Competency Based Health Professions Education 101

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PATIENT CENTERED · RESPECT · INTEGRITY · EXCELLENCE · OWNERSHIP · INNOVATION

- **All planners, faculty, and others in control of the content of this educational activity have no relevant financial relationships with ineligible entities (i.e., commercial organizations).**

Act with kindness and compassion.

Be an active listener.

Be a role model.

Set high standards.

Take responsibility.

Embrace change.

Maine Medical Center
MaineHealth

2

Ground rules

- **Feel free to ask any questions or make a comment anytime. Plenty of Q &A time.**

- **For virtual colleagues, please use the chat.**

- **Everyone take out a piece of paper, or your phone or laptop to jot some notes.**

- **…and be honest about yourself!**

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Learning objectives

1. **Define common terminology related to competency-based education.**

2. **Compare examples of competencies in multiple health professions.**

3. **Describe use of competencies in the progression of learners.**

4. **Propose methods to measure competency.**

Thanks to Dr. Kalli Varaklis for many of the slides to follow.

Competency-Based Education

Starts with the desired end-product

An <u>outcomes-based approach</u> to the design implementation, assessment and evaluation of a health professions education program using an <u>organizing framework of competencies.</u>

Frank, et al. The International CBME Collaborators, 2009

Competency

- **An observable ability of a health professional, integrating multiple components such as knowledge, skills, values and attitudes**

    - Removing stitches

    - Inserting an IV

    - Admitting a child with respiratory illness

Competent

- **An individual who <u>possesses the required abilities</u> *in all domains* in a certain context at a defined stage of health professions education or practice**

  - A clinician is competent in admitting a healthy child with asthma

Competence

- **Entails more than the possession of knowledge, skills and attitudes; it requires the application of <u>these abilities</u> in the clinical environment to achieve optimal results**

    - A clinician can admit children with simple and complex respiratory conditions

ten Cate, Med Teach, 2010

Applied to our Learners?

- **<u>Competency</u>** – the thing(s) they need to do

- **<u>Competent</u>** – can do all of the things

- **<u>Competence</u>** – does all of the things consistently, adapting to contextual and situational needs

Public safety (core competency for living in Maine/NH)

Driving around town (sub-competency)

Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of all of the automobile switches. Manages to pass the DMV examination. Demonstrates ability to change a flat tire.	Demonstrates ability to identify driving mistakes and correct next time. Applies destination desires (without GPS) and arrives at correct location. Others are comfortable _and_ actually willing to be in the same vehicle as you.	Analyzes changing traffic situations with ease (e.g., summer road construction in Maine). Adapts to changing traffic conditions appropriately (e.g., 1 foot snow storm) Demonstrates ability to drive seamlessly between stick-shift vs automatic vehicles.	Demonstrates ability to navigate traffic circles with eyes closed. Seeks feedback openly about driving habits from spouses, partners or close friends. Parallel parks forward and backwards _without_ the use of automatic system.	Teaches children, partners, or family members to learn how to drive _without_ any yelling involved. Serves as consultant to DMV. Receives local town award for "safest driver" of the year.

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Examples of health professions competencies

- **1999 ACGME Outcomes Project: 6 core competencies (Patient Care, Medical Knowledge, Communication, Professionalism, Practice-based Improvement, System-based Practice)** **same for ABMS**

- **American College of Clinical Pharmacy: (6) Direct Patient Care, Pharmacotherapy Knowledge, Systems-based Practice and Population Health, Communication, Professionalism, Continuing Professional Development**

- **Clinician Educator Milestones** **– hot off the press!**

Nursing CBE: What it is and what it is not

- **What it is:**
  - a demonstration that knowledge, attitudes, motivations, self-perceptions, and expected skills have been *learned.*

- **What it is not:**

  - checklist of tasks

  - isolated learning experience devoid of context

  - LMS module

  - objective exam

American Association of Colleges of Nursing (2023)

