The State of Milestones

An Update

The Ultimate Goal of CBME

Quadruple Aim

High Functioning CLE
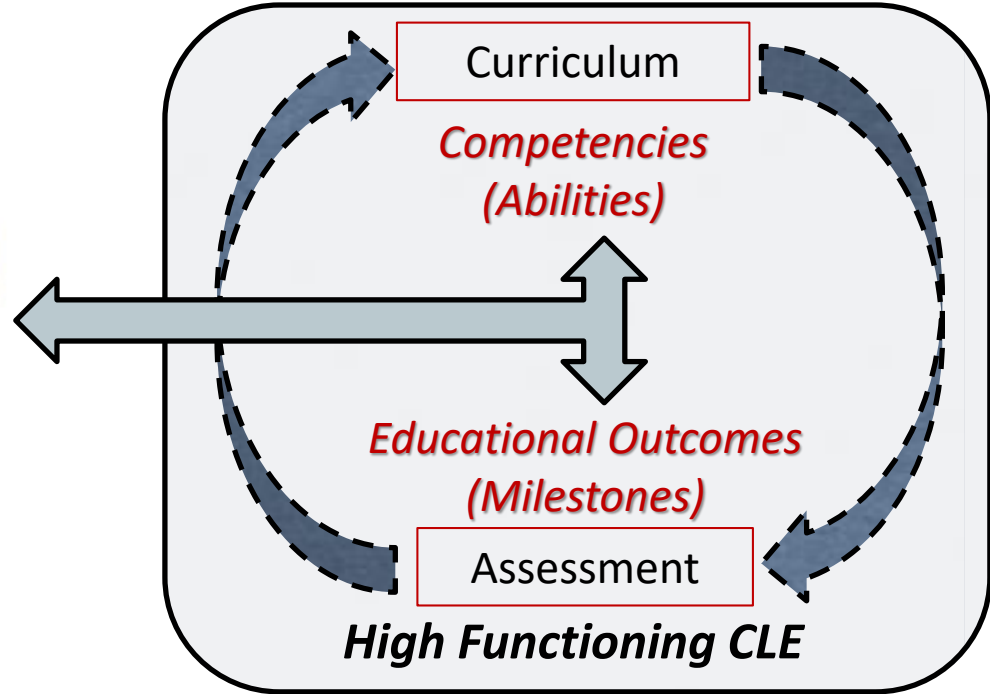
A Brief Look Back…

U.S. Competency Journey: Phase 1

| Dates	Event/Change
1997	ACGME begins work on developing competencies
February, 1999	Six general competency framework approved
2001	Launch of Outcomes Project

Outcome Project 2001

General Competencies

Patient Care and Procedural Skills

- Implementation, however, of an Outcomes-based approach was hard and confusing
- Educators struggled to understand how competencies translated into curriculum and assessments.
- Educators and faculty lacked a shared mental model

PBL & I

Systems-based Practice

Milestones

- By definition a milestone is simply a significant point in development.

- Competencies can be described in terms of stages, or *narrative milestones*

- Milestones should enable the learner and training program to know an individual's trajectory of professional development.
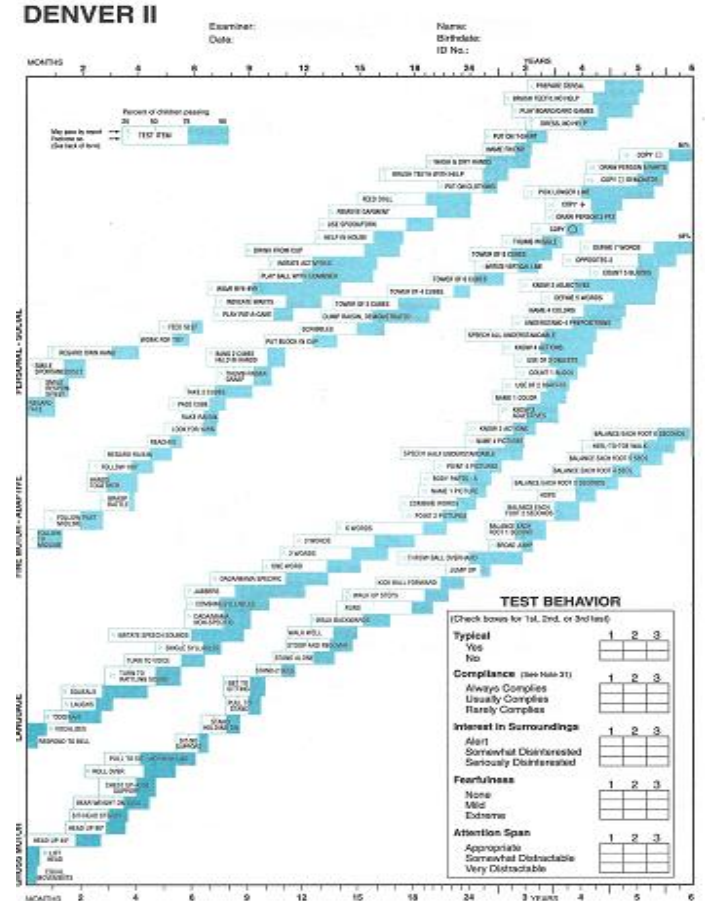
Key Educational Science Informing Milestones

