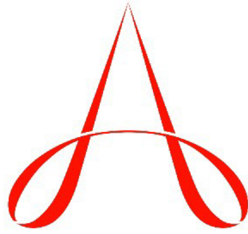

Accreditation Council for
Graduate Medical Education

Clinical Competency Committees

A Guidebook for Programs

3rd Edition
Modified for ACGME-I-accredited programs – May 2023

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Overview

The Clinical Competency Committee (CCC) is a structure that has emerged as an essential component of the evaluation process in graduate medical education (GME). While some specialties and programs have utilized CCCs for years, this structure is still relatively new to many others. Likewise, with the emergence of the CCC as a requirement for accreditation (ACGME-International Foundational Program Requirements), even seasoned programs and committees are facing questions regarding the CCC's structure, function, and process. Furthermore, scholarship on group decision making, assessment, and CCCs themselves continues to provide evidence to inform practices. The purpose of this manual, now in its third edition, is to provide designated institutional officials (DIOs), program directors, faculty members, CCC members, coordinators, residents, and fellows with information and practical advice regarding the structure, implementation, function, and utility of a well-functioning CCC. The materials were prepared for both individual learning and application in a group setting. Ideally, institutions and programs will be able to use these materials to have meaningful conversations with all stakeholders; enhance CCC development, function, and outcomes; and improve transparency for residents and fellows on the nature of assessment in competency-based education. This third edition also contains updated material and new tools for programs to use to continually improve their CCC processes, and a section on institutional opportunities with CCCs has been added. Each major section has an accompanying brief "summary" available as a separate, individual document.

This manual provides information related to the following topics:

1. Purposes of a CCC
2. CCC Structure and Membership
3. Preparing for CCC meetings
4. Running the CCC meeting, including effective group process
5. Post-meeting feedback, documentation. and follow-up
6. Legal issues
7. Other Uses for the CCC
8. Individualized Learning Plans
9. Institutional Oversight of CCCs
10. Current Research

Several appendices contain tools for institutions, programs, and CCCs. A robust body of research to support the various aspects of CCCs, including assessment, feedback, documentation, group dynamics, and outcomes, is now available. An annotated bibliography is updated approximately every six months and is available on the Milestones section of the ACGME-I website.

We welcome your feedback, and hope this guidebook provides institutions, programs, and faculty members with valuable information and tools to enhance GME.

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Introduction

The Clinical Competency Committee (CCC) became a central tool in graduate medical education (GME) as ACGME-I transitioned to its current model of accreditation (previously dubbed the “Next Accreditation System”) as an important element of competency-based education. ACGME-I International (ACGME-I) programs use CCCs as well. The requirements for CCCs have evolved with the most recently revised International Foundational Program Requirements, which apply to all ACGME-I-accredited residency and fellowship programs regardless of specialty or subspecialty. The requirements are discussed in Part 2 of this guidebook.

The objectives of this guidebook are to help institutions and programs:

1. Recognize the role and purpose of the CCC for individual programs in ACGME-I’s current accreditation model.
2. Design, create, implement, and continuously improve the program’s CCC.
3. Run an effective CCC meeting.
4. Provide feedback to residents or fellows allowing for improved constructed individual learning plans.
5. Anticipate questions regarding “process” and considerations of academic law.
6. Align the program’s own CCC processes with the best evidence from the medical education literature.
7. Use the CCC to continuously improve the program’s curriculum, assessment system, faculty development, and clinical training/experiences/quality.

The guidebook also aims to help programs understand other opportunities for using Milestones data and for designated institutional officials (DIOs) to recognize opportunities to support CCCs at an institutional level.

This guidebook is intended to be a practical resource and a professional development tool for institutional and program leadership, coordinator(s), and faculty members. Residents and fellows may also benefit from this guidebook, although a separate guidebook has been developed specifically for them: *Milestones Guidebook for Residents and Fellows*. Institutional and program leaders are encouraged to share these materials with their program faculty members and leaders, and to use the exercises as part of faculty and coordinator professional development. These materials can be reviewed individually or as part of a meeting. The guidebook also provides suggestions for faculty development.

The CCC contributes to an effective resident/fellow assessment system as outlined in Figure 1. In this figure, the CCC serves the critically important function of synthesizing multiple quantitative and qualitative assessments regarding individual resident/fellow performance. This figure highlights several important points:

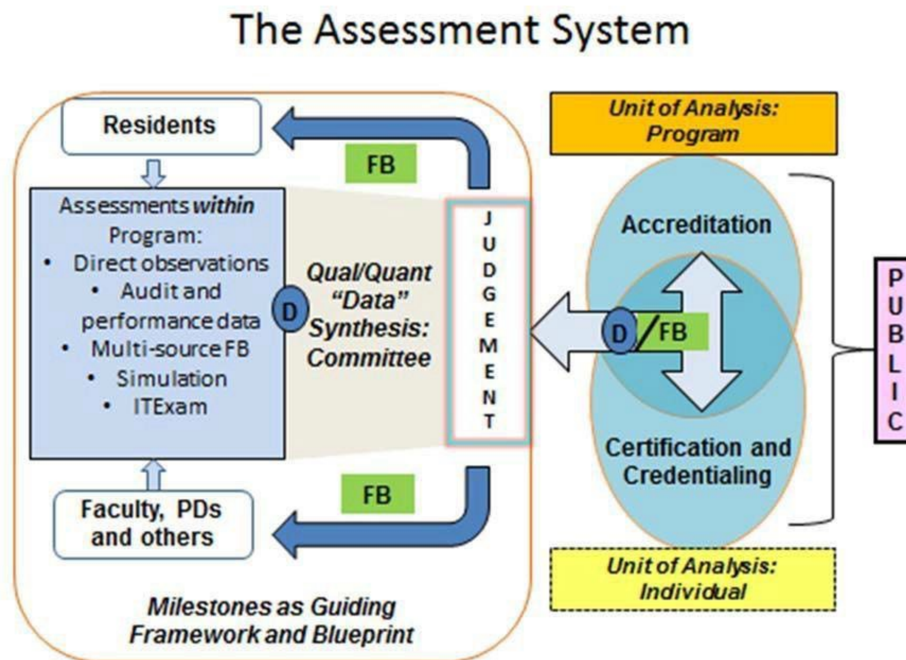
1. The CCC’s deliberative process will depend on the quality of the assessment program that should include a combination of assessment *methods* and a *number* of different assessors. Ideally, the individuals who sit on the CCC must

understand the basics of good assessment and the assessment tools being used by the program. Faculty members should have opportunities to enhance their assessment skills and understand how their assessments fit into the program's overall assessment strategy.

2. Residents and fellows are adult learners and must be active agents in this system; guided self-directed assessment behaviors by an individual resident or fellow should be expected and strongly cultivated. Programs are urged to encourage all of their residents and fellows to review the *Milestones Guidebook for Residents and Fellows* (available at http://www.acgme.org/Portals/0/PDFs/Milestones/MilestonesGuidebookforResidentsFellows.pdf)

3. The program director of a residency, fellowship, or post-graduate educational program is the ultimate arbiter of whether a resident or fellow is ready to practice without supervision. The accountability of the program director and the program cannot be over-emphasized: professional self-regulation depends heavily on the informed judgment of education programs, as manifest by the final summative evaluation of competence and entrustment made by the program director.

Figure 1: Structure of a High Performing Resident/Fellow Assessment System



Residents = both residents and fellows FB = Feedback loops
D = Assessment data and information
The model is more fully described in Appendix A

In this model the Data Synthesis Committee IS the CCC.

Holmboe ES, Yamazaki K, Edgar L, et al. Reflections on the first 2 years of milestone implementation. *J Grad Med Educ*. 2015;7(3):506-511. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4597976/. 2020.

Part 1: Purpose of a CCC

The CCC serves several purposes for multiple stakeholders: the program itself, program directors, faculty members, program coordinators, residents and fellows, the institution, and ACGME-I (Table 1). The ultimate purpose is to demonstrate accountability as medical educators to the public: that graduates will provide high quality, safe care to patients while in training, and be well prepared to do so once in practice.

Table 1: Purposes of a CCC

Purpose of CCC	
Program	● Develop shared mental model of what resident/fellow performance should "look like" and how it should be measured and assessed ● Ensure the right combination of assessment tools to effectively determine performance across the Competencies and specialty-specific Milestones ● Increase quality, standardize expectations, and reduce variability in performance assessment ● Contribute to aggregate data that will allow programs to learn from each other by comparing residents' and fellows' judgments against national data ● Improve individual residents'/fellows' progress along a developmental trajectory ● Identify early those residents/fellows who are challenged and not making expected progress so that individualized learning plans can be designed ● Identify advanced residents/fellows to offer them innovative educational opportunities to further enhance their development ● Identify weaknesses/gaps in the program as a first step in program improvement ● Model "real time" faculty development
Program Director	● Fulfill public accountability by ensuring that residents/fellows who successfully complete a program can practice without supervision ● Engage faculty members, and others when appropriate, to make informed decisions regarding performance ● Enhance credibility of judgments about resident/fellow performance ● Identify opportunities for faculty development around supervision and assessment, both formative and summative ● Facilitate the program director's role as "advocate" for the resident/fellow ● Improve feedback for residents and fellows

Table 1 (continued)

Faculty Members	● Facilitate faculty members' development of a shared mental model of what is expected within each of the Competencies and specialty-specific Milestones ● Improve documentation by simplifying and creating "more actionable" and efficient assessment tools for the direct observation of residents/fellows in the clinical learning environment ● Fulfill the professionalism inherent in the faculty member's role by contributing high quality teaching and assessment as part of the program ● Contribute accurate, rich descriptive assessment information to the CCC
Program Coordinators	● Optimize resident/fellow data management systems ● Synthesize assessment data ● Improve methods to share data with the CCC ● Collaborate with program directors to ensure residents and fellows receive feedback and follow-up, and that Milestones assessments are reported to ACGME-I ● Help improve CCC process by observing the meeting dynamics and providing feedback
Residents/ Fellows	● Improve the quality, amount, and timing of feedback; normalize constructive feedback ● Offer insights and perspectives of a group of faculty members ● Enhance self-directed learning ● Compare performance against established competency benchmarks (rather than only against peers in the same program) ● Allow earlier identification of sub-optimal performance that can inform individualized learning plans and improve individualized interventions ● Improve "stretch goals" for residents/fellows to help high performing residents/fellows achieve even greater competence ● Provide transparency regarding performance expectations
Institutions	● Ensure residents/fellows are making expected progress and those who are not are provided an opportunity for early intervention ● Provide foundational expectations for faculty members as assessors of performance through direct observation ● Ensure CCCs adhere to pertinent institutional policies ● Share best practices from within the institution, nationally and internationally ● Identify opportunities to enhance resources necessary to optimize CCC functioning at an institutional level

ACGME-I	- Enhance progress toward competency-based education with outcomes data - Establish international benchmarks for the trajectory of resident/fellow skills acquisition that can be used for each specialty - Provide better measures for public accountability - Enable continuous quality improvement of GME programs - Document the effectiveness of the nation's GME to prepare graduates to meet the needs of the public

A program's creation of a CCC is, in itself, a "developmental" process. Next, this guidebook will briefly review of the current ACGME-I requirements for a CCC, effective July 1, 2019. Programs may identify gaps and potential enhancements through their CCCs by comparing what they have in place to meet the requirements. For programs either beginning to institute a CCC, or looking to enhance an existing CCC, the next few pages offer a practical roadmap.

Part 2: CCC Structure and Membership

Designing and Creating a CCC

To design, create, and operate a CCC, it is useful to start with the requirements.

The ACGME International Foundational Program Requirements are similar. "The program director must appoint the CCC [V.B.2.]; (It) should be composed of members of the program faculty [V.B.3.a)]; have a written description of its responsibilities, including its responsibility to the Sponsoring Institution and to the program director [V.B.3..b)]; participate actively in reviewing all resident evaluations by all evaluators [V.B.3.c).(1)]; and, making recommendations to the program director for resident progress, including promotion, remediation, and dismissal. [V.B.3.c).(2)]"] [Requirements (acgme-i.org)]

These are minimum requirements; once the program CCC fulfills the International Foundational and Advanced Specialty Program Requirements, it is free to innovate!

Step 1: Review Section V.A. of the relevant specialty-specific Program Requirements.

While there are no specific requirements for the CCC in the Institutional Requirements at present, there are at least two institutional requirements that should be considered. The Sponsoring Institution is responsible for programs' development of "promotion criteria" and criteria for renewal of a resident's/fellow's appointment [ACGME-I Institutional Requirement II.D.4.d).(1)] , and those conditions for reappointment and promotion to a subsequent PGY level must be in the contract or letter of appointment. ACGME-I Institutional Requirement II.D.4.d)) Many CCCs may de facto "act" as promotion committees and apply their judgement of resident/fellow performance to recommend resident/fellow renewal and promotion to the next program year. The International Foundational Program Requirements specify that "at least annually... a summative evaluation of each resident that includes their readiness to progress to the next year of the program, if applicable" must be conducted. [ACGME-I Foundational Requirement V.A.1.b).(4)] Although not stated explicitly, it is likely that an effective CCC will have collaborated with the program director to identify the promotion criteria, or at the very least, align Milestones performance with them. The CCC should inform the program director of its review so that the program director can truly exercise the responsibility, authority, and accountability for promotion of residents. [ACGME-I Residency Foundational Requirement II.A.2.p); ACGME-I Fellowship Foundational Requirement II.A.5.l)]

It is important to recognize that the Milestones do not represent the totality of any discipline, but rather form a foundational core. They are intended to be used as a formative framework to guide curricula, assessment, and CCC deliberations in programs. The Milestones will also ultimately guide and inform CCC deliberations that lead to a summative judgment to allow the program director to decide upon an individual resident's/fellow's readiness for entrustment decisions, promotion, and graduation. However, the Milestones should not be used as the sole criteria for these important decisions.