Donna Wright Competency Model

- **4 questions to determine competency needs**

    - **What's new?**

    - **What's changing?**

    - **What's high-risk?**

    - **What's problematic?**

- **3 competency categories**

    - **Core**

    - **Cross-functional**

    - **Functional (technical)**

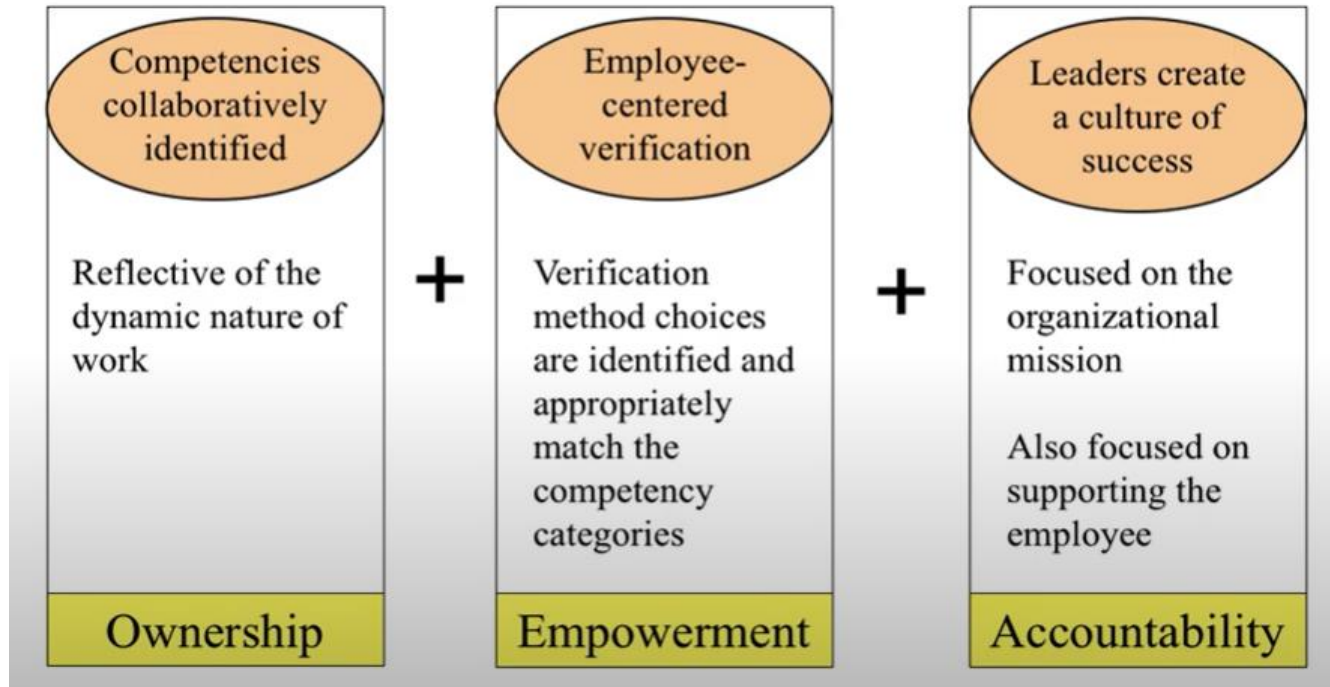Act with kindness and compassion. Be an active listener. Be a role model. Set high standards. Take responsibility. Embrace change.

Wright's Competency Model

Elements of success

Competencies collaboratively identified	+	Employee-centered verification	+	Leaders create a culture of success
Reflective of the dynamic nature of work		Verification method choices are identified and appropriately match the competency categories		Focused on the organizational mission Also focused on supporting the employee
Ownership		**Empowerment**		**Accountability**

