

# ACCREDITATION COUNCIL FOR GRADUATE MEDICAL EDUCATION

# Clinical Competency Committees

A Guidebook for Programs (2<sup>nd</sup> Edition)

Kathryn Andolsek Duke University

Jamie Padmore Medstar-Georgetown

> Karen E. Hauer UCSF

> > Laura Edgar ACGME

Eric Holmboe ACGME

This information is current as of September 23, 2017

#### ACGME CCC Guidebook

#### **Executive Summary**

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 required component of accreditation (ACGME Common Program Requirements), even seasoned programs and committees are facing questions regarding structure, function, and process.

The purpose of this manual, now in its second edition, is to provide designated institutional officials (DIOs), program directors, faculty members, CCC members, coordinators, and 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. It is our intent that programs will be able to utilize these materials to have meaningful faculty conversations and development on CCC functions and outcomes, and greater transparency with residents and fellows on the nature of assessment in competency-based education. This second edition also contains updated material and new tools for programs to use to continually improve the CCC process.

This manual provides information related to the following topics:

- 1. CCC purpose
- 2. Structure and membership
- 3. Preparing for effective CCC meetings
- 4. Running the CCC meeting
- 5. Post-meeting feedback, documentation and follow-up
- 6. Legal issues and considerations
- 7. Other Uses for the CCC
- 8. Opportunities
- 9. Annotated bibliography
- 10. Appendices

There are several appendices included that contain tools for programs and CCCs to utilize. We have also provided a robust reference list to support the various aspects of CCCs, including assessment, feedback, documentation, group dynamics, and outcomes.

The ACGME welcomes feedback, and hopes this guidebook provides programs and faculty members with valuable information and tools to enhance GME programs.

#### Introduction

A CCC is the Accreditation Council for Graduate Medical Education (ACGME)'s "required body comprising three or more members of the active teaching faculty who is advisory to the program director and reviews the progress of all residents in the program."

1. Its requirements are found in Section V.A. of the Common Program Requirements and Section V.A. of each program's specialty-specific Program Requirements.<sup>2</sup> The CCC "reviews all resident evaluations semi-annually, prepares and ensures the reporting of Milestone evaluations... and advises the program director regarding resident progress, including promotion, remediation, and dismissal."<sup>2</sup>

The objectives of this guidebook are to help programs:

- Recognize the role and purpose of the CCC for individual programs and in the ACGME's current accreditation model
- 2. Design, create, implement, and improve a CCC
- 3. Run an effective CCC meeting
- 4. Provide feedback to residents or fellows
- 5. Anticipate process questions and academic law considerations
- Analyze evidence supporting CCCs to make the best choices for their own CCC process
- 7. Use the CCC to improve the curriculum and clinical training/experience/quality

This guidebook is intended to be a practical resource and a professional development tool for institutional and program leadership, coordinator(s), faculty members, and residents/fellows. We encourage you to share these materials with your residency or fellowship program faculty and leadership, and use the exercises as part of faculty and coordinator professional development. These materials can be completed individually or in a group meeting. The guidebook also provides suggestions for faculty development.

The CCC is an essential component, but still only one part, of a high performing residency or fellowship program. It contributes to an effective resident/fellow assessment "system" as outlined in Figure 1. In this figure, the CCC serves the important function of synthesizing multiple quantitative and qualitative assessments regarding individual resident/fellow performance. This figure highlights several important points:

 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 assessors. Ideally these individuals on the CCC must understand the basics of good assessment and the assessment tools being used by the program.<sup>3</sup>

- Residents and fellows must be active agents in this system; guided self-directed assessment behaviors by the resident or fellow should be strongly encouraged. We strongly recommend programs encourage all their residents and fellows to review the Milestones Guidebook for Residents and Fellows (available at <a href="http://www.acgme.org/Portals/0/PDFs/Milestones/MilestonesGuidebookfor ResidentsFellows.pdf">http://www.acgme.org/Portals/0/PDFs/Milestones/MilestonesGuidebookfor ResidentsFellows.pdf</a>)
- 3. The program director within a residency or fellowship program is the ultimate arbiter of whether a resident or fellow will enter unsupervised practice. The program will perform the majority of the assessments that will inform the final entrustment decision to graduate a resident or fellow from the program. The accountability of the program director and the program cannot be overemphasized: professional self-regulation depends heavily on the informed judgment of training programs, as manifest by the final summative evaluation of competency and entrustment made by the program director.

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

#### Unit of Analysis: Residents Program FB Assessments within Accreditation Program: U Direct observations D Qual/Quant Auditand G "Data" U performance data E Synthesis: B M Multi-source FB Committee E Simulation N ITExam Certification and Credentialing FB Faculty, PDs and others Unit of Analysis: Individual Milestones as Guiding Framework and Blueprint

#### The Assessment System

Residents = both residents and fellows
FB = Feedback loops
D = Assessment data and information

The model is more fully described in Appendix A

#### Part 1: Purpose of the CCC

## Purpose of the CCC for the Program

The CCC serves several purposes: for the program director, the program itself, the faculty, the residents/fellows, the ACGME, and the specialty (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 and maintain the standards of the health care system.

Table 1: Purposes of a CCC

able 1: Purposes of a CCC		
Purpose of CCC		
Program Director	<ul> <li>Fulfill public accountability by ensuring residents/fellows who successfully complete a program can practice the specialty-specific core professional activities without supervision</li> <li>Create greater "buy-in" from a group of faculty members to make decisions regarding performance</li> <li>Enhance credibility of judgments about resident/fellow performance</li> <li>Facilitate role of "advocate" for the resident/fellow</li> <li>Improve feedback for residents and fellows</li> </ul>	
Program	<ul> <li>Develop shared mental model of what resident/fellow performance should "look like" and how it should be measured and assessed</li> <li>Ensure assessment tools sufficient to effectively determine performance across the competencies</li> <li>Increase quality, standardize expectations, and reduce variability in performance assessment</li> <li>Contribute to aggregate data that will allow programs to learn from each other by comparing residents' and fellows' judgments against national data</li> <li>Improve individual residents/fellows along a developmental trajectory</li> <li>Serve as a system for early identification of residents/fellows who are challenged</li> <li>Identify weaknesses/gaps in the program as the first step in program improvement</li> <li>Model "real time" faculty development</li> </ul>	

Table 1 (continued)

Table 1 (commune	-7
Faculty	<ul> <li>Facilitate faculty members' development of a shared mental model of what is expected within each of the competencies</li> <li>Improve documentation by simplifying and creating "more actionable" and efficient assessment tools for the direct observation of trainees in the clinical learning environment</li> <li>Fulfill the professionalism inherent in the faculty member's role as to contribute high quality teaching and assessment as part of the program</li> </ul>
Residents/ Fellows	<ul> <li>Improve the quality and amount of feedback; normalize constructive feedback</li> <li>Offer insights and perspectives of a group of faculty members</li> <li>Compare performance against established competency benchmarks (rather than only against peers in the same program)</li> <li>Allow earlier identification of sub-optimal performance that can improve remedial intervention</li> <li>Improve "stretch goals" for residents/fellows with acceptable performance to achieve even greater proficiency</li> <li>Provide transparency regarding performance expectations</li> </ul>
ACGME	<ul> <li>Enhance progress toward competency-based education with outcomes data</li> <li>Establish national benchmarks for trajectory of resident/fellow skill acquisition that can be used for specialty-specific feedback</li> <li>Provide better measures for public accountability</li> <li>Enable continuous quality improvement of residency/fellowship programs</li> <li>Document the effectiveness of the nation's graduate medical education efforts in provision of graduates prepared to meet the needs of the public</li> </ul>

A program's creation of a CCC is, in itself, a "developmental" process. This guidebook will start with a brief review of current ACGME requirements for a CCC. Programs may identify gaps and potential enhancements through their CCCs by comparing what they have in place to 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's requirements for a CCC are in the Program Requirements—both the Common Program Requirements and all of the specialty Program Requirements. The ACGME Common Program Requirements stipulate the minimum requirements for a CCC in every residency and fellowship program. These are defined in the first section of Common Program Requirements Section V, Evaluation. If a specialty has developed additional expectations for the CCC, they will be found in Section V.A. of the specialty-specific requirements. Other entities, such as the relevant American Board of Medical Specialties board(s), may add requirements as well. Once the CCC fulfills the Common and any specialty-specific and Board requirements, programs are free to innovate!

Review Section V.A. of the specialty-specific Program Requirements carefully. Compare them to Common Program Requirements Section V.A.1., noting any differences.<sup>2</sup> In addition to the Common and the specialty Program Requirements, the ACGME has provided additional guidance for CCCs in documents, such as its Common Program Requirements Frequently Asked Questions (FAQs) document.<sup>4</sup>

While there are no specific requirements for the CCC in the Institutional Requirements, there is at least one institutional requirement that may be useful to consider. The Sponsoring Institution is responsible for programs' development of "promotion criteria" and criteria for renewal of a resident's/fellow's appointment (IV.C.), and that conditions for reappointment and promotion to a subsequent PGY level must be in the contract or letter of appointment. (IV.B.2.d)<sup>5</sup>

CCCs may be an excellent mechanism to identify those promotion criteria or, at the very least, to align Milestones performance with them. It is important to recognize that the Milestones do not represent the totality of any discipline, but rather form a robust foundational core. Consider how the Milestones fit into the program's criteria for promotion and/or renewal of a resident's/fellow's appointment, a Core requirement. Remember, the Milestones 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 for a resident's/fellow's promotion and graduation. However, the Milestones should not be used as the sole criteria for these important decisions. Programs should also read the companion *Milestones Guidebook* that provides specific recommendations and guidance on how best to use the Milestones in residency and fellowship programs (http://www.acgme.org/Portals/0/MilestonesGuidebook.pdf).

#### ACGME CCC Guidebook

Questions to ask of one's program, which may include input from institutional Legal and Human Resources team members, include:

- Are any clarifications or adjustments in the criteria for promotion, program completion, remediation, and/or non-renewal required?
- Are any changes in the agreement of appointment necessary to reflect Milestones reporting to the ACGME?
- Are any changes in the grievance policy necessary?

No changes may be necessary at all, but the development of a CCC provides an excellent opportunity to review current performance standards, promotion/program completion criteria, and assessment processes, and align the Milestones and the CCC with them. The DIO, Office of GME, Legal, and HR resources may provide useful guidance.

How Well Do You Know the CCC Requirements?

Appendix B is a multiple choice "quiz" on the current ACGME requirements for a CCC; Appendix D a series of case studies; and Part 9 is an annotated bibliography. Consider having the members of the CCC, of the core faculty, and of the program and/or institutional leadership take the quiz, discuss the case studies, or use one or more readings as an educational journal club, as fun faculty development exercises! Consider using these with the program residents/fellows to help them better understand the role of CCCs in the program's assessment process.

The ACGME's CCC requirements are fairly minimal (See Table 2). There are only eight requirements. Seven are Core requirements, mandatory for all programs; one is a Detail requirement, necessary for new programs with Initial Accreditation and those with a status of Accreditation with Warning or Probationary Accreditation.

Table 2. Common Program Requirements for a CCC

Table 2. Common Program Requirements for a CCC			
Description of Requirement	Core	Detail	CPR section
The program director must appoint CCC	X		V.A.1. V.A.1.a)
Minimum of three program faculty members	X		v.A.T.a)
	X		
Must have a written description of responsibilities of the CCC	X		V.A.1.b)
	Х		
	X		
Should advise the program director regarding resident/fellow progress, including promotion, remediation, dismissal		X	V.a.1.b).(1).(c)

Some programs have expressed confusion around the role of the program director regarding the Milestones. The ACGME's intent is that the program director has the final decision on milestones, as he/she has the authority for summative decisions relative to resident/fellow promotion and graduation. However, if the CCC functions effectively, it is expected that it would be a rare occurrence for a program director to overrule its Milestone judgments, especially since the Milestones are primarily for formative purposes as outlined in Table 1. In summary, the program director has **final** responsibility for the program's evaluation and promotion decision"<sup>2</sup>

Appendix C contains a template which may help to design and/or evaluate the CCC, by "walking through" its various components. "Filling in the blanks" provided can generate a draft document that will help to fulfill the Common Program Requirement for a "written description of the responsibilities" of the CCC. Some program directors may develop the written description of the CCC on their own. Others will ask the CCC to create it as one of its initial activities as a group. Others may appoint a subset of the faculty, with or without resident/fellow representation. The template provides a checklist of items to consider.