- Stage models of development (e.g. Dreyfus)

- Deliberate practice

- Learning curves

- Mastery-based learning

- Competency-based education

CBME: An Evidenced Informed Approach

| Core Components				
Competencies required for practice are <u>clearly articulated.</u>	Competencies are <u>arranged</u> progressively.	Learning experiences <u>facilitate</u> progressive development.	Teaching practices <u>promote</u> the progressive development.	Assessment practices <u>support & document</u> the progressive development.
Key Educational Frameworks, Models and Theories				
- Social Accountability - Outcome-based Learning - Backwards Design	- Novice to Expert - EPAs - Surface & Deep Approaches to Learning	- Situated Learning - Deliberate Practice - Self-regulated Learning	- Zone of Proximal Dev't - Constructive Friction - Learner Centered - Cognitive Apprenticeship	- Programmatic Assessment - Formative Assessment

Van Melle E. Queens University
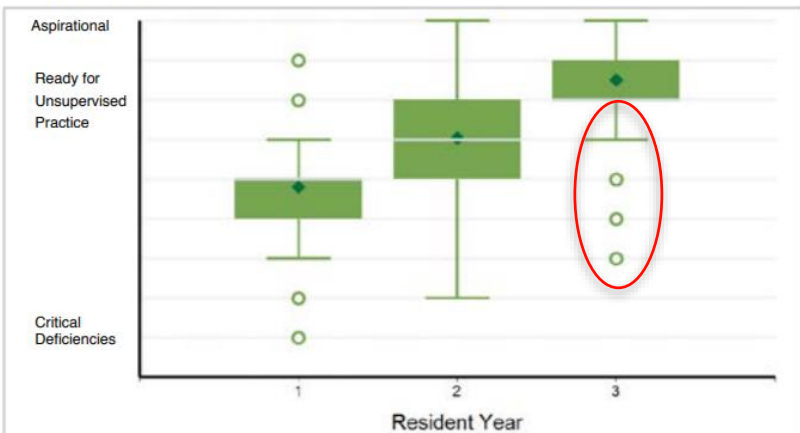