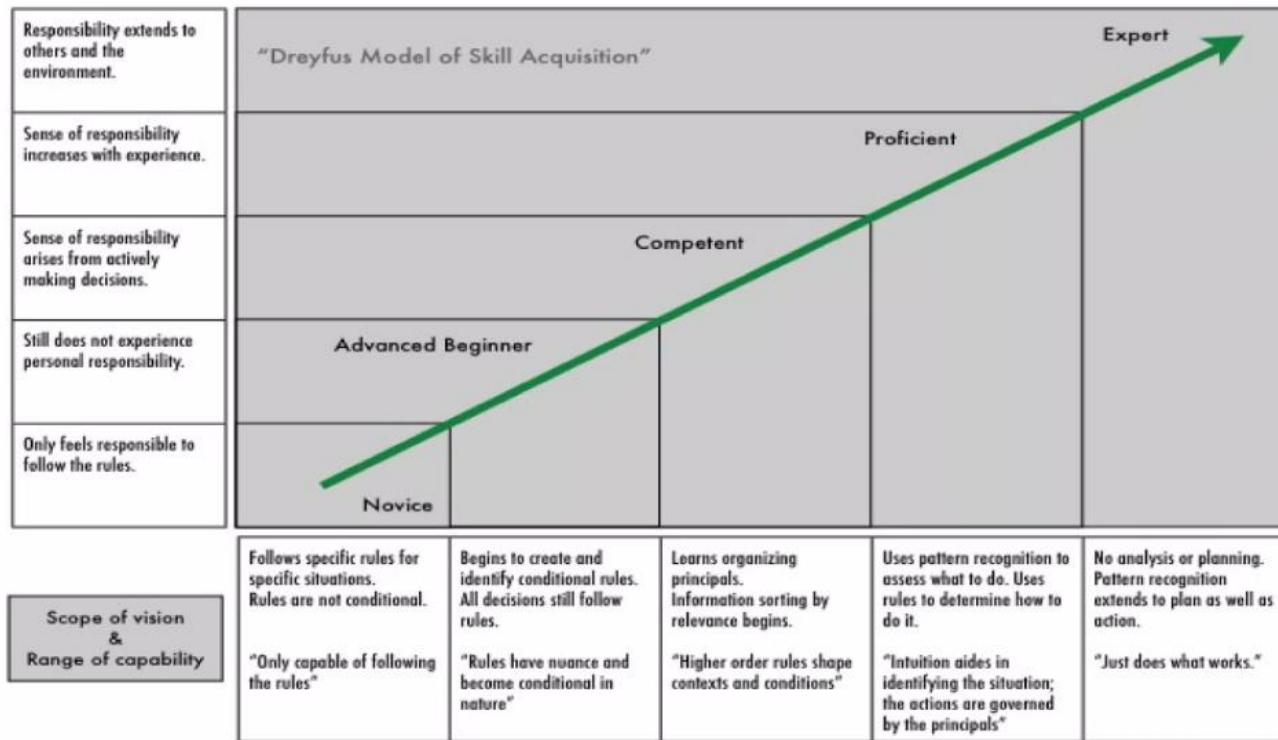Act with kindness and compassion.   Be an active listener.   Be a role model.   Set high standards.   Take responsibility.   Embrace change.

Using competencies to reflect learner progression

- Benner's Novice to Expert Theory (Dreyfus model of skill acquisition

Responsibility extends to others and the environment.	"Dreyfus Model of Skill Acquisition"				Expert
Sense of responsibility increases with experience.				Proficient	
Sense of responsibility arises from actively making decisions.			Competent		
Still does not experience personal responsibility.	Advanced Beginner				
Only feels responsible to follow the rules.		Novice			
Scope of vision & Range of capability	Follows specific rules for specific situations. Rules are not conditional. "Only capable of following the rules"	Begins to create and identify conditional rules. All decisions still follow rules. "Rules have nuance and become conditional in nature"	Learns organizing principals. Information sorting by relevance begins. "Higher order rules shape contexts and conditions"	Uses pattern recognition to assess what to do. Uses rules to determine how to do it. "Intuition aides in identifying the situation; the actions are governed by the principals"	No analysis or planning. Pattern recognition extends to plan as well as action. "Just does what works."

Adiong, M. (n.d.) Patricia Benner Novice-Expert Model

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What are Milestones?

- **General Definition: Skill and knowledge-based development that commonly occur by a specific time**

  - **ie: babies should be sitting by about 9 months**

  - **ie: interns should be able to tie knots by December**

- **ACGME Milestone definition: Specific behaviors, attributes, or outcomes in the six general competency domains to be demonstrated by residents during residency**

  - **Specialty specific**

  - **Organized in the context of the 6 core competencies**

Milestones

- Observable developmental steps moving from Novice to Expert/Master (Dreyfus)
    - Describe a trajectory of development
    - Clinical medicine, driving
- Articulate shared understanding of expectations across a profssion (same on East and West coasts)
- Set aspirational goals of excellence

