Milestones: Frequently Asked Questions

More information about the Milestones can be found on the ACGME website.

What are Milestones?
Simply defined, a milestone is a significant point in development. For accreditation purposes, the Milestones are competency-based developmental outcomes (e.g., knowledge, skills, attitudes, and performance) that can be demonstrated progressively by residents and fellows from the beginning of their education through graduation to the unsupervised practice of their specialties.

Who developed the Milestones?
Each specialty's Milestone Working Group was co-convened by the ACGME and relevant American Board of Medical Specialties (ABMS) specialty board(s), and was composed of ABMS specialty board representatives, program director association members, specialty college members, ACGME Review Committee members, residents, fellows, and others.

What are the Milestones Supplemental Materials?
The Milestones Supplemental Materials consist of a variety of educational information, references, frequently asked questions (FAQs), and assessment methods and tools developed to aid in the understanding and use of the Milestones in each specialty. These materials were developed by the Working Groups, Advisory Groups, and other members of the GME community. These materials are listed on their corresponding specialty pages. The Milestones Department will continue to add helpful materials over time as they are developed. We welcome any suggestions.

Why Milestones?
First and foremost, the Milestones are designed to help all residencies and fellowships produce highly competent physicians to meet the 21st century health and health care needs of the public. To this end, the following describes the purposes of the Milestones:

For educational (residency/fellowship) programs, the Milestones will:
- Provide a rich descriptive, developmental framework for Clinical Competency Committees
- Guide curriculum development of the residency or fellowship
- Support better assessment practices
- Enhance opportunities for early identification of struggling residents and fellows

For residents and fellows, the Milestones will:
- Provide more explicit and transparent expectations of performance
- Support better self-directed assessment and learning
- Facilitate better feedback for professional development

For accreditation, Milestones will:
- Allow for continuous monitoring of programs and lengthening of site visit cycles
- Enhance Public Accountability – report at a national level on aggregate competency outcomes by specialty
- Provide a community of practice for evaluation and research, with focus on continuous improvement of graduate medical education

What is the difference between reporting milestones, curricular milestones, and EPAs?
Reporting milestones are those posted on the ACGME website that each program must use to judge the developmental progress of its residents and fellows twice per year and on which each program must submit reports through ADS.

Curricular milestones are designed in conjunction with the reporting milestones – these milestones are typically very descriptive (granular) and are not required by the ACGME. Primarily, they are utilized by internal medicine and pediatrics, and their related subspecialties, to guide curriculum development and specific assessments.

"EPA" stands for Entrustable Professional Activities, and was originally conceptualized by Olle ten Cate in the Netherlands. ten Cate recently updated his definition in a JGME publication: "*EPAs are units of professional practice, defined as tasks or responsibilities that trainees are entrusted to perform unsupervised once they have attained sufficient specific competence. EPAs are independently executable, observable, and measurable in their process and outcome, and, therefore, suitable for entrustment decisions.*" In other words, what is it we expect a particular specialist to be able to do without supervision upon graduation from residency and fellowship?

Where are the milestones found on the web?
The Milestones can be found on each specialty web page as well as on the Milestones web page, at: http://www.acgme.org/acgmeweb/tabid/430/ProgramandInstitutionalAccreditation/NextAccreditationSystem/Milestones.aspx.

When will the specialties start reporting?
Initial reporting dates for the Milestones vary by specialty. For the most current reporting dates, please review the *Milestones by Reporting Date* document on the Milestones web page: http://www.acgme.org/acgmeweb/Portals/0/PDFs/MilestonesByReportingDate.pdf.

How will the Milestones be used by the ACGME?
Residents'/fellows' performance on the Milestones will become a source of specialty-specific data for the specialty Review Committees to use for continuous quality improvement in assessing programs and for facilitating improvements to program curricula and resident assessment. In this early phase, the Milestone data will be used as formative assessment of the quality of residency and fellowship programs. The Milestones will also be used by the ACGME to demonstrate accountability of the effectiveness of graduate medical education within ACGME-accredited programs in meeting the needs of the public over time.

How do we know the CCCs are judging accurately and appropriately?
The ACGME will closely study and monitor the Milestone data. Using various statistical models we will monitor overall progression of milestones in a given specialty, as well as within individual programs. We encourage every CCC to accurately report the Milestone evaluations as the data will also be used to identify individual milestones that need to be edited or removed.

In addition, professional self-regulation, exemplified by the work of the ACGME and the certification boards, requires a high degree of professionalism from program directors and faculty members. This includes honest assessment and reporting of residents' and fellows' progress on the Milestones. It would be a disservice to its residents or fellows for a program to be less than candid about their performance on the Milestones, and will also undermine the goal of continuous improvement of the NAS.