Creating, developing, and improving a CCC does require time and effort. Sharing best practices across programs and institutions, having strong institutional support from the DIO for shared resources across programs within an institution, and appreciating that there will be a learning curve for programs just now starting can facilitate the long-term effectiveness of a CCC. Ultimately, the CCC process will help programs do what they have always been responsible for doing, but with more structure and clearer purpose.

Creating and implementing a CCC provides the program with excellent opportunities to enhance two other ACGME requirements related to: 1) annual program evaluation and improvement; and, 2) faculty development. Faculty development will be needed at three levels: 1) the program director; 2) the engaged core and other faculty members who join the CCC or Program Evaluation Committee (PEC); and, 3) the faculty members in the trenches who are not fully involved in educational programming or administration, but who are 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 in the trenches need to understand what key elements of assessment information they need to contribute to the larger "whole" the program director and CCC will consider, and must be trained to use assessment methods and tools aligned with the purpose of the curricular experience they are supervising or overseeing.

The PEC, which undertakes the Annual Program Evaluation resulting in one or more improvements, may select implementing and/or improving the CCC as one of its enhancements for the academic year. If so, be certain the CCC improvement plan is reflected in the PEC's analysis and action plan(s).

The ACGME also expects program engagement in faculty development. Faculty development is one of the required program components reviewed by the PEC in the annual program evaluation and improvement process. The CCC faculty role will typically include the need for substantial faculty development. The ACGME has recognized that though "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. <sup>6,7</sup> 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. Sharing the written description of the CCC with the full faculty and residents/fellows can be an easy first step to fulfilling this requirement.<sup>8</sup>

#### **General Principles:**

The size of the residency or fellowship will affect constructing and running a CCC meeting. For the purposes of this guidebook, "small programs" are considered to be those with fewer than 15 total learners; "medium programs" are considered to be those with 15-to-75 learners; and "large programs" have more than 75 learners.

#### One committee or more:

- Large programs: may need to have several CCCs. It is not clear how best to construct sub-CCCs. Some are creating sub-CCCs based on PGY; others have a CCC follow a cohort through entering residency to graduation; and still others have separate CCCs for large themes within the program (e.g., a CCC that will review resident scholarship or quality improvement activities). Others simply divide up residents into more manageable numbers.
  - 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.
- Medium or small programs: one CCC can likely oversee all residents/fellows, but again, it will depend on the curricular design of the program and local resources.

#### Committee membership:

- The program director must appoint the CCC, which at a minimum must include three physician faculty members. Three is considered the smallest number essential for a good discussion. The literature suggests that a group size of five to seven is probably ideal, and no more than eight to 10 is recommended for optimal committee functioning. The program director should select faculty members who teach and observe residents/fellows, but also strongly consider how non-physician faculty members can provide valuable input.
- The program director may appoint additional members who must be physician faculty members (Common Program Requirement V.A.1.a.(1).(a)) for the same or other programs, or other "health professionals who have extensive contact and experience with the program's residents in patient care and other health care settings (e.g., nurses, physician assistants, nurse practitioners, social workers, etc.)." If the program has Osteopathic Recognition and has osteopathic-focused residents/fellows, there must be two osteopathic-focused faculty members on the committee.
- Chief residents who have completed a core residency program and are board-eligible in their specialty may serve on the CCC (Common Program Requirement V.A.1.a).(1).(b)). Chiefs who are residents within the same ACGME 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. The chief may be too personally close to fellow

- residents to be candid in this summative evaluation activity.
- Role of advisors/mentors: an ACGME-hosted webinar indicated advisors and mentors should be "excluded" from CCC deliberations. This prohibition is not reflected in the Common Program Requirements. Program directors may want to consider whether there is an inherent conflict of interest in a faculty member being an advocate for a resident/fellow (as his/her advisor mentor) and "judging" performance (as a CCC member). On the other hand, advisors and mentors may benefit from being observers to the CCC and hearing or contributing information to the discussion. They may also be able to convey the impressions of the CCC to their residents/fellows.
- "Right size" large enough to reflect diversity of perspectives; small enough to be "manageable" in terms of faculty development about CCC role, and participation in meeting discussions.
- "Right people" CCC members must be committed and able to attend all or nearly all meetings; erratic attendance will not allow the continuity critical to assess resident/fellow performance over time. Each member must be willing to make honest decisions, even when it is tough.
- Term limits/duration of service: Consider whether appointments should be "in perpetuity," or for a defined term limit. "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 turns over at once.
- Some programs have found value in having a "public member" to represent a societal view, similar to many boards. This is not an ACGME requirement, but anecdotally some programs have described benefits of adding a non-physician member, such as a social worker, patient safety officer, or member of a patient advisory board.
- Residents cannot serve on the CCC unless, in an individual program, a "chief resident" is really a member of the faculty and "not a resident." Having residents responsible for the high-stakes decisions regarding their colleagues is not allowed. On the other hand, residents have a major role in providing input into the competencies of their peers through the multi-source/multi-rater assessment process (previously also called "360-degree feedback"). "Residents and chief residents in accredited years of the program may provide input to the CCC and/or the program director outside the context of the CCC meetings... However, to ensure that residents' peers are not providing promotion and graduation decisions, and they are not involved in recommendations for remediation or disciplinary actions... [they] may not serve as CCC members or attend CCC meetings.<sup>4</sup>

#### Special considerations:

 Small programs may have a challenging time identifying individuals for the CCC as many programs also have a limited number of faculty members. Many fellowships will be in this position. In addition to program faculty members, consider inviting faculty members from the core residency program, other related disciplines, or settings for which the learner has substantial exposure and/or provides substantial consultation. Many small programs are also tied to specific clinical settings; consider inviting nonphysician faculty members from such settings who have ongoing contact with the learner to sit on the CCC (e.g., a nurse leader from a dialysis unit for a nephrology fellowship program, a nurse anesthetist for a surgery fellowship, a patient safety officer, or a discharge planner from a specific clinical unit).

 Medium programs may also encounter some of the same problems as small programs, and may still need to use a sub-committee process to facilitate CCC deliberations.

#### Coordinator role:

Program coordinators can be extremely valuable 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 assessment tools. They may also participate in multi-source feedback assessment instruments as they may have valuable and often unique perceptions of an individual resident's/fellow's abilities in interpersonal and communication skills, teamwork, and professionalism.

Program coordinators may administratively attend CCC meetings 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 also serve as observers of 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 the meeting a program coordinator can be part of communicating the results to the program director (if not in attendance); scheduling meetings with individual residents/fellows and the program director or designated faculty member to review the decisions, including Milestone status; and assisting the program director in electronically submitting Milestones information on each resident/fellow to the ACGME. He/she can also capture information in the CCC "debriefs" that may lead to improvements in the process at the next meeting. However, the program coordinator should not be making judgments in or after the meeting regarding resident/fellow performance. Coordinators should only provide assessment and feedback through the program's assessment system, such as participating in multi-source assessment instruments.4

Role/responsibility of each CCC member (French et. al. present Guidelines for Committee Members):<sup>9</sup>

- Know role on the committee
- Follow-through with assigned tasks
- Be educated on purpose and responsibilities of the committee, the Milestones, the review process, and committee guidelines
- Do "one's part" to maintain a collegial atmosphere within the committee and facilitate best practices in good process
- Ensure own "voice" is heard along with those of colleagues
- Maintain confidentiality
- Help orient new members
- Commit to ongoing professional development in CCC promising practices,

- group process, and assessment
- Contribute to ongoing improvement of the CCC processes

In a study prior to the implementation of the Milestones requirement, Hauer's study of 34 program directors at five institutions discovered that most CCCs relied on global, end-of-rotation evaluations known to be notoriously unreliable, focused on problem residents more than they spent time discussing the typical residents, and lacked faculty development or training of CCC members. More recently a small, single-institution study found again that faculty 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. Both studies speak to the need to provide deliberate, ongoing faculty development for those who serve on the CCC, especially in the Milestones era.

Appendix D lists additional details. These include the essential requirement for confidentiality. Larger CCCs may assign members a subset of the residents/fellows to review in advance of a meeting. It will be important to identify who will convey the CCC results to the program director (if not in attendance) and to the resident/fellow.

#### Committee chair:

Some Boards or Review Committees may place restrictions on "who can chair" a CCC. The American Board of Anesthesiology, for example, doesn't allow the program director to chair the CCC. Others are silent on this issue. Think through who would be the right chair for the program: the program director? the associate program director? another faculty member? a rotating responsibility among members? Select the individual who will best solicit broad input regarding resident/fellow performance and ensure all voices are heard. French et. al. present Guidelines for Committee Chairs:<sup>9</sup>

- Be the Milestones expert for the committee
- Encourage a confidential positive working environment and open communication from all members
- Ensure members know their roles, as well as the Milestones and the review process/quidelines
- Use best practices in effective group processes; for instance, employ structured format of getting information from each committee member; go in the same order of members, get perspectives of most junior member first (See Part 4, Running the CCC Meeting)
- Keep meetings on task and move towards the common goal
- Make certain the coordinator or designated member maintains documentation and meeting minutes

In addition, the CCC chair should be familiar and comfortable with major assessment methods and develop a plan for professional development of CCC members.

#### Program director role:

There is no mandatory role for the program director, and he or she can be chair (unless the program is in anesthesia), member, or observer, or not attend at all. <sup>12</sup> If present, he or she should not "detract" from the participation of other team members by prematurely inserting his or her perspective on a given resident's/fellow's performance. In the same way, the program director shouldn't determine the Milestone performance 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 competency, judged against the Milestones, to convey to the program director.

If the program director is present at CCC meetings, he or she 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 his or her own comments). Some program directors find it very 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 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 Milestone level for each resident/fellow. The program director should also ensure the residents/fellows are aware of the milestones that have been reported to the ACGME. The program director has the final responsibility for determining Milestone acquisition, and reporting to the ACGME.

#### Meetings:

Logistics of meetings should include location frequency and length. CCCs may wish to meet more frequently than the minimum Common Program Requirement of "twice yearly." There is no one way to accomplish this. A study of 116 emergency medicine program directors found that slightly over half met quarterly, and a third monthly. 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.<sup>13</sup>

#### Part 3: Preparing for Effective CCC Meetings

#### Preparing for a CCC Meeting

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 the 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 models over time. Having a written description of the CCC process, and providing faculty development for committee members, will facilitate this process. Some programs find it useful to discuss a relevant article at the 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. The committee may also benefit from individually assessing one or more recent program graduates using the Milestones, and then discussing as a CCC to determine a group consensus as another potential faculty development exercise.

Inventory Where Milestones are Represented in the Program

CCCs should inventory (or review an inventory conducted by others) where each milestone is currently taught and assessed in the program. Teaching may occur on a specific rotation, or in the context of a program activity, such as "leading morbidity and mortality rounds."

The inventory should help to identify gaps in both curriculum and assessment:

1) milestones for which the program has no good learning opportunities or assessment tool in place at the present time; 2) rotations/activities the program believes add value, but for which there are no milestones. The CCC can identify how to best address these gaps, perhaps by delegating the review to a designated faculty member.

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 stand-alone assessment tool, especially for short rotations (e.g., two to 12 weeks). Some programs still continue to use the entire Milestone Set for end-of-rotation evaluations. This typically works poorly despite the fact this approach may seem to many as a logical expedient, and even helpful to faculty members, to better acquaint them with what the Milestones are and what skills, attitudes, and behaviors programs 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 had not directly observed, 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 their
  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 and multiple sampling, and utilize multiple assessors. No single assessment method or tool is sufficient to judge something as varied and complex as clinical competence. 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. Please consult the *Milestones* Guidebook for more information.
- Core methods of assessments should include direct observation of a specific component (e.g., care of individual patients, procedures, etc.), multi-source feedback, multiple choice test/in-service examination, longitudinal evaluations (e.g., rotational evaluation forms), audit of clinical performance, and simulation. 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 individual using it. The tool or form simply guides the individual performing the assessment. Many CCCs will identify an overreliance on global, end-of-rotation evaluations, which are notoriously unreliable. Table 3 provides an overview of common assessment methods.
- 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.