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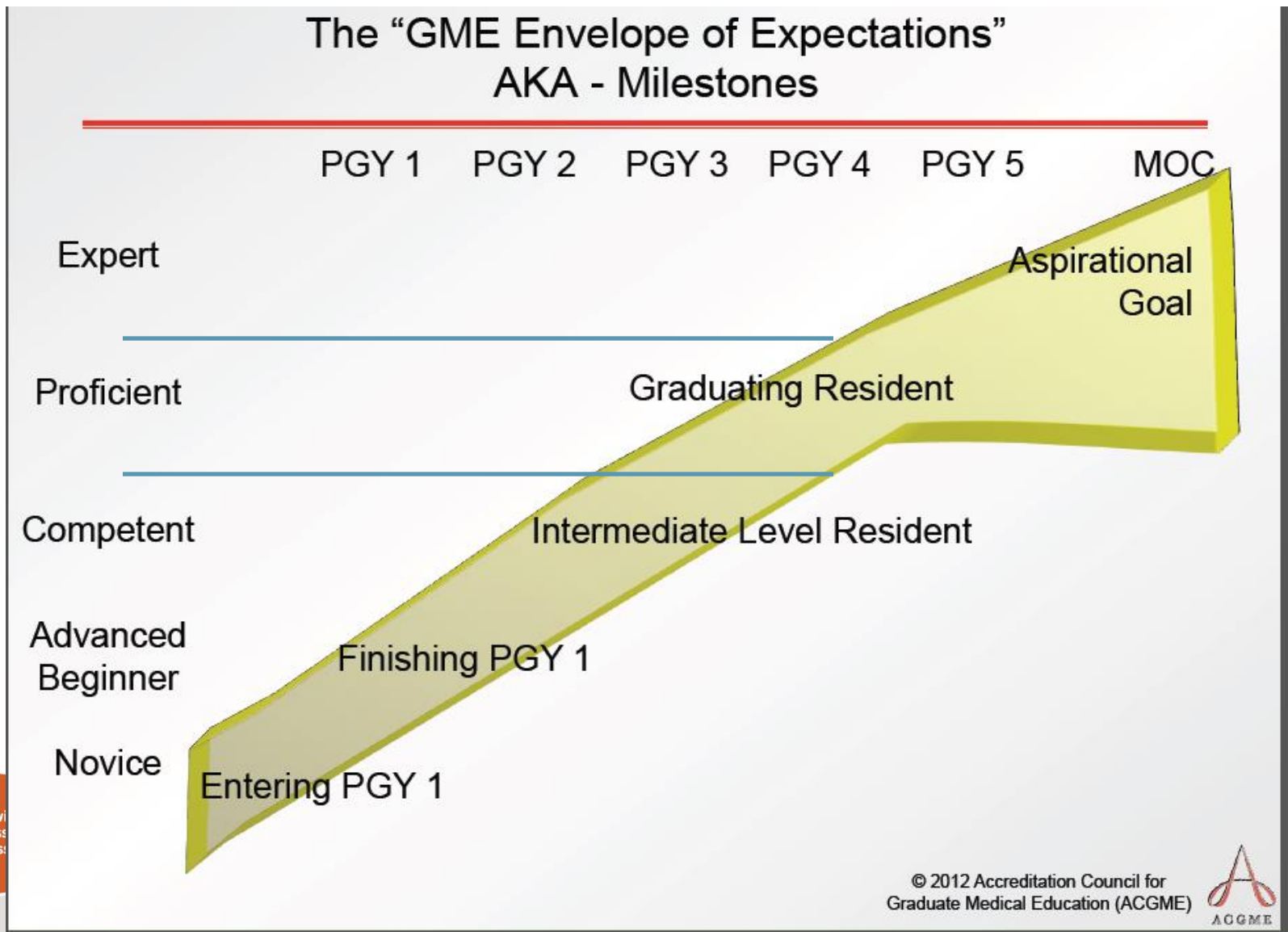| Level 1	Level 2	Level 3	Level 4	Level 5
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Milestones – Dreyfus model

The "GME Envelope of Expectations" AKA - Milestones

© 2012 Accreditation Council for Graduate Medical Education (ACGME)

Benefits of Milestones?

- Standardize expected competencies at graduation

- Directs evaluation development

- Provides explicit expectation for learners

    - As well as aspirational goals!

- **Earlier identification of under-performers**

- May inform accreditation, credentialing, accountability, liability

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Benefits of Milestones?

- Guide curriculum development
  - Programs can analyze evaluation data and make changes to the educational structure accordingly
    - ie: if none of the learners are meeting XYZ Milestone, then the structure of the educational program needs to change to provide a better context for Milestone achievement
  - Better evaluations, faculty development, remediation, teaching, etc

Challenges of Milestones?

