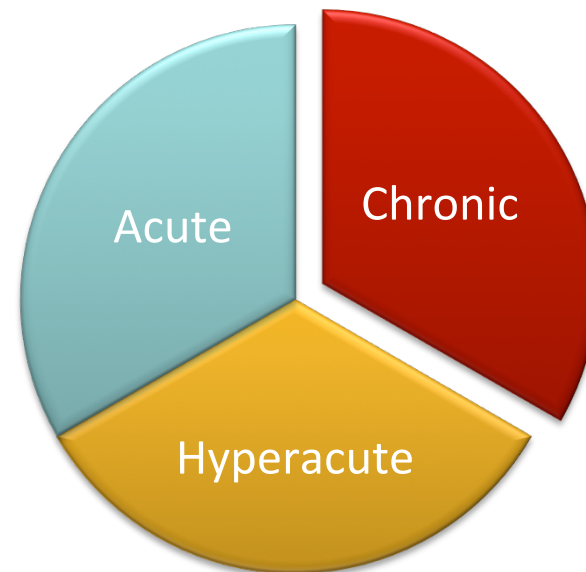
Images (L to R): Ashlinorton / Jackaranga / Mark L. Norton; Wikimedia Commons

Narrowed Scope: enhanced focus

Diseases that cause diarrhea:



Diseases that cause chronic diarrhea:



Abstract Oppositional Descriptors

Qualitative: neurologic c/o's

My limb:	Processed descriptor
"is weak"	-paresis
"can't move"	-plegia
"is numb"	-dysesthesia
"has pins and needles"	-parasthesia

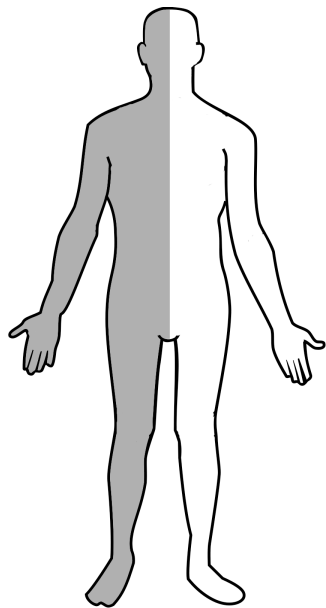


Process

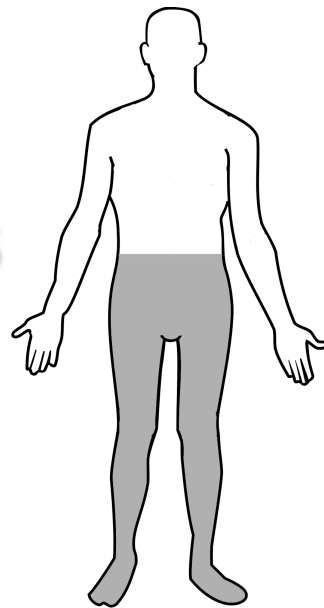
Abstract Oppositional Descriptors

Process

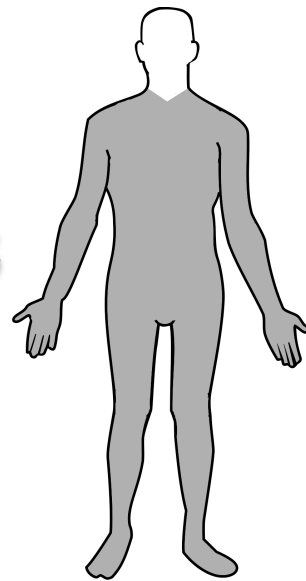
Distribution: plegia, paresis, dysesthesia