#### ACGME CCC Guidebook

Some opportunities for assessments include the methods in the following table. Please note the table is not comprehensive, and we recommend consulting the *Milestones Guidebook* and the recent overview by Lockyer and colleagues.<sup>14</sup>

Table 3: Examples of Assessment Methods for the ACGME Core Competencies

Competency	Method	Example
Patient Care		
	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
	Faculty evaluations	Evaluation forms using developmental, supervision, or entrustment scales
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; miniclinical evaluation exercise (MiniCEX)
	Oral-guided chart review	Chart-stimulated recall
Interpersonal and Communication Skills		
	Multi-source feedback (MSF)/ "multirater"/360°	Some tools available; most home grown
	Patient survey	CAHPS suite of survey tools www.ahrq.gov/cahps/index.html

Table 3 (continued)

rable 3 (continued)		
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	Evaluation forms
	teaching skills	
Professionalism		
	Contribution to	Spontaneous error reporting;
	institution's "error	root cause analysis
	reporting"	
	Multi source feedback	Some tools available; most
	(MSF)/"multirater"/360°	home grown.
	Patient survey	CAHPS suite of survey tools
Systems-based Practice		
	Quality improvement	Can judge quality of a QI
	(QI) project	project using several tools;
	(3.7)	can measure impact of QI
		project through clinical
		performance measures
	Contribution to	Spontaneous error reporting;
	institution's "error	root cause analysis
	reporting"	

#### 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, 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. 15,16 Some learning management systems have the ability to perform basic statistics on assessment data. 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.

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 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.
- Share written performance information about individual residents'/fellows'
  performance during the CCC meeting (e.g., in a handout, a projection in
  the room).
- Train CCC members on how to interpret aggregated, synthesized performance information about individual residents/fellows. This means that CCC members have to understand the nature and quality of the assessment data being synthesized.

Coordinators can have key roles in scheduling and coordinating CCC meetings. They may aggregate data sources on each resident/fellow electronically or on paper, and create resident/fellow summaries or snapshots of performance, which may be easier for committee members to use in the meetings. Coordinators can prepare and distribute any necessary information to CCC members in advance. However, if this occurs, it is critical that CCC members maintain the confidentiality of the information. Failure to do so will undermine trust in the Milestones and the CCC process.

Some programs document their CCC deliberations through their RMS. The RMS can create a Milestones evaluation composite, which can be shared electronically with a resident/fellow and stored with all of the other resident/fellow evaluations.

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.

#### Part 4: The CCC Meeting

#### Running a CCC Meeting

How a CCC meeting is conducted can have a significant impact on decisions and judgments. Effective group process has been shown in multiple fields, including medical education, to produce better decisions. For example, Schwind and colleagues found a significant proportion of problematic performances among surgery residents were only uncovered through group discussion.<sup>17</sup> Hemmer and colleagues found important professionalism deficiencies of medical students during internal medicine clerkships were only discovered during formal, planned group discussions.<sup>18</sup> Thomas and colleagues found that group discussion before completing rotational evaluation forms for internal medicine residents produced higher reliability and better discrimination of performance.<sup>19</sup> Ekpenyong and colleagues also recently found that comments were considered important and valuable among members of their CCC.<sup>11</sup>

Hauer and her team provided evidence-based recommendations on group composition and group process as relates to a CCC.<sup>20</sup> Table 4 is adapted from Table 2 of that article and presents *Recommendations for Clinical Competency Committees Based on Study Findings and Literature on Group Decision Making.* 

Table 4: Key Elements of Group Process<sup>20</sup>

Table 4: Key Elements of Group Process <sup>23</sup>		
Group Process		
Group understanding of its work	<ul> <li>Committee members should have a shared mental model of the purpose and nature of the group's work and be committed to performance goals.</li> <li>Members also need a shared understanding of resident performance expectations based on milestones.</li> </ul>	
Information sharing	Sharing more information and sharing unique information that is not known to other committee members improves the group's knowledge, increases cohesiveness, and leads members to feel better about their work.	
Sharing written information	Sharing assessment data and written information, rather than just relying on committee members' memory, increases information sharing.	

#### Table 4 (continued)

Table T (continued)	
Structuring discussions	<ul> <li>Structured group discussions (versus unstructured) facilitate information sharing that increases the likelihood of relevant information becoming available to group members.</li> <li>Structure can entail soliciting multiple perspectives, members' speaking in a predetermined order, and weighing of alternatives, including the risks and benefits of different courses of action for a resident.</li> </ul>
Group leader soliciting perspectives	Committee chairs can encourage members to share, discuss, and integrate information rather than prioritizing ready agreement among members.
Group leader encouraging elaboration and exchange	Committee chairs can use elaboration strategies by repeating and summarizing, inquiring about additional information, and encouraging information exchange.

There are also two other significant issues in CCC work: groupthink and group cognitive errors and bias. The website Mindtools has a useful definition for groupthink: "Groupthink is a phenomenon that occurs when the desire for group consensus overrides people's common sense desire to present alternatives, critique a position, or express an unpopular opinion." Here, the desire for group cohesion effectively drives out good decision-making and problem solving." (See Mindtools: https://www.mindtools.com/pages/article/newLDR\_82.htm)

Risks for groupthink are the presence of a strong, dominating leader, high levels of group cohesion, and the group experiencing or feeling strong pressure from others to make a good decision. It is not hard to see how this can happen in CCCs.

Below are symptoms of groupthink adapted from Mindtools. CCCs should have a mechanism to assess whether groupthink might be occurring. One suggestion is to have the program coordinator or a non-CCC faculty member observe a CCC meeting and look for these symptoms as part of the CCC's own quality improvement process.

#### Symptoms of Groupthink:

#### 1. Rationalization

This is when team members convince themselves that despite evidence to the contrary, the decision or alternative being presented is the best one. "Those other people don't agree with us because they haven't researched the problem as extensively as we have or know the resident as well as we do."

#### 2. Peer Pressure

When a team member expresses an opposing opinion or questions the rationale behind a decision, the rest of the team members work together to pressure or penalize that person into compliance.

"Well if you really feel that we're making a mistake about this resident you can always leave the CCC."

#### 3. Complacency

After a few successes, the group begins to feel like any decision they make is the right one because there is no disagreement from any source. "Our track record speaks for itself. We have never misjudged a resident's progress and development."

#### 4. Moral High Ground

Each member of the group views him or herself as moral. The combination of moral minds is therefore thought not to be likely to make a poor or immoral decision. When morality is used as a basis for decision-making, the pressure to conform is even greater because no individual wants to be perceived as immoral.

"We all know what is right and wrong in medicine, and this is definitely the right thing to do with this resident."

#### 5. Stereotyping

As the group members become more uniform in their views, they begin to see outsiders as possessing a different and inferior set of morals and characteristics from themselves. These perceived negative characteristics are then used to discredit the opposition.

"Nurses will find any excuse to complain about residents, even when the facts are clear they are wrong about a resident."

#### 6. Censorship

Members censor their opinions in order to conform.

"If everyone else agrees then my thoughts to the contrary must be wrong." Information that is gathered is censored so that it also conforms to, or supports the chosen decision or alternative.

"Don't listen to that nonsense; they don't have a clue about what is really going on."

#### 7. Illusion of Unanimity

Because no one speaks out, everyone in the group feels the group's decision is unanimous. This is what feeds the groupthink and causes it to spiral out of control.

"I see we all agree on this resident so the decision not to place the resident on remediation is final."

Finally, rater bias and error is common even in groups. This helpful table (Table 5) from Dickey and colleagues also provides a list of possible rating errors and bias in groups.<sup>21</sup>

Table 5: Examples of Bias that Can Occur during Clinical Competency Committee (CCC) Deliberations

Bias	Definition	Example
Anchoring	Holding on to an initial observation or opinion and not acknowledging changes.	A poor patient history and physical examination performance by someone in PGY-1 may "anchor" in an attending's mind and result in assigning a level that is too low later
Availability	Giving preference to data that are more recent or more memorable.	In a CCC meeting, an attending may give more weight to his or her own observations of a resident than to observations of attendings from other rotations.
Bandwagon	Believing things because others do.	Faculty member mentions an insignificant mishap by a resident, and other members join in and mention other minor mishaps that would not have been described
Confirmation	Focusing on data that confirm an opinion and overlooking evidence that refutes it.	Faculty member with a negative opinion of a resident recalls a single instance of prescribing error and neglects the 99% of prescriptions written correctly.
Framing effect	Forming an opinion based on how data are presented.	Training director may frame a CCC task as demonstrating to the ACGME that the program is strong. Faculty may feel pressure to adjust level determinations and overrate residents in the later years of their

Table 5 (continued)

Groupthink	Judgment influenced by	CCC members may choose not to
Grouptimik	overreliance on consensus.	challenge a level determination in order to preserve group camaraderie. Some committee members, such as senior faculty or the training director, may exert undue influence over other committee members.
Overconfidence	Having greater faith in one's ability to make a judgment than is justified.	CCC members may have too little data to determine a milestone level, yet feel comfortable selecting a level.
Reliance on gist	Judgments based more on context than on specific observation or measurement.	A member may think, "This is a strong resident; 2.5 is appropriate," rather than detailing specific information gathered from evaluations to support choosing that level.
Selection	Relying on partial information that is not truly random or representative.	A faculty member may meet the training director by chance in the hallway and describe a resident's minor breach of professionalism. Had he or she not met the training director, the story might not have been relayed. Now the training director may place too much emphasis on the event during CCC discussions.
Visceral	Judgment influenced by emotions rather than objective data.	A "favored" or personally attractive resident may receive a higher level than another resident for a similar performance.

Abbreviations: PGY, post-graduate year; ACGME, Accreditation Council for Graduate Medical Education.

Reproduced from (reference 21) Dickey CC, Thomas C, Feroze U, Nakshabandi F, Cannon B. Cognitive Demands and Bias: Challenges Facing Competency Committees. J Grad Med Educ. 2017 Apr;9(2):162-164.

Provided below is guidance on running a successful meeting and pitfalls to avoid.

- 1. Diverse, more heterogeneous groups tend to make better decisions (see Part 2: CCC Structure and Membership).
- 2. The "starting point" of the CCC will have a significant impact on the ultimate judgment and decision. There are several processes that can affect that starting point:
  - a. The committee should have a clear sense of purpose and of the charge of the CCC, and understand the group's role in the assessment system.
  - b. It is very important to avoid coming to the meeting with a decision already pre-determined; i.e. using the CCC to simply confirm a "verdict" about a resident or fellow from one's opinion or a set of data. This may seem tempting; however, it significantly undermines group process (see Table 4).
  - c. Shared mental models are very helpful in group process (see Part 3: Preparing for Effective CCC Meetings). The CCC should spend time discussing each committee member's interpretation of the Milestones and be able to describe examples of performance.
  - d. Spend time discussing how the group will work together so as to develop group cohesiveness. One simple technique is to create group "touchstones" or ground rules. 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."
- 3. The CCC should use a consistent, systematic process for each meeting.
  - a. Diverse opinions should be invited and encouraged. Research shows that minority opinions, even when "wrong," can lead to better decisions.
  - b. Issues of hierarchy and psychological size can negatively affect group decision-making. This is particularly a risk when a more senior faculty member serves as CCC chair. It is critical to minimize effects of hierarchy. One clear measure of the effectiveness of the CCC is the willingness of all members to speak up.
    - i. A simple technique to reduce the negative effects of hierarchy is to always start with the most "junior" person or the person most at risk in the hierarchical chain.
    - ii. The CCC chair should, as a general rule, state his/her opinion last.
    - iii. The program director should avoid stating his/her opinion early on, if at all, depending on her/her 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.
    - iv. A structured format used to discuss each resident or fellow may improve the quality of discussion and ensure no key aspect is missed.