Learning Curves and Developmental Models
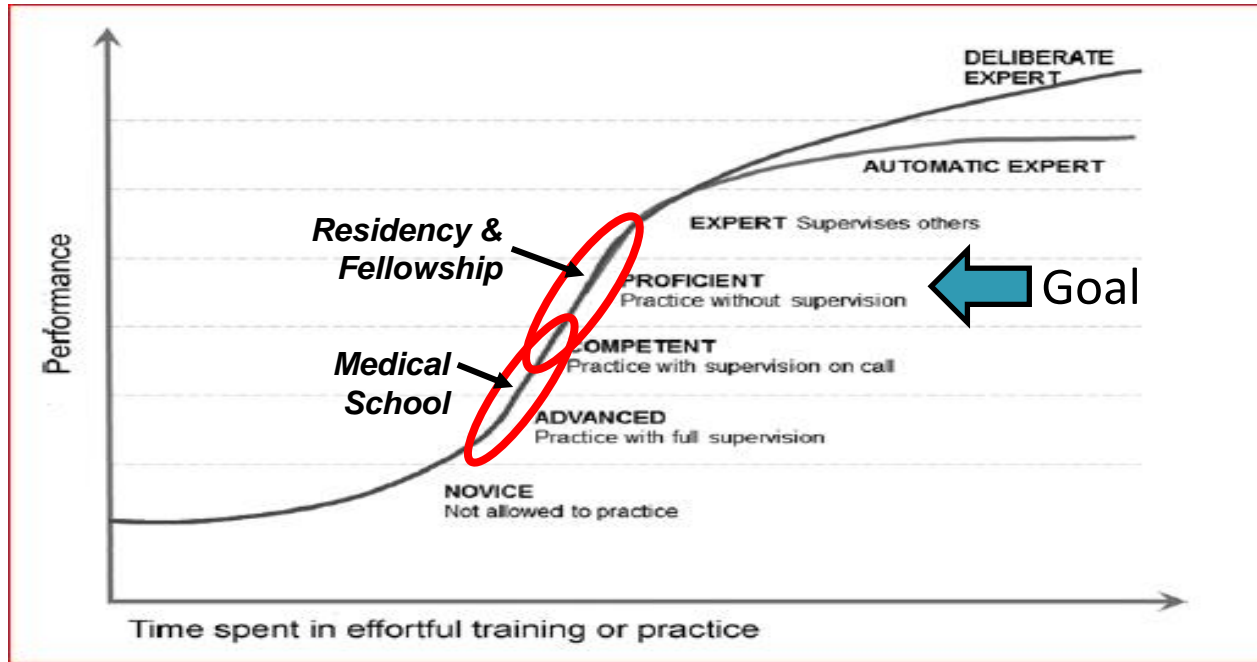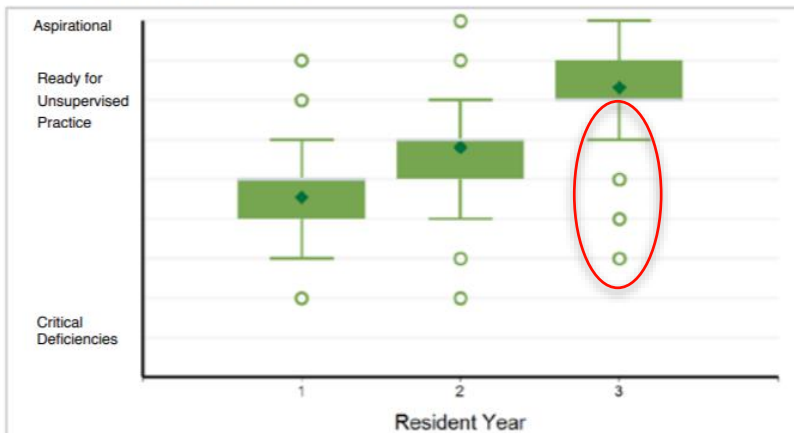
Current Experience

Cardiovascular Data

3. Patient Care - Manages patients with progressive responsibility and independence. (PC3)

Note: 1 of 2,917 residents have a status of "Not Yet Assessable" and are not included in the analysis.

4. Patient Care - Demonstrates skill in performing and interpreting invasive procedures. (PC4a)

Note: 9 of 2,917 residents have a status of "Not Yet Assessable" and are not included in the analysis.

Cardiovascular Data

21. Professionalism - Exhibits integrity and ethical behavior in professional conduct. (PROF4)

Note: 1 of 2,917 residents have a status of "Not Yet Assessable" and are not included in the analysis.
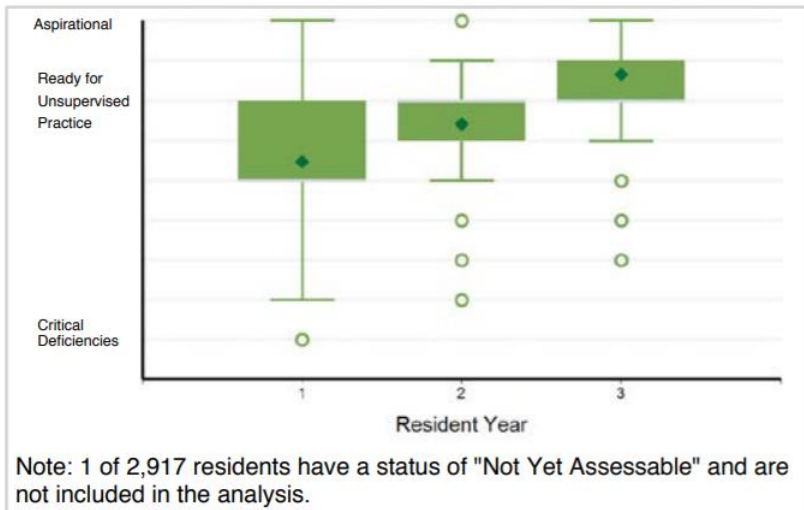
22. Interpersonal and Communication Skills - Communicates effectively with patients and caregivers. (ICS1)

Note: 1 of 2,917 residents have a status of "Not Yet Assessable" and are not included in the analysis.

