
Direct Observation in CBME: Importance and Challenges

**Eric Holmboe
Jennifer Kogan**

*Portions of this work have been supported by the
American Board of Internal Medicine*

Direct Observation Research Team

Bill Iobst

Lisa Conforti

Siddhartha Reddy

Kate Ross

Sarah Hood

Elizabeth Bernabeo

Krista Hirshmann

Steve Durning

Lorna Lynn

Rebecca Baranowski

Thanks to

Drexel Simulation Center

Perelman School of Medicine
Simulation Center

Faculty & residents who
participated in research
studies

Video Scenario

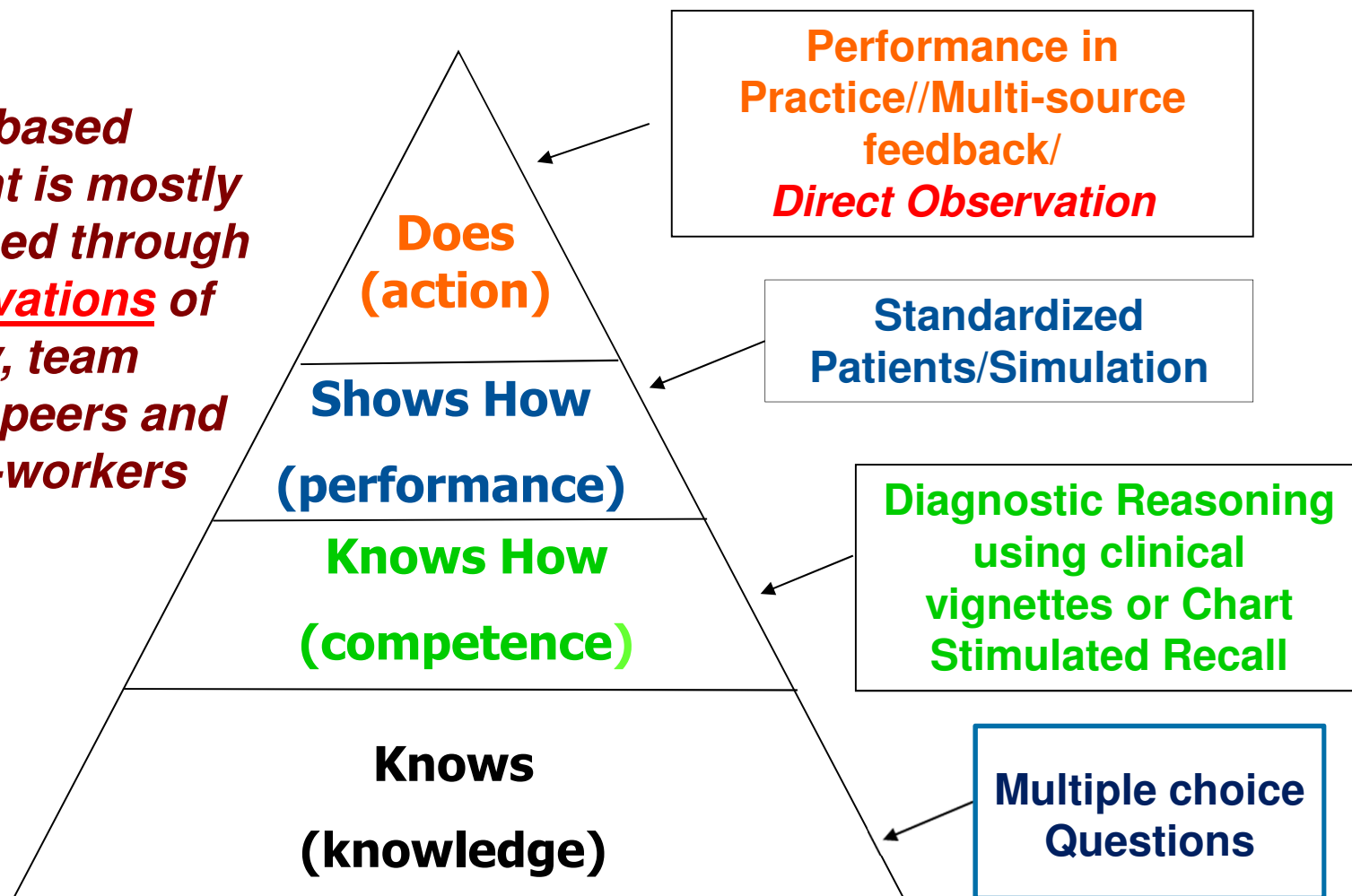
**Watch the following clinical encounter between a
internal medicine resident and patient**