- c. Research shows that the more performance information that is available to groups the better the quality of the decisions.
  - i. The CCC should carefully consider how information is prepared and presented in the group (see Part 3: Preparing for Effective CCC Meetings). While some pre-synthesis is necessary and important, the underlying data that informed the pre-synthesis should be available to the committee for discussion if needed. The same format should be used for each resident or fellow.
- d. Longer discussions tend to produce better decisions and will also likely produce better feedback. Time pressure or trying to cover too many residents/fellows in one meeting can produce lower quality decisions. Be sure to give the CCC adequate time for discussion, especially for residents/fellows-in-difficulty. However, even the best residents/fellows can grow professionally and improve, so be careful not to short-change your more talented learners who will also benefit from robust feedback and the committee's providing them with some "stretch goals."
- e. CCCs may find themselves spending a disproportionate amount of time with sub optimally performing residents/fellows. The committee should try to spend a more equal amount of time on all residents/fellows. Lower performing residents/fellows may need educational plans, but so do the "superstars." Competence is the "floor" not the ceiling of performance, and higher performing residents/fellows can be challenged to develop further. Hauer's study of 34 program directors at five institutions discovered that most CCCs relied on global, end-of-rotation evaluations known to be notoriously unreliable, focused on problem residents more than they spent time discussing the typical residents, and lacked faculty development or training of CCC members. The CCC should determine which issues related to struggling residents/fellows will be addressed in the CCC meeting and which will be assigned to a remediation individual or group for further in-depth work.<sup>22</sup>
- f. Have a structure to the meeting discussions rather than only an open forum for members to share their general comments about each resident/fellow.
- g. If possible, share information in multiple formats, not just verbally.
- h. Projecting data at the meeting or having a written summary can be helpful.
- i. If a resident/fellow has not rotated through an experience over the past six months 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.
- j. 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.
- k. Consider asking one person to offer an opposing or different view, to help represent all possible perspectives.
- I. A quick debrief at the end of each CCC meeting can also help to improve group process. The leader can simply ask: "What worked well in today's meeting?" "What did not work well during this meeting?" "What would you improve and how?" This technique builds continuous quality improvement into the CCC process, and can help encourage relationships and trust.

#### 4. Post-meeting

- a. The discussion about each resident/fellow should be captured and documented (see Part 6: Legal Issues and Considerations). 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.
- b. Transparency is an important principle in the ACGME's current model of accreditation and the Milestones. Accurately documenting and sharing the key components and judgments with residents and fellows is a critical aspect of this principle.
- c. Assess if the CCC is meeting its goals and determine how to improve the next CCC meeting.
- d. All residents/fellows should receive timely feedback after CCC meetings, not just those for whom the CCC has concerns. This can be accomplished in a multitude of forms, including being communicated to them by the program director during the twice-yearly performance review, by an advisor, a designated CCC member or another member of the faculty, and/or by written communication. Feedback, however, is best given in person. ACGME research has found residents are quite frustrated when they simply get an e-mail with a written report. They desire 1:1 conversation to review and make sense of the report.
- e. Feedback to a resident or fellow should occur after the CCC deliberations.

CCCs will increasingly assess the program's performance, as well as individual residents/fellows. In assessing resident/fellow performance against the Milestones, it will become clear what is missing from the program's assessment "toolkit" and the utility of the tools the program has in place. 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 or through incentives.

#### ACGME CCC Guidebook

Others may be tapped to coach fellow faculty members whose evaluations could be improved. 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 resident/fellow performance.

It is recommended that the CCC revisit its purpose, shared mental model, and procedures each year. This is important as ongoing faculty development to help prevent the development of groupthink or drift from the original aims and procedures.

In conclusion, research supports the importance of well-structured, systematic processes for groups such as a CCC. Effective group process, capturing the "wisdom of the crowd," enhances the probability of better judgments around resident and fellow professional development. Systematic process can also help develop a shared mental model among committee members, a condition that will be important in most effectively using the Milestones to judge learner development with the competencies.

#### Part 5: After the CCC Meeting Concludes

#### Providing Feedback to the Resident or Fellow

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. 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. 14, 23

#### Basic features of high quality feedback:

- 1. <u>Timeliness.</u> The results of the 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 the 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," etc., are not helpful in promoting professional development, especially in the context of Milestones data.
- 3. <u>Balance reinforcing ("positive") and corrective or constructive ("negative")</u> <u>feedback.</u> 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 (positivenegative-positive) is actually not very effective and not routinely recommended (see ADAPT and R2C2 models below). Models for giving feedback are provided below.
- 4. <u>Learner reaction and reflection.</u> 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. <u>Individualized learning plans (ILPs).</u> Creating and executing an ILP after Milestones review is critical to professional development and is often neglected in feedback. As Boud and Molloy 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.<sup>14</sup>
- 6. Feedback should start with where the resident/fellow was at the last feedback meeting and a review of the action plans created then.

Models for Milestones Feedback

#### **Prepare to ADAPT Model**

This model was developed by developed by Susan Johnston, Judy Pauwels, Kris Patton, Tyra Fainstad and Adelaide McClintock at the University of Washington, UW Medicine, and was built on the work of Lyuba Konopasek and her earlier Ask-Tell-Ask (ATA) model.

ADAPT stands for Ask-Discuss-Ask-Plan Together. Since feedback should be a dialogue and not a one-way conversation, the "Ask-Tell-Ask" model was revised to recognize this important aspect of feedback. Ahead of an observation or other assessment activity, such as reviewing the Milestones feedback from the CCC, ask the learner what he/she would like feedback on. During an observation, determine one or two improvement points appropriate for the learner and situation. Then debrief the observation using the ADAPT conversation. Whether debriefing a single observation or a composite, longitudinal assessment like the Milestones, start by asking how things are going and encourage a self-assessment. Discuss with the learner your observations of the self-assessment and how it relates to your feedback, looking for areas of concordance and discordance. Discordances are especially good opportunities for professional growth and helping the learner with the skill of self-reflection and calibration. Ask the learner to then reflect on the feedback session and gain their further input. Finally, plan together to decide next steps, action plans and needs for ongoing coaching. The figure below describes the Prepare to ADAPT process.

The University of Washington has created two short web-based training presentations for residents, fellows, and faculty members:

#### **Prepare to ADAPT website**

http://www.uwmedicine.org/adaptfeedback

Prepare to ADAPT for the Learner: Getting the Feedback You Need <a href="https://depts.washington.edu/lgateway/elearning/feedback/story.html">https://depts.washington.edu/lgateway/elearning/feedback/story.html</a>

Prepare to ADAPT for the Coach: Providing High Quality Feedback <a href="https://depts.washington.edu/lgateway/elearning/fbc/story.html">https://depts.washington.edu/lgateway/elearning/fbc/story.html</a>

#### Prepare to ADAPT: A conversational approach to feedback

## LEARNER Initiates Feedback – Seeker / Receiver

- Reflect on learning goals for direct observation
- Communicate learning goals to coach
- Try to be as natural as possible
- Some learners ignore the observer during the activity



## PREPARE For the Feedback and Observation

#### PERFORM the Activity and Direct Observation

## COACH Initiates Feedback – Giver / Teacher

- Reflect on program and learner goals
- Orient learner, as necessary, to what is expected
- Consider learner state-of-mind
- Try to be unobtrusive; work with
- Take notes on specifics, particularly the learner-targeted feedback points.

## DEBRIEF With the ADAPT Conversation

Reflect on the observation, assess your own work and **ask** for feedback.

**Discuss** the observation; have a conversation about the activity. "Please coach me on that..."

**Ask** for clarification. Re-state what you understood: "*I heard you say....*"

Work with your coach on how to improve the next time:
Compare feedback to your educational goals and
Summarize the main points to come up with a plan.









Reflect on learner emotions and readiness for feedback. **Ask** the learner for his/her thoughts about the observation

**Discuss** and coach observed, modifiable, specific behaviors; relate to learner's goals; focus on 1-2 improvements.

**Ask** learner to re-state what you said. **Clarify** and/or re-state important points. **Ask** what he/she will do differently the next time.

Work with learner to compare self-assessment with your observations. Offer to follow-up with him/her, if possible, on next steps to create a mutually agreed upon plan.

LEARNER Improved Future Work Performance

Developed at the University of Washington, UW Medicine, by Susan S. Johnston, EdD; Judith Pauwels, MD; Kristen Patton, MD; Tyra Fainstad, MD; Adelaide McClintock, MD.

#### R2C2 Model

This model was developed by Joan Sargeant and colleagues, who specifically included feedback sessions that involved the review of multi-source performance data, such as multi-source feedback and clinical performance measures, in their research.<sup>24</sup> The model builds on robust educational theory. The steps of the model are:

Rapport Building: In this initial stage, the faculty member should build rapport and establish the relationship; if the same person is delivering the feedback after each CCC meeting, this step is facilitated and can be abbreviated in subsequent feedback meetings. The goal of this stage is to explain the purpose of the assessment (e.g., the Milestones), engage the resident/fellow, and establish the credibility of the assessment. At this stage, you want to outline and negotiate the agenda with the learner to ensure issues he/she wishes to discuss are surfaced during the review of the Milestones data, discuss what the process means to him/her, and confirm that the session should lead to an action plan.

Explore **R**eaction: The next stage is to explore reactions, emotions, and perceptions of the Milestones report. If the resident/fellow has completed a self-assessment of the Milestones (see above), emotion and reaction are likely around areas of concordance and especially discordance between his/her impressions of his/her performance and those of the CCC and program. These concordances and especially discordances should be explored. The goal of this stage is to ensure the resident/fellow feels heard and that his/her views are respected, even if there is disagreement.

Explore **C**ontent: In this stage, explore how and what the resident/fellow understands about the Milestones data. In this stage, you want to ensure the resident/fellow fully understands the meaning of the data and how he/she can use it for action plans and professional development. Helping the resident/fellow also understand how the various assessments are used to inform the Milestones may also be helpful.

**C**oach for Performance Change: In this last stage, the faculty member facilitates and engages the resident/fellow in "change talk" (i.e., helping the learner recognize his/her strengths to maintain and grow while also recognizing the needs for change) and the creation of an action plan.

One more observation of the R2C2 model – emotion, reaction, or misinterpretation can arise at any time during a session, so you may need to "loop back" to explore reactions or content.<sup>24</sup>

The figure bellows highlights the overlap between the Prepare to ADAPT and R2C2 Models:

### **ADAPT and R2C2 Models**



#### Part 6: Legal Issues and Considerations

The CCC can be an extremely beneficial structure to support legal constructs required for academic decision-making. There are two Supreme Court decisions that provide the context and framework for academic due process, including the concept of a Clinical Competency Committee (See Key Legal Cases Supporting Professional Judgment in GME).

Academic due process consists of three components:

- 1. notice (of deficiencies); and,
- 2. opportunity to cure; and,
- 3. a careful and deliberate decision-making process.

The reasonable decision-making process is the CCC; that is, a regularly called meeting of the faculty for the purpose of discussing student (resident/fellow) performance. In both Missouri v. Horowitz ("Horowitz") and Michigan v. Ewing ("Ewing"), the faculty evaluation committee was identified as being a core component of the reasonable decision-making process. While not specifically referred to at the time of the decision as the CCC, this structure of a faculty committee is the legal construct supporting the importance of what is now referred to as a CCC in today's evaluation systems in medicine. The Ewing case further supported the idea that a faculty decision-making committee providing academic performance decisions that are conscientious and made with careful deliberation (i.e., not arbitrary or capricious) constitutes reasonable decision-making. When making academic decisions regarding resident/fellow performance, promotion, or dismissal, the CCC provides the structure recognized by the highest court in academic cases.

#### **Documentation**

When defending a legal case, contemporaneous documentation of events, actions, or conversations is very helpful for confirming whether or not something actually happened. While there is no law that requires evaluations or performance feedback to be written, the ACGME requires written rotational evaluations and semi-annual evaluations of performance. Of course, it is natural within an academic clinical setting that a faculty member provides a resident/fellow with routine verbal feedback. Although it is not recorded, this verbal feedback constitutes notice and opportunity to cure (can cite the Horowitz case here again).

While it is always helpful to have written performance documentation, lack thereof should not deter evaluators from doing the right thing and utilizing this information as part of the overall evaluation process. One critical role of the CCC is to elicit feedback from faculty members regarding performance in a variety of settings and situations, and for the faculty to discuss performance based on individual experiences and opinions. In many situations, this discussion at the CCC may be the first time that issues emerge and indicate a pattern of performance or behavior.

This discussion is the heart of the CCC, and should not be discounted just because there is not a rotational evaluation or other assessment tool or form to support the discussion. Research shows that the discussion among the faculty members in the CCC often provides more accurate and robust information regarding learner performance than the written evaluation alone, which may not represent a complete view of actual performance.

These discussions are not only valuable to the formation of individual performance evaluations, but also to demonstrate a "fair and reasonable decision-making process" by the program.

The documentation of the CCC meeting itself can be one of the most valuable documents to an institution when defending a resident/fellow dismissal or adverse action. The ACGME does not have any requirement as to how the CCC meeting should be documented. However, many programs will find it worthwhile to retain minutes of the CCC meeting. These minutes may be:

- 1. A written document reflecting the discussion of each resident's/fellow's performance.
- 2. A concise summary of each resident's/fellow's performance and any action or follow-up items.
- 3. Confidential (i.e., not shared with anyone other than the resident/fellow, CCC, and program leadership).
- 4. Archived in accordance with the institution's document retention policy in consultation with legal counsel.