Programs should periodically review their policies, with input from the DIO and institutional Legal and Human Resources (HR) team members, to address:

- Needed clarifications or adjustments in the criteria for promotion, program completion, remediation, and/or non-renewal.
- Needed changes in the “agreement of appointment” necessary to reflect Milestones reporting to ACGME-I.
- Necessary changes in the grievance policy, ensuring program policies are always aligned with the institutional policy.

Changes may not be necessary. However, the ongoing development of the CCC provides an excellent opportunity to review current performance standards, promotion/program completion criteria, and assessment processes, and align the Milestones and the work of the CCC with them. The DIO, Office of GME, Legal, and HR resources may provide useful guidance.

Step 2: Assess How Well You Know the CCC Requirements

Appendix B provides a multiple choice “quiz” on the current ACGME-I requirements for a CCC; Appendix C includes a series of case studies.

Faculty development opportunities may include having the CCC members, the members of the core faculty, and the program and/or institutional leadership take the quiz, discuss the case studies, or use one or more readings as an “educational” journal club. These resources may also be used with the program’s residents/fellows to help them better understand the role of the CCC in the program’s assessment process.

ACGME-I’s CCC requirements are listed in Table 2. These are the same across all programs.

Appendix D provides a template that may help programs design and/or evaluate the CCC, by “walking through” its various components. Filling in the blanks can generate a draft document that will provide a written description of the responsibilities of the CCC.

The ACGME-I no longer requires a written description of the CCC. However, programs may still benefit from a written description, which may serve as an important communication tool for residents/fellows and faculty members. It may also provide a concise description of the expected roles for faculty members on the CCC, that they could use to support their own promotion, and/or to help the program director negotiate for needed resources from the division, department, or institution.

Creating, developing, and improving a CCC to optimize its function does require considerable time and effort. The long-term effectiveness of a CCC can be facilitated by institutional support from the DIO for shared resources across programs within an institution, and for appreciating that there will be a learning curve for new programs. Ultimately, the CCC process will help programs do what they have always been responsible for doing, but with greater structure, clearer purpose, and more standardization across programs nationally.

Table 2. ACGME-I Foundational Requirements Related to the CCC

Description of Requirements in Specialty/Subspecialty Programs	**ACGME-I Foundational Program Requirements**
Programs must provide objective performance evaluation based on the Competencies and regular evaluation of the Milestones.	V.B.1.
The program must provide each resident/fellow with a documented semi-annual evaluation of performance with feedback aimed to assist residents in developing individualized learning plans to capitalize on their strengths and identify areas for growth.	V.A.1.b).(4)
The program director must appoint a Clinical Competency Committee (CCC) to review performance evaluations for each resident/fellow.	V.B.2.
The CCC must be composed of at least three program faculty members, at least one of whom is a core faculty member.	V.B.3.a)
The findings of the CCC and program director must be shared with each resident/fellow on at least a semi-annual basis.	For residencies V.B.3.d); for fellowships V.B.4.
The CCC must participate actively in reviewing all resident/fellow evaluations by all evaluators, Case Logs, the Milestones, incident reports, and other data semi-annually.	V.A.3.c).(1)

General Principles for CCCs

The size of the residency or fellowship will affect how the program director constructs the CCC process. For the purposes of this guidebook, “small programs” have fewer than 15 total learners; “medium programs” have 15 to 75 learners; and “large programs” have more than 75 learners.

One committee or more:

- Large programs may need to have several CCCs. There is a great deal of variety in how programs construct sub-CCCs. Some programs create sub- CCCs based on PGY, having separate sub-CCCs responsible for each PGY cohort; others have a sub-CCC follow a cohort longitudinally from entering residency through graduation; and still others have separate sub-CCCs for large curricular themes or components within the program (e.g., a CCC that will review resident/fellow scholarship, procedural competence/Case Logs, or quality improvement activities). Others simply divide the residents into more manageable numbers. Some CCCs have each member responsible for a subset of the Competencies.
- If sub-CCCs are used, it is essential that they still have robust membership and review processes to ensure all residents and fellows are thoroughly reviewed, discussed, and provided with an opportunity to receive high quality feedback. There also needs to be a mechanism to integrate information from sub-CCCs and ensure each sub-CCC has a shared mental model with the overall program and is using the same standards and procedures.
- For medium-sized or small programs, a single CCC may be able to oversee all residents/fellows. Program directors will use their discretion to determine whether one CCC is sufficient based on the curricular design of the program and local resources.

Committee membership:

- Appointment. The program director must appoint the CCC, which at a minimum must include three faculty members, at least one of which is a **core** faculty member in the program. Three is the smallest number of individuals required for a truly good discussion. Some program directors will want to use “term limits” and have a subset of CCC members rotate off each year to refresh the CCC periodically and retain experience.
- Size. The literature suggests that a group size of five to seven individuals is generally considered ideal, and no more than eight to 10 individuals in a group is recommended for optimal committee functioning. CCC members should regularly teach and observe residents/fellows.
- Diversity. The literature suggests that diverse groups make better decisions than homogenous groups. To the extent possible, program directors should try to balance CCCs in terms of academic rank, gender, race/ethnicity, program role, and professional focus. (Hauer, 2016)
- Additional Members. The program director may appoint additional CCC members from the same or other programs, or other health professionals who have extensive contact and experience with the program’s residents (e.g., nurses, physician assistants, nurse practitioners, social workers, etc.).
- Chief Residents. Chief residents who have completed a core residency program may serve on the CCC. Chiefs who are residents in the same ACGME-I-accredited program (the chief title distinguishing their final year of training) *cannot* serve on the CCC. It is important to make sure any chief selected is comfortable with this role. A chief who completed the program within the last year or two years may be too personally close to the residents to be candid in this evaluation activity.
- Role of Advisors/Mentors. Program directors may want to consider whether there is an

inherent conflict of interest if a faculty member is an advocate for a resident/fellow (as the resident's advisor or mentor) and a "judge" of performance (as a CCC member). On the other hand, advisors and mentors may benefit from being observers to the CCC and contributing information to the discussion and hearing the deliberation. This may better help them convey the impressions of the CCC when they provide feedback to their resident/fellow advisees.

Other considerations:

- The "right size" of a committee is large enough to reflect the diversity of perspectives and small enough to be manageable. CCC members must be able to attend meetings, actively participate, and engage in faculty development about their CCC role.
- CCC members must be committed and able to attend all or nearly all meetings; erratic attendance will not allow the continuity critical to assessing resident/fellow performance over time. Each member must be willing to make honest decisions, even when it is challenging.
- With regards to term limits and duration of service, consider whether appointments should be "in perpetuity," or for a defined time period. In perpetuity appointments should be coupled with regular addition of new members for fresh perspectives; if enacting term limits, consider staggering appointments so that not everyone on the CCC turns over at once.
- Some programs have found value in having a "public member" to represent a societal view, similar to the practices of many organizations' boards, including ACGME-I's. This is not an ACGME-I requirement, but anecdotally some programs have described benefits of adding a non-faculty member, such as a social worker, patient safety officer, or member of a hospital/health system/school patient advisory board.
- Small programs may be challenged in identifying three CCC members if they have a limited number of faculty members. Many fellowships will likely be in this position. Three program faculty members, one of whom must be a core faculty member (denoted as such on the program's Faculty Roster), are essential. In addition to program faculty members, consider inviting faculty members from the core residency program, other related disciplines, or settings in which the resident(s)/fellow(s) have substantial exposure and/or provide substantial consultation. Many small programs are also tied to specific clinical settings; consider inviting faculty members from such settings who have ongoing contact with the resident(s)/fellow(s) to sit on the CCC (e.g., a nurse leader from a dialysis unit for a nephrology fellowship, a nurse anesthetist for a surgery fellowship, a patient safety officer, or a discharge planner from a specific clinical unit).
- Medium-sized programs may also encounter some of the same challenges in finding faculty CCC members as small programs.

CCC Chair:

Programs should reflect on who would be the right chair for the CCC: the program director? the associate program director? another faculty member? a rotating responsibility among members? voted on by CCC members? Program directors should select the individual who will best solicit broad input regarding resident/fellow performance and ensure all voices are heard.

CCC chairs should work with the CCC members to ensure a safe environment in which all can freely share their judgements and concerns. The chair can mitigate "hierarchy" within the group by having the most junior member(s) speak first. The chair should ensure all residents are discussed, not just those perceived as having problems or concerns. Table 3 identifies additional guidelines for the optimal CCC chair.

Guidelines for Committee Chairs, adapted from French et al. (2014)

Chairs should:

- Be the Milestones "expert" for the committee or designate another committee member who will serve in this role.
- Encourage a confidential positive working environment and open communication from all members.
- Ensure members know their roles, as well as the latest versions of the Milestones and the CCC process.
- Engage members in developing a shared mental model for the Milestones and the assessment tools.
- Use best practices in effective group processes; for instance, employ a structured format to gain information from each committee member; obtain input using the same order of members, get perspectives of the most junior member first (See Part 4, Running the CCC Meeting).
- Keep meetings on task and move toward the common goal.
- Make certain the coordinator or designated member maintains documentation and meeting minutes.
- Understand the typical assessment methods used by the program, as well as their limitations.
- Develop a plan for the professional development of CCC members (perhaps a dedicated period of time at the beginning or end of each meeting, or an assigned article to read before the meeting).
- Anticipate biases on the part of both oneself and committee members, and intentionally cultivate greater insight on biases and strategies to mitigate them.

Program Director Role:

The International Foundational Program Requirements do not proscribe a specific CCC role for the program director. The program director can be a chair a CCC member, or an observer, or not attend CCC meetings at all. If present, the program director should not detract from the participation of other team members by prematurely inserting a personal perspective on a given resident's/fellow's performance. In the same way, the program director should not determine the Milestones ratings of each resident/fellow and then bring these to the CCC for ratification. The CCC should be able to perform its assessment of resident/fellow competence freely, judged against the Milestones, to convey to the program director.

Program directors who attend CCC meetings should defer to the chair, to make sure other CCC members' voices are encouraged (e.g., asking other members to discuss residents/fellows and reach consensus decisions before adding their own comments). Some program directors find it extremely useful to have another faculty member chair the CCC, so they can function better as the resident/fellow advocate and mentor and avoid the residents/fellows viewing the CCC's judgments as "only" those of the program director. On the other hand, the program director indeed has the final responsibility for reporting and determining the Milestones ratings for each resident/fellow and should also ensure the residents/fellows are aware of how their performance on the Milestones has been reported to the ACGME-I.

Coordinator Role:

Program coordinators are essential in the CCC process through their involvement with many, if not all, aspects of the program, and their knowledge of the residents/fellows. Program coordinators frequently distribute and collect results from assessment tools. They may also participate in multisource feedback by using assessment instruments to share valuable and often unique perceptions of an individual resident's/fellow's abilities in interpersonal and communication skills, teamwork, and professionalism.

Program coordinators may attend CCC meetings in an administrative role at the discretion of

the program director. They can assist in the collection, preparation, organization, and distribution of assessment data; take minutes; and capture key aspects of the discussion. They can observe group process using some of the tools and frameworks provided below and provide feedback to the CCC as part of a continuous quality improvement (CQI) process. Following a CCC meeting, the program coordinator can facilitate the communication of results to the program director (if not in attendance); schedule meetings with individual residents/fellows and the program director or designated faculty member to review decisions, including Milestones status; and electronically submit Milestones information on each resident/fellow to ACGME-I. The coordinator can also capture information in the CCC "debriefs" that may lead to improvements in the CCC process at the next meeting. However, the program coordinator cannot be a CCC member, or make judgments in or after the meeting regarding resident/fellow performance.
Coordinators should provide assessment and feedback through the program's assessment system, such as by participating in multisource assessment instruments.

Members of the CCC:
Each member of the CCC will have various tasks to complete prior to, during, and after each meeting. Table 4 summarizes these.

Role/responsibility of each CCC member, modified from French et al.
Guidelines for Committee Members:

- Understand the purpose and responsibilities of the CCC
- Know role on the committee
- Recognize sources of likely biases and take steps to mitigate their impact
- Work with other members to develop a shared mental model of the Milestones
- Follow through with assigned tasks (such as pre-review and synthesis of resident/fellow performance data)
- Participate in ongoing professional development (the Milestones, best practices in assessment, effective group process, understanding and identifying bias)
- Facilitate a collegial, respectful atmosphere within the committee
- Use best practices to support a robust group process
- Ensure own honest "voice" is heard along with those of colleagues
- Maintain confidentiality
- Help orient new members
- Contribute to ongoing improvement of the CCC processes

Meetings:
Logistics of meetings should include location, frequency, and length. CCCs may wish to meet more frequently than the minimum requirement of twice yearly. There is no one way to accomplish their task. A study of 116 emergency medicine program directors found that slightly over half met quarterly, and a third monthly. (Doty, 2016) Approximately 40 percent of the CCCs reviewed the entire program at a single sitting, and a third reviewed an entire class of residents at a meeting, such as all PGY-1s.