**Task 1: Complete the questions on the rating form
*first***

Task 2: Provide ratings on the miniCEX form

Assessing for the Desired Outcome

Work-based assessment is mostly accomplished through the observations of faculty, team members, peers and other co-workers



Who Watched You?



Being Observed

- How did it feel?
- Was it useful?

Have you done it?

- How did it feel?
- Was it useful?

Objective 1

Theories supporting the importance of direct observation

- Development of expertise
- Role in competency based medical education
- Necessity in supervision

Clinical Skills Do Matter

- History/exam
 - Makes diagnosis > 80% of the time
 - Even in era of technology
 - Required to avoid unnecessary testing

- Patient centered communication associated with
 - Increased patient knowledge and self-efficacy
 - Increased adherence and well-being
 - Improved outcomes
 - Decreased costs

Hampton BMJ 1975

Peterson 1992

Levinson W et al. 2010; 29: 1310-18

Patient Centered Care

- Focuses on patient's needs/ concerns, not just doctors
- Explores patients' main reason for visit, concerns, need for information
- Seeks integrated understanding of patients' world including emotional needs and life issues
- Finds common ground on what the problem is and mutually agrees on management
- Enhances the continuing relationship between the patient and the doctor

Little P et al. BMJ 2001;322:468-72

State of Clinical Skills

➤ **Trainees**

- Wide variability in graduating students' clinical skills measured as MS4s or starting internship
 - History taking
 - Exam

➤ **Practicing physicians**

- Variability in physical exam skills
- Missing elements of informed decision making

Stillman. Ann Intern Med.1990; Sachdeva. Arch Surg.1995;
Lypson.Acad Med.2004; Mangione.1997; Braddock.1999

Why the Gap??

- Communication is a sophisticated procedure
 - Needs to be taught and honed throughout one's career

- Skills of patient-centered communication are rarely taught or practiced

Levinson W. BMJ Qual Saf 2011

What Do They Have in Common?



How Do People Become Experts?

- Deliberate practice
 - Working on well defined tasks
 - Informative feedback
 - Repetition
 - Self-reflection
 - Motivation
 - Endurance