Some institutions may prefer #1 to be brief and use the Milestones reported to the ACGME as #2.

#### **Decision Process**

The ACGME requires the CCC to make recommendations on resident/fellow performance to the program director for review and action; thus, the CCC is not the final decision maker. The program director is the final decision maker. However, in most situations, the feedback and consensus of the CCC is critical in informing the program director of the faculty's expert opinion regarding progress and promotion.

In general, discussions of the CCC will lead to a "consensus" decision. That is, after presentation of all data, and engagement of the members in a discussion of their experience with, and opinion regarding, the progress of a resident/fellow, the Milestone assessment will be reached by "consensus." As Milestones are designed to guide a developmental judgment, CCCs should not vote on individual subcompetencies and milestones.

However the CCC may find a situation in which strongly held differing opinions that are not modified through discussion fails to result in consensus. The Chair must recognize and be prepared for this circumstance. The CCC members should discuss this at the outset, and should consider describing how they will proceed in the written description of the CCC. The ACGME provides no specific guidance in this setting. The committee should establish its own policy in this regard, and apply it consistently, taking into account input from the DIO and Legal office. While it is recognized that decisions regarding remediation, probation, and promotion can be difficult and programs may resort to voting, the ACGME strongly discourages voting as a decisional approach. If programs do choose to use voting, it is very important to be clear about what exactly the vote means from the outset, and to ensure that the process of voting does not provide a false sense of power to the committee. For example, is a vote being taken to determine if performance is not at an expected competence level, or is the vote to recommend a disciplinary action, remediation, or dismissal? If a vote is held and there is a narrow result, "4 to 3" for example, the program director's expert decision on a resident may seem less clear cut if a resident subsequently appeals.

Regardless of whether a vote is taken, the CCC must remember that the decision of the committee is advisory to the program director, and the program director has the responsibility to be the final decision maker. With these mechanisms in place and followed, fundamental fairness to both residents/fellows and committee members is provided, and challenges to process consistency and fairness are prospectively addressed.

#### Peer-Review Privilege

Peer-review statutes fall under state law, and thus vary from state to state. However, in general, peer-review privilege has some common tenets that generally do not apply to CCCs and resident/fellow performance evaluation.

Generally speaking, peer-review privilege:

- protects discussion of clinical performance for the purpose of internal quality assessment, not evaluation and decisions communicated to external parties; and.
- applies to in-person meetings where the information is maintained internally, not communicated outside of the peer-review process (such as to clinical advisors, other departments, or external agencies).

Each institution should review its peer-review statute with its legal counsel to determine if it should be applied to the CCC. Likewise, given the ever-changing legal environment and number of cases being heard regarding resident performance, an institution's legal counsel should regularly review new case law and decisions in the state for updated rulings and orders issued by courts.

Notwithstanding a program's natural tendency to want to maintain strict confidentiality, if conducted in accordance with these guidelines, the discussions and recommendations of the CCC are generally helpful when defending a program's decision to dismiss a resident/fellow (reference Horowitz and Ewing). Carefully prepared CCC minutes can provide one of the strongest legal defenses to support dismissal actions by demonstrating the three core tenants of academic due process: notice of deficiencies; opportunity to cure; and a reasonable decision-making process.

#### **Appeals and Due Process**

The members of the faculty must be encouraged to provide candid and robust evaluations that are reflective of actual performance. Evaluations are based on each faculty member's observations, judgments, and expectations. A faculty member should complete evaluations in an honest and good-faith effort to provide feedback to the resident/fellow with the goal of identifying both strengths and deficiencies in order for the resident/fellow to improve academic performance.

Programs should be aware that allowing residents/fellows to appeal performance evaluations (rotational evaluations, semi-annual evaluations, etc.) can send a message to the residents/fellows that faculty member or program director feedback is negotiable. It can also suggest to faculty members and program directors that their feedback, usually critical feedback, can be subject to scrutiny and overturned if a resident/fellow complains. Programs should discuss with legal counsel the impact of allowing residents/fellows to appeal performance evaluations or academic evaluation decisions. Most institutions do not allow due process for routine feedback, including assessment and evaluations, and the ACGME does not require it for these purposes.

The ACGME does encourage programs utilizing progressive disciplinary processes (probation) to allow these actions, as well as termination or non-promotion, resulting from CCC decisions to be eligible for appeal to ensure the department and institution follows the policies in place regarding the decision-making process.

#### **Key Legal Cases Supporting Professional Judgment in GME**

University of Missouri v. Horowitz (1978)

Board of Curators of Univ. of Mo. v. Horowitz, 435 U.S. 78, 98 S. Ct. 948, 55 L. Ed. 2d 124 (1978).

Case Summary: Ms. Horowitz excelled in her first two years of medical school, but received criticism from the faculty as she began her clinical rotations. She was provided feedback in her rotational evaluations regarding her attendance, slovenly appearance, hygiene, and bedside manner. Despite feedback, Ms. Horowitz's behavior did not improve. The school's faculty evaluation committee ultimately recommended her dismissal from medical school. Ms. Horowitz appealed the decision to the Dean. The Dean allowed Ms. Horowitz the opportunity to be evaluated by seven independent physicians. At the conclusion of the rotations, the faculty provided feedback to the Dean of varied opinion.

Based on the feedback of the independent faculty evaluators, the Dean upheld the dismissal decision. This case and the issue of academic due process were ultimately argued in front of the Supreme Court. The Court supported the University's decision based on the following:

- Ms. Horowitz was provided <u>notice</u> of her deficiencies through private verbal feedback and her rotational evaluations.
- Ms. Horowitz was provided an opportunity to cure her deficiencies.
- The <u>decision was made carefully and deliberately</u>. The regularly called meeting of the faculty, called for the purpose of evaluating academic performance, was noted as being a reasonable decision-making process consisting of faculty members, expected to evaluate student performance.
- The Court decision noted that under this particular set of circumstances the rotation with the seven physicians was much more process than was due.

University of Michigan vs. Ewing, (1985)
Regents of Univ. of Mich. v. Ewing, 474 U.S. 214, 106 S. Ct. 507, 88 L. Ed. 2d 523 (1985).
Case Summary: Mr. Ewing was enrolled in the six-year BS/MD program. After four years, he was eligible to write the NBME Step 1 exam. Mr. Ewing failed the exam and was subsequently dismissed from medical school. He sued, citing at least 11 other students who failed the exam and were allowed to stay enrolled in school and retake the test; some were allowed to retake the exam three and four times. The decision to dismiss Mr. Ewing was made by the faculty committee charged with reviewing academic performance. This committee reviewed Mr. Ewing's entire academic record and determined that based on his overall performance (including several incompletes, required repeats of courses, and the lowest score ever recorded on the NBME exam at this school), he did not have the ability or aptitude required of a physician and had no chance of succeeding. The Court sided with the school noting:

- "The narrow avenue for judicial review of the substance of academic decisions precludes any conclusion that such decision was a substantial departure from accepted academic norms as to demonstrate the faculty did not exercise professional judgment."
- The decision was "conscientious and made with careful deliberation," citing the regularly-called faculty meeting structure, and the Promotion and Review Board.
- 3. The faculty rightly reviewed Mr. Ewing's entire academic record, not just a single test, rotation, or incident, to provide context to the decision.

#### Part 7: Other Uses of a CCC

Increasingly CCCs are used to assess the competence of residents/fellows who are either transferring into a program from a period of prior training or applying to a fellowship with core training that was not attained in an ACGME-accredited program.

"In specialties that do not require an initial year prior to entry into a program, a credit for one year of training may be allowed at the program director's discretion, for residents who have completed a residency program in a specialty not accredited by the ACGME, RCPSC, or CFPC. Such residents must enter at the PGY-1 level and may be advanced to the PGY-2 level by the CCC based upon Milestones assessments." [Common Program Requirement III.A.1.b (See ACGME Common Program Requirements FAQs, p.7, at <a href="http://www.acgme.org/Portals/0/PDFs/FAQ/CommonProgramRequirementsFAQs.p">http://www.acgme.org/Portals/0/PDFs/FAQ/CommonProgramRequirementsFAQs.p</a> df)]

Fellows can be considered through an "exceptionally qualified applicant pathway" if their core residency program was not accredited by ACGME. Applicants who graduated from ACGME International-accredited programs fall into this category.

"Within six weeks of matriculation, programs will conduct a Milestones assessment of such a fellow's competency. That assessment will ensure that the fellow has at least entry-level competency in the specialty. The program may choose to use the subspecialty Milestones, the core specialty Milestones, or a combination. The assessment may be conducted by the fellowship Clinical Competency Committee (CCC) independently, or in collaboration with the sponsoring core program's CCC. Programs may use one or more evaluation tools (e.g., global faculty evaluations, CEX, Simulation Center, OSCE, etc.) in this assessment." [Common Program Requirement III.A.2.b).(5); One-Year Common Program Requirement III.A.2.e)

http://www.acgme.org/Portals/0/PDFs/FAQ/CommonProgramRequirementsFAQs.pdf)]

### **Part 8: Opportunities**

The CCC offers many excellent opportunities for continuous educational quality improvement. For the resident/fellow, it 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 should a resident/fellow fail to progress, and therefore identifies an opportunity for remediation. For the faculty, CCCs can be an opportunity to balance out the "hawks" and the "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.

CCCs can present an excellent opportunity to simplify a program's individual and collective assessment tools. It will quickly 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 necessary for faculty members to complete multipage evaluation forms, for example. The CCC can identify for what faculty consensus is useful. 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 evaluations and create faculty development or other intervention opportunities.

The CCC will also help identify gaps in a program, as well as opportunities to improve program components (e.g., curricula, rotation schedules, supervision, and mentorship).

The ACGME welcomes feedback on this Guidebook and encourage programs to share best practices regarding their CCCs with colleagues so the graduate medical education community can continue to learn and improve.

#### References

- ACGME Glossary of Terms July 1, 2013. Accessed July 27, 2016: https://www.acgme.org/Portals/0/PDFs/ab\_ACGMEglossary.pdf.
- 2. ACGME Common Program Requirements V.A.1 Accessed August 9, 2017.
- 3. Van der Vleuten CPM, Schuwirth LWT, Driessen EW, Dijkstra J, Tigelaar D, Baartman LKJ, van Tartwijk J. A model for programmatic assessment fit for purpose. Med Teach. 2012; 34: 205–214.
- Common Program Requirements FAQs. Accessed at http://www.acgme.org/Portals/0/PDFs/FAQ/CommonProgramRequirementsFAQs.p df.
- Institutional Requirements. Accessed at <a href="http://www.acgme.org/Portals/0/PDFs/FAQ/InstitutionalRequirements">http://www.acgme.org/Portals/0/PDFs/FAQ/InstitutionalRequirements</a> 07012015.pdf
- 6. Annual Review of Competence Progression <a href="http://www.gmc-uk.org/education/competence-progression-review.asp">http://www.gmc-uk.org/education/competence-progression-review.asp</a>.
- 7. Black D. Revalidation for trainees and the annual review of competency progression (ARCP) Clinical Medicine 2013; 13 (6): 570–2.
- 8. Faculty development for CCC members Accessed February 20, 2013 at <a href="http://www.acgme-nas.org/assets/pdf/NASFAQs.pdf">http://www.acgme-nas.org/assets/pdf/NASFAQs.pdf</a>.
- 9. French JC, Dannefer EF, Colbert CY. A systematic approach toward building a fully operational clinical competency committee. J Surg Educ. 2014;71(6):e22-7.
- 10. Hauer KE, Chesluk B, Iobst W, Holmboe E, Baron RB, Boscardin CK, Cate OT, O'Sullivan PS. Reviewing residents' competence: a qualitative study of the role of clinical competency committees in performance assessment. Acad Med 2015;90(8):1084-02.
- 11. Ekpenyong A, Baker E, Harris I, Tekian A, Abrams R, Reddy S, Park YS. How do clinical competency committees use different sources of data to assess residents' performance on the internal medicine milestones? A mixed methods pilot study. Med Teach. 2017 Jul 25:1-10. [Epub ahead of print]
- 12. Cohen NH. "Assessing Clinical Competence What is the Role for the Anesthesia Board info "ABA requires each residency to file an Evaluation of Clinical Competency in January & July to ABA for any resident who spent any portion of prior 6 months in clinical anesthesia training..." Certificate of Clinical Competency" attesting to satisfactory clinical competence during final period of training." The residency must:
  - Develop & manage evaluation system from multiple sources
  - Manage faculty advisor system (mentorship and feedback)
     Neal H Cohen MD MPH MS "Assessing Clinical Competence What is the Role for the Program Director"
- 13. Doty CI, Roppolo LP, Asher S, Seamon JP, Bhat R, Taft S, Graham A, Willis J. How Do Emergency Medicine Residency Programs Structure Their Clinical Competency Committees? A Survey. Acad Emerg Med. 2015;22(11):1351-4.
- 14. Lockyer J, Carraccio C, Chan MK, Hart D, Smee S, Touchie C, Holmboe ES, Frank JR; ICBME Collaborators. Core principles of assessment in competency-based medical education. Med Teach. 2017;39(6):609-616.