- Deconstruction of a professional activity into ~200+ individual competencies

- Potential overuse/abuse for credentialing, licensing

- Still have observer, rater and assessment committee interpretation of what "competency" is

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Questions? Thoughts?

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How do we measure competency?

Act with kindness and compassion.

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Be a role model.

Set high standards.

Take responsibility.

Embrace change.

My first bowl!

Act with kindness and compassion.

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Am I a competent endocrinologist?... Are you competent in your respective profession?

How can we measure competency?

Dana- 2 minute buzz group

Virtual – write some thoughts down, use Chat

Competency based evaluations

Competency-based evaluations

Current Evaluation Focus

Evaluation
Synthesis
Analysis
Application
Understanding
Knowledge
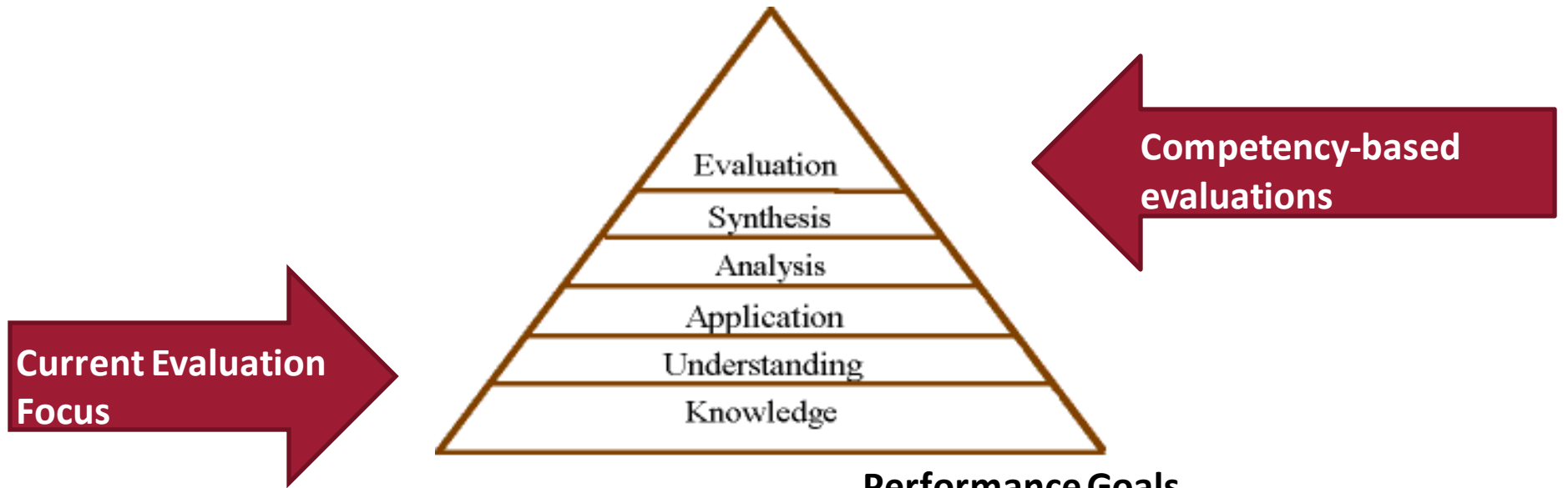
Performance Goals
• Evaluation - judging outcomes, analyzing
• Synthesis - putting things together in another way
• Analysis - taking apart the known
• Application - making use of the knowledge
• Understanding - Recall
• Knowledge - finding out

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Benjamin Bloom, 1956

Best Practice for Competency-based Evaluations

- **Be very specific about the outcome to be evaluated**

    - **"performs proper insertion of endoscopic instruments"**

    - **"Leads high quality transitions of care interactions"**

    - **USE MILESTONES as a GUIDE**

- **Evaluate the desired outcome in more than one way**

    - **Different types of evaluations**

    - **Different times in training**

    - **By different evaluators**

    - **Direct observation**

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Best Practice for Competency-based Evaluations

- **Consider a binary or near-binary rating system**

    - **Either they are performing competently or not….**

- **"performs proper insertion of XYZ instrument"**

    - **Yes, almost always**

    - **Sometimes**

    - **No**

    - **No opportunity to observe/evaluate**

    - **(As opposed to Likert scale)**

Best Practice for Competency-based Evaluations

- **Goal to have 6-8 different evaluators assess each competency**

  - **Ideally more than one time**

  - **In more than one way/setting**

- **Increased number of evaluations increase reliability and validity of evaluations**