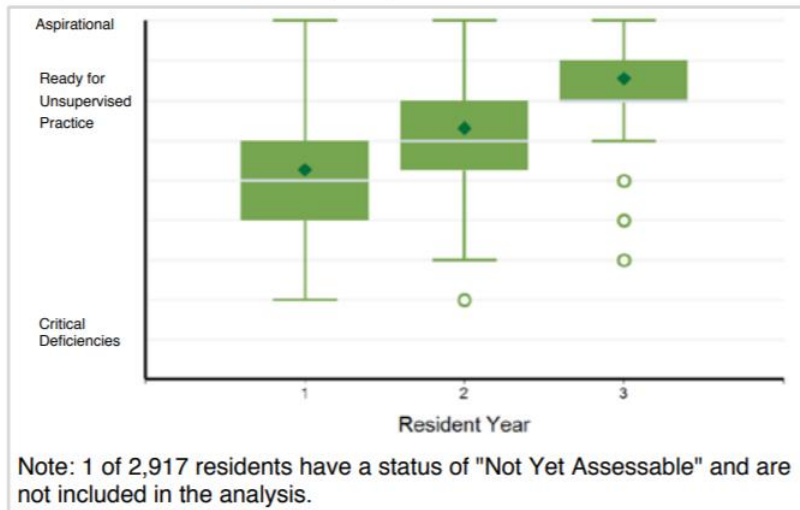# Resident-Level Trajectories of Milestones Ratings
PC03: Manages patients with progressive responsibility and independence