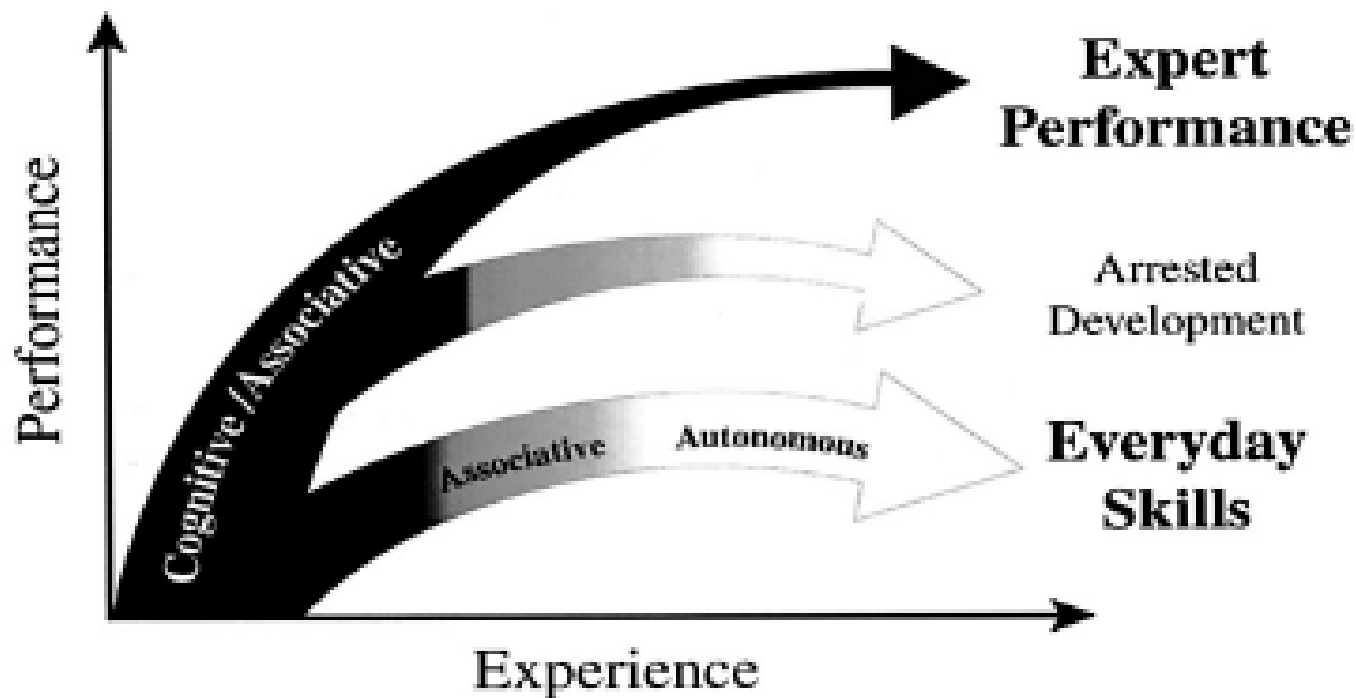
Ericsson KA et al. Psych Rev.1993.100(3):363-406.

Self Assessment

- Individually generated summary judgment of one's skill level
- Inaccurate
 - Poor performers overestimate
 - Outstanding performers underestimate

Davis D et al. JAMA 2006; 296:1094-1102
Eva KW et al. Acad Med. 2005;80:S46-54

Expert Performance vs. Everyday Skills



Ericsson KA. Acad Med. 2004

The Role of the Coach



- “They observe, they judge, and they guide”
- “That one twenty-minute discussion gave me more to consider and work on than I’d had in the past five years”
- “Medical practice is largely unseen by anyone who might raise one’s sights. I’d had no outside ears and eyes.”

Atul Gawande, New Yorker 10/3/2011

Observation and Safe Patient Care

- Importance of appropriate supervision
- Entrustment

Trainee performance* X

Appropriate level of supervision**

Must = Safe, effective patient-centered care

* a function of level of competence in context

** a function of attending competence in context

Kogan JR, Conforti LN, Iobst WF, Holmboe ES. [Reconceptualizing Variable Rater Assessments as Both an Educational and Clinical Care Problem](#). Acad Med. 2014 Mar 24. [Epub ahead of print]