- 15. Friedman KA, Raimo J, Spielman K, Chaudhry S. Resident dashboards: helping your clinical competency committee visualize trainees' key performance indicators, Med Educ Online 2016, 21: 29838 http://dx.doi.org/10.3402/meo.v21.29838.
- 16. Johna S, Woodward B. Navigating the Next Accreditation System: A Dashboard for the Milestones Perm J. 2015; 19(4): 61–63.
- 17. Schwind CJ, Williams RG, Boehler ML, Dunnington GL. Do individual attendings' post-rotation performance ratings detect residents' clinical performance deficiencies? Acad Med. 2004 May;79(5):453-7.
- 18. Hemmer PA, Hawkins R, Jackson JL, Pangaro LN. Assessing how well three evaluation methods detect deficiencies in medical students' professionalism in two settings of an internal medicine clerkship. Acad Med. 2000;75:167-73.
- 19. Thomas MR, Beckman TJ, Mauck KF, Cha SS, Thomas KG. Group assessments of resident physicians improve reliability and decrease halo error. J Gen Intern Med. 2011; 26: 759-64.
- 20. Hauer KE, ten Cate O, Boscardin CK, lobst W, Holmboe ES, Chesluk B, Baron RB, O'Sullivan PS, Ensuring Resident Competence: A Narrative Review of the Literature on Group Decision Making to Inform the Work of Clinical Competency Committees J Grad Med Educ. 2016 May; 8(2): 156–164.
- 21. Dickey CC, Thomas C, Feroze U, Nakshabandi F, Cannon B. Cognitive Demands and Bias: Challenges Facing Competency Committees. J Grad Med Educ. 2017 Apr;9(2):162-164.
- 22. Hauer KE, Chesluk B, Iobst W, Holmboe E, Baron RB, Boscardin CK, Cate OT, O'Sullivan PS. Reviewing residents' competence: a qualitative study of the role of clinical competency committees in performance assessment. Acad Med. 2015 Aug;90(8):1084-92.
- 23. Boud D and Molloy E. Feedback in Higher and Professional Education. Routledge. Sydney. 2013.
- 24. Sargeant J, et; al. Evidence-based facilitated feedback: Using the R-2 C-2 model to enhance feedback acceptance and use. Presented at the Association for Medical Education in Europe. Prague, 2013.

## Part 9: Annotated Bibliography

Hemmer PA, Hawkins R, Jackson JL, Pangaro LN. Assessing how well three evaluation methods detect deficiencies in medical students' professionalism in two settings of an internal medicine clerkship. Acad Med. 2000; Feb;75(2):167-73.

This study compared three methods (standard checklists, written comments, and comments from formal evaluation sessions) in detecting student deficiencies in internal medicine clerkships at the Uniformed Services University of the Health Systems (USUHS). The framework for the formal evaluation sessions is RIME (Reporter-Interpreter-Manager-Educator). The authors found the face-to-face, formal evaluation sessions significantly improved the detection of unprofessional behavior, and that 25% of professionalism concerns were only identified at the formal evaluation session.

Battistone MJ, Milne C, Sande MA, Pangaro LN, Hemmer PA, Shomaker TS. The feasibility and acceptability of implementing formal evaluation sessions and using descriptive vocabulary to assess student performance on a clinical clerkship. Teach Learn Med. 2002 Winter;14(1):5-10.

This study tested the group evaluation technique used in the USUHS RIME model (see Hemmer) in a setting outside of the military, and found the residents and faculty members who participated in the descriptive evaluation sessions provided more valid evaluations and the majority of students found the RIME system helpful or more helpful compared to their previous evaluation system.

Schwind CJ, Williams RG, Boehler ML, Dunnington GL. Do individual attendings' post-rotation performance ratings detect residents' clinical performance deficiencies? Acad Med. 2004 May:79(5):453-7.

In this study the authors found in a surgery program that only 0.7% of evaluation form ratings (of 1,986 individual post-rotation ratings) nominally noted a deficit. Eighteen percent (18%) of residents determined to have some deficiency requiring remediation received no post-rotation performance ratings indicating that deficiency. Written comments on post-rotation evaluation forms detected deficits more accurately than did numeric ratings. The largest percentage of performance deficiencies only became apparent when the attending physicians discussed performance at the annual evaluation meetings. The conclusion of the authors was that, "annual evaluation meetings may help identifying patterns of residents' behavior not previously apparent to individual faculty and provide additional information about residents' performance deficiencies."

Williams RG, Schwind CJ, Dunnington GL, Fortune J, Rogers D, Boehler M. The effects of group dynamics on resident progress committee deliberations. Teach Learn Med. 2005 Spring;17(2):96-100.

This study in a single surgery residency found no evidence of "feeding frenzy" or piling on (problem of negative group think) in committee deliberations about residents.

Regehr G, Ginsburg S, Herold J, Hatala R, Eva K, Oulanova O. Using "standardized narratives" to explore new ways to represent faculty opinions of resident performance. Acad Med. 2012 Apr;87(4):419-27.

While not directly related to group process and Clinical Competency Committees, this study used narratives to describe levels of performance and asked faculty members to rank residents using the narrative performance profiles. The authors found a small group of faculty members (14 after initial development) that used a set of 16 narratives led to better discrimination of "excellent," "competent," and "problematic" performance. This provides some indirect support for using narratives in the Milestones, although it should be noted that these were more holistic, combined narratives and not de-aggregated narratives.

Surowiecki J. The Wisdom of Crowds. Why the many are smarter than the few. Anchor Books. 2004. New York.

This is a fun book highlighting the research and evidence of how good group process can lead to better decisions. A number of important principles are discussed, such as the need for diversity of members of a committee, allowing for minority opinions to be heard, and using an evidence-based group process to avoid problems such as confirmation bias.

Sanfey H, DaRosa DA, Hickson GB, Williams B, Sudan R, Boehler ML, Klingensmith ME, Klamen D, Mellinger J, Hebert JC, Richard KM, Roberts NK, Schwind CJ, Williams RG, Sachdeva AK, Dunnington Gl. Pursing Professional Accountability: An Evidence Based Approach to Addressing Residents with Behavioral Problems. Arch Surg. 2012;147(7):642-647.

This presents practical highlights from a think tank held at the American College of Surgeons by medical and nursing leaders involved in resident education; individuals with expertise in academic law, mental health issues, learning deficiencies, and disruptive physicians; and surgical residents. The value of a CCC is emphasized. Meeting participants noted that the amount of time spent discussing a resident is frequently a measure of the severity of the problem.

Yao DC, Wright SM. National survey of internal medicine residency program directors regarding problem residents. JAMA. 2000;284(9):1099-1104

An internal medicine study in which only 31 percent of program directors identified a problem resident from a written evaluation; in 75 percent of cases, program directors first became aware through verbal complaints by faculty members.

Dudek NL Marks MB Wood TJ Dojeiji S Bandiera G Hatala R Cooke L Sandownik L. Quality evaluation reports: Can a faculty development program make a difference? Med Teach 2012;34:e725-731.

In this study, a three-hour interactive faculty development program improved the quality of faculty written evaluations. The authors noted, "assessor training is a key component of high quality assessment... there is evidence to suggest that faculty can be trained to improve the quality of their assessments."

George BC. Teitelbaum EN, Darosa DA, Hungness ES, Meyerson SL, Fryer JP, Schuller M, Zwischenberger JB. Duration of faculty training needed to ensure reliable performance ratings. J Surg Educ 2013 Nov-Dec;70(6):703-8.

One good hour of faculty development may be as good as four in helping faculty members improve their evaluations. This study adapted "frame of reference" (FOR) training, a process used in other fields to improve raters assessing performance indicators associated with points along a rating scale. The authors compared two faculty development programs for surgical faculty: one was a one-hour program; the second was a four-hour program. The groups were not significantly different in their subsequent ratings of video clips of residents at different levels.

Williams RG, Sanfey H, Chen X, Dunnington GL. A controlled study to determine measurement conditions necessary for a reliable and collaborative formative assessment. Annals of Surgery 2012:177-187.

This study found that five-to-seven members appear to make up an effective size for group process when making formative assessments. As noted by the authors, this group size helps "balance out idiosyncrasies in judges' ratings." Rater idiosyncrasies affect all raters to a degree, and group process can help maximize the strengths and weaknesses of rater idiosyncrasy.

Angus S, Moriarty J, Nardino RJ, Chmielewski A, Rosenblum MJ. Internal Medicine Residents' Perspectives on Receiving Feedback in Milestone Format. J Grad Med Educ. 2015 Jun;7(2):220-4.

Residents preferred receiving feedback in "milestone" format. However, residents did not perceive any difference in the amount of feedback they received after implementation of the Milestones.

Choe JH, Knight CL, Stiling R, Corning K, Lock K, Steinberg KP. Shortening the Miles to the Milestones: Connecting EPA-Based Evaluations to ACGME Milestone Reports for Internal Medicine Residency Programs. Acad Med. 2016 Jul;91(7):943-50.

This program comprehensively mapped milestones and competencies to "activities of "work" (entrustable professional activities) and created new evaluations that asked faculty to assess how much more supervision they believed they would need to provide to have a resident safely perform that activity (for example, discharge a patient from the hospital to home). Faculty were asked to assess only those activities they themselves "observed." Although they admit this took a great deal of upfront work, they believed added more value.

Doty CI, Roppolo LP, Asher S, Seamon JP, Bhat R, Taft S, Graham A, Willis J-How Do Emergency Medicine Residency Programs Structure Their Clinical Competency Committees? A Survey. Academic Emergency Medicine Nov 2015; 22:1351-1354.

This is a nice descriptive study of the specific tactics used by 116 emergency medicine programs. However, no specific validity data is provided.

Johna S, Woodward B. Navigating the Next Accreditation System: A Dashboard for the Milestones. Perm J. 2015 Fall;19(4):61-3.

Friedman KA, Raimo J, Spielmann K, Chaudhry S. Resident dashboards: helping your clinical competency committee visualize trainees' key performance indicators. Med Educ Online. 2016 Mar 31;21:29838. doi: 10.3402/meo.v21.29838

Both of these articles discuss their experiences with improving CCC efficiency by visually presenting aggregate information.

Guerrasio J, Garrity MJ, Aagaard EM. Learner deficits and academic outcomes of medical students, residents, fellows, and attending physicians referred to a remediation program, 2006-2012. Acad Med. 2014 Feb;89(2):352-8

Guerrasio J, Brooks E, Rumack CM, Christensen A, Aagaard EM. Association of Characteristics, Deficits, and Outcomes of Residents Placed on Probation at One Institution, 2002-2012. Acad Med. 2016 Mar;91(3):382-7.

Both of these describe the outcomes of residents (and other learners) who are identified as performing at a level lower than expected and who undergo remediation. They conclude most remediation is successful and remediation requires an investment of faculty resources.

Hauer KE, Chesluk B, Iobst W, Holmboe E, Baron RB, Boscardin CK, Cate OT, O'Sullivan PS. Reviewing residents' competence: a qualitative study of the role of clinical competency committees in performance assessment. Acad Med. 2015 Aug;90(8):1084-92.

Nice qualitative study of CCC practices prior to formal implementation of Milestones. CCCs essentially divided into types: those that viewed their task as developmental to help all residents improve and those that mainly saw their role to deal with residents in difficulty. The goal of the CCC should be to review the development of all residents.

Tichter AM, Mulcare MR, Carter WA. Interrater agreement of emergency medicine milestone levels: resident self-evaluation vs clinical competency committee consensus. Am J Emerg Med. 2016 Aug;34(8):1677-9. Epub 2016 May 7.

Bradley KE Andolsek KM. A pilot study of orthopaedic resident self-assessment using a milestones' survey just prior to milestones implementation. Int J Med Educ. 2016; 7: 11–18.