When and how will the Milestones be changed?
We will collect feedback through several mechanisms, including through our own research and evaluation activities, the Milestones web page, and ongoing outreach. We will also work with the ABMS to plan a second summit, tentatively scheduled for May-June 2015. The exact date of when "version 2.0" of the Milestones might roll out is yet to be determined, but it will be at least several years of learning and planning before the next version would be implemented.

Being that individual data is being reported, how is resident privacy being protected?
The ACGME is dedicated to protecting the data collected from programs and residents. There are four key components to this discussion:

1. From a legal standpoint, the ACGME is subject to the Illinois state peer review statutes. We track these very carefully and have successfully blocked discoverability of ACGME data because of the protections afforded under these statutes.
2. The Review Committees will not review any identified individual Milestone data, but will instead view the data in aggregate, using the program as the unit of analysis.
3. We plan to convert the resident and fellow identifier to the National Provider identifier (NPI) to discontinue use of SSNs. Currently we have NPIs for about 40% of residents and fellows.
4. The ACGME also uses state-of-the-art data security methods, including 256-bit encryption of sensitive data (e.g., SSNs, etc.)

How do combined programs report Milestones?
Residents in combined programs will have access to and will report on the Milestones for both specialties. For example, a resident in a Medical Genetics-Pediatrics program will have Milestones reports submitted for both medical genetics and pediatrics.

How does a program facilitate evaluation of an off-cycle resident?
Residents and fellows who are "off-cycle" will be reported at the same time as their peers. If the resident (or fellow) graduates prior to the reporting date, and ADS has been updated prior to the start of the reporting period, there will not be a final report. Programs must ensure that the resident's record is updated appropriately as a report is required for all residents with an "active" status.

It is understood that the evaluation of these residents will differ from those of their peers. Should the applicable Review Committee have a concern, it will be able to determine whether an off-cycle resident is indeed enrolled in the program.

How should a resident doing a six-month research rotation be evaluated?
Residents performing research for a duration of six months will still need to be evaluated. It is recognized that many of the subcompetencies will not have been evaluated during this period, and as such, the Milestone evaluation would remain as it was during the previous assessment period.

How should a resident who is learning in a different department be evaluated?
Residents must be evaluated against their specialty Milestones every six months. Evaluations from another department must be reviewed and used in determining the resident's Milestone level. If this is a regular occurrence, a member from the other department should become a member of the Clinical Competency Committee to facilitate the review.

If transitional year residents must score at least a "3" in the Milestones, what is the minimum evaluation for a resident in a preliminary or categorical program?
This has been a misinterpretation by many programs. **The ACGME has listed no required minimums on Milestone reporting**. Level 4 is a target for graduation (except for TY in which Level 3 is the target) but readiness for graduation is at the discretion of the program director.

Why do some specialties use "Level 4" as the target for graduation and others use "Ready for Unsupervised Practice"? How can a graduating resident not receive "Ready for Unsupervised Practice" and still be eligible to take the ABMS board exam?
The original Milestones were started by multiple groups at the same time. The ACGME made a strategic decision that to try and maximize buy-in by the various specialty communities that flexibility would be permitted in developing the Milestones. In addition, some Milestone groups, most notably Internal Medicine, initiated their Milestone development process before the formal ACGME process began. Moving forward we will learn from the current experience and discuss with the community whether and what level of harmonization among the Milestones across specialties would be advisable.

How is the validity and reliability of the Milestones being established?
The Milestones were written by a Working Group of ABMS board members, Review Committee members, program directors, and residents, and represent a broad range of specific areas of expertise that a resident or fellow in a given clinical specialty is expected to develop.

Similarly, establishing the reliability of the Milestones will require data from their use in resident/fellow assessments. Several specialties are currently conducting pilot studies to gather information about the clarity, feasibility, acceptability, and performance characteristics of the Milestones. One advantage of the Milestones, compared to the evaluation tools currently used by individual programs, is that assessment data will be collected on thousands of residents and fellows, producing a sample that, over time, will make it possible to establish their reliability and validity. We will use the validity frameworks of Kane and Messick to guide the validity work. Kane approaches validity as an "argument" – in other words one always has to build the case for validity. The Messick framework is provided below as an example of the "elements" of the argument:

> **Content:** do instrument items completely represent the construct?
> **Response process:** the relationship between the intended construct and the thought processes of subjects or observers (e.g., have the observers been trained?)
> **Internal structure:** acceptable reliability and factor structure
> **Relations to other variables:** correlation with scores from another instrument assessing the same construct
> **Consequences (intended uses):** do scores really make a difference?

If indicated by performance on the Milestones, can a resident or fellow finish his or her educational program early and be considered "board-eligible"?
The decision to allow an "early graduation" that would render a resident or fellow board-eligible would always and only be made by the relevant ABMS certifying board. While such a decision would likely be aided by the use of the Milestones, accelerating resident and fellow education is not the intent of the Milestones.