Entrustment

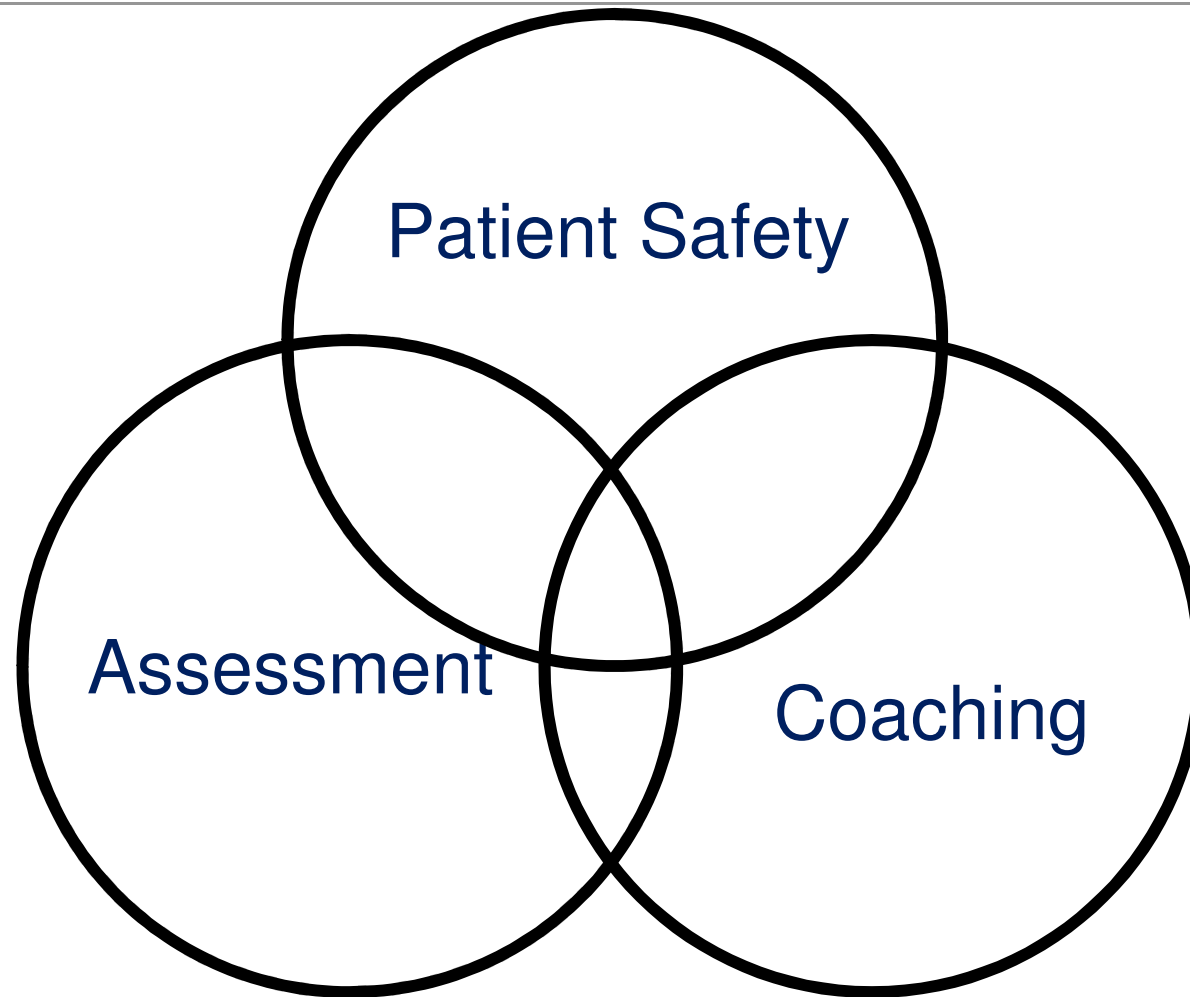
- “A practitioner has demonstrated the necessary knowledge, skills, and attitudes to be trusted to independently perform this activity.”

Ten Cate O, Scheele F. Acad Med 2007;82:542-7

Your Supervision

- How do you usually supervise?
 - When do you supervise more closely?
 - How do you change your supervision to ensure patients get safe, effective, patient-centered care?
 - What did you learn observing that will change how you supervise going forward?
-
- **REMEMBER: SUPERVISION ALSO FOR FEEDBACK**

Direct Observation - Purposes



Objective 2

**To recognize factors that impact
the quality and accuracy
of rater assessments**

Problems with Performance Assessment

- Poor accuracy
- Focus on different aspects of clinical performance
- Differing expectations about levels of acceptable clinical performance
- Rating errors
 - Halo effect/ “Horn” effect
 - Leniency/stringency effect
 - Central tendency

Factors That May Impact Ratings

- **Minimal impact of demographics**
 - Age, gender, clinical and teaching experience
- **Faculty's own clinical skills may matter**
 - Faculty with higher history and patient satisfaction performance scores provide more stringent ratings.