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Part 3: Preparing for CCC Meetings

Developing a Shared Mental Model

Perhaps the most important aspect of preparing for a CCC meeting is to make sure the members develop a shared mental model of what resident/fellow performance looks like, and understand their roles and responsibilities on the committee, as well as how the CCC operates to judge resident/fellow performance. Developing a shared mental model of the Competencies and the Milestones is essential. This will usually necessitate a "meeting before the meeting," or allocating sufficient time at the beginning of a CCC meeting for this discussion before a new CCC gets started on its first reviews. CCCs should also engage in ongoing dialogue to enrich and deepen their understanding and mental model over time. Having a written description of the CCC process (though no longer required by ACGME-I) and providing faculty development for committee members, can facilitate this. Some programs find it useful to discuss a relevant article at a CCC meeting as part of faculty development. See the references and annotated bibliography for some suggestions.

Faculty members should reach a common understanding on the meaning of the narratives of each milestone in the context of the specialty. This will almost always require group conversation. It may be worthwhile to have each faculty member perform self-assessment, using the specialty-specific Milestones, as a faculty development exercise. Faculty members should be trained to compare each resident's/fellow's performance to the Milestones as a whole, not just to the performance of other or 'typical' residents/fellows in the program.

Note that as Milestones 2.0 are available for individual specialties, a Supplemental Guide is also available. The Supplemental Guide includes the intent of the subcompetency along with examples for each level, assessment methods, and resources. The Supplemental Guide can be used to develop a shared mental model and determine examples for **each** program. The CCC can individualize the Supplemental Guide and use it as it considers resident development over time.
Members may also benefit from individually assessing recent program graduates using the new Milestones, and then discussing as a committee to determine a group consensus as another potential faculty development exercise.

Inventory Where Milestones are Represented in the Program

Competency-based medical education entails defining outcomes of education and training, which then guide development of milestones to chart progress through the course of a residency and fellowship program. Each program must determine which of its assessment tools and activities address each milestone. CCCs should inventory (or review an inventory conducted by others) where each milestone is currently taught and ***assessed*** in the program to create a map that guides design of curricular experiences. Teaching may occur on a specific rotation, or in the context of a program activity, such as "leading morbidity and mortality rounds." Appendix E lists assessment methods for each of the Core Competency domains with some representative examples.

The inventory should help to identify gaps in both curriculum and assessment. The CCC can identify how to best address these gaps, perhaps by delegating the review to a designated faculty member.

Shift from Assessment *of* Learning to Assessment *for* Learning

The foundation of competency-based education requires robust assessment with regular honest feedback to each learner. This requires a large amount of data. The CCC is in the perfect position to analyze how assessments drive learning, inform the judgement of resident progress, and improve the overall quality of the program.

The assessment information and data that inform CCC deliberations necessitate a comprehensive and intentional overall program assessment strategy. It should follow several key principles:

- The Milestones were never meant to be used as a standalone assessment tool, especially for short rotations (e.g., two to 12 weeks). Some programs continue to use the entire Milestones Set for end-of-rotation evaluations. This typically works poorly despite the fact this may seem a logical expedient, and even helpful to faculty members, to better acquaint them with the Milestones and the skills, attitudes, and behaviors they need to assess. However, there are several major issues. First is the concept of cognitive load – the more you ask faculty members to judge in shorter periods of time, the more difficult it is to truly assess all the Competencies. Faculty members may feel pressed to assess residents on milestones they did not directly observe, leading to range restriction (i.e., using a very limited range of the Milestone levels), "straight lining" (i.e., residents rated exactly the same on all Milestones), and halo effects (i.e., strength in one area, such as Medical Knowledge, "spills over" into ratings of other areas, especially if they were poorly assessed).
- Programs may consider a "retreat" to take each milestone and map out where it is taught and assessed, as well as how it is assessed in the program. This will highlight any gaps and opportunities for improvement. Frequently this can be done collaboratively, either with other programs in the same state or region in the same specialty, or with other programs of different specialties within the same institution.
- The assessment program will need to include multiple forms of assessment with multiple sampling using multiple assessors. No single assessment method or tool is sufficient to judge something as varied and complex as clinical competence. While end-of-rotation evaluations have some value, an overreliance on global, end-of-rotation evaluations should be avoided.
- The combination of assessments will depend to some extent on the specific needs of the specialty and the local context. Consult the *Milestones Guidebook* for more information.
- At a minimum, core methods of assessments should include direct observation of a specific component (e.g., care of individual patients, procedures, hand- offs), multi-source feedback, multiple choice test/in-service examination, longitudinal evaluations (e.g., rotational evaluation forms), audit of clinical performance, and simulation where appropriate. The specific assessment tools used will depend on the specialty and local context. The key point to remember is that the true assessment "instrument" is not the tool or form itself, but rather the individuals using it. The tool or form simply guides the individual performing

the assessment. CCCs should be cautious not to place an overreliance on global, end-of-rotation evaluations, which too often fail to provide meaningful comments and are limited by their scales and items.

- Faculty members and others involved in assessing residents/fellows will need training in the use of and interpretation of data from the selected assessment tools.

Some opportunities for assessments include the methods included in Appendices E and F. Please note the lists are not comprehensive; consult the *Milestones Guidebook* and the recent overview by Lockyer et al. (2017).

Preparing for Specific CCC Meetings

Another key pre-meeting activity is preparing the assessment data for review. It is important to plan how all assessment information, including information that occurs at the meeting, and from information gained through hallway conversations or other informal sources, will be collected and summarized. Many resident management systems (RMS) have tools available to aggregate evaluations, such as spider graphs (aka radar plots), visual plots, and dashboards. These have been shown both to make CCC discussions more efficient and to help in giving feedback to the residents following the CCC meeting. Some learning management systems have the ability to perform basic statistics on assessment data and may display visually with dashboard tools such as spider graphs. While this is helpful, a word of caution: simple means (i.e., averages) of aggregated assessments can be misleading, especially if ranges and confidence intervals are not provided. In these cases, an important outlier assessment might be missed and not properly reviewed and discussed. Also remember the cardinal GIGO ("garbage in, garbage out") rule: if the quality of the assessments being used to produce aggregate data, such as averages, is poor, then not even fancy statistics can make the assessment information better.

It is also important for CCCs to examine the assessment data longitudinally. This can be especially helpful once residents and fellows have acquired several cycles of Milestones judgments, typically starting in their second year.

Larger CCCs may assign members a subset of the residents/fellows for whom to review the assessment information in advance and prepare a preliminary review. An individual member may be responsible for reviewing all measures of the assigned residents'/fellows' performance and preparing a synopsis that is brought to the meeting and discussed with the full CCC. Some programs have individual members complete Milestones assessments on each resident or fellow and have the coordinator aggregate the information in advance of the meeting.

Suggested practices:

1. Synthesize performance information (done by the coordinator or assigned CCC member) in advance of meeting.

2. Share written performance information about individual resident/fellow performance during the CCC meeting (e.g., in a handout, a projection in the room).
3. Train CCC members on how to interpret aggregated, synthesized performance information about individual residents/fellows. This means that CCC members must understand the nature and quality of the synthesized assessment data.
4. Maintain the confidentiality of the information. Failure to do so will undermine trust in the Milestones and the CCC process.
5. Increase the use of direct observation, video logs, outcomes from actual clinical performance, patient experience, and team member data as data sources.
6. Practice good group process.
7. Review the specialty's PPV tables in the *2019 Milestones National Report*.
8. Identify what's not being assessed that may be critical to authentically judge Milestone performance. CCCs have been shown to neglect resident/fellow quality improvement, patient surveys, and actual clinical performance data.

Prior to the implementation of the ACGME Milestones, Hauer's 2015 study of 34 program directors at five institutions discovered that most CCCs relied on global, end-of- rotation evaluations rather than using programmatic assessment with multiple tools and data points, focused on problem residents more than they spent time discussing the typical residents, and lacked faculty development or training of CCC members. A small, single-institution study found that faculty members' evaluations received substantial weight in CCC deliberations in a large internal medicine residency that used sub-CCCs, but the sub-CCCs weighed comments next in importance. (Epkenyong, 2017) A study of 14 pediatric CCCs found that only two considered participation in quality improvement projects (Schumacher, 2018).
Finally, a study by Watson, et al. (2017) found patient surveys identifying 13 of 19 factors the CCC used as important to evaluation; performance data was not included in the 19 factors. Each of these studies speaks to the need to collect robust data and provide deliberate, ongoing faculty development for those who serve on the CCC, especially in the Milestones era.

Dashboards

A strategy for efficient data synthesis and display facilitates the work of the CCC. Data synthesis remains challenging for many programs that may share too much, too little, or poorly organized data with CCC members. A dashboard offers a platform for high-level data display, combined with drill-down options for more detail on quantitative and qualitative measures of learner performance. This information, combined with display of metrics indicating expected levels of performance, enables evidence-informed feedback discussions between residents/fellows and their faculty advisors or coaches to inform robust learning planning.

Some programs document their CCC deliberations through their resident management system (RMS). The RMS can create a Milestones evaluation composite, and often graphical plots, which can be shared electronically with a resident/fellow and stored with all the other resident/fellow evaluations. (Friedman, 2016; Johna, 2015)

Key Point: Whatever method is used to “pre-digest” and organize the data for review, programs should ensure processes and/or standard protocols are in place to ensure a systematic, consistent approach to the pre-review and the meeting preparation process. Programs should not simply use statistical means (i.e., averages) or a single type of data to make CCC determinations. Narrative data collected from assessment tools represents important additional information for the CCC. As noted above, the Milestones do not represent the totality of the discipline, and informed human judgment is still a critical component of the CCC process. Much important and useful assessment information is attained through effective group discussion at the CCC meeting.

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Part 4: Running the CCC Meeting, Including Effective Group Process

The CCC meeting can serve multiple purposes and the chair should ensure that all members have a shared understanding about the role of the CCC and its goals. In addition to rating residents'/fellows' performance on the Milestones, other important tasks can be accomplished, such as faculty development for the members, and monitoring the quality of the assessment system. This section focuses on the many processes and procedures that occur during CCC meetings. CCCs are charged with rendering judgements about resident/fellow progress on the Milestones. It is important to consider the following tips to bring the committee closer to realizing this goal.

1) At the beginning of (or prior to) the meeting:
    a. The CCC must have a shared understanding of its role in the assessment system. Hauer et al. found that program directors had two different perceptions of the role of the CCC: that of "problem identification" (i.e., focused on identifying the struggling residents/fellows) and "developmental" (i.e., focused on helping all residents/fellows on their trajectory towards achieving the Milestones). (2016) Although CCC chairs should contemplate this prior to the meeting, during the meeting they should take opportunities to move the group toward a developmental approach to benefit all learners in the program.
    b. Members should avoid coming to the meeting with a decision already predetermined. It is inappropriate to use the CCC to simply confirm a "verdict" about a resident or fellow from one member's opinion or a set of data. This may seem tempting; however, it significantly undermines the benefit of having a group discussion, and pre-determined verdicts can be inaccurate.
    c. Plan for the group to discuss and agree on some ground rules or "touchstones" for how the group will work together. Touchstones are simply principles of engagement the group agrees to observe and to which members hold each other accountable. For example, one touchstone might be "all member opinions will be considered respectfully."

2) During the meeting:
    a. There should be a consistent and structured process for presenting each resident/fellow during the meeting to ensure all members have an opportunity to voice their opinions and any information that any given member has about an individual resident/fellow is shared by the group. CCC chairs should develop a structure or format to use during discussion of each resident/fellow to ensure that key elements are not missed and so that any relevant information that CCC members may have about a resident/fellow that is not captured in the formal assessments can be introduced. Some CCCs choose to assign residents/fellows to specific members and ask the latter to present a summary about each of their residents'/fellows' performance. Donato and colleagues' description of their internal medicine residency CCC is one in which the resident is presented in a "debate-like" format. (2016) Mentors present their resident(s) to the CCC describing their accomplishments, and a second reviewer presents challenges. The committee then discusses the presented information and the mentor provides feedback to the resident.

b. Discussions of each resident/fellow may be enhanced by using charts, pictures, spreadsheets, or other visual aids during the meeting. As noted earlier, the PPV tables from the *Milestones National Report* can also help guide the discussion. See Appendix G for an example of a PPV table.
c. At all times the chair should use guidelines for effective group process. It is important to be mindful of issues of hierarchy that can negatively affect the group dynamic. This is particularly an issue when a more senior faculty member serves as CCC chair. One clear measure of the effectiveness of the CCC is the willingness of all members to speak up. Consider using the following techniques to minimize the effects of hierarchy:
    i. Always start with the most "junior" person or the person most at risk in the hierarchical chain.
    ii. Chairs should, as a general rule, state their opinion last. In addition, program directors, if present, should avoid stating their opinion early on, if at all, depending on their role with the CCC. If present, the program director's role may be best as an observer, to "listen" to the conversation and provide clarifying information if necessary, but not to voice opinions, at least not until later in the discussion.
d. Effective group process is critical to the success of a CCC. The underlying premise is that under the right circumstances, groups make better decisions than individuals. The following are some examples of this phenomenon, both within medical education and beyond:
    i. Schwind et al. – deficiencies in surgical residents were uncovered via group discussion, not during individual faculty member review. (2004)
    ii. Hemmer et al. – professional lapses in medical students were only identified as a result of formal group discussion. (2000)
    iii. Thomas et al. – group discussions prior to the completion of the evaluations of internal medicine residents in continuity clinic resulted in higher reliability. (2011)
    iv. *The Wisdom of Crowds* – author James Surowiecki, *New Yorker* columnist, uses examples from a range of fields to demonstrate that under the right circumstances (e.g., having diverse opinions, avoiding groupthink) groups make better decisions than individuals. (2005)
e. CCC chairs and program directors need to be aware of the importance of having a diversity of opinions expressed to enrich the group decision- making process. The perspective each member brings to the discussions (based on clinical expertise, research, medical education expertise, etc.) is important. Research shows that minority opinions, even when "wrong," can lead to better decisions. In addition, CCC chairs need to have an understanding of the factors that enable groups to function effectively and the potential biases that CCCs can encounter.
f. CCCs should have a shared mental model as to which assessment data they need for their decision-making process. CCC chairs should take note when this is not the case and should continue to work on building or refining their "Milestones map" (see section on "Other uses of the CCC"). In addition, committee members will likely bring information about many residents and fellows not captured on completed assessment tools and forms. The CCC provides a forum to hear this previously unshared information. This information is critical to making a robust overall assessment of each resident's or fellow's progress. However, if a program finds that most of the useful information comes from CCC discussion and

is not written down on any assessment forms, it should consider revising its assessment tools or processes and/or faculty development to solicit better written/recorded information. Members may also need to spend time discussing the "value" of different types of assessment data. They may struggle with how much to value their own first-hand knowledge of a resident's or fellow's performance versus information provided by colleagues on formal assessments.