- **Communicate with your learners!!**

  - **Entire evaluation system**

  - **Make them stakeholders**

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Best Practice for Competency-based Evaluations

- **Make sure that all of your Milestone competencies are being evaluated *somewhere***

- Example: "Performs proper insertion of XYZ instrument" is evaluated in 4 different evaluations:

  - OR evaluation

  - Self-evaluation

  - Scarborough Surgical Center rotation evaluation

  - Simulation evaluations

Create a master spreadsheet

Compassion, Integrity, and Respect for Others		JR Clinic	SR Clinic	JR GYN	Onc	SR GYN	Urogyn	Repro	Patient	Sr Peer	Jr Peer	OR	MFM	Sr OB	Jr OB	Intern NF	PGY2 NF	PGY3 NF	Senior NI	EBM	US	Nursing	Admin	M&Ms	QIQA	elearn	CREOG	OSCE
1	Understands the importance of compassion, integrity, and respect for others																									1		
1	Demonstrates sensitivity and responsiveness to patients	1													1	1						1						1
2	Consistently shows compassion, integrity and respect in typical situations with patients, peers, and members of the health care team	1		1					1		1				1		1					1						1
2	Consistently demonstrates sensitivity and responsiveness to diversity of patients' ages, cultures, races, religion, abilities or sexual orientations	1		1				1			1				1		1					1						
2	Accepts constructive feedback to improve his or her ability to demonstrate compassion, integrity and respect for others			1				1			1				1								1					
2	Consistently shows compassion, integrity and respect for patients who decline medical advice or request un-indicated tests or treatments, for patients who have psychiatric comorbidities, and for team members in circumstances of conflict or high stress	1		1							1				1			1					1					1
3	Modifies one's own behavior based on feedback to improve his or her ability to demonstrate compassion, integrity, and respect for others		1			1		1						1	1								1					
4	Consistently model compassion, integrity and respect for others		1		1	1				1				1					1									
4	Coaches others to improve compassion, integrity and respect for patients		1	1						1				1														
5	Assumes long term or leadership role in community outreach activities to improve the health of vulnerable populations																						1					

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Consider faculty evaluative effort……

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Clinician Educator Milestones

- **Developed by ACGME, in partnership with ACCME, AACOM and AAMC**

  - **Provide a developmental trajectory of knowledge, skills, and behaviors**

  - **Serve as a foundation for lifelong learners**

  - **Can serve as a scaffold for improvement for faculty members and those responsible for faculty development efforts at institutions**

[New Clinician Educator Milestones Provide Pathways for Professional Development and Framework for Assessment (acgme.org)](acgme.org)

Clinician Educator Milestones

- **Benefit clinician educators, scholars, learners, education leaders**

- **Have 20 sub-competencies, in 5 different areas for professional development**

  - Universal Pillars for All Clinician Educators

  - Administration

  - Diversity, Equity, and Inclusion in the Learning Environment

  - Educational Theory and Practice

  - Well-Being

- **NOT mandated - intended for individual use and to inform need-based faculty development programs**

Example

Universal Pillar 1: Reflective Practice and Commitment to Personal Growth				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Accepts responsibility for personal and professional development by establishing goals	Demonstrates openness to performance data (feedback from learners and other input) to inform goals	Seeks performance data episodically, with adaptability and humility	Consistently solicits specific performance data, with adaptability and humility, including from learners, that leads to behavior change	Role models consistently seeking performance data with adaptability and humility and making positive behavior changes
Identifies the factors that contribute to gap(s) between expectations and actual performance	Analyzes and reflects on the factors that contribute to gap(s) between expectations and actual performance	Analyzes, reflects on, and institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance	Challenges personal assumptions and considers alternatives in narrowing the gap(s) between expectations and actual performance	Coaches others on reflective practice
Actively seeks opportunities to improve	Designs and implements a learning plan, with prompting	Independently creates and implements a learning plan	Uses performance data to measure the effectiveness of the learning plan and, when necessary, improves it	Facilitates the design and implementation of learning plans for others
☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐

Comments:

Not Yet Completed Level 1   ☐

Commitment to change

- Take a minute to write down on paper, or send yourself a future email 3 months from now

- What to you commit to doing over the next 3 months regarding competency-based education in your profession?

Questions? Thoughts?
Thank you!

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