

Performance Framework - Examples, Articles and Analysis

Examples

Performance level schema:

- The **European Qualifications Framework (EQF)**. "A common European reference framework which links countries' qualifications systems together, acting as a translation device to make qualifications more readable and understandable across different countries and systems in Europe."
 - [EQF Overview Brochure](#) || [EQF Levels scheme](#) || [Website](#)
- [Review of UK pharmacy competency and professional development frameworks](#) (related to [GLF](#) and [ACLf](#))
- [RIME \(Pengaro\)](#)
- [Dreyfus model](#): Novice, advanced beginner, competent, proficient, expert, (innovation)

EPAs/STARs:

- Example of an **Entrustable Professional Activity (EPA)** for physician assistants.
- [Manage Patient with Common Single System Diagnoses who require a Hospital Setting](#)
- [Lead a Family Meeting](#) (from Internal Medicine)
- [Pediatrics - EPA mapped to ACGME competencies and sub-competencies](#)
- [Internal Medicine - Presentation that includes illustration of an EPA mapped to milestones](#)
- [Internal Medicine - Final 16 end-of-training EPAs: <http://www.im.org/AcademicAffairs/milestones/Pages/EndofTrainingEPAs.aspx>](#)
- [Internal Medicine - Table of the 16 EPAs mapped to milestones](#) (also contains examples of EPA descriptions and sub-tasks)
- [Newborn care EPA, performance levels, and representative vignettes](#)
- [The Patient Handover as an entrustable professional activity: adding meaning in teaching and practice](#)
- [Core Entrustable Professional Activities for Entering Residency \(CEPAER\)](#)

Performance criteria or milestones:

- [Internal medicine reporting milestones](#)
- [Internal medicine \(Tufts\)](#)
- [Pediatrics: Final PDF version](#) or [website at ACGME](#)
- [Emergency Medicine](#)
- [Transformation in Medical Education \(UTMB\)](#)
- [DNP CNS Evaluation \(U of San Diego\)](#)
- [DNP clinical evaluation \(U of San Diego\)](#)
- [Quad Council Competencies for Public Health Nurses](#)
- [University of Toronto Orthopaedic surgery example \(login required\)](#)
- [Royal Australasian College of Surgeons' Surgical Competence and Performance](#) and [Becoming a competent and proficient surgeon](#)
- [Tulane milestones](#)

Articles

Definitions/General

Frank JR, Snell LS, ten Cate O, et al. [Competency-based medical education: theory to practice](#). *Medical teacher*. 2010;32(8):638-45. - Describes CBME and gives key definitions.

ten Cate O, Scheele F. [Competency-based postgraduate training: can we bridge the gap between theory and clinical practice?](#) *Academic Medicine*. 2007; 82(6):542-7. - Definition and description of EPAs and STARs; contrast with competencies; no examples though.

Krackov SK, Pohl H. [Building expertise using the deliberate practice curriculum-planning model](#). *Medical Teacher* 2011;33(7):570-5. - Mentions the role of milestones in curriculum planning.

Khan K, Ramachandran S. [Conceptual framework for performance assessment: Competency, competence and performance in the context of assessments in healthcare - Deciphering the terminology](#). *Medical teacher*. 2012 Oct 8; Online early:1-9.

Performance Frameworks, Criteria, Milestones, and EPAs

Pediatrics:

- Boateng BA, Bass LD, Blaszak RT, Farrar HC. [The development of a competency-based assessment rubric to measure resident milestones](#). *Journal of Graduate Medical Education*. 2009;1(1):45-8. - Describes process of constructing a rubric to measure observable behaviors related to competencies in pediatrics.
- Hicks P, Schumacher D, Benson B, et al. [The pediatrics milestones: conceptual framework, guiding principles, and approach to development](#). *Journal of Graduate Medical Education*. 2010;2(3):410-418. - Includes one example.
- Hicks P, Englander R, Schumacher D, et al. [Pediatrics Milestone Project: Next Steps Toward Meaningful Outcomes Assessment](#). *Journal of Graduate Medical Education* 2010;2(4):577-584. - Gives examples of assessment instruments.
- Jones MD, Rosenberg AA, Gilhooly JT, Carraccio CL. [Perspective: Competencies, outcomes, and controversy--linking professional activities to competencies to improve resident education and practice](#). *Academic Medicine*. 2011;86(2):161-5. - Discusses the convergence of EPAs and milestones. Contains a table listing pediatric EPS and mapping them to confidence levels and ACGME competencies.

- Carraccio C, Burke AE. [Beyond competencies and milestones: adding meaning through context](#). *Journal of graduate medical education*. 2010;2(3):419-22.

Internal Medicine:

- Green ML, Aagaard EM, Caverzagie KJ, et al. [Charting the road to competence: developmental milestones for internal medicine residency training](#). *Journal of graduate medical education* 2009;1(1):5-20. - Provides many performance criteria and milestones for internal medicine.
- Caverzagie, KJ. [Linking Milestones to the Core Competencies using EPAs](#). Presentation at APDIM, Spring 2012.
- Caverzagie KJ et al. [Assessing Competencies in Internal Medicine Residencies: Connecting Milestones to Entrustable Professional Activities \(EPAs\)](#). Workshop at APDIM, Oct 2011. - Gives an example of an EPA (Leading a Family Meeting) and shows how milestones are incorporated into EPAs.
- Meade LB, Borden SH, McArdle P, Rosenblum MJ, Picchioni MS, Hinchey KT. [From theory to actual practice: Creation and application of milestones in an internal medicine residency program, 2004-2010](#). *Medical teacher*. 2012;34(9):717-23.

Competency/Performance-Based Assessment

- Schuwirth L, Colliver J, Gruppen L, Kreiter C, Mennin S, Onishi H, et al. [Research in assessment: consensus statement and recommendations from the Ottawa 2010 Conference](#). *Medical teacher*. 2011;33(3):224-33.