g. CCCs should have a shared understanding of how decisions will be made, including how to deal with inadequate assessment data or lack of data. A few studies have attempted to outline how CCCs make decisions. Through observations of CCC meetings, Pack and colleagues describe the process of making sense of assessment data that are difficult to understand, and how the discussion of how to use the data enriches the decision-making process. (Pack, 2019) Chahine and colleagues performed a review of the literature on group process, and developed a theoretical framework consisting of three "orientations" or approaches to decision making by CCCs, namely "schema" (use of rules, guidelines), "constructivist" (members work together to develop meaning and understanding), and "social influence." (2017) Also at play in this framework are "moderators," such as time, leadership style, etc., which have an impact on the process.

h. Strategies to organize the conversation flow to ensure a systematic approach with minimal bias can be inferred from the literature on clinical reasoning. For example, Lambe (2016) and Croskerry (2003) found that using *cognitive forcing strategies* allows for structured approaches to what is discussed and how. Another recommendation from a review on strategies to optimize clinical reasoning decision making is *guided reflection*, in which decision making is slowed to avoid quick assumptions and to lead individuals to consider information more deliberately. (Lambe) The *framing effect* describes how individuals are swayed by whether a scenario or option is portrayed positively or negatively. Bringing awareness to the risk of the framing effect and overconfidence influencing decisions is important for CCCs. (Saposnik, 2016)

i. How the decisions are made by the group is also important. The best approach is for CCC members to choose the best description of the residents' or fellows' abilities using the Milestones narratives, not the numeric levels. Some studies have suggested that rating based on narrative tends to be more discriminating. Too often when individuals start by choosing a number rating, they will be more likely to try and justify that rating. Encourage all members to focus on the narrative Milestones descriptors.

j. The chair can determine the frame of reference that the CCC members are using when rating the residents/fellows. The Milestones framework is criterion-based, referring to specific expectations for all residents/fellows to meet. However, sometimes faculty members may find themselves comparing a given resident's/fellow's performance to themselves (self) or to other residents/fellows (peer). If a resident/fellow has not rotated through an experience over the past six months, and that hinders the CCC in making a determination on one of the milestones, the CCC should maintain the Milestone judgment from the previous reporting period.

k. The committee members will need to determine how best to spend their time, e.g., time spent on struggling learners can often consume the majority of the meeting, leaving little opportunity for discussing how to assist residents/fellows with satisfactory or an even higher performance level to create stretch goals. Large programs may address this in several ways. To avoid having to discuss too many residents/fellows in one meeting, some programs develop "subcommittees," e.g., one for each post-graduate year. These subcommittees may meet prior to the large CCC meeting to discuss their assigned residents/fellows. In these instances, subcommittees review each resident's/fellow's data and discuss this in their meetings. During this process, they identify concerns to bring to the full CCC. Other CCCs set up more than one meeting per six-month cycle, e.g., once per month or every other month. They may intentionally devote some of their meetings to be "formative" (i.e., focused
on ensuring they have all the necessary data and discussing performance, but not assigning Milestones ratings), while other meetings are "summative," during which the committee actually rates the residents/fellows on the Milestones. All residents/fellows, from the lower performing residents and fellows to the "superstars," need individualized educational learning plans. Competence is the "floor," and not the "ceiling" of performance, and higher performing residents/fellows can be challenged to develop further. Longer discussions tend to produce better decisions and will likely produce better feedback.
l. Time pressure or trying to cover too many residents/fellows in one meeting can produce lower quality decisions.
m. There should be a clear process for allowing the CCC to forward their concerns about a given resident's/fellow's performance, their suggestions for remediation, and their expectations for follow-up to either another committee or the program director. There should also be clarity about the expected outcomes of the meeting, which include not only the Milestones ratings generated twice per year, but also feedback from the CCC to the residents/fellows. The group will need to come to a consensus about the type of feedback generated and develop a process for delivering it. The CCC may also provide feedback to other stakeholders, such as the program and core faculty members.
n. CCC chairs may choose to include time during the meeting for faculty development, such as regarding developing shared mental models (as above), rater training, the pros and cons of various assessment methods, building a "Milestones map," etc.

3) Post-meeting:
   a. The discussion about each resident/fellow should be captured and documented. The discussion and judgments of the CCC are legitimate and important assessment information and should become part of each resident's/fellow's record. This information should also serve as the template for the feedback session with each resident/fellow. See section 5 for details regarding providing feedback to residents/fellows.
   b. Transparency is an important principle in ACGME-I's accreditation model. Accurately documenting and sharing the key components and judgments with residents and fellows is a critical aspect of this principle.

c. Taking time at the end of each meeting to debrief how the meeting went can improve processes at future meetings. The chair can generate a discussion among the group by simply asking what went well, what could be improved, and how members would like to see things move forward. The coordinator, serving as an observer, can also provide useful feedback for the whole group if appropriately guided and empowered to do so. Thus, assess if the CCC is meeting its goals and determine how to improve the next meeting.
d. In conjunction with assessment of residents/fellows, CCCs will increasingly assess the performance of program. In assessing resident/fellow performance against the Milestones, it will become clear what is missing from the program's assessment "toolkit," and if there are curricular gaps and redundancies. CCC deliberations can generate behaviorally-specific feedback that will be useful to learners. But CCCs will also identify feedback useful for faculty members. Some faculty members will be recognized as role models for the timeliness, quality, and quantity of their evaluations. The CCC can help these individuals to be recognized, perhaps as part of promotion and tenure considerations, or through incentives. Others may be tapped to coach fellow faculty members whose evaluations could be improved.
e. The CCC should provide a synopsis of its findings to the Program Evaluation Committee for its use in improving the assessment system within the program.
f. The CCC, therefore, has an important role in the continuous educational quality improvement of faculty members and the program, in addition to its role in assessing residents/fellows.

It is recommended that the CCC revisit its purpose, shared mental model, and procedures annually. Ongoing faculty development for CCC members to help prevent the development of groupthink or drifting from the original aims and procedures is critical.

As listed above, there are many factors to consider when planning or conducting a CCC meeting. Should CCCs choose to maintain a written "policies and procedures" document, it should be updated at least annually. CCCs should include the above- mentioned processes in this document. Doing so not only fosters a quality improvement approach to the workings of this committee but allow for greater transparency of the CCC's work to stakeholders.

Anticipating, Recognizing, and Mitigating Bias

Ensuring a fair and equitable assessment system constitutes a fundamental obligation of the CCC to ensure that learners are afforded maximal opportunities to learn and thrive in the program.

Especially as the diversity of learners continues to increase, CCC members require awareness and training regarding bias in evaluations of learner performance.
Multiple studies and experts describe concerns about the risks of bias influencing the evaluations of learners from students to postgraduate residents/fellows based on gender and race/ethnicity. Emerging studies suggest that bias affects both numerical and qualitative evaluations of learner performance. Quantitative ratings

of student and resident/fellow performance have been shown to be systematically lower for women than men, (Dayal, 2017; Klein, 2019) and lower for residents/fellows from backgrounds underrepresented in medicine. (Teherani,2018; Backhus, 2019; Boatright, 2017) Narrative resident/fellow performance data also reinforces stereotypes through use of different words to describe the performance of different groups based on gender or race/ethnicity. (Rojek, 2019; Mueller, 2017; Gerull, 2019; Salles, 2019; Ross, 2016; Isaac, 2011)

To address this important risk of bias influencing resident/fellow performance ratings during CCC discussions, programs should do the following:

- CCC membership should include diverse members in terms of gender and race/ethnicity. Diverse groups outperform homogeneous groups in terms of the quality of their work and decision making. (Hong, 2004)
- All CCC members should participate in training on diversity, equity, inclusion, and bias. Training can entail deepening one's understanding of unconscious bias and racism that permeates health care and medical education. CCC members should appreciate how bias based on learners' race/ethnicity or gender can impact both quantitative and qualitative ratings of learner performance. Learners who are not white or who are women receive lower numerical ratings and are less likely to be selected for the Alpha Omega Alpha Honor Medical Society. (Boatright, 2017; Mueller, 2017; Teherani, 2018) Women also receive less favorable ratings on some milestones than men in some specialties (Dayal, 2017; Klein, 2019; Santen, 2019). Another study from Hamstra (2019) showed that in pediatrics and some family medicine milestones, women scored higher. Review of narrative comments about learner performance shows how certain words may be systematically used more to describe individuals based on the groups to which they belong. (Mueller, 2017; Rojek, 2019) Through ongoing discussion and reflection, CCC members can share and address their own perspectives and biases in order to recognize and mitigate unconscious biases. (Morgan, 2018)
- The CCC should examine the program's own data for any systematic group differences in performance that signal bias in the evaluation data. In their roles using CCC data to continuously improve the program, CCC members should be vigilant for signs indicating how issues of race and racism may be influencing residents' learning experiences. (Karani, 2017)
- The CCC should discuss and reflect upon their performance ratings to identify any areas in which bias may be influencing ratings and discuss improvements to their processes. This reflection process can be structured by reviewing the CCC's data, including ratings for learners based on gender and race/ethnicity. This review can uncover systematic differences, as have been observed in some Milestones ratings showing higher assessment of men than women in certain milestones traditionally thought of as more 'male' characteristics. (Santen, 2019; Dayal, 2017)

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Part 5: Post-Meeting Activities: Feedback, Documentation, and Follow-Up

Feedback to the resident or fellow is an essential activity of the Milestones assessment system. Research has clearly shown that feedback is one of the most effective educational tools faculty members and programs have to help residents and fellows learn and improve. The Milestones should be used to help residents and fellows develop action plans and adjustments to their learning activities and curriculum. Feedback sessions should be conducted in person.

Program directors will have different processes within their programs based on program size. Some program directors may provide feedback to residents/fellows themselves. Others will delegate this responsibility to one or more of the CCC members or a separate set of advisors. Research is clear that interpreting and understanding multi-source performance data, as represented by the Milestones, should be facilitated and guided by a trusted advisor working with a resident/fellow over time. This relationship has been termed an ‘educational alliance’ that strengthens the residents’/fellows’ ability to engage with the feedback provider in reflecting on their own performance and incorporating feedback into a plan for improvement. (Telio, 2015, Ramani, 2019) Feedback is most effective when structured as an ongoing dialogue rather than a one-time transmission of information. This process builds learners’ skills as Master Adaptive Learners equipped to engage in lifelong learning. (Cutrer, 2017)

The faculty members providing feedback should be trained to serve in a coaching role. Training entails building skills in discussing feedback, guiding reflection, and creating learning plans. (Armson, 2019) A coach uses strategies to help residents build on their strengths and address areas for improvement as part of their learning experience. (Palamara, 2018) Similarly, residents should receive training about how to maximize the benefit of a coaching relationship, including how to receive and use feedback even when it may feel uncomfortable. (Deiorio, 2017)

There are many different models that can be used to provide feedback, like ADAPT - ***A***sk-***D***iscuss-***A***sk-***P***lan ***T***ogether (Appendix H), and R2C2 (Appendix I). (Fainstad, 2018; Sargeant, 2018) Regardless of the particular model used by a program, the basic features of high-quality feedback include:

1. **Timeliness:** The results of CCC deliberations and Milestones determinations should be shared with the individual resident or fellow soon after the meeting has occurred.
2. **Specificity:** The Milestones help to facilitate this criterion by providing descriptive narratives. However, as noted above, the Milestones do not represent the totality of a discipline, and many other important points of feedback will likely arise in a CCC meeting that should also be captured and shared with the individual resident or fellow. Generalities (often called “minimal” feedback), such as “you’re doing great,” or, “should read more,” are not helpful in promoting professional development, especially in the context of Milestones data.
3. **Balance reinforcing (“positive”) and corrective or constructive (“negative”) feedback:** It is important to include both in specific terms. An imbalance between too much reinforcing or conversely corrective feedback can undermine the effectiveness. The popular feedback sandwich (positive-

negative-positive) is not actually very effective and not routinely recommended. Models for giving feedback are provided in Appendix H (ADAPT model) and Appendix I (R2C2).