Kogan JR. et al. Acad Med. 2010;85(10 Suppl):S25-8

Factors Influencing Faculty Ratings

- **Different frameworks for judgments/ratings**
 - Self-as-reference (predominant)
 - Trainee level
 - Absolute standard
 - Practicing physicians

Kogan JR, et al. Med Educ. 2011. 45(10):1048-60
Yeates P et al. Adv in Health Sci Educ. In Press
Govaerts Adv Health Sci Educ. 2007.12(2):239-60.

Faculty OSCE Clinical Skills

<u>Competency</u>	<u>Mean (SD)</u>	<u>Range</u>	<u>Generalizability</u>
History Taking	65.5% (9.6%)	34% - 79%	0.80
Physical Exam	78.9% (13.6%)	36% - 100%	0.52
Counseling	77.1% (7.8%)	60% - 93%	0.33
Patient Satisfaction ¹	5.62 (0.48)	4.43 – 6.63	0.60

¹On 7-point scale

N=44

Kogan JR. et al. Acad Med. 2010;85(10 Suppl):S25-8

Other Factors Influencing Ratings

- Contextual factors
 - Encounter complexity
 - Resident characteristics
 - Institutional culture

- Emotions surrounding constructive feedback

- Inference

Types of Inference about Residents

➤ **Skills**

- Knowledge
- Competence
- Work-ethic

➤ **Prior experiences**

- Familiarity with scenario

➤ **Feelings**

- Comfort
- Confidence
- Intentions
- Ownership

➤ **Personality**

➤ **Culture**

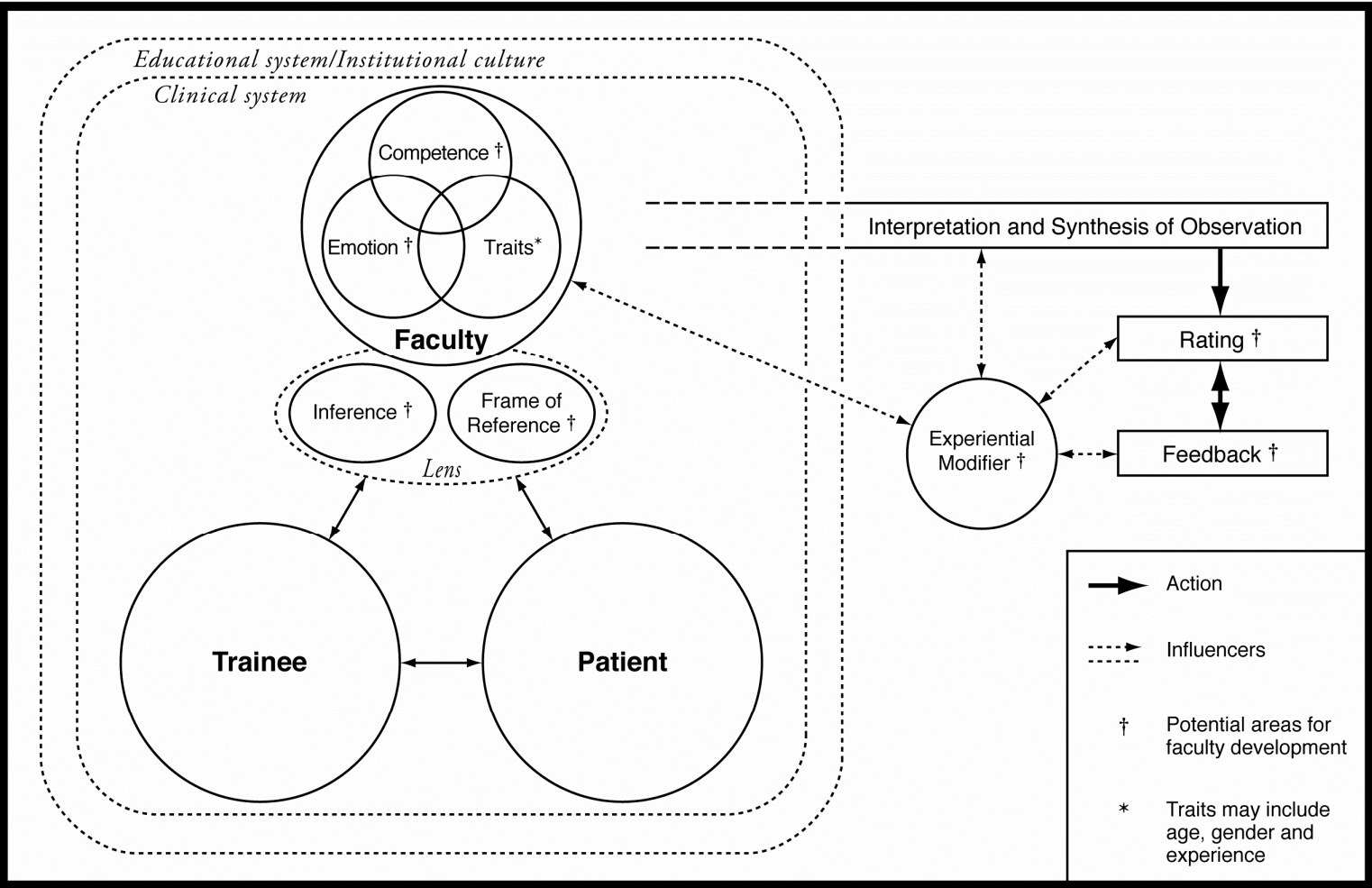
High Level Inference



The Problem with Inference

- Inferences are not recognized
- Inferences are rarely validated for accuracy
- Inferences can be wrong

Direct Observation: A Conceptual Model



Kogan JR, et al. Med Educ. 2011

Objective 3

Understand faculty development approaches to improve assessments raters make

- Performance dimension training
- Synthesis to final judgment

Observations and Ratings



Performance Dimension Training



Performance Dimension Training

Identify specific dimensions of a competency
in behavioral terms



Discuss the criteria and qualifications required for
each dimension of that competency



Develop a **SHARED MENTAL MODEL**



