

# Glossary

| Term   | CWG definition   | Other definitions  | Terms used by others for the CWG definition  | AAMC                             |
|--|--|--|--|----------------------------------|
| <b>Competence</b>  | From competency framework spec: Possession of sufficient and necessary knowledge, skill and attitude by an individual to allow her to safely and effectively perform a specific job.   | <p>Frank et al: The array of abilities (KSA) across multiple domains or aspects of performance in a certain context. Statements about competence require descriptive qualifiers to define the relevant abilities, context, and stage of training. Competence is multi-dimensional and dynamic. It changes with time, experience, and setting.(1)</p> <p>From EQF: The proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy.(3)</p> <p>A point along the spectrum from beginner /novice to expert/master.</p> |  | Use (1)                          |
| <b>Competency</b>  | From competency framework spec: A statement describing a specific ability, or set of abilities, requiring specific knowledge, skill and/or attitude. Competencies are used to set performance standards that must be met.  | <p>Frank et al: An observable ability of a health professional, integrating multiple components such as knowledge, skills, values, and attitudes. Since competencies are observable, they can be measured and assessed to ensure their acquisition. Competencies can be assembled like building blocks to facilitate progressive development.(1)</p>   |  | Use (1)                          |
| <b>Competency Object</b>   | From competency framework spec: An umbrella term used by the CWG to describe any abstract statement of learning or performance expectations, and information related to the statement. Statements can be learning outcomes, competencies per se, learning objectives, professional roles, topics, classifications/collections, etc. The Competency Object may include additional data to expand on or support the statement. The Object is abstract in the sense that it does not inherently contain information about connections of the statement to individuals or events or other objects. |  | <p><b>Singapore:</b> EPAs, problems, and conditions might be represented as competency objects with interrelationships expressed through the Competency Framework and object type indicated by the category element.</p> <p><b>TIME:</b> Transition milestones (independent of levels) would likely map to competency objects within a competency framework</p>  | Use MedBiq                       |
| <b>Competency Framework</b>  | From competency framework spec: An organized and structured representation of a set of interrelated and purposeful competency objects.   |  |  | Use MedBiq                       |
| <b>Performance</b>   | Adapted from competency framework spec: A demonstration of behavior, either in an assessment setting or in practice, such as patient care. Can be used as evidence of one or more competencies.  |  |  |                                  |
| <b>Performance level schema</b>  | New: A generic set of levels of performance (e.g. beginner, novice, expert; or simply 1-2-3-4) that can be used to frame performance progression.  |  | <p><b>Singapore:</b> These are characterized as Standards.</p> <p><b>TIME:</b> These are characterized as Levels.</p>  |                                  |
| <b>Performance level</b>   | Adapted from AAMC draft: A specific level within a level schema (e.g. novice to master) defined by one or more measurable behaviors (performance criteria) related to a specific competency. Levels are ordinal data; that is, there is an order to the performance levels of a competency.  |  | <p><b>Pediatrics: Developmental milestone</b> -"behavioral descriptions of the developmental progression of the knowledge, skills, and attitudes that define each of the sub-competencies within the broader competency domain...since milestones map directly to the sub-competencies, they help to pinpoint at what level in the developmental progression a resident is performing and to address any specific subcompetencies that may be barriers to entrustment. Specific milestones must be reached for entrustment to occur."(6)</p> <p><b>Internal Medicine reporting milestone</b></p> <p><b>Emergency medicine:</b> Milestone</p> <p><b>public health:</b> similar to the Tiers used for the Core Competencies.</p> | Use MedBiq                       |
| <b>Performance criterion</b>   | New: An explicit description of a single measurable behaviour that is part of a specific performance level of a specific competency.   | AAMC: An explicit description of measurable behaviors that indicate an individual has achieved a certain performance level.  | <b>Pediatrics: Milestone anchor or behavioural anchor</b>  | Use definition similar to medBiq |
| <b>Progression of competence</b><br><br>(SC suggests 'Progression of performance') | New: The spectrum of ability from least to most ability (i.e. the lowest to the highest level) with respect to a specific competency.(1) This can be represented as a performance level set.   | From Frank et al: For each aspect or domain of competence, the spectrum of ability from novice to mastery. The goal of medical education is to facilitate the development of a physician to the level of ability required for optimal practice in each domain. At any given point in time, and in a given context, an individual physician will reflect greater or lesser ability in each domain. (1)  | <b>Pediatrics and Internal Medicine: Developmental progression</b>   | Use (1)                          |
| <b>Performance level set</b>   | New: The set of performance levels for one competency, which may be listed according to a performance level schema.<br><br>Note: Internal Medicine links each performance level set to more than one competency!   |  | <b>Pediatrics: Milestone series</b>  |                                  |