4. **Learner reaction and reflection:** It is very important to allow the individual resident or fellow to react to and reflect on the feedback and Milestones data. The two models provided below are excellent ways to facilitate this process. Reaction and reflection help garner resident/fellow buy-in and development of individualized learning plans (ILPs). Residents should be strongly encouraged, in partnership with a faculty advisor and coach, to create their own ILP every six months.
5. **ILPs**: Creating and executing an ILP after Milestones review is critical to professional development and is often neglected in feedback. As Boud and Molloy (2013) argue, feedback hasn't occurred until the learner has actually attempted an action or change with the information. Feedback is more than just information giving and dissemination. (Lockyer, 2017)
6. Feedback should start with where the resident/fellow was at the last feedback meeting and a review of the action plans created then.

CCCs should also provide feedback to the program and the Program Evaluation Committee as to which milestones have been easier to assess based upon the assessments presented. This feedback is critical for the program to improve its curriculum (where the content of the milestone is taught) and where and how it is assessed.

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Part 6: Other Uses for the CCC

Although the primary role of the CCC is that of documenting residents'/fellows' performance on the Milestones, by virtue of their review and synthesis of a vast array of assessment data from different learning experiences, CCCs are uniquely qualified to render judgements not only on resident/fellow performance, but on the curriculum and the quality of the assessment system. CCCs can play many important roles in the assessment system, including:

1. Assessing transferring residents/fellows
2. Contributing to the Annual Program Evaluation
4. Faculty development
5. Quality improvement of the assessment system
6. Assisting the institutional Graduate Medical Education Committee (GMEC)
7. Continuous educational quality improvement
8. Simplifying a program's individual and collective assessment tools

This section, describes an expansion of the role of the CCC outlined in the International Foundational Program Requirements in order for programs and institutions to make the most of these committees' important work.

Transfers/Admittance from Non-ACGME-I-Accredited Programs

When residents/fellows transfer into an ACGME-I-accredited program with previous experience from a non-ACGME-I-accredited program, an assessment on the Milestones is required within 12 weeks of matriculation. Programs should also review the resident's/fellow's Milestones results from the previous program when applicable. The CCC may be used to assess the competence of those residents/fellows who are either transferring into a program from a period of prior education or applying to a fellowship with core residency education experience from a non-ACGME-I-accredited program.

Annual Program Evaluation

Through the process of reviewing vast amounts of resident/fellow assessment data, CCCs should take the time to develop "Milestone maps" (i.e., a spreadsheet to track where each milestone is taught and assessed). CCCs can use these maps to determine the extent of the curricular content for each milestone, including the teaching and assessment methods and the learning experiences where the material is currently taught and/or assessed, or perhaps where it *should be* taught/assessed. This process can illuminate any potential gaps or redundancies in the curriculum. Then, CCCs can make recommendations for the development of new rotations or learning experiences that may help address curricular concerns.

Such information can be formally submitted to the program director at least once per year to be included on the agenda for the Program Evaluation Committee (PEC) as it performs the Annual Program Evaluation. The PEC is expected to review multiple data points during this review, including information about the curriculum and aggregate Milestones data.

Faculty Development

CCCs review an inordinate amount of faculty ratings and narratives about residents'/fellows' performance and must make important decisions based on this data. Thus, they can provide important insights on the usefulness of such data and offer feedback to be used for the purpose of faculty development. Program directors are expected to review the performance of their faculty members at least annually, including providing faculty members with feedback on their evaluations. The CCC can have a significant role in this key faculty development mission.

Faculty development is needed at three levels: 1) the program director; 2) the engaged core and other faculty members who join the CCC; and, 3) the faculty members "in the trenches" who may not be as fully involved in educational programming or administration, but who have essential roles in actively teaching and assessing residents/fellows. Each group will have different needs. Program directors and CCC members will need a deeper understanding of the Milestones, assessment, group process, and program evaluation. Faculty members need to understand what key elements of assessment information they need to contribute to the larger picture of each resident/learner.

Faculty professional development is a required program component. ACGME-I recognizes that although "evaluation is a core faculty competency… most [faculty members] will need additional training in [the] evaluation process," to include evaluation process training (how to interpret aggregated evaluation data), understanding how many assessments are needed for each Milestone, assurance of data quality, and application of QI methods to the evaluation processes. The CCC provides an opportunity for faculty development for other program faculty members as well: to understand the CCC process and how its evaluations of residents/fellows fit into the overall assessment of resident/fellow performance using the Milestones.

Quality Improvement

In aggregate, CCCs can review not only assessment data generated by the core faculty members, but also their own Milestones ratings. Using aggregate reports from their residency management system, CCCs can review trends in the ratings for specific milestones and initiate conversations to assist in explaining such trends. For example, if most PGY-2s are scoring low on the practice-based learning and improvement milestones, there can be multiple reasons for this finding. This may be due to lack of data, inadequate data, inadequate performance, or perhaps inadequate sampling of performance. In some situations, there may be no assessment data at all for certain milestones. This finding may also signal gaps in the curriculum, a lack of assessment, inadequate documentation, and presentation of assessment data to the CCC or some combination thereof. Mechanisms should be put in place to recognize these issues and attempts should be made to address them prior to the next review cycle.

Assist the GMEC

The CCC can assist the GMEC in the oversight of the effectiveness of programs' curricula by providing the aggregate Milestones data for each program and trends

in the data, and by making recommendations for programs' Annual Program Evaluations. Per the International Institutional Requirements, the GMEC's responsibilities must include oversight of the educational programs [ACGME-I Institutional Requirements IV.B.6. 8., and 11]:

Continuous Educational Quality Improvement

For the individual resident/fellow, the CCC offers insights and perspectives from a group of faculty members, and comparison of an individual's performance to a national standard, the Milestones. For the entire program, the CCC serves as an early warning system if a resident/fellow fails to progress, and therefore identifies an opportunity for remediation. For the members of the faculty, CCCs can be an opportunity to balance out the "hawks" and "doves," and to develop a more standardized, consistent, explicit approach to expectations of resident/fellow performance. More importantly, through longitudinal dialogue and repeated sessions, faculty members can develop a better shared mental model of competence and reduce the variability in assessment judgments.

Simplify a Program's Individual and Collective Assessment Tools

The CCC can identify which assessments are most useful, and where there are gaps. A program may be able to eliminate administrative burden. It may not be feasible or even necessary for faculty members to complete multi-page evaluation forms, for example. As stated earlier, the true assessment instrument is not the tool or form, it is the faculty member(s) or others using it. CCCs can help to identify barriers and impediments to effective faculty members' evaluations and create faculty development or other intervention opportunities.

Part 7: Individualized Learning Plans and Final Evaluations: The Other Roles of the CCC

The CCC has one other critically important role.

1) The program director/designee, with input from the CCC, must: “assist residents in developing individualized learning plans to capitalize on their strengths and identify areas for growth” (Foundational Program Requirement V.A.1.b).(4)

Individualized Learning Plans (ILPs)

Learning contracts are “without question the single most potent tool I have come across in my more than half-century of experience with adult education.” (Knowles,1990)

Adult learning theory is premised on the construct that adults learn best when they are actively engaged in the learning process and self-direct their own learning goals and activities. (Knowles, Holton and Swanson, 2005). The International Foundational Program Requirements now reference ILPs [Foundational Requirement V.A.1.b.(4)]: “The program must… assist residents in developing individualized learning plans to capitalize strengths and identify areas of growth.”

At the point of graduation, program directors must certify that each resident has achieved competence as an independent, self-directed, and lifelong learner. The Core Competency of practice-based learning and improvement is a fundamental component of this certification. Self-directed learning is a process by which individuals identify and/or acknowledge their own learning needs, find resources to meet those needs, and subsequently evaluate their own achievements; it is integral to maintaining professional competence. An ILP is also an important tool for the struggling resident or fellow.

Although ACGME-I expects all residents/fellows to have individual learning plans, often CCCs and program directors only think about using them in for those learners who are performing below expectations. Residents/fellows struggling to perform at acceptable standards are often a source of frustration for faculty members and for CCCs. When the CCC and/or the faculty acknowledge that a learner is not meeting academic standards, there is sometimes hesitation regarding a path forward. Often, this hesitation stems from learners who are perceived as lacking insight to their own deficiencies. In addition to being unable to self-reflect on performance, these learners also tend to disregard faculty members’ feedback (often perceived as biased or misdirected), claim that the faculty members have not adequately taught them or provided them with helpful feedback, and cannot acknowledge their own personal role and responsibility in the learning process. But the inability to accurately “self -assess” and have appropriate insight is almost universal among those performing poorly; program directors and faculty members should expect it and not be surprised by it. Indeed, the very lack of insight that makes residents/fellows incapable of recognizing their own poor performance, frequently makes it nearly impossible for them to succeed with a remediation plan.

An ILP should be formulated by the learner for the learner, and should include personal learning objectives, as well as resources and strategies to achieve them. While the learner should be able to create an initial ILP, the ILP content should be guided by a facilitator (faculty member, advisor, coach, or program director). The draft ILP created by the resident/fellow can provide enormous insight to the program director and/or CCC; the information contained in the ILP is one way to determine if the learner has the ability to self-reflect based on feedback received, and the insight required to be successful in remediating. Those unable to “own” their

deficiency(ies) and construct or at least contribute in a major way to a plan to address it, are unlikely to be successful.

Creating an ILP should actively engage learners to take ownership of their own learning. (Li and Burke, 2010) ILPs allow the learner to focus on priority areas, re- evaluate learning needs, and have regular discussions about achieving learning goals.

Components of an ILP (Li and Burke, 2010):

1. Reflection on goals and self-assessment of strengths and weaknesses
2. Generation of specific learning goals and/or objectives
3. Specific plans or strategies to achieve each goal focused on what the learner will do to improve
4. Mutual agreement on how the assessment of progress on each goal will be determined
5. Eventual revision of goals or creation of new goals based on performance
6. Expected timeline

ILPs ARE:

- Formulated by the individual (resident/fellow) – made by the learner, for the learner
- Guided by a facilitator (faculty member, advisor, coach, or program director)
- An exercise in self-assessment and self-reflection
- Iterative
- An ACGME-I foundational requirement
- An indicator of insight and ability to become an independent lifelong learner

ILPs are NOT:

- Set in stone – they can and should be revisited by both the learner and the facilitator
- A portfolio
- Evaluations
- The sole or major responsibility of the program director (or faculty) or the program

CCCs do not “create” ILPs. This is the work of the residents/fellows, co-produced with the program director (or designee), an advisor, or coach.

The Final Evaluation

Upon completion of a program, the program director must provide a final evaluation for each resident/fellow (Foundational Requirement V.A.2.a)). In the past, this was often referred to as the “Final Summative Evaluation.” While this evaluation has been a perfunctory document and process for residents/fellows successfully completing a residency or fellowship and progressing to the next stage of their career, the final evaluation for residents/fellows who depart the program prior to completion, typically for performance reasons, are even more important and can be difficult to write.

When a resident/fellow is dismissed from the program, or resigns early due to performance concerns, the final evaluation becomes the document of record regarding the resident’s/fellow’s achievement to date in each of the Core Competencies. It also describes areas in which the resident/fellow is either deficient or has not attained a level of performance consistent with PGY level expectations. Additionally, the final evaluation can contain important contextual information, including the dates of enrollment in the program, any relevant prior

education/training information, description of any behavioral issues or concerns, and a summary paragraph describing the program director's overall impression of the individual resident/fellow, their achievements, any ongoing concerns, or areas for future focus. For residents and fellows in procedural specialties, the final evaluation may also include a summary of procedural cases performed at the institution.

Table 5: International Foundational Program Requirements for the Final Evaluation (previously the Final Summative Evaluation)

V.A.2.a)	be provided by the program director for each resident/fellow upon completion of the program
V.A.2.a).	become part of the resident's/fellow's permanent record maintained by the institution, and must be accessible for review by the resident in accordance with institutional policy
V.A.2..b). (2)	verify that the resident has demonstrated the knowledge, skills, and behaviors necessary to enter autonomous practice

The final evaluation should be a comprehensive, stand-alone document that encompasses the scope of a resident's/fellow's performance while enrolled in the program. The final evaluation should not be confused with a letter of recommendation, which is typically prepared to promote or support an individual with a positive bias. Instead, the final evaluation should be written with candor, in a way that is fair and balanced with regard to actual performance.

The final evaluation can be an important tool for a program receiving an off-cycle resident/fellow. If properly written, the program receiving the resident/fellow should be able to use the final evaluation from the prior program to ascertain the resident's/fellow's current performance level for each Core Competency, understand the resident's/fellow's strengths and weaknesses, understand the context in which the resident/fellow departed the prior program, and provide continuity of education, supervision, and feedback.

The final evaluation is also valuable for well performing residents as transitioning from residency to fellowship or into their first post-GME professional role.

The final evaluation SHOULD be:

- Sufficiently comprehensive to stand alone in the resident or fellow's permanent record as an historic document of enrollment, achievement, and areas of concern
- Honest – fair and balanced
- Competency-based, including knowledge, skills, and behaviors
- Signed and dated by the program director
- Maintained in the permanent academic record of the program and/or institution
- Provided to the resident/fellow when finalized and signed
- Provided to others upon request (as appropriate, and when indicated, with the approval of the resident/fellow)

The final evaluation SHOULD NOT:

- Misrepresent actual performance in any way
- Serve as a letter of recommendation
- Be negotiated by the resident/fellow or anyone else (the content of the final evaluation must be the program director's honest view of performance at the conclusion of the resident's/fellow's time in the program

Some programs ask departing residents/fellows to sign the final evaluation retained for their permanent file.

The Milestones were not designed to be used for this purpose, and the authors of this guidebook strongly recommend that programs NOT substitute the final Milestones report submitted to ACGME-I for this final evaluation document.

The authors recommend contacting the Sponsoring Institution's DIO to learn if the program should also collaborate with the institutional Legal and/or HR entities for guidance.