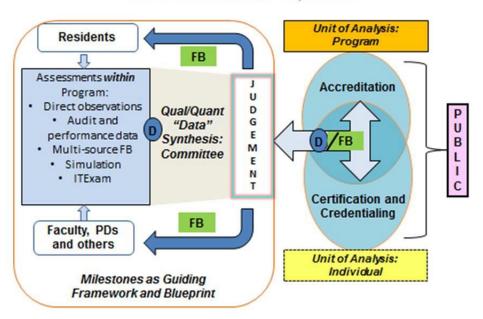
Both of these articles suggest the role that self- assessment can play as one tool used by CCC members.

Turner JA, Fitzsimons MG, Pardo MC Jr, Hawkins JL, Huang YM, Rudolph MD, Keyes MA, Howard-Quijano KJ, Naim NZ, Buckley JC, Grogan TR, Steadman RH. Effect of Performance Deficiencies on Graduation and Board Certification Rates: A 10-yr Multicenter Study of Anesthesiology Residents. Anesthesiology. 2016 Jul;125(1):221-9.

The Anesthesia Board has required competency committees for many years, prior to their requirement by ACGME for all specialties. This study suggests that residents who were identified by their competency committees as having a performance issue were slightly less likely to gain eventual board certification than those who did not; nonetheless, the vast majority, > 93% were successful.

# Appendix A: The High Performing Residency Assessment System

# The 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, 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 they need to improve. The CCC is the committee which 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, which makes the final determination on residents'/fellows' Milestone "level" at least twice yearly. These are provided to the applicable ACGME Review Committee and, in some cases, the pertinent specialty boards. The ACGME's unit of analysis is the program, and the Review Committees use aggregate Milestone information comparing a program with all residents/fellows in the given specialty.

The comparison against these benchmarks serves as one source of input into the ACGME's determination of program quality and accreditation decisions. The Unit of Analysis is the "individual" for certification and credentialing entities. Collectively, all of us—residents/fellows, faculty members/program directors/programs, the ACGME, and certification and credentialing entities—are accountable to the public for honest assessments of resident/fellow performance and truthful verification of their readiness to progress to independent practice. Data (D) is essential for the entire system in engage in continuous quality improvement, especially to create meaningful feedback (FB) loops within the program and also back to programs from the ACGME. Programs and residents and fellows can currently download their Milestone report after each reporting period.

# Appendix B: CCC Quiz

- 1. Requirements for a CCC are found in:
  - A. The ACGME Common Program Requirements
  - B. The ACGME Institutional Requirements
  - C. CLER Pathways to Excellence Document
  - D. Both A and B
  - E. None of the above
- 2. Which of the following requirements of CCCs is an ACGME "*core* requirement"?
  - A. Include faculty members from other programs and non-physician members of the health care team
  - B. Advise the program director regarding resident progress, including promotions, remediation, and dismissal
  - C. Have a written description of the CCC's responsibilities
  - D. Have the same description for each program within the Sponsoring
  - E . Institution
  - F. Allow residents to exercise a grievance process if they disagree with the milestone determination of the CCC
- 3. 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
- 4. 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

- 5. 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
- 6. 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

#### 7. CCC members:

- A. Provide a consensus on each resident's/fellow's performance
- B. Only consider residents/fellows who need remediation
- C. Only review residents/fellows in their final year of the program
- D. Only review some of the competencies and not others
- E. Review the decisions the program director has already made regarding each resident/fellow and provide advice
- F. Vote on each resident's/fellow's performance
- 8. A specialist (different specialty than the resident) evaluates a resident on a specialty service as performing poorly. The CCC should:
  - A. Use the grade/Milestone recommendation provided by the specialist
  - B. Not consider the evaluation as it came from a different specialty as the program's faculty
  - C. Take the evaluation and apply it with other data to judge the resident's performance on the program-specific Milestones
  - D. Vote whether the evaluation seems accurate and should be included in the overall review of the resident's/fellow's performance

#### 9. The CCC must:

- A. Review all resident/fellow evaluations semiannually
- B. Submit Milestones summaries to the ACGME
- C. Meet with each resident/fellow to discuss his/her progress on the Milestones
- D. Design and implement any remediation plan necessary (and mentor the resident/fellow throughout)
- E. Share Milestones evaluations with the specialty board and state licensing board

- 10. According to the ACGME, 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 the ACGME
  - E. None of the above
- 11. According to the ACGME, a resident/fellow must be able to exercise a grievance process/due process ("appeal") if he/she disagrees with the CCC regarding the Milestones determination it plans to report to the ACGME.
  - A. True
  - B. False
  - C. It depends
- 12. A resident has not rotated through an experience over the past six months, hindering the CCC in making a determination on one of the milestones. The CCC should:
  - A. Leave that milestone blank
  - B. Drop back a level from the resident's prior rating
  - C. Indicate the same level as the previous reporting period
  - D. Report that level as an "average" of the Milestones levels that can be determined
- 13. 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 him- or herself
  - D. The ACGME
  - E. The program director
- 14. In order to serve on a CCC, a chief resident must:
  - A. Have completed the core program and be board eligible or board certified in the specialty
  - B. Have completed the core program and be board certified in the specialty
  - C. Still be in the core program and in the last year of training
  - D. None of the above; a chief resident cannot be on a CCC

- 15. Program coordinators:
  - A. Should serve as voting members of CCCs
  - B. Can manage submission of Milestones data for the ACGME
  - C. C. Should not attend the CCC meeting
  - D . Should not provide any assessment of the resident
  - E. None of the above
- 16. The CCC identifies a resident who isn't making adequate progress. Which of the following is always true?
  - A. The CCC creates a plan for the resident and monitors it
  - B. The CCC tells the program director who creates a plan and monitors it
  - C. The CCC tells the advisor who creates a plan and monitors it
  - D. None of the above
- 17. 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 and/or health professionals with "different" voices/options are encouraged
  - D. The most senior person should express their opinion first
  - E. None of the above
- 18. 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
- 19. 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

- 20. 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 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
- 21. 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. Low level of group cohesion
  - B. The CCC feels pressure to make a good decision
  - C. Lack of a strong dominating leader
  - D. All of the above
  - E. None of the above
- 22. A CCC member says, "This is a strong resident, I think a 2.5 milestone rating is appropriate." This is an example of which type of cognitive bias that is common in groups?
  - A. Reliance on gist
  - B. Anchoring
  - C. Framing effect
  - D. Selection
  - E. Confirmation
- 23. Using what's known from the literature to encourage good group processes, the CCC should:
  - A. Encourage the most senior person to discuss the resident first
  - B. Have the CCC chair state his/her opinions first
  - C. Avoid a structured format and use open forum for discussion
  - D. Use only the synthesis of the resident'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

- 24. Feedback to the resident/fellow following the CCC meeting is best accomplished through an e-mail with a written report.
  - A. True
  - B. False

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

# Appendix B: Quiz Answers

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

# Appendix C: Design the CCC: Creating and Describing 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 and faculty members.

Element		Describe the CCC on this element
Co	mmittee Membership	
•	Appointed by program director	
•	Minimum of three faculty members	
•	Size—"enough" but 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	
	and are board-eligible/certified in the specialty	
	Term Limits? (Two years? The duration of the	
	residency/fellowship?)	
	Staggered appointments? (May be useful to plan	
`	overlap among those joining the committee and	
	leaving it)	
	iournig ity	
Ch	air	
•	Are there requirements/restrictions imposed from the	
	specialty board or Review Committee regarding who	
	can chair (or not; e.g., anesthesiology program	
	director cannot chair per American Board of	
	Anesthesiology)?	
If n	o 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	
	him/her)	
	Program director?	
Ĭ.	Associate program director?	
	Another faculty member?	
	Rotating among members?	
	Notating among members:	
Ь		

Element	Describe the CCC on this element
<ul> <li>Role/Responsibility of each member</li> <li>Where is this information summarized/documented, and how is it conveyed to CCC members?</li> <li>Confidentiality</li> <li>Meeting attendance</li> <li>Term length</li> <li>Participation in required professional development around this role</li> <li>Necessary preparation in advance of meeting (is each member assigned a subset of residents/fellows to review in advance?)</li> <li>How do members "prepare and assure the reporting of Milestones evaluations of each resident semi-annually to ACGME" (Common Program Requirement V.A.1.b).(1).(b))</li> <li>Who conveys results to program director (if the program director is not in attendance at a meeting)?</li> <li>Who is responsible for any remediation plan (a member of CCC, or is this referred to another</li> </ul>	
individual or group within residency/fellowship?)  Role of the Program Director  Chair (or not)  A member  An observer (perhaps he/she only attends but refrains from providing input)  Not present  Provides feedback from CCC to the residents/fellows (or not)	
Role of Residents/Fellows     Residents are not 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	
Aggregating data sources (electronically or on paper)	
Providing information to members before the meeting so	
they can engage in any pre-work	
Summarizing 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 the ACGME	
Shared Mental Model	
How do CCC members develop a shared mental	
model of performance?	
<ul> <li>What faculty development needs do they have?</li> </ul>	
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 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?	
managed?	
Consider asking CCC members to self-assess their own	
performance using the specialty Milestones.	
Meetings	
• When?	
Where?      How fraguently? at least twice yearly for most.	
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?	
·	

Element	Describe the CCC on this element
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 subcommittees of the CCCs each review 1/3 of the residents/fellows)	
Consensus vs. Voting Preferable to have CCC reach consensus and not vote How are disagreements among CCC members managed? Documents? 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	
<ul> <li>Minutes</li> <li>What information is captured at the meeting electronically vs. in writing? How is it retained?</li> <li>Are there institutional policies that address how this information is retained (i.e., where? in what format/ for what duration?)?</li> </ul>	
Measures of Assessment/Tools used by the CCC  Existing resident assessment data What are these? How many different types of tools (e.g., multirater, inservice training exam, chart audit of clinical performance) How are these assessments documented? How are these assessment 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	

Element	Describe the CCC on this element
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)?	
How are these documented?	
Used in provision of feedback to residents/fellows?	
Data from Milestone assessments	
Are these observations captured in such a way that they provide useful input in Milestone assessments	
Inventory of 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?	
Are there expectations the program has of	
residents/fellows that aren't captured in the current specialty Milestone(s)?	
How are these communicated to residents/fellows?	
To faculty members?	
How are these assessed and documented?	
If a resident/fellow is performing sub-optimally:	
<ul> <li>Is the CCC (or a member of the CCC) responsible for a remediation plan? Another member/group of faculty</li> </ul>	
members?	
monisoro.	
What are the options for 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	
If the CCC is responsible for remediation, how does it	
avoid conflicts of interest in "judging" the success of	
its own educational intervention(s)?	
Transparance of the CCC	
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)?	
<ul> <li>Is the description of the CCC process up to date and</li> </ul>	
reflective of actual process?	
. Should of dotain process.	

Element	Describe the CCC on this element
If a resident/fellow disagrees with a CCC	
assessment:	
Review with Human Resources and Legal the desirability	
of a grievance process in this instance (not required by	
the ACGME)	
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	
Take the association of the portornation record	
How do the Milestones fit into promotion	
criteria?	
ACGME Institutional Requirement IV.C.1.:	
"The Sponsoring Institution must have a policy"	
that requires each of its programs to determine	
the criteria for promotion and/or renewal of appointment"	
арронинен	
How do the Milestones fits 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 the	
ACGME?	
Do you wish to modify your grievance policy?	
You may 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 quality	
improvement	
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?	

