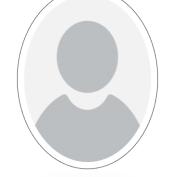
Session 2 10:45 - 12:30 Milestones





Ms. Lori Lewis Executive Director ACGME-International

Dr. Laura Edgar Vice President Milestones Development ACGME-International







Dr. James Arrighi President and Chief Executive Officer ACGME-International



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Ms. Lori Lewis Executive Director ACGME-International

Lorraine C. Lewis, EdD, is Accreditation Council for Graduate Medical Education– International (ACGME-I) Executive Director. She joined ACGME in 2011 as the Executive Director for the Review Committees for Anesthesiology, Preventive Medicine, and the Transitional Year. Before joining the ACGME, Dr. Lewis was manager of predoctoral dental education and international accreditation for the Commission on Dental Accreditation. Dr. Lewis earned an EdD in Higher Education Policy and Administration from the University of Minnesota, where she conducted research on faculty attitudes and practices related to program evaluation. She also has an MS in Allied Health and a BS in Medical Dietetics, both from the Ohio State University





ACGME-I requirements for Milestones

Lorraine Lewis, Executive Director

Programs must document progressive performance improvement appropriate to educational level in each milestone.

[Foundational requirement V.A.1.b).(3)]



Programs must provide residents'/fellows' objective performance evaluations based on the ACGME-I Competencies and regular evaluation of the Milestones.

[Foundational requirement V.B.1.]



The CCC must participate actively in reviewing all resident/fellow evaluations by all evaluators, Case Logs, the Milestones, incident reports, and other data semi-annually,

[Foundational requirement V.B.3.c).(1)]



The program must document formal, systematic evaluation of the curriculum at least once a year that is based on the program's stated mission and aims and monitors and tracks each of the following areas: a) resident/fellow performance, including Milestone evaluations

[Foundational requirement V.D.1.a)]



Milestone data has multiple uses

For assessment of an individual learner, Milestones provide

A 'road map' for development and improvement

Structure for evaluation of competency

Assurance to the public, government, and certifying boards

For evaluation of a curriculum, Milestones provide

Comparative data that can be used for benchmarking

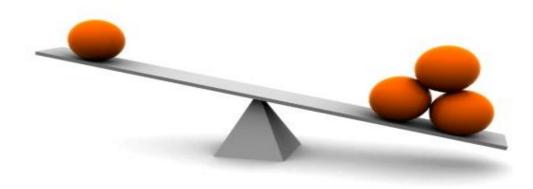
Data for evaluation of the curriculum, rotations or clinical assignments, participating sites



Milestone data has multiple uses

For assessment of an individual learner, Milestones provide

For evaluation of a curriculum, Milestones provide





Common questions

1. What is the difference between Milestones and EPA's

<u>Answer</u>: EPAs are units of professional practice, defined as tasks or responsibilities that trainees are entrusted to perform unsupervised once they have achieved sufficient competence.



Common questions

2. How are Milestones used by the Review Committee when making an accreditation decision

Answer: Specific Milestone assessments are not considered by the review committee. The only data on milestones that is used when evaluating a program is if the milestone assessment was reported to ACGME-I by the established deadline.



Common questions

3. Can a resident/fellow graduate if he/she has not achieved all milestones?

<u>Answer</u>: ACGME-I has no required minimums for Milestone reporting. The determination of an individual's readiness for graduation is at the discretion of the program director.





Thank you





Dr. Laura Edgar Vice President Milestones Development ACGME-International Dr. Edgar is the Vice President for Milestone Development. In her current role, she serves as an organizational and department leader. She leads volunteers and staff members through the development of Milestones and related materials for all ACGME accredited specialties. Dr. Edgar creates and manages the Milestones resources that aid program directors, learners, and Clinical Competency Committees. She serves as a liaison to the medical education community and is a frequent speaker on topics related to the Milestones, Clinical Competency Committees, assessment, education, and accreditation. She previously served as the Executive Director for Milestones Development and the Review Committees for Medical Genetics and Genomics, Pathology, and Radiation Oncology. Prior to working at ACGME, Dr. Edgar worked in the clinical laboratory for 10 years and then directed several domestic and international certification, accreditation, and scientific organizations. Dr. Edgar earned her doctorate in education, focusing on organizational leadership after obtaining a Bachelor's degree in medical laboratory sciences and a Master's degree in business administration. She is a certified medical technologist and a certified association executive





Milestones: Return to Basics

Dr. Laura Edgar, EdD Vice President, Milestones Development

Milestone Levels – A Brief Review

| Level | Dreyfus Stage | Description (clinical reasoning example) | | | |
|-------|-------------------|---|--|--|--|
| 1 | Novice | Rule Driven; Analytic Thinking; Little Ability to Prioritize information | | | |
| 2 | Advanced beginner | Able to Sort Through Rules based on experience; Analytic and Non-Analytic for some Common problems | | | |
| 3 | Competent | Embraces appropriate level of Responsibility; Dual Processing of reasoning for most Common problems; Can see Big Picture; Complex Problems default to Analytic Reasoning; Performance can be exhausting. | | | |
| 4 | Proficient | More Fully Developed Non-Analytic and Dual Process Thinking; Comfortable with Evolving Situations; Able to Extrapolate; Situational discrimination; Can live with Ambiguity | | | |
| 5 | Expert | Experience in Subtle Variations; Distinguishes Situations | | | |