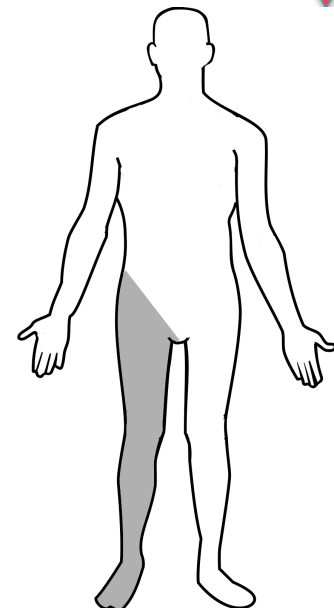
VS



VS



VS



HEMI-

PARA-

TETRA-

MONO-

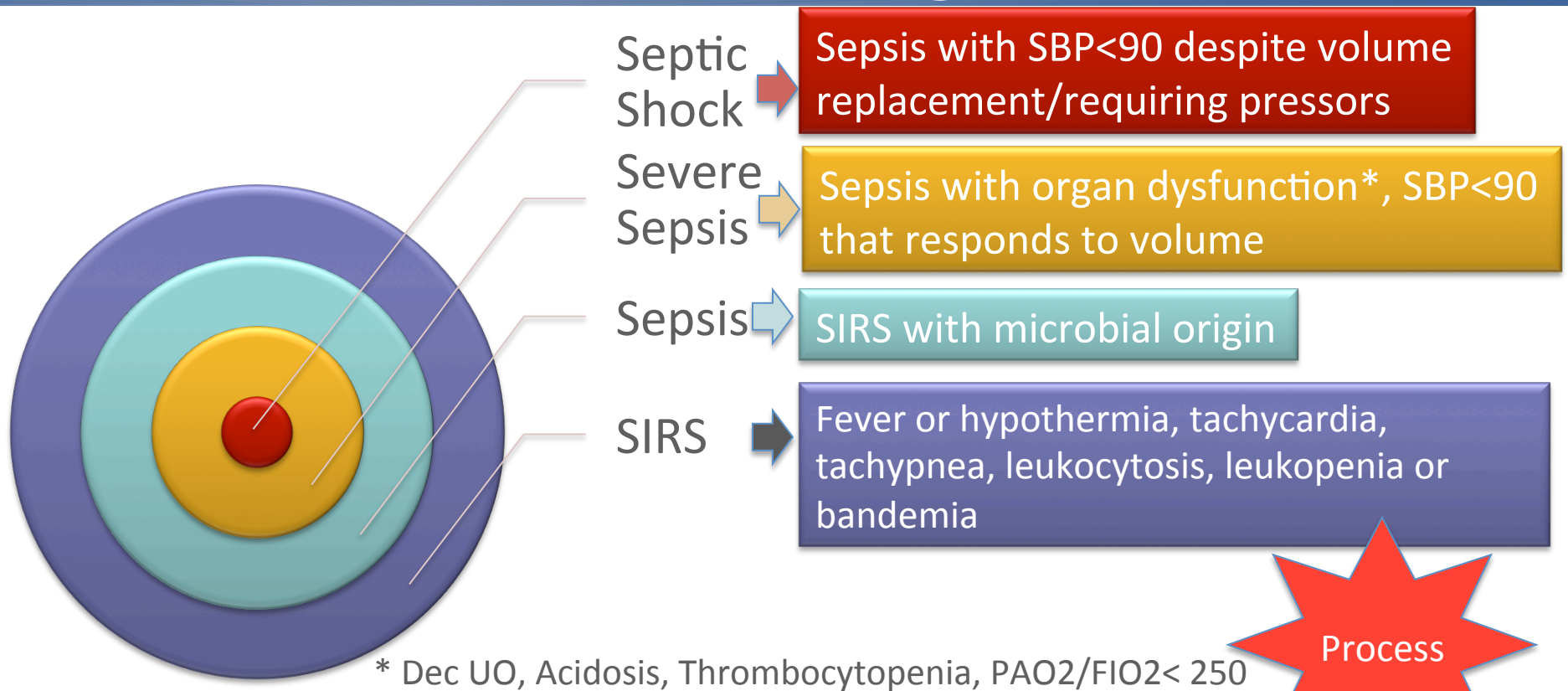
Summative Processing



Process

- Recognizes the existence of a described syndrome
- Rich Communication shorthand: instantly conveys tremendous information
- Prevents overemphasis of single symptom or underemphasis of constellation of symptoms.

Summative Processing: Syndromes



Quiz 2.3

- Processing is advisable because:
 1. Using medical terminology keeps patients guessing.
 2. It decreases the specificity of the patient symptom
 3. It activates memory stores and facilitates diagnosis