Conclusion

Although CCCs do not create ILPs or final evaluations, they have critical input into these important, required program processes. As such, they benefit from understanding how their judgement of resident/fellow progress will be used by the program director beyond Milestones ratings alone.

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Part 8: Institutional Oversight of CCCs

[Acknowledgement to Y. Wimberly, MD, MSc, FAAP, Associate Dean of Clinical Affairs and Designated institutional Official, Morehouse School of Medicine]

Although there are no CCC-specific requirements in the International Institutional Requirements, DIOs and their team, as well as the GMEC, have a critically important oversight role in ensuring each program's CCC processes adhere to the International Foundational Program Requirements. They may be a source of resources, including for faculty development, and provide ways to share lessons learned among the institution's programs.

In addition, there is at least one institutional requirement that may impact CCCs. The Sponsoring Institution is responsible for programs' development of "promotion criteria" and criteria for renewal of a resident's/fellow's appointment [ACGME-I Institutional Requirement II.D.4. d).], and those conditions for reappointment and promotion to a subsequent PGY level must be in the contract or letter of appointment [ACGME-I Institutional Requirement II.D.4.]. Many CCCs may de facto "act" as promotion committees and apply their judgement of resident/fellow performance to recommend resident/fellow renewal and promotion to the next program year. Although not stated explicitly, it is likely that an effective CCC will have collaborated with the program director to identify the promotion criteria or at the very least, align Milestones performance with them. The CCC should inform the program director of its review so that the program director can truly exercise the responsibility, authority, and accountability for promotion of residents/fellows. [Foundational Requirement II.A.2. p).]

For residents not making sufficient progress, other institutional requirements will likely become important, such as due process and grievance policies. Ideally the Sponsoring Institution and its programs are closely aligned, and the DIO and the program directors are effective collaborators.

The GMEC may wish to monitor CCCs through their oversight of each program's Annual Program Evaluation and Self-Studies [ACGME-I Institutional Requirement IV.B.11.]. The GMEC may wish to make some aspect of the CCC's assessments one of the performance indicators used and reported as part of the institution's Annual Institutional Review (AIR) [ACGME-I Institutional Requirement IV.B.5.b)].

One institution's experience with this is described using change management strategies and realizing effective engagement. (Dagnone, 2019)

Appendix H provides a checklist of important CCC elements for DIOs and GMECs to use in their monitoring. It can be modified to reflect program-/institutional-specific practices. It outlines potential expectations for the DIO and GMEC, the program director, the CCC Chair, CCC members, program faculty members and evaluators, and residents/fellows. It can be used to review the current status of CCCs within an institution and to identify potential areas for improvement, enhanced resources, and strategies to disseminate best practices.

References:

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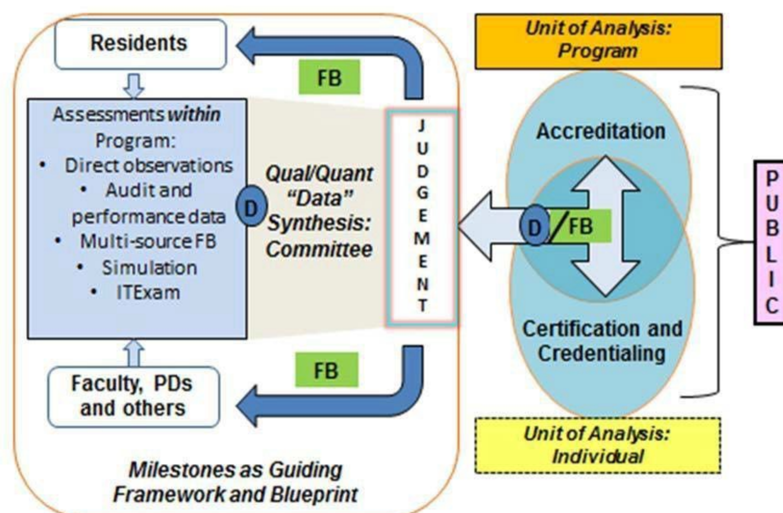
Part 9: Current Research

The ACGME Department of Research, Milestone Development, and Evaluation maintains a bibliography of research related to the Milestones and Clinical Competency Committees. The bibliography is updated approximately every six months and can be found at https://www.acgme.org/What-We- Do/Accreditation/Milestones/Research.

Appendix A: The High Performing Residency Assessment System



At the program level, residents/fellows are assessed routinely through a combination of many assessment tools. These include: direct observations; global evaluation; audits and review of clinical performance data; multisource feedback from team members, including peers, nurses, patients, and family; simulation; in- service training examinations (ITE); self-assessment; and others. Increasingly, the Milestones and entrustable professional activities (EPAs) are used as a guiding framework and "blueprint" for expected performance. Assessment tools are selected intentionally to allow routine, frequent, formative feedback to the resident/fellow to affirm areas of successful performance and to highlight those aspects that need to be improved. The CCC is the committee that synthesizes data—quantitative from in-service exams and clinical performance audits, and qualitative from observers and co-workers. Using the Milestones, the committee forms a consensus decision, or a judgment, regarding each resident's/fellow's performance. The CCC provides those conclusions to the program director, who makes the final determination on residents'/fellows' Milestone "level" at least twice yearly.

Data (D) is essential for the entire system to engage in continuous quality improvement, especially to create meaningful feedback (FB) loops within the program and back to programs from ACGME-I. Programs and residents and fellows can currently download their Milestones report after each reporting period.

Appendix B: CCC Quiz

1. Requirements for a CCC are found in:
    A. The International Foundational Program Requirements
    B. The International Institutional Requirements
    C. The *CLER Pathways to Excellence* document
    D. Both A and B
    E. None of the above

2. The minimum number of CCC members is:
    A. 1
    B. 2
    C. 3
    D. 4
    E. As many as necessary so that all divisions/subspecialties must be represented
    F. None of the above; there are no specific requirements on the numbers needed

3. Who of the following should ALWAYS chair the CCC?
    A. Program director
    B. Associate program director
    C. Department Chair
    D. DIO
    E. Head, GMEC
    F. Most senior faculty member on the committee
    G. None of the above

4. The CCC must include:
    A. Patients
    B. Nurses
    C. Peer-selected residents or fellows
    D. Members of the program faculty
    E. Program director
    F. All of the above
    G. None of the above

5. How many residents/fellows **must** participate on the CCC?
    A. 0
    B. 1
    C. At least one peer-selected resident or fellow
    D. At least one from every year of the program
    E. At least one chief resident

6. CCC members:
    A. Determine each resident/fellow's progress on achievement of the specialty-specific Milestones
    B. Only consider residents/fellows who need remediation
    C. Only review residents/fellows in their final year of the program
    D. Review the decisions the program director has already made regarding each resident/fellow and provide advice
    E. Vote on each resident's/fellow's performance

7. The CCC must:
    A. Submit Milestones summaries to ACGME-I
    B. Meet with all residents/fellows to discuss their individual progress on the Milestones
    C. Design and implement any remediation plan necessary (and mentor the resident/fellow throughout)
    D. Review all resident/fellow evaluations at least semi-annually
    E. Share Milestones evaluations with the local certification board

8. According to ACGME-I, the minutes of the CCC must be:
    A. Fully transcribed
    B. Retained as a summary of all residents/fellows
    C. Retained only as a summary of the sub-optimally performing residents/fellows
    D. Provided to ACGME-I
    E. None of the above

9. According to ACGME-I, all residents/fellows must be able to exercise a grievance/due process ("appeal") if they disagree with the CCC regarding the Milestones determination it plans to report to ACGME.
    A. True
    B. False
    C. It depends

10. Who makes the final decision on a resident's/fellow's Milestones level?
    A. The CCC
    B. The resident's/fellow's advisor
    C. The resident/fellow
    D. ACGME-I
    E. The program director

11. In order to serve on a CCC, a chief resident must:
    A. Have completed the core program
    B. Be in the last year of the core program
    C. None of the above; a chief resident cannot be on a CCC

12. Program coordinators:
    A. May serve as voting members of CCCs
    B. Can manage submission of Milestones data to ACGME-I
    C. Should not attend the CCC meeting
    D. Should participate as voting members of the CCC
    E. None of the above

13. Which of the following is true about CCCs?
    A. The best size of a CCC is 12-15 members
    B. At least one peer-selected resident should attend
    C. Faculty members and/or health professionals with “different” voices/options are encouraged to participate
    D. The most senior persons should express their opinion first
    E. None of the above

14. The **most reliable** assessment of performance is:
    A. Multiple choice (written) examination
    B. Global end-of-rotation evaluation
    C. Multi-rater evaluation (multisource feedback)
    D. Procedural log
    E. Oral examination
    F. Observation of actual performance

15. The literature suggests the idea size of a CCC is:
    A. 3 to 5
    B. 5 to 7
    C. 7 to 9
    D. 9 to 11
    E. None of the above

16. Which of the following statements regarding Milestones assessments is true?
    A. Programs should give faculty members the entire Set of Milestones for them to use as part of their end-of-rotation evaluations
    B. Faculty members should be encouraged to make inferences on the performance of residents ONLY based upon the performance they have directly observed
    C. Faculty members should generally use the Milestones level that corresponds to a resident’s year in training (i.e., Level 1 for a PGY-1 resident)
    D. Information gained from informal “hallway” conversations can be useful
    E. CCCs should use the average calculated by their resident management system to determine the Milestones level

17. Groupthink is a phenomenon that occurs when the desire for group consensus overrides people’s common-sense desire to present alternatives, criticize a position, or express an unpopular opinion. Which of the following is a risk for groupthink?
    A. The CCC feels pressure to make a consensus decision with inadequate time (decisional stress)
    B. Low level of group cohesion
    C. Lack of a strong dominating leader
    D. The CCC cultivates an environment that encourages dissent

18. A CCC member says, “this is a strong resident, and I think a 2.5 Milestone rating is appropriate,” and provides two supporting vignettes. This is mostly likely an example of which type of cognitive bias that is common in groups?
    A. Authority bias
    B. Anchoring bias
    C. Framing bias
    D. Confirmation bias

19. Using what’s known from the literature to encourage good group processes, the CCC should:

A. Encourage the most senior person to discuss a resident/fellow first
B. Have the CCC chair state opinions first
C. Avoid a structured format and use open forum for discussion
D. Use only the synthesis of a resident's/fellow's performance rather than the underlying data used to make that synthesis
E. Ask one member to offer an opposing or different view to help represent all possible perspectives

20. Feedback to residents/fellows following the CCC meeting is best accomplished through an email providing them with a written report of their Milestones performance.
    A. True
    B. False

21. Individualized Learning Plans are required by ACGME-I:
    A. Only for residents/fellows failing to progress
    B. All residents/fellows
    C. Only residents/fellows in the first year of the program
    D. Only residents/fellows in the final year of the program

22. An applicant is accepted through an "exceptional candidate" exception and matriculates into the program. A performance evaluation by the CCC must take place:
    A. Within 2 weeks
    B. Within 8 weeks
    C. Within 12 weeks
    D. Within 20 weeks

23. Which of the following is/are other possible roles of the CCC?
    A. Contributing information for use in Annual Program Evaluation
    B. Assessing the competence of residents/fellows transferring from non- ACGME-I-accredited programs to ACGME-I-accredited programs
    C. Faculty development for core faculty members
    D. All of the above
    E. None of the above

Modified from an earlier quiz presented by Andolsek, KM and Nagler, A at the 2013 ACGME Annual Educational Conference

Appendix B: Quiz Answers

1. A
2. C
3. G
4. D
5. A
6. A
7. D
8. E
9. B
10. E
11. A
12. B
13. C
14. F
15. B
16. D
17. A
18. B
19. E
20. B
21. B
22. C
23. D

Appendix C: Case Studies

Mini Case Studies/FAQs/Common Dilemmas/Challenging Situations/Promising Practices

1. Program director, "Dr. C," is an accomplished clinician and well-regarded educator. Dr. C recruits several faculty members to the newly constituted CCC, but decides to chair the committee to ensure everything occurs correctly and meets ACGME-I expectations.

Program directors and programs should think carefully about the role of the program director in the CCC. Even if there are no rules, it is worthwhile to think through the role of the program director on the committee. The intent of the CCC is to ensure all faculty members feel comfortable discussing each resident's/fellow's performance. If the program director is the chair, how comfortable and motivated are the faculty members expressing their own opinions, versus deferring to the program director who may "know" many more details about the residents/fellows. Do the faculty members essentially rubber-stamp the program director's view? Or can they provide independent and important judgments necessary to create a valid consensus, maximizing the strengths of the process, which depend on several, independent, thoughtful faculty members weighing in?

As with any group process, the program should think strategically about how to create an atmosphere in the CCC in which all participants feel they can and should speak candidly and that their opinions will be valued. This committee should be one of the most important committees in a department and should be known as a place where faculty members can speak freely and honestly regarding learner performance in a setting that is supportive, confidential, and structured. Think intentionally about ways to reduce a hierarchy, perhaps having more junior faculty members speak first. A faculty chair other than the program director may help facilitate this process.

In situations where the program director needs to chair the committee, consider having the program director speak last, after all committee members have provided meaningful input based on their own observations and experiences. The program director can be a participant or an observer or not present at all, although many programs will find it beneficial for the program director to be present to at least observe and hear the conversations regarding resident/fellow performance.

2. A residency program has 90 residents in a three-year program. The CCC has its first meeting and can't imagine faculty members having enough time to meaningfully review all 90 residents in a practical manner.