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

## Appendix D: Additional CBME References

- 1. Amin Z. Purposeful Assessment Medical Education 2012 Jan 46(1):4-7.
- 2. Aagaard E Kane GC Conforti L Hood S. Caverzagie KM Smith C Chick DA Holmboe ES lobst WF. Early feedback on the use of the internal medicine reporting milestones in assessment of resident performance J Grad Educ. 2013 Sep;5(3):433-8.
- Albanese MA. Challenges in using rater judgments in medical education. J Eval Clin Pract. 2000;6:305–19.
- 4. Baker K. Determining resident clinical performance: Getting beyond the noise. Anesthesiology. 2011;115(4):862-878.
- 5. Black D. Revalidation for trainees and the annual review of Competency Progression (ARCP) Clinical Medicine 2013;13 (6):570-2.
- 6. Bonnema RA, Spencer AL. Remediating residents: Determining when enough is enough. Academic Internal Medicine Insight 2012;10(4):6-7.
- 7. Carr SJ. Assessing clinical competency in medical house officers: how and why should we do it? Postgrad Med J. 2004;80(940):63-6.
- 8. Carraccio C, Wolfsthal SD, Englander R, Ferentz K, Martin C. Shifting paradigms: From Flexner to competencies. Acad Med. 2002; 77(5):361-367.
- 9. Cohen GS, Henry NL, Dodd PE. A self-study of clinical evaluation in the McMaster clerkship. Med Teach 1990;12:265-272.
- Cohen GS, Blumberg P, Ryan NC, Sullivan PL. Do final grades reflect written qualitative evaluation of student performance? Teach Learn Med 1993;5:10-15.
- 11. David DA, Mazmanian PE, Fordis M, Van Harrison R, Thorpe KE, Perrier L. Accuracy of physician self-assessment compared with observed measures of competence: A systematic review. JAMA. 2006;296(9):1094-102.
- 12. Downing SM. Threats to the validity of clinical teaching assessments: What about rater error? Med Educ. 2005;39:353–5.
- 13. Dudek NL Marks MB Regehr G. Failure to fail: the perspectives of clinical supervisors. Acad Med 2005 Oct;80(10 Suppl)S84-7.
- 14. Dudek NL, Marks MB, Wood TJ, et al. Quality evaluation reports: Can a faculty development program make a difference? Med Teach 2012; 34:e725-e731.
- 15. Friedlander RB Green V Padmore J Richard K. Legal Issues in Residency Training. (Pps. 8-35). The Life Curriculum Teachers Guide 2.
- 16. Gaglione MM, Moores L, Pangaro L, and Hemmer P. Does group discussion of student clerkship performance at an education committee affect an individual committee member's decisions? Acad Med 2005;80(10):S55-S58.
- 17. Gifford KA Fall LH Doctor coach: a deliberate practice approach to teaching and learning clinical skills. Acad Med 2014; feb;89(2):272-6.
- 18. Ginsburg S, McIlroy J, Oulanova O, Eva K, Regehr G. Toward authentic clinical evaluation: Pitfalls in the pursuit of competency. Acad Med. 2010;85:780–6.
- 19. Ginsburg S Eva K Regehr G. Do in-training evaluation reports deserve their bad reputations? A study of the reliability and predictive ability of ITER scores and narrative comments. Acad Med 2013 Oct;88(10):1539-44.

- 20. Ginsburg S McIllroy J Oulanova O Eva K Regehr G. Toward authentic clinical evaluation: pitfalls in the pursue of competency. Acad Med 2010 May;85(5):780-6.
- 21. Greaves JD, Grant J: Watching anesthetists work: Using the professional judgment of consultants to assess the developing clinical competence of trainees. Br J Anaesth. 2000;84:525–33.
- 22. Govaerts MJ, van der Vleuten CP, Schuwirth LW, Muijtiens AM. Broadening perspectives on clinical performance assessment: Rethinking the nature of intraining assessment. Adv Health Sc Educ Theory Pract. 2007;12(2):239-260.
- 23. Hamdy H, Prasad K, Anderson MB, Scherpbier A, Williams R, Zwierstra R, Cuddihy H. BEME systematic review: Predictive values of measurements obtained in medical schools and future performance in medical practice. Med Teach. 2006;28:103–16.
- 24. Hamby H Prasad K Williams R Salih FA. Reliability and validity of the direct observation clinical encounter validation (DOCEE) Med Ed 2003:37:205-212.
- 25. Hattie J, Timperley H. The power of feedback. Rev Educ Res. 2007;77(1):81-112.
- 26. Hatala R, Norman GR. In-training evaluation during an internal medicine clerkship. Acad Med 1999;74(10):S118-S120.
- 27. Hauer KE, Mazotti L, O'Brien B, Hemmer PA, Tong L. Faculty verbal evaluations reveal strategies used to promote medical student performance. Med Educ Online. 2011; 10.3402/meo.v16i0.6354. Epub 2011.
- 28. Hemmer PA, Hawkins R, Jackson JL. Assessing how well three evaluation methods detect deficiencies in medical students' professionalism in two settings of an internal medicine clerkship. Acad Med. 2000;75(2):167-73.
- 29. Herbers JE Jr, Noel GL, Cooper GS, Harvey J, Pangaro LN, Weaver MJ. How accurate are faculty evaluations of clinical competence? J Gen Intern Med. 1989;4:202–8.
- 30. Hodges B. Assessment in the post-psychometric ear: Learning to love the subjective and collective. Medical Teacher 2013; Jul 35(7):564-8.
- 31. Holmboe ES: Faculty and the observation of trainees' clinical skills: Problems and opportunities. Acad Med. 2004;79:16–22.
- 32. Holmboe ES, Hawkins RE. Methods for revaluating the clinical competence of residents in internal medicine: a review. Ann Intern Med. 1998;129(1):42-8.
- 33. Holmboe ES, Sherbino J, Long DM, Swing SR, Frank JR. The role of assessing in competency-based medical education. Med Teach. 2010;32:676-682.
- 34. Holmboe ES, Ward DS, Reznick RK, Katsufrakis PJ, Leslie KM, Patel VL, Ray DD, Nelson EA. Faculty Development in Assessment: Noel GL, The missing link in competency-based medical education. Acad Med. 2011;86(4):460-467.
- 35. Herbert JE Jr, Caplow MP, Cooper GS, Pangaro LN, Harvey J. How well do internal medicine faculty members evaluate the clinical skills of residents? Ann Intern Med. 1992;117:757–65.
- 36. lobst WF Caverzagie KJ Milestones and Competency Based Medical Education AGA Institute hkttp://dx.doi.org/10.1053.j.gastro.2013.09.029
- 37. Issenberg SB, McGaghie WC, Waugh RA. Computers and evaluation of clinical competence. Ann Intern Med. 1999;130(3):244-5.

- 38. Ketteler ER Auyang ED Beard KE McBride EL McKee R Russell JC Szoka NL Nelson MT Competency Champions in the clinical competency committee: a successful strategy to implement milestone evaluations and competency coaching. J Surg Educ. 2014 Jan-Feb;71(1):36-8.
- 39. Kogan JR, Holmboe ES, Hauer KE. Tools for direct observation and assessment of clinical skills of medical trainees: A systematic review. JAMA. 2009;302:1316–26.
- 40. Langsley DG. Medical competence and performance assessment. A new era. JAMA. 1991;266(7):977-80.
- 41. Lavin B, Pangaro L. Internship ratings as a validity outcome measure for an evaluation system to identify inadequate clerkship performance. Acad Med 1998;73(9):998-1002.
- 42. Littlefield JH, DaRosa DA, Anderson KD, Bell RM, Nicholas GG, Wolfson PJ. Accuracy of surgery clerkship performance raters. Acad Med 1991;66:S16-S18.
- 43. Lurie SJ, Mooney CJ, Lyness JM. Measurement of the general competencies of the accreditation council for graduate medical education: A systematic review. Acad Med. 2009;84:301–9.
- 44. Miller A, Archer J. Impact of workplace based assessment on doctors' education and performance: a systematic review. BMJ. 2010; 341:c5064.
- 45. Miller A, Archer J. Impact of workplace based assessment on doctors' education and performance: a systematic review. BMJ 2010;341:c5064
- 46. Nasca TJ, Philibert I, Brigham T, Flynn TC. The Next Accreditation System Rationale and Benefits. N Engl J Med. 2012;366(11):1051-1056.
- 47. Pangaro L. A new vocabulary and other innovations for improving descriptive in-training evaluations. Acad Med.1999;74(11):1203-7.
- 48. Regehr G, Ginsburg S, Herold J, Hatala R, Eva K, Oulanova O. Using "standardized narratives" to explore new ways to represent faculty opinions of resident performance. Acad Med. 2012;87(4):419-27.
- 49. Sanfey H Ketchum J Bartlett J Markwell S Meier A Williams R Dunnington G Verification of proficiency in basic skills for postgraduate year 1 residents. Surgery 2010;148:759-67.
- 50. Scavone BM, Sproviero MT, McCarthy RJ, Wong CA, Sullivan JT, Siddall VJ, Wade LD. Development of an objective scoring system for measurement of resident performance on the human patient simulator. Anesthesiology. 2006;105:260–6.
- 51. Schwind CJ, Williams RG, Boehler ML, Dunnington GL. Do individual attending post-rotation performance ratings detect resident clinical performance deficiencies? Acad Med 2004;79:453-457.
- 52. Stillman PL, Swanson DB, Smee S, Stillman AE, Ebert TH, Emmel VS, Caslowitz J, Greene HL, Hamolsky M, Hatem C, Levenson DJ, Levin R, Levinson G, Ley B, Morgan GJ, Parrino T, Robinson S, Willms J. Assessing clinical skills of residents with standardized patients. Ann Intern Med. 1986:105:762–71.
- 53. Swing SR, Clyman SG, Holmboe ES, Williams RG. Advancing Resident Assessment in Graduate Medical Education. J Grad Med Educ. 2009;1(2):278-86.

- 54. Swing SR; International CBME Collaborators. Perspectives on competency-based medical education from the learning sciences. Med Teach. 2010;32(8):663-8.
- 55. Tesser A, Rosen S. The reluctance to transmit bad news. In: Berkowitz L (ed). Advances in Experiential Social Psychology, vol. 8. New York: Academic Press, 1975. P. 193-232.
- 56. Tonesk X, Buchanan RG. An AAMC pilot study by 10 medical schools of clinical evaluation of students. J Med Educ 1987;62:707-718.
- 57. Wilkinson JR, Crossley JG, Wragg A, Mills P, Cowan G, Wade W. Implementing workplace-based assessment across the medical specialties in the United Kingdom. Med Educ. 2008;42(4):364-73.
- 58. Williams RG, Klamen DA, McGaghie WC. Cognitive, social and environmental sources of bias in clinical performance ratings. Teaching and Learning in Med. 2003;15(4):270-292.
- 59. Williams RG, Sanfey H, Chen X, Dunnington GL. A controlled study to determine measurement conditions necessary for a reliable and valid operative performance assessment. Annals of Surg. 2012;256(1):177-187.
- 60. Williams RG, Verhulst SJ, Colliver JA, Dunnington GL. Assuring the reliability of resident performance appraisals: More items or more observations? Surgery 2005;137:141-147.
- 61. Williams RG, Dunnington GL, Klamen DL. Forecasting resident performance Partly cloudy. Acad Med 2005; 80(5):415-422.
- 62. Williams RG, Klamen DA, McGaghie WC. Cognitive, social and environmental sources of bias in clinical performance ratings. Learn Med 2003; 15(4):270-292.
- 63. Williams RG, Sanfey H, Chen X, Dunnington GL. A controlled study to determine measurement conditions necessary for a reliable and collaborative formative assessment. Annals of Surgery 2012:177-187.
- 64. Williams RG, Schwind CJ, Dunnington GL, Fortune J, Rogers DA, Boehler ML. The effects of group dynamics on resident progress committee deliberations. Teach Learn Med 2005;17:96-100.

## Appendix E: Case Studies

Mini case studies/FAQs/common dilemmas/challenging situations/promising practices

 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 expectations.

Program directors and programs should think carefully about the role of the program director in the CCC. The American Board of Anesthesiology precludes the program director from serving as chair. The other boards and the ACGME are silent on this issue. 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 him/her 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. The residency program has 90 residents in a three-year program.

The CCC has its first meeting and can't imagine faculty members having sufficient time to meaningfully review all 90 residents in a practical manner.

There are several options for CCC structure, and since structure is not dictated by the ACGME, 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 (e.g., one CCC to assess the QI activities, one for the research activities, one for ambulatory versus inpatient activities, etc.).
- Some CCCs have organized similarly to an Institutional Review Board (IRB), 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. The 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. The ACGME 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. The ACGME allows a chief who has completed a core residency and is eligible for board 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 the ACGME. 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 Human Resources 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 ACGME Common 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.

 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 the ACGME. Currently, the ACGME 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.

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

The ACGME expects the program to have a written description of its CCC and its process. This example is an important item that should be included in the description so that residents/fellows and the faculty are clear on what a resident/fellow should do if he/she disagrees with the CCC or the program assessment. Program policies and procedures should differentiate the situations in which a resident/fellow can exercise due process and grievance procedures. Some would separate an evaluation, such as the CCC consensus, from a program decision. For instance, a resident/fellow may not be able to have the CCC decision reviewed, but should be able to appeal any program decision regarding non-promotion, non-renewal, or dismissal that arose from a CCC decision.