Achieve evidence-based standardization
and calibration

Holmboe ES ABIM 2010

Performance Dimension Training

- Identify important components of information transfer (counseling about assessment and plan) and starting a chronic medication for a young child
 - What should be discussed or done?
 - How should it be discussed or done?
- Make certain that components are described behaviorally

Performance Dimension Exercise

- Review frameworks for information transfer (counseling about assessment and plan/starting a medication) for any additions
 - SEGUE
Makoul GT. 1993/1999
 - STRUCTURED CLINICAL OBSERVATION
Lane JL, Gottlieb RP. Pediatrics. 2000;105:973-7.
 - Informed Decision Making
Braddock CH, Edwards KA, Hasenberg NM, Laidley TL, Levinson W. JAMA 1999; 282:2313-2320

Apply Your Framework to Scenario

- What did the resident do well?

- What are the errors/deficiencies?

Monitoring for Inference

➤ **TIP 1: Ask**

- Is this the "right" conclusion?
- Why am I making these interpretations?
- Is this really based on all the facts?

➤ **TIP 2: Reflect on your reasoning**

- Do you tend to make assumptions too easily?
- Do you tend to select only part of the data?

Synthesis to Judgment

- Goal: Improve the quality and accuracy of the educational “judgment” using a compare and contrast process

Steps: Synthesis to Judgment

- Review vignettes of different performance levels
- Judge using behaviorally-based frameworks (e.g. evidence based frame of reference)
- Trainer provides feedback on assessment accuracy
- Discuss discrepancies between scripted performance and participants' assessments

What Was the Basis of Your Judgment?

- Why did you give this rating?
- What influenced your rating?

Group Discussion

- What are the elements?
- Apply to scenario
- What are the implications of this approach?

Going Forward

5

=

Satisfactory

=

Competent

=

Safe, Effective,
People Centered Care

Questions