|                                      |  |   |  |                      |
|--------------------------------------|--|---|--|----------------------|
| <b>Performance framework</b>         | New: All the performance level sets (and may include performance level schema(s)) associated with a competency framework. i.e. The collection of all the performance criteria for each level of each competency in a competency framework. A performance framework may apply a single performance level schema across all competencies, or there may be a variable number of levels across competencies. There may be multiple performance frameworks associated with a single competency framework (e.g. one for undergraduate medical students and one for residents). | AAMC: A set of performance levels and criteria associated with a competency framework.  |  | Derived from MedBiq  |
| <b>Performance threshold</b>         | New: The point of discrimination between two adjacent performance levels.  | AAMC ("Milestone" alternative 2): An achievement point or threshold in medical education, training, or practice (e.g. transition from medical student to residency; earning entrustment in an EPA) defined by reaching predetermined performance levels for a given competency or across an aggregate of competencies.<br><br>AAMC ("Milestone" alternative 3): A meaningful marker of achievement. |  |                      |
| <b>Performance level change</b>      | New: The advancement of a learner from one performance level to the next (i.e. the crossing of a threshold)  | AAMC ("Milestone" alternative 1): Achievement of the next level of performance in a continuum.  |  |                      |
| <b>Achievement progression frame</b> | A point in professional development by which a learner is expected to have achieved specified performance levels of specified competencies. (4) This may be a point in time (in a time-based curriculum) or the criteria to progress to the next stage of a competency-based curriculum.   | AAMC: "Competency benchmark" = Expected performance level for a cohort of learners at a given point in education, training or practice.   | Others: <b>Milestone</b><br><br>Jones et al: <b>Expected achievement level</b> | Competency Benchmark |
| <b>Confidence level</b>              | The performance levels on one or more competencies that a learner must achieve in order to be permitted a particular degree of independence. (Note that other factors may also come into play when making a decision about independence/entrustment.)  | From ten Cate: a predetermined level of proficiency in executing an EPA.(2)<br><br>Example: (1) has knowledge, (2) may act under full supervision, (3) may act under moderate supervision, (4) may act independently, and (5) may act as a supervisor and instructor.   |  |                      |

## Related terms

|   |    |  |  |                    |
|---|----|--|--|--------------------|
| <b>Entrustable Professional Activity (EPA)</b>    | -- | An activity that is part of the essential work of a profession, specialty or subspecialty with the following characteristics: requires the integration of knowledge, skills and attitudes and their demonstration within an authentic context; is independently executable within a given timeframe by qualified personnel; and leads to observable and measurable outputs. An EPA describes a unit of work, while a competency is characteristic of an individual. (2) (Taken from Educational Achievement Specification) |  | Use (2)            |
| <b>Nested EPA</b>                                 |    | AAMC: A nested EPA is a task unit that represents a foundational subset of the KSA required for the broader EPA. As a building block for the broader EPA, the expectation for entrustment occurs at an earlier stage of the developmental trajectory. A nested EPA possesses the elements of its "parent" EPA (requires the integration of knowledge, skills and attitudes; is independently executable within a given timeframe by qualified personnel; and leads to observable and measurable outputs).                  |  | Use (2)            |
| <b>Entrustment</b>                                |    | A decision to entrust the learner to perform certain activities without direct supervision. (Taken from Educational Achievement Specification - may be subject to change based on recent discussions)  |  |                    |
| <b>Statement of Awarded Responsibility (STAR)</b> | -  | <del>AAMC: A STAR is the point at which entrustment for a specific EPA has been awarded. Awarding STARS for EPAs over time requires supervisors to make deliberate decisions about their trainees' competence to perform all critical activities for that EPA.(2)</del>  |  | <del>Use (2)</del> |
| <b>Qualifications</b>                             |    | From EQF: A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards.(3)   |  |                    |
| <b>Qualification Framework</b>                    |    | From EQF: An instrument for the classification of qualifications according to a set of criteria for specified levels of learning achieved, which aims to integrate and coordinate national qualifications subsystems and improve the transparency, access, progression and quality of qualifications in relation to the labour market and civil society. (3)   |  |                    |
| <b>Narrative</b>                                  |    | From IM: A report describing the current performance level of a resident with respect to a specific competency. Produced by the program director for submission to ACGME/ABIM. Has a defined progression of performance with criteria for each level. Perhaps could be represented as performance level set? Related to milestones and EPAs but does not appear to directly draw data from them.   |  |                    |
|   |    |  |  |                    |

## References:

1. Frank JR, Snell LS, Ten Cate O, et al. [Competency-based medical education: theory to practice](#). *Medical teacher*. 2010;32(8):638-45.
2. 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.
3. [EQF Brochure](#) with definitions.
4. 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.
5. 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.

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

7. Some from AAIM: <http://www.im.org/AcademicAffairs/milestones/Pages/Definitions.aspx>

8. 1. 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.