There are several options for CCC structure, and since a specific structure is not dictated by ACGME-I, this is an area for programs to be flexible and innovative.

- Some CCCs accomplish this by meeting more frequently—perhaps three separate meetings at which 30 residents each are considered.
- Large programs may have separate CCCs for each PGY cohort (i.e., one for the first-years, one for the PGY-2s, and one for the PGY-3s). Programs using this model may have the individual CCCs follow their cohort across all years of the program or develop expertise in the particular curriculum year.
- Some programs may organize their CCCs around specific activities (such as one CCC to assess the QI activities, one for the research activities, one for ambulatory versus inpatient activities)
- Some CCCs have organized similarly to an Institutional Review Board, where one or

two members will review a resident's/fellow's performance in detail prior to the meeting and present their assessments and recommendations to the committee at the meeting, soliciting feedback from the group.

Programs will gain efficiency by having the CCC think through its expectations of performance and identify what program assessments best speak to these. When gaps in assessment tools are identified, it can help the program address them.
CCC members will benefit from faculty development on the Milestones, and on how best to assess resident/fellow performance. Whatever methods are chosen, the program coordinator plays a critical role in organizing and providing the right information to the CCC and its members.

3. A program wants to "democratize" the CCC to reflect resident input by inviting its chief resident to attend.

Some chiefs are still considered residents, while other chiefs are considered faculty members. ACGME-I precludes a resident (whether or not a chief) from being on the committee. The rationale is that residents are colleagues of their fellow residents, and it can be challenging to have them in a situation in which they engage in high-stakes performance evaluation of these colleagues. ACGME-I allows a chief who has completed a core residency and is eligible for certification in his/her specialty to be a CCC member.

Though technically possible to have a faculty-level chief resident as part of the CCC, the same concern may lead the program to not include such a resident— they are often just a year away from being a resident themselves and know the residents very well, and it may be too challenging to engage in the required tasks of the CCC. On the other hand, input from all residents on their peers is desirable and may be an important source of data for CCCs, particularly in resident Professionalism and Communication and Interpersonal Skills milestones. The program can accomplish this by having regular resident peer feedback as part of its multi-source/multi-rater evaluation process. Likewise, residents can have a forum to discuss peer performance and/or send concerns or accolades to the CCC for review and inclusion in the faculty process.

4. The CCC wants to thoroughly document its process and keep extensive minutes.

At a minimum, the program director will record the CCC consensus and report resident/fellow performance on the Milestones to ACGME-I. How much of the discussion that informs the Milestones decision is up to the individual program. Specific, behavioral feedback that would help a resident/fellow improve can be conveyed as with any program evaluation. This information can be shared with the resident/fellow as part of his/her twice-yearly evaluation meeting with the program director, an assigned CCC member, or his/her advisor. The assessment data used by the CCC to develop its consensus should already be available to the resident/fellow for review. A written document reflecting the discussion of each resident's/fellow's performance should be:

1. A concise summary of each resident's/fellow's performance and any action or follow-up items
2. Confidential
3. Archived for several years*

*The program should consult with its HR and Legal experts to understand what should be retained, where it should be archived, and for how long.

5. The CCC and the program director disagree on the Milestone performance of a particular resident/fellow.

The International Foundational Program Requirements expect the CCC to provide input, but the program director to make the final decision on resident/fellow performance against the specialty-specific Milestones.

6. The CCC wants its faculty members to be more comfortable and candid in their deliberations, and decides not to share its decision on resident/fellow performance on the Milestones with the residents themselves.

Residents/fellows should be informed and aware of the Milestones performance summary the program director is submitting to ACGME-I. **Currently, ACGME-I does not require programs to have the resident/fellow sign a copy of what is submitted, but it is considered a best practice. It is required that a copy is kept in the resident's/fellow's performance file.** It is expected that programs will use this as an opportunity to provide feedback to residents/ fellows on their performance, and to discuss what is needed to get them to the next level. It should be noted that ACGME-I provides individual Milestones data to the residents/fellows via the Accreditation Data System (ADS).

7. A resident doesn't agree with the CCC and asks it to change its assessment.

The program director should work with the CCC to clarify and communicate the program process on options if residents/fellows disagree with the CCC or the program director's subsequent assessment of milestone performance. Program policies and procedures should differentiate the situations in which a resident/fellow can exercise due process and grievance procedures for an adverse decision. Some programs would consider the CCC consensus, as a judgement but one devoid of adverse consequences and would not provide an opportunity for a resident to "grieve" it. On the other hand, a resident could exercise due process if there were an adverse program decision (suspension, non-renewal, non-promotion; or dismissal) based upon the CCC's Milestones evaluation. Programs should work closely with the DIO and GMEC to ensure program policies are consistent with institutional policies. HR and Legal contacts may also be useful.

8. The CCC has formed and at its first meeting is deliberating upon the residents' performance. The Chair is uncertain if they should "call for a vote."

The authors of this guidebook recommend CCCs not vote. Rather, they recommend CCCs sufficiently discuss each resident/fellow so they can arrive at a decision with which each of the members can agree, a true consensus. Calling for a vote may lead to a situation in which the CCC may appear "divided" and set up a situation in which its recommendation may be considered uncertain, leaving the program more vulnerable to a future challenge.

Appendix D: Designing the CCC

Completing this table will provide programs with a draft of the required written description of the CCC, which they can refine and use to educate residents/fellows and faculty members.

Element	Describe the CCC on this Element
Committee Membership ● Appointed by program director ● Minimum of three faculty members ● at least one core faculty member ● Size—"enough," but all individuals are committed and able to get to meetings ● Who on the faculty is best able to take on this role? (i.e., sufficient resident/fellow contact; need for subspecialty representation) ● Other members? (at the prerogative of and appointed by program director) ● Physician faculty members from same or other program(s) ● Health professions with extensive contact and experience with the program's residents/fellows in patient care and other health care settings ● Chief residents who have completed core program ● Term limits? (five years? the duration of the residency/fellowship?) ● Staggered appointments? (may be useful to plan overlap among those joining the committee and leaving it)	
Chair ● Are there requirements/restrictions imposed from the institution or local health authority regarding who can chair If no external requirements/restrictions: ● Consider pros and cons of who is best positioned for this role (goal is to ensure all voices are heard—if program director chairs, will everyone simply defer to the program director) ● Program director? ● Associate program director? ● Another faculty member? ● Rotating among members?	

Element	Describe the CCC on this Element
Role/Responsibility of *each* member ● Where is this information summarized/documented, and how is it conveyed to CCC members? ● Confidentiality ● Attempts to mitigate bias ● Meeting attendance ● Term length ● Participation in required professional development around this role ● Necessary preparation in advance of meeting (is each member assigned a subset of residents/fellows to review in advance?) ● Who conveys results to program director (if the program director is not in attendance at a meeting)? Who is responsible for any remediation plan (a member of CCC, or is this referred to another individual or group within residency/fellowship?)	
Role of the Program Director ● Chair (or not) ● A member ● An observer (perhaps this individual only attends but refrains from providing input) ● Not present ● Provides feedback from CCC to the residents/fellows (or not)	
Role of Residents/Fellows ● Residents/Fellows are *not* permitted to be members of the CCC ● In some programs “chief residents” are faculty members, and not considered trainees; in this case it may be appropriate to include them ● Residents/fellows are commonly asked to provide multi-rater feedback on their peers; this information is typically used by the CCC as one assessment of resident/fellow performance on the Competencies of interpersonal and communication skills and professionalism	

Element	Describe the CCC on this Element
(Potential) Role of the Coordinator **Pre-meeting** ● Schedule meeting and location ● Notify attendees ● Aggregate data sources (electronically or on paper) ● Provide information to members before the meeting so they can engage in any pre-work ● Summarize data, preparing “scorecards” or “snapshots” **At the meeting** ● Provide any information needed by committee members ● Take minutes ● Document any necessary information to resident/fellow record ● Record recommendations on each resident/fellow by milestone **Post-meeting** ● Communicate results to program director (if not present) ● Schedule meetings with residents/fellows and program director and/or designated faculty member(s) to review CCC decisions, including Milestone status ● With program director, submit Milestone information on each resident/fellow to ACGME-I	
Shared Mental Model ● How do CCC members develop a shared mental model of performance? ● What faculty development needs do they have? ● Reaching a common agreement of Milestones narrative meanings ● Determining how many assessments (and of what type) are needed for any given milestone ● Determining how to aggregate/interpret data ● Applying quality improvement (QI) principles to the evaluation process ● How is this provided? Documented? ● Who is responsible for providing? ● How is any lack of consensus among members managed? *Consider asking CCC members to self-assess their performance with specialty-specific Milestones.*	

Element	Describe the CCC on this Element
Meetings ● When? ● Where? ● How frequently? at least twice yearly for most specialties; could be more frequently, e.g., monthly, quarterly ● How long are meetings? ● What is necessary prep to be completed ahead of meetings, and who contributes to it? What is deliverable and who is responsible?	
How the work of the CCC will be distributed? ● Some CCCs may be responsible for all the residents/fellows ● Others may be responsible for a subset of the residents/fellows, (e.g., all PGY-1s, or the research component of all of the fellows) ● In a large program, there may be CCCs that each review a specific subset of the residents/fellows (e.g., three sub-committees of the CCCs each review 1/3 of the residents/fellows)	
Consensus versus Voting ● Preferable to have CCC reach consensus and not vote ● How are disagreements among CCC members managed? Documented? ● Program director is the final decision maker ● Guidance from institutional Human Resources/Legal on how this is managed/reflected	
Integrating assessments from faculty members external to the program ● If a faculty member not from the program makes an assessment on resident/fellow performance with which the CCC disagrees, it is expected that CCC will take data from evaluations and apply them to the Milestones to judge the progress of residents/fellows ● The CCC will have the advantage of knowing how each of the specialists evaluated the residents/fellows and can apply that knowledge as it marks residents'/fellows' progress on the Milestones	

Element	Describe the CCC on this Element
Minutes ● What information is captured at the meeting electronically versus in writing? How is it retained? ● Are there institutional policies that address how this information is retained (i.e., where? in what format/for what duration?)?	
Measures of Assessment/Tools Used by the CCC ● *Existing resident assessment data* ● What are these? ● How many different types of tools (e.g., multi-rater feedback, in-service training exam, chart audit of clinical performance) ● How are these assessments documented? ● How are these assessments shared with residents/fellows? ● Are there challenges (e.g., faculty members not completing assessments; milestones for which no assessment is currently done)? Can the CCC work with the program to solve these issues?	
Measures of Assessment/Tools Used by the CCC (continued) ● *Faculty observations* ● How are these organized (global end-of-rotation evaluation, checklist from a procedure, simulation, standardized patient, miniCEX)? ● How are these documented? ● Used in provision of feedback to residents/fellows? ● Data from Milestones assessments ● Are these observations captured in such a way that they provide useful input in Milestones assessments	
Inventory of the Milestones ● Where is each taught in the curriculum? ● How/where/by whom/ is each assessed? ● What are the gaps in teaching and assessment and what are the plans for addressing them?	

<table>
<tr><th>Element</th><th>Describe the CCC on this Element</th></tr>
<tr><td>Are there expectations the program has of residents/fellows that aren’t captured in the current specialty/subspecialty Milestone(s)?
How are these communicated to residents/fellows? To faculty members?
How are these assessed and documented?</td><td></td></tr>
<tr><td>If a resident/fellow is performing sub-optimally:
Is the CCC (or a member of the CCC) responsible for an individualized learning plan/ remediation plan? Another member/group of faculty members?
What are the options for individualized learning/ remediation?
Intensify mentoring
Additional readings/structured reading plan
Skill lab/simulation experiences
Added rotations
Repeat rotations/activities
Extend education
Counseling to consider another specialty/profession</td><td></td></tr>
<tr><td>Transparency of the CCC Process
How do you describe the CCC process to your residents/fellows and faculty members (e.g., program manual, web page)?
Is the description of the CCC process up to date and reflective of actual process?</td><td></td></tr>
<tr><td>If a resident/fellow disagrees with a CCC assessment:
Review with HR and Legal the desirability of a grievance process in this instance (not required by ACGME-I)
Courts (in general) support faculty decisions:
“Made at routine meeting for the purpose of evaluation”
“Shared understanding of performance”
“Reasonable process”
Residents given notice (of deficiency) and “opportunity to cure” (ameliorates)
Conscientious decision making
Take into account the entire performance record</td><td></td></tr>
</table>

Element	Describe the CCC on this Element
How do the Milestones fit into promotion criteria? International Institutional Requirement II.D. 4.d).: *(The Sponsoring Institution must have a policy regarding) conditions for reappointment and promotion to the next level of the educational program* How do the Milestones fit into the program's criteria for promotion and/or renewal of a resident's/fellow's appointment? Based upon program review: ● Do you need to make any adjustments in your criteria for promotion and/or non-renewal? ● Do you need to change your agreement of appointment to reflect Milestone reporting to ACGME-I? ● Do you wish to modify your grievance policy? *You may find that you do not need to make any changes at all, but this is an excellent opportunity to review your current processes and ensure they align.*	

Element	Describe the CCC on this Element
Using the CCC in Continuous Educational QI ● Following the CCC meeting, it may be useful to debrief ● What types of assessments were particularly helpful to the CCC in making decisions on resident/fellow performance? ● Who among the faculty members generated the most useful assessments (e.g., from explicit, behaviorally specific narrative comments) ● Do the residents/fellows consistently demonstrate challenges in their performance on a small subset of the Milestones? (If so, this may be either a curricular issue or the lack of an effective assessment tool) ● What did the program learn from the CCC experience to help improve the overall educational and assessment process? (e.g., simplifying the assessment system; applying examples from the most useful assessment formats to those that were least useful) ● What can the program learn from its best assessors? How can they acknowledge/reward/use these faculty members as role models? How can these faculty members' practices be transferred to other faculty members? ● Based on this debrief, identify at least one way to improve assessment in the program ● Specify who will do what, and what exact timeline to implement the change ● Follow up on results of the improvement at the next CCC meeting ● Did all faculty members feel able to honestly represent their views on each resident/fellow? What impeded/facilitated this ability, and can enhancements be identified? Consider making the CCC and its related processes part of the Annual Program Evaluation.	

