**Reporters**
- Accountability, ability to accurately and reliably collect and communicate clinical facts and the knowledge to address the “What” questions.
- “Consistently good in Interpersonal skills; reliably obtains and communicates clinical findings” (Pangaro, 1999).

**Skills & Knowledge**
- Collect Data
- Identify and label problems
- Communicate clinical facts
- Demonstrate awareness of difference (age, gender, culture, etc.)
- Describe reflection on the case, self and process
- Identify and summarize appropriate and optimal sources of information

**Processes**
- Data Gathering
- Data Reporting
  - Reflective, Critical, Strategic & Creative Thinking

**Attitudes & Reflective Behaviors**
**Accountable & Accurate**
- Is accountable to self and group
- Knows who and when to consult and on what issues
- Understands and compensates for strengths and weaknesses of self and peers
- Identifies what they don’t (but need to) know and how to find out
- Articulates conditions under which they perform well and those that tend to cause stress or interfere with performance
- Distinguishes between normal and abnormal
- Actively considers and includes perspectives of others (peers, patients, patient’s families, other health care professionals, et al.)

Prepared by Karen Spear Ellinwood, PhD, JD, EdS, with grateful acknowledgement of the contributions by: Susan Ellis, EdS, and Joanna Arnold, PhD.
**Interpreter**

- Active participation in the problem solving process, the ability to prioritize and interpret (rather than repeat) findings and the knowledge to address “Why” questions.
- “Reporting shows selectivity, prioritization, and implies analysis. Fulfills the promise of active involvement in thinking through patient problems, and of acquiring the knowledge to offer a reasonable differential diagnosis” (Pangaro, 2006).

**Skills & Knowledge**

- “Able to prioritize and analyze patient problems” for example, in “selecting the clinical findings that support possible diagnoses and in applying test results' to specific patients.” (Pangaro, 1999)
- Identifies key findings that imply differential diagnoses.
- Uses pertinent positives and negatives
- Prioritizes problem lists
- Offers “reasonable possibilities”
- Identifies and explains tests & follow-up
- Reaches conclusions that are not a repetition of findings
- Actively participates in problem solving process
- Explains how key elements affect prioritizing of possible diagnoses

**Application of Medical Knowledge**

**Data Interpretation**

- Reflective, Critical, Strategic & Creative Thinking

**Attitudes & Reflective Behaviors**

**Reliably interprets data**

- Strategically assesses situation and which diagnostic tests (labs, exams or imaging) might be needed or what they expect to find from these
- Formulates multiple hypotheses in developing differential diagnoses
- Articulates rationales for thinking and for action
- Articulates evidence for decision-making
- Considers different elements of own reflection/process (which data to collect, how and why it should be collected and how to make sense of it)
- Engages in reflective – deliberate – reasoning to support decisions and propose and select from among options
- Actively considers and includes perspectives of others (peers, patient, patient’s family, other health care professionals, supervising physicians, et al.)
Manager

- Consistent level of knowledge of current medical evidence; can critically apply knowledge to specific patients.
- "Clinical planning fulfills a promise of working with patients on diagnostic and therapeutic decisions, and a promise of developing the expertise to do so;
- Consistently answers “how’ to resolve problems” (Pangaro, 2006)

Skills & Knowledge

- Discerns appropriate resources
- Applies medical knowledge with some confidence to the case
- Prioritizes among hypotheses
- Able to select among options in developing a plan of care
- Engages at higher interpersonal level of communication, including negotiation of options with patient or colleagues

Attitudes & Reflective Behaviors

Critical & Reflection Application of Medical Knowledge

- Engages in reflective practice (before, during, after engagement with patient care)
- Engages in critical reflection that considers relationship among process, outcomes and consequences.
- Incorporates past experience in present learning
- Is able to “tailor the plan to the particular patient's circumstances and preferences [which] requires higher-level interpersonal skills, including the skills needed to educate patients” (Pangaro, 2006).
- Uses knowledge of basic science to identify, justify, and prioritize possible treatments
**Educator**
- Consistently proposes reasonable options [for plan of care?] could this include assessment strategies as well?
- Incorporates patient preferences
- Masters “self-directed learning and a mastery of basics” & “insight to define important questions to research in more depth, the drive to look for hard evidence on which clinical practice can be based, and the skill to know whether the evidence will stand up ‘to scrutiny’” (Pangaro, 2006)

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**Skills & Knowledge**
- Reads deeply (Pangaro, 2006)
- Shares new learning with others (Pangaro, 2006)
- “Defining important questions to look up in more depth takes insight.” (Pangaro, 2006)
- Articulates evidence on which decisions are based
- “learning systematically from one’s own “practice” experience” (Pangaro, 2006)

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**Attitudes & Reflective Behaviors**

**Internal Motivation, Time-management & Applying Forward**
- Engages in personal planning and reflection fulfill a commitment to deeper expertise for self and colleagues and patients (Pangaro, 2006)
- Incorporates past experience in present learning
- Learns systematically from problem-solving experience and develops awareness and ability to apply it forward
- Committed to self-correction and self-improvement
- Focuses on developing plan for self-education and patient education
- Explains to peers and facilitators diagnoses as well as options for treatment or plan of care in lay and medical terms
- Demonstrates “internal motivation and time-management skills to look for rigorous evidence on which to base clinical practice, knowing whether current evidence will stand up to scrutiny,” (Pangaro, 2006).
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**Sources:**