PC03
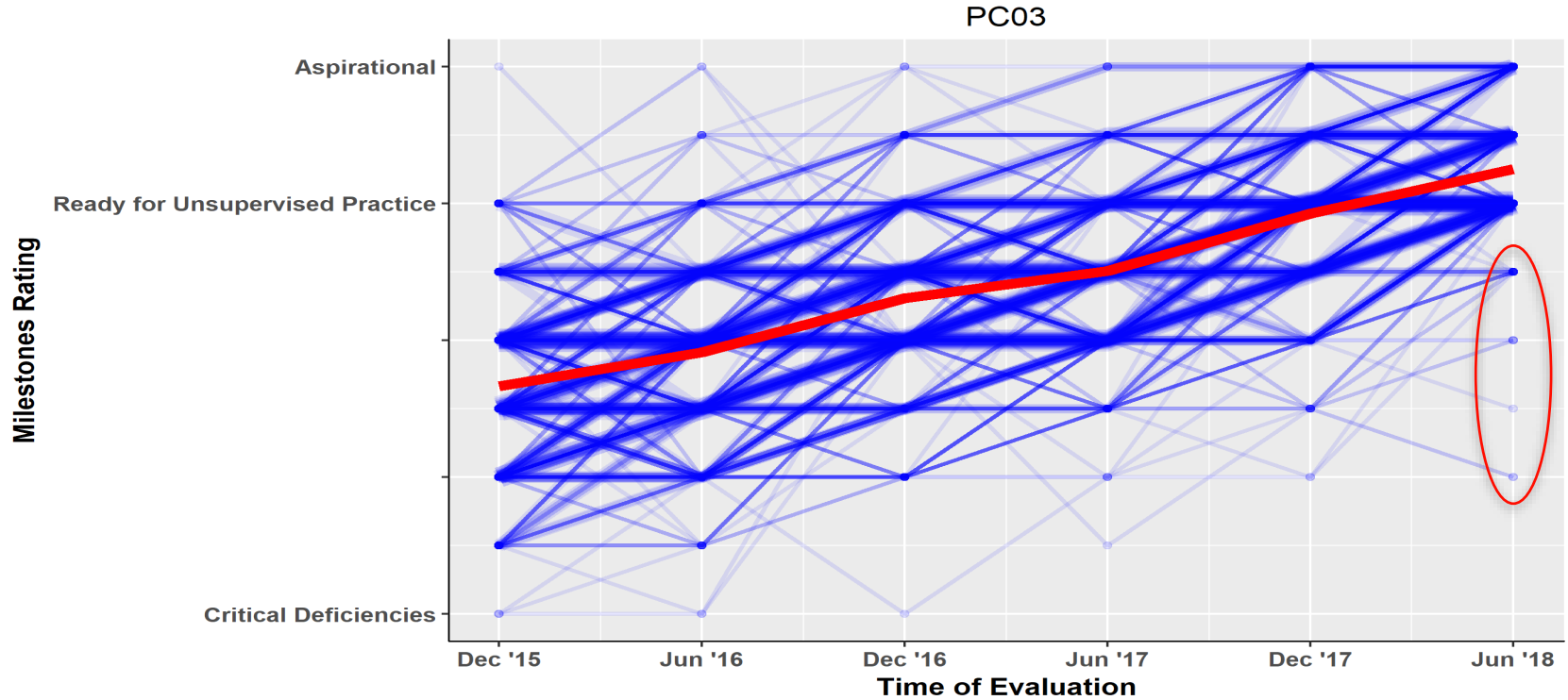
Results – EM Wound Management

Milestones trajectories for residents who attained Level 4 and those who did not

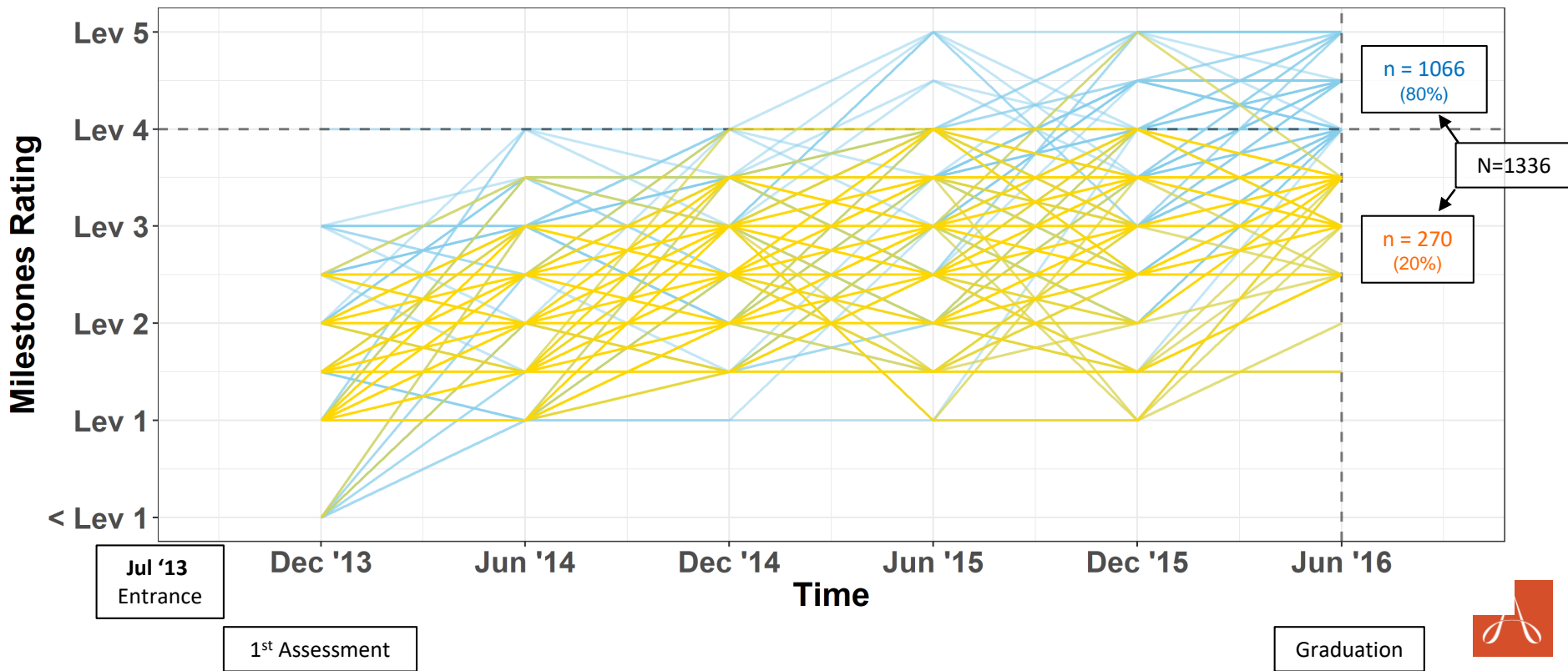# PPV Matrix: EM Example

Emergency Stabilization Cut-offs: Levels	1st year Mid-Year 1	Year-End 1	2nd year Mid-Year 2	Year-End 2	3rd year Mid-Year 3
	% Not Achieving Level 4 At Graduation				
<= Lev5.0					
<= Lev4.5					
<= Lev4.0					
<= Lev3.5			17.5	18.3	26.9
<= Lev3.0	17.3	17.4	18.8	24.7	52.4
<= Lev2.5	17.4	18.4	26.2	51.5	81.0
<= Lev2.0	18.5	22.8	39.5	62.6	88.1
<= Lev1.5	22.4	32.9	48.5	90.9	
<= Lev1.0	27.8	38.1			
= Lev0.0	25.2				

If You See These Patterns…

Simply ask "why?"

Is further assessment (i.e. educational diagnosis) or clarification needed?

Could such a realization help guide an individualized learning plan? Need for a formal remediation plan?

The purpose of Milestones analytics is to facilitate professional growth and improvement

What Works for the Learner

- Introduction and/or review of Milestones at beginning of every academic year

- Self assessment on Milestones prior to CCC

- In-person conversation with advisor to compare/contrast self-assessment with judgments of CCC

- Completion of written learning plan

Cannot overemphasize the importance of involving the learner!

Where to Next: Milestones 2.0

Milestones 2.0

- Process already underway

  - Amazing amount of interest from Cardiology community in participating (thank you!)

- Will be specialty specific (esp. PC and MK)

- Supplemental Guide for 2.0 sets

What will be changing?

1. Ensure enough breath of subcompetencies

2. Provide enough specificity for understanding

3. Limit the number of rows to 3

4. Each row must be a complete developmental process

What will be changing?

5. Asking each specialty to use the subcompetencies from the harmonized Milestones

6. Moving to "positive" language, including aspirational level

7. Supplemental Guide

Supplemental Guide

Systems-Based Practice 1	Patient Safety and Quality Improvement (QI)
Overall Intent	To engage in the analysis and management of patient safety events, including relevant communication with patients, families, and health care professionals; to conduct a QI project
Level 1 Examples	• Has basic knowledge of patient safety events, reporting pathways, and QI strategies, but has not yet participated in such activities