Will the use of the Milestones cause a shift of focus toward these areas at the expense of other important knowledge and skills necessary for competent practice?
The Milestones were developed by members of the specialty community to encompass the core aspects of the specialty in which the growth of an individual during residency/fellowship is most important to preparedness for unsupervised practice. Milestones do not define the totality of competence or of a discipline. Judgment on the part of faculty members and the programs is and will remain essential in producing the "whole physician." The ACGME will use the Milestones to promote better curriculum and assessment, and as one method of assessing whether programs are adequately preparing individuals for the unsupervised practice of the specialty. Programs should continue to maintain their curricula in all areas of knowledge, skills, and attitudes necessary for the practice of the specialty. In addition, the ABMS member boards will continue to assess individuals for their acquisition of the knowledge, skills, and attitudes necessary for the unsupervised practice of the specialty.

What does the report that the programs can print and put into the residents' files look like?
After the program submits the Milestone data through ADS, a report is prepared (pdf) for each individual resident/fellow. The report includes all of the milestones the resident achieved during the previous reporting cycle. The program director can choose to print this report and use it as part of the semiannual evaluation with the resident/fellow. There is a space for signatures, should the program choose to use it. It is not required that programs print these reports; the ACGME does not require any further action after the Milestone data is submitted.

When will the "resident report" be available?
The individual detailed PDF documents will be posted 10-14 days after the close of the reporting window. The reports will be permanently available in ADS.

Can a resident's Milestone reports/assessments be shared with potential fellowship programs for which the resident is interviewing?
Currently, this data is not available for programs the resident is not enrolled in. The following is in the Common Program Requirements that take effect July 1, 2016. The mechanism of how this is done has not been determined.

> CPR III.A.1. Eligibility Requirements – Residency Programs
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> III.A.1.a) All prerequisite post-graduate clinical education required for initial entry or transfer into ACGME-accredited residency programs must be completed in ACGME-accredited residency programs, or in Royal College of Physicians and Surgeons of Canada (RCPSC)-accredited or College of Family Physicians of Canada (CFPC)-accredited residency programs located in Canada. Residency programs must receive verification of each applicant's level of competency in the required clinical field using ACGME or CanMEDS Milestones assessments from the prior training program. (Core)
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> III.A.2.a) Fellowship programs must receive verification of each entering fellow's level of competency in the required field using ACGME or CanMEDS Milestones assessments from the core residency program. (Core)

Can the programs use the Milestone tables as assessment tools?
The Milestone tables were not designed to be used as evaluation forms for specific rotations or experiences. The reporting Milestones are designed to guide a synthetic judgment of progress roughly twice a year. Utilizing language from the Milestones may be helpful as part of a mapping exercise to determine what competencies are best covered in specific rotation and curricular experiences. The reporting Milestones can also be used for self-assessment by the resident/fellow in preparation for feedback sessions and in creating individual learning plans. Residents and fellows should use the Milestones for self-assessment with input and feedback from a faculty advisor, mentor, or program director. It is imperative that programs remember that the Milestones are not inclusive of the broader curriculum, and limiting assessments to the Milestones could leave many topics without proper and essential assessment and evaluation.

Who can and cannot be on the Clinical Competency Committee (CCC)?
Revisions to the Common Program Requirements regarding who can serve on the CCC are currently out for public comment, so the information below is subject to change. The members of a CCC have responsibility for: 1) determining residents' or fellows' progression on the educational Milestones; 2) making recommendations on promotion and graduation decisions; and 3) recommending remediation or disciplinary actions to the program director.

Members of the CCC can include physician faculty members and members from other health professions (i.e., inter-professional) who serve on the faculty or have extensive contact and experience with residents/fellows in patient care and other health care settings.

Chief residents may attend CCC meetings is if they have completed a core residency program in their specialty discipline, possess a faculty appointment from the program, and are eligible for specialty board certification. They cannot be members of the CCC.

Exclusion of residents from the CCC is meant to ensure that the residents' peers are not providing promotion and graduation decisions, and to ensure they are not involved in recommendations for remediation or disciplinary actions. However, the chair(s) of the CCC and/or program director should receive input from program residents outside the context of CCC meetings through the evaluation system.

Program coordinators may attend CCC meetings to provide administrative support and to help document CCC deliberations and decisions. However, coordinators may not serve as members of the CCC.

Can the program director serve on the CCC? Can he/she chair it?
The requirements regarding the CCC do not preclude or limit a program director's participation on the CCC. The intent is to leave flexibility for each program to decide the best structure for its own circumstances, but a program should consider: its program director's other roles as resident advocate, advisor, and confidante; the impact of the program director's presence on the CCC members' discussions and decisions; the size of the program faculty; and other program-relevant factors. The program director has final responsibility for the program's evaluation and promotion.