A Novel Method of Evaluating Competency in Information Literacy

Drew Keister MD
Lehigh Valley Health Network, Drew_M.Keister@lvhn.org

Julie Dostal MD
Lehigh Valley Health Network, Julie.Dostal@lvhn.org

Elissa Foster PhD
Lehigh Valley Health Network, Elissa.Foster@lvhn.org

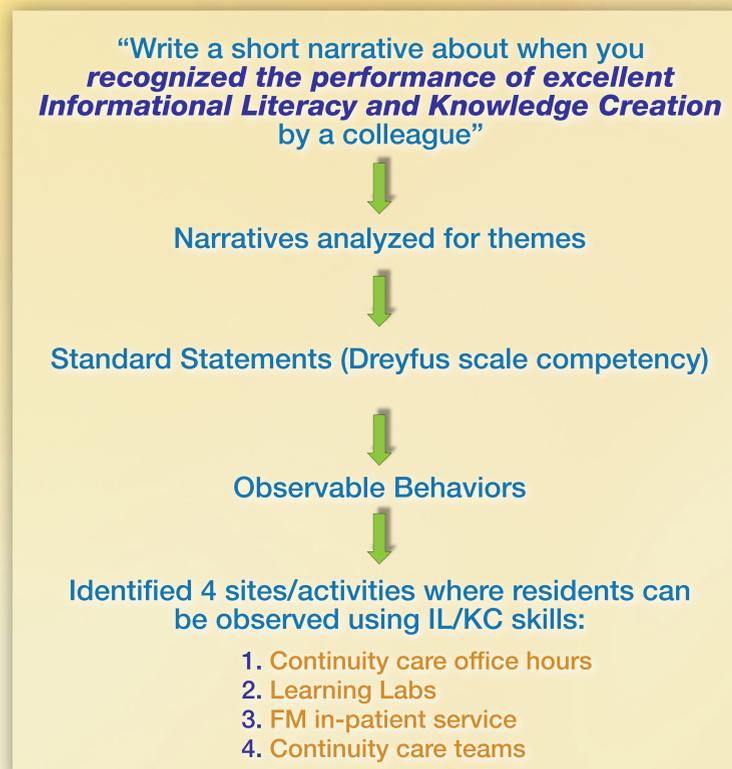# A Novel Method of Evaluating Competency in Information Literacy

Drew Keister, MD; Julie Dostal, MD; Elissa Foster, PhD

Lehigh Valley Health Network, Allentown, Pennsylvania

The Problem:

"There is little evidence about the effectiveness of different methods (of teaching information literacy), and this may be related to the lack of a conceptual framework within which to structure evaluation strategies." Straus 2004

The Process

- Sought to use direct observation of resident behavior as central to the assessment of this competency (See study by McCord 2007)

"Write a short narrative about when you **recognized the performance of excellent Informational Literacy and Knowledge Creation** by a colleague"

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Narratives analyzed for themes

⬇

Standard Statements (Dreyfus scale competency)

⬇

Observable Behaviors

⬇

Identified 4 sites/activities where residents can be observed using IL/KC skills:

1. Continuity care office hours
2. Learning Labs
3. FM in-patient service
4. Continuity care teams

Sample Questions - Continuity Care:

Response Options:

- ☐ Routinely observed
- ☐ Observed
- ☐ Not Observed
- ☐ N/A this session

- Formulates a clear, concise clinical question related to patients seen in clinical care (e.g. PICO question)
- Uses or asks preceptor for help with evidence at point of care
- Compares and contrasts evidence with their personal clinical observations/experiences and integrates both features into clinical decision making

Sample Questions - In-patient:

Check the behaviors that you observed the resident perform during this week:

- ☐ Searches an evidence-based resource to find an answer to a focused clinical question
- ☐ Interprets information from evidence-based resources within the context of the patient's situation
- ☐ Assists others with the proper utilization of EBM

Competency Correlation:

Standard	Observable Behaviors
Novice: **N1>** Develops skills in selective data acquisition **N2>** Knows how to formulate a focused clinical question and draws from appropriate resources for solution.	N1> Uses or asks preceptor for help with evidence at point of care (PBLI, PC) N1> Searches an evidence-based resource to find an answer to a focused clinical question (PBLI) N2> Formulates clear, concise clinical question related to patients seen in clinical care (e.g. PICO question) (PBLI)
Advanced Beginner:	This level not represented by sample questions
Competent: **C1>** Recognizes EBM triad as the integration of physician experience and patient experience of condition along with conclusions drawn from clinical research.	C1> > Interprets information from evidence-based resources within the context of an individual patient (PC, PBLI) C1> Compares and contrasts evidence with their personal clinical observations/experiences and integrates both features into clinical decision making (PBLI
Proficient: **P1>** Integrates the three circles of EBM triad into all aspects of patient care.	P1> Assists others with the proper utilization of EBM (PBLI, ICS)

"Radar Graph"

p^4
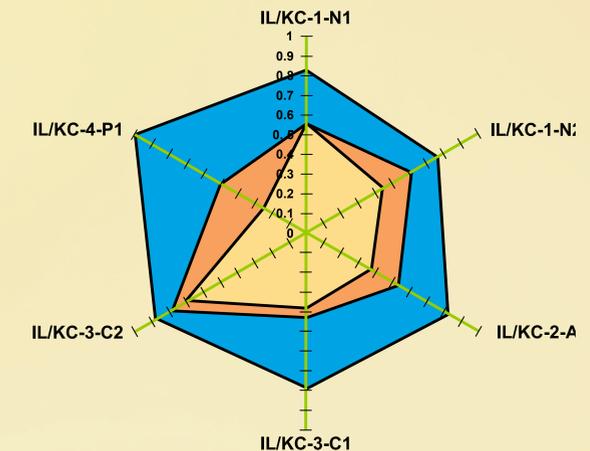
Successes

- Translates observed behaviors to Dreyfus competency levels
  - Translates further into ACGME competencies
- Eliminates "Lake Wobegone Effect," where all residents are above average
- Data easily interpretable via radar graph

Challenges

- Currently unclear whether observable behaviors accurately reflect their associated competency level
- Evaluator training required

Application

- Process of translating competency to observable behaviors is reproducible
- IL/KC assessment integrated into broader summative assessment for the residency