Modified from an earlier table presented by Andolsek, KM and Nagler, A at the 2013 ACGME Annual Educational Conference.

APPENDIX E: Examples of Assessment Methods for the ACGME-I Core Competencies

Competency	Method	Example
Patient Care		
	Direct observation	Mini-Clinical Evaluation Exercise; various apps.
	Simulation	Partial task trainers for procedures; virtual reality
	Standardized patient	Objective standardized clinical exams (OSCEs)
	Clinical performance review	Medical record audits using quality and safety measures
	Procedure log with assessment of competency	Surgical Case Logs with/without entrustment scales, potentially with learner reflection
	Faculty evaluations of observed performance	Evaluation forms using developmental, supervision, or entrustment scales
	Video-captured performance	Surgical or other procedure; patient encounter
	Virtual reality	Simulation of procedure/ encounter
	Multi-source feedback/360-degree	Feedback from patient experience, team members, resident/fellow peers
Medical Knowledge		
	In-training Examination (ITE)	Most specialties now have an ITE provided either by their certification board or a specialty society
	Work-based assessments of medical knowledge	SNAPPS framework; mini-clinical evaluation exercise (MiniCEX); Assessment of Reasoning Tool (ART)
	Oral-guided chart review	Chart-stimulated recall
Interpersonal and Communication Skills		
	Multi-source feedback (MSF)/multi-rater/360-degree	Some tools available; most home grown; Teamwork Effectiveness Assessment Module (TEAM) multi-source feedback instrument

	Patient experience surveys	Consumer Assessment of Healthcare Providers and Systems (CAHPS) suite of survey tools www.ahrq.gov/cahps/index.html
Practice-Based Learning and Improvement		
	Self-assessment	Milestones self-assessment followed by a compare/contrast review of CCC Milestones ratings with a mentor or advisor
	Evaluation of resident/fellow teaching skills	Evaluation forms
	Evidence-based practice (EBP)	Clinical question logs; EBP prescriptions; EBP assessment of journal articles
Professionalism		
	Contribution to institution's error reporting process	Spontaneous error reporting; root cause analysis
	MSF/multi-rater/360-degree	Some tools available; most home grown
	Patient survey	CAHPS suite of survey tools
Systems-Based Practice		
	Quality improvement (QI) project	Can judge the quality of a QI project using several tools; can measure the impact of QI project through clinical performance measures
	Contribution to institution's error reporting process	Spontaneous error reporting; root cause analysis

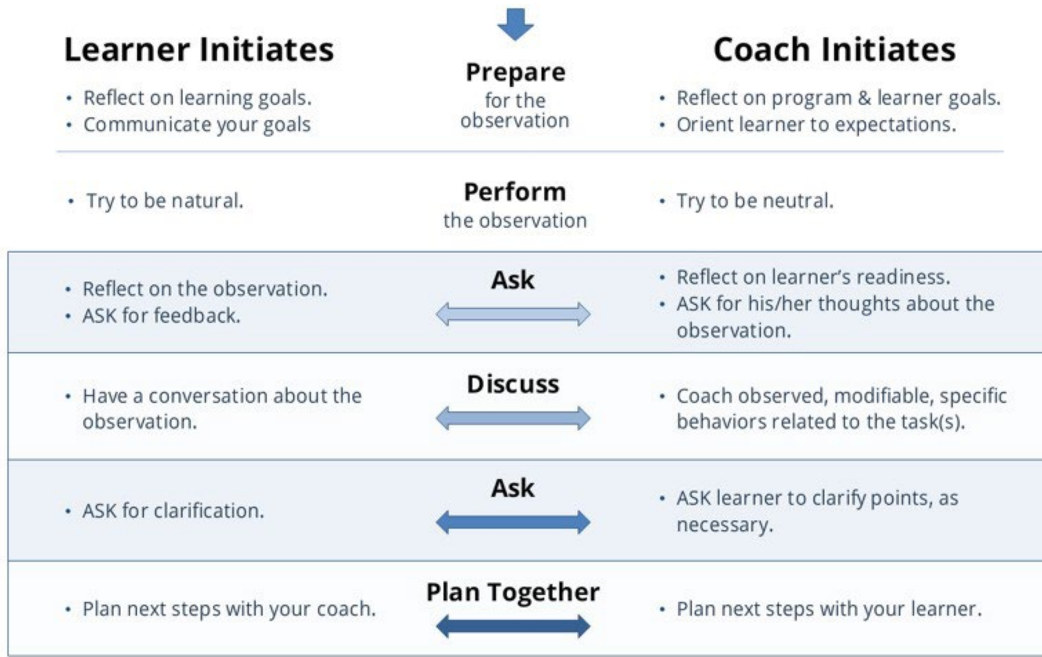
Appendix F: Overview of Assessment Methods Aligned with Miller's Pyramid (adapted from Lockyer, et al.)

Stage	Corresponding Methods to Assess Performance
Does	Medical record (chart) review CCC Direct observation Efficiency data End-of-rotation evaluations Multisource feedback Patient outcome data Portfolio Case Log with assessment Project review
Shows How	Objective structured clinical exam Oral case presentation Simulated case Skills station Virtual/computerized patient management
Knows How	Chart-stimulated recall Development of ILP Mock oral boards examination Oral questioning targeting patient management Written test
Knows	Test (oral or written) targeting fact recall

Reference:

1. Lockyer J, Carraccio C, Chan MK, et al. Core principles of assessment in competency-based medical education. *Med Teach*. 2017;39(6):609-616. https://www.tandfonline.com/doi/abs/10.1080/0142159X.2017.1315082?journalCode=imte20. 2020.

Appendix G: ADAPT Model of Feedback



Reference:

1. ADAPT Model of Feedback. University of Washington. Accessible at: https://depts.washington.edu/lgateway/elearning/feedback/story_html5.html

Appendix H: R2C2 Evidence-Informed Facilitated Feedback
(*tri-fold and learning change plan forms may be found at* https://medicine.dal.ca/departments/core-units/cpd/faculty- development/R2C2.html)

Stage 1. Build relationship

Goal: To engage the resident and build relationship, mutual trust and respect.

Explain the purpose of the report and the review, i.e., to share information about how they are doing; for them to describe their training and experiences; determine data identifying opportunities for improvement.

Outline the agenda: to review performance data and gaps; discuss their reactions to the data and what it means to them, and co-develop an action plan from the data.

Phrases and Strategies:

How has the rotation gone for you? What did you enjoy? What challenged you? how do you think you are doing?

Tell me about your assessment and feedback experiences to date. What has been helpful?

If this is one of a series of meetings, *The last time we met, you were going to do [X], how did that work?*

What do you want to get out of the feedback session?

Confirm what you are hearing; empathize; show respect; build trust validate.

Relationship-building is central and needs attention throughout the discussion.

Stage 2. Explore reactions and perceptions about the data/report

Goal: To ensure the resident feels understood and that their views are heard and respected.

Phrases and strategies:

What were your initial reactions? Was anything particularly striking?

Were there surprises? Tell me more about that…

How do these data compare with how you thought you were doing? Any surprises?

Based on your reactions, is there a particular part of the report that you would like to focus on?

Negative reactions/surprises tend to be more frequently elicited by:

- Lack of concrete examples in the report
- Data showing that one is not doing as well as one thought
- Subjective data not supported by objective data

Be prepared for negative reactions in these cases. Support expression of negative reactions using general facilitative approaches and explore reasons for these reactions.

It is difficult to hear feedback that disconfirms how we see ourselves.

We are all trying to do your best and it is tough to hear when we are not hitting the mark.

We are going to work together.

Stage 3: Confirm content

Goal: To ensure the resident is clear about what the assessment data mean and the opportunities suggested for improvement.

Phrases and strategies:

Ask general questions initially, but be systematic as the session goes on, **to ensure that items that might impact patient safety or are priorities for achievement are covered.**

Were there things in the data that didn't make sense to you?

Is there anything you are not clear about?

Let's go through the report section by section

Is there anything in section [X] that you'd like to explore further or comment on?

Anything that causes you to think of how this might impact on patient safety or team work?

Anything that struck you as something to focus on?

Do you recognize a pattern?

When I reviewed the report, I noticed [X], what are your thoughts about that?

Stage 4: Coach for performance change and co-create an action plan

Goal: To ensure the resident identifies areas for change and co-develops an achievable action plan.

Before developing a learning change plan (see next panel), resident needs to understand and accept the content of the assessment.

Coaching guides the development of specific goals and activities to achieve them, supports self-directed learning, and ensures the action plan is co- developed.

Phrases and strategies:

What do you see as the priorities for improvement?

What would you like to achieve on your next rotation (4 month block)?

What 2-3 things will you target for immediate action?

What will your goals be?

What actions will you have to take?

Who/what might help you?

What might get in the way?

What is your timeline?

Do you think you can achieve it?

How will you know you have been successful?

Action Plan

Describe specific, observable change/s you intend to make. For each:

What will you do?

When will you begin?

When do you think you will see results?

What resources will you need? Who can help you? What learning will you need?

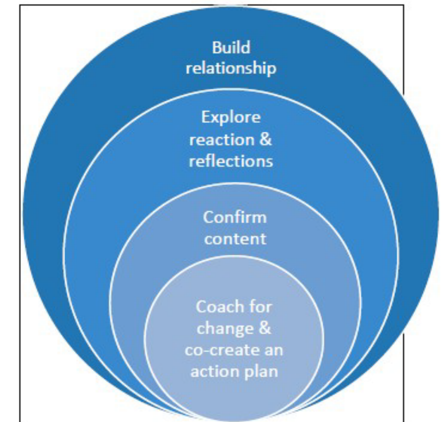
What might get in the way of making the changes?

How will you overcome that?

How will you know you have achieved your goal?

You Tube Videos:

- Video 1 uses competency based language: https://youtu.be/_cSDQYjUEok
- Video 2 uses generic language: https://youtu.be/-ljhCWYujks



R2C2

Evidence-Informed Facilitated Feedback and Coaching

Resident Formal Version

Adapted from: Sargeant et al., Academic Medicine, 2015, 2018; Armson et al., Medical Education, 2019.

To be used during progress meetings and other formal review sessions. Further information about the R2C2 model, copies of this tri-fold and learning change plan forms may be found at https://medicine.dal.ca/departments/core-units/cpd/faculty-development/R2C2.html

Reference:

1. Dalhousie University. R2C2 Feedback and Coaching Resources. https://medicine.dal.ca/departments/core-units/cpd/faculty-development/R2C2.html. 2020.

Appendix I: Institutional Checklists for CCCs
(links to institutional oversight of CCCs)
Adapted from Y. Wimberly, MD, Morehouse School of Medicine

✓	Recommended Practices	Comments
for DIO and GMEC		
	Program incorporates CCC information into Annual Program Evaluation and identifies improvements	
	Regular review of overall resident/fellow milestone performance and adverse events related to resident/fellow promotion, program completion, withdrawal, dismissal	
	Institutional faculty development for CCCs	
	Program director/core faculty members, and CCC members participated in program/institutional faculty development for CCCs, Milestones, and assessment	
	Quality of CCC documentation across programs (any expectation this is standardized across programs)	
	CCCs have “right” membership (≥ 3 faculty members, including at least one core faculty member)	
	Program CCC processes consistent with institutional policies	
	Sharing of CCC experiences among the institution’s programs	
	Resident/fellow Milestone performance and/or program CCC experiences/performance incorporated into Annual Institutional Review	
	Program satisfaction with institutional tool(s) such as a resident management system, used to aggregate performance data for CCCs	
For Program Directors		
	Need for program “grievance policy” for CCC decisions?	
	Program director’s CCC role described and acceptable to specialty	
	Program faculty development for CCCs	
	Documented feedback to residents/fellows on their Milestones performance	
	Identified enhancements in assessment based on CCC experiences	
	CCC Improvements identified as part of Annual Program Evaluation	
	Program director has final responsibility for resident/fellow evaluation/promotion decisions	

✓ Recommended Practices		Comments
For CCC Chair		
	CCC conclusions/recommendations are communicated to program director	
	Process for how lack of consensus is managed within the CCC	
	Best practices in group meetings utilized	
	Review resident evaluations at least semi-annually	
For CCC Members		
	Participate in faculty development (annually?)	
	Attend specified percent of CCC meetings	
	Provide requested pre-review of residents and/or meeting "preparation" prior to meeting	
	Reach common agreement of Milestone narratives and understand how assessed	
	Respect confidentiality	
	Work to recognize and mitigate biases	
For Faculty/Evaluators		
	Provide timely, honest, high-quality assessments using appropriate methods to allow CCCs to make informed decisions regarding resident performance measured against the Milestones	
For Residents/Fellows		
	Complete Milestones self-assessment before each CCC meeting?	
	Compare Milestones self-assessment with program determination of Milestones assessment following meeting	
	Co-create an ILP for continued growth with program director or designee	