Level 2 Examples	• Identifies and reports a patient safety issue (real or simulated), along with system factors contributing to that issue • Is aware of improvement initiatives within their scope of practice
Level 3 Examples	• Reviews a patient safety event (e.g., preparing for morbidity and mortality presentations, joining a Root Cause Analysis group) and has communicated with patients/families about such an event • Participates in a QI project, though they may not have yet designed a QI project
Level 4 Examples	• Collaborates with a team to lead the analysis of a patient safety event and can competently communicate with patients/families about those events • Initiates and completes a QI project, including communication with stakeholders
Level 5 Examples	• Competently assumes a leadership role at the departmental or institutional level for patient safety and/or QI initiatives, possibly even being the person to initiate action or call attention to the need for action
Assessment Models or Tools	• Simulation • Reflection • Direct observation at bedside or in meetings • E-module multiple choice tests • Chart or other system documentation by fellow • Documentation of QI or patient safety project processes or outcomes • 360-degree evaluations • Portfolio
Notes or Resources	• Institute of Healthcare Improvement website (http://www.ihi.org/Pages/default.aspx) which includes multiple choice tests, reflective writing samples, and more

Resources

Are you aware of the Milestones resources available from ACGME?

Resident-Fellow Guidebook for Milestones?

Annual Milestones National Report?

Faculty Development in Assessment?

Home > What We Do > Accreditation > Milestones > Milestones Resources

Milestones Resources

National Reports

2018 Milestones National Report

2017 Milestones National Report

2016 Milestones National Report

Guidebooks

Milestones Guidebook

Milestones Guidebook for Residents and Fellows

Clinical Competency Committee Guidebook

Other Resources

Milestones FAQs

ACGME Milestones Project: Lessons Learned and What's Next

Clarification on Common Program Requirements and Milestones

Use of Individual Milestones Data by External Entities for High Stakes Decisions

Quick Links

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Feedback and Questions

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Thank you.