Milestone Levels – A Brief Review

| Level | Dreyfus Stage | Description (clinical reasoning example) | |
|-------|-------------------|--|---|
| 1 < | | Rule driven; analytic thinking; little ability to pr | ioritize information |
| 2 | Advanced beginner | Able to cort through rules based on experience | ; analytic and non- |
| 3 | Competent | LEVEL ≠ NOT PGY | ual processing of big picture; g. Performance can |
| 4 | Proficient | comfortable with evolving situations; able to ex situational discrimination; can live with ambigu | - |
| 5 | Expert | Experience in subtle variations; distinguishes | situations |







Systems-Based Practice 1: Patient Safety

| Level 1 Level 2 l | | Level 3 | Level 4 | Level 5 | |
|--|--|--|---|--|--|
| Demonstrates knowledge of commonly reported patient safety events | Identifies system factors that lead to patient safety events | Participates in analysis of patient safety events | Conducts analysis of patient safety events and offers error prevention strategies | Actively engages teams and processes to modify systems to prevent patient safety events | |
| Demonstrates knowledge of how to report patient safety events | Reports patient safety events through institutional reporting systems | Participates in disclosure of patient safety events to patients and families | Discloses patient safety events to patients and families | Role models or mentors others in the disclosure of patient safety events | |
| | | \Box \Box ζ | | | |
| Comments: | | | Not Yet C | ompleted Level 1 | |
| | | | | | |
| middle of a leve | at level and in lower | between in lower le demonstr | a response box on the levels indicates that mi evels have been substa ated as well as some es in the higher level(s) | lestones antially | |



What Changed?

| F | | | Patient Care 2: Open F | Procedures | | | | | |
|-----------------------------|---|--|--|--|---|--|---|--|---|
| | | | | | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 |
| PC5. Performs oper | n surgical procedures. | | | | Demonstrates basic skills (e.g., positioning, knot tying, suturing) | Independently performs bedside open procedures (e.g., incision and drainage, priapism aspiration and irrigation, circumcision, removal of | Independently performs simple open procedures (e.g., scrotal procedures, vasectomy, <u>cystorrhaphy</u> , mid-urethral sling) | Independently performs complex open procedures (e.g., partial nephrectomy, prosthetic replacement, cystectomy and ileal | Independently performs uncommon complex open procedures (e.g., retroperitoneal lymph node dissection (RPLND), nephrectomy with caval |
| Has not achieved Level 1 | Level 1 | Level 2 | Level 3 | Level | | genital wart) | | conduit, ureteral | thrombus, reconstructive |
| | Closes incisions for routine urologic procedures under direct supervision (as defined in the Program Requirements) | Creates and closes surgical wounds for <i>routine</i> urologic procedures Performs routine urologic procedures appropriate for level of education | Plans, creates, and closes surgical wounds for routine urologic procedures Manipulates, repairs, and excises (as necessary) internal structures with | Plans, creates, i surgical wound routine and cou urologic proced Manipulates, re and/or excises necessary) inte | Comments: | | | | t Completed Level 1 |
| | | | appropriate instrument selection and technique for <i>routine urologic</i> procedures | structures with appropriate instr selection for a <i>m</i> urologic procedu Demonstrates ca perform surgical procedures indep | najority of apacity to | | | | |
| | Example: Closure of the abdomen after a midline incision | Examples: Circumcision in an adult with phimosis Hydrocelectomy for a moderate sized hydrocele | Examples: Radical orchiectomy for a testicular mass Orchidopexy for an inguinal undescended testis | Examples: Open partial nep for a small polar mass Ileal conduit urin diversion | renal neobladder Radical nephrectomy for | | | | |
| | | | Bladder neck/urethral sling for female stress urinary incontinence Opening and closing of abdominal and flank | Placement of infl penile prosthesis | latable | | | | |
| | | | incisions | | | | | | |
| Comments: | | | | | | | | @2002 AC | |

| physical exam to confirm history Does not perform an appropriately thorough physical exam or misses key others to generate differential diagnosis Does not perform an appropriately thorough physical exam or misses key others to generate differential diagnosis Does not perform an appropriately thorough physical exam or misses key others to generate differential diagnosis Does not perform an appropriately thorough physical exam or misses key others to generate differential diagnosis Does not perform an appropriately thorough physical exam findings secondary sources when needed Performs accurate physical exams that are targeted to the patient's complaints Identifies st physical exam Elicits and concisely reports a hypothesis driven patient history for common patient presentations Elicits and concisely reports a hypothesis driven patient history for complex patient presentations Elicits and concisely reports a hypothesis driven patient history for presentations Elicits and concisely reports a hypothesis driven patient driven patient history for presentations Elicits and co | 1. Gathers and synth | nesizes essential and accurate | e information to define each p | | | | | | | |
|--|--|--|---|---|--|--|--|--|---|---|
| accurate historical data accurate historical data accurate historical information in an organized fashion Does not use physical exam to confirm history Relies exclusively on documentation of documentation of documentation of documentation of documentation of documentation of documentation of differential diagnosis Fails to recognize patient's central clinical problems Fails to recognize potentially life Fails to recognize potentially | Critical Deficiencies | | | Ready for unsupervised practice | As | pirational | | | | |
| physical exam to confirm history Does not perform an appropriately thorough physical exam or misses key concentation of others to generate own database or differential diagnosis Does not perform an appropriately thorough physical exam or misses key physical exam or misses key Does not perform an appropriately thorough physical exam or misses key Secondary sources when needed Performs accurate physical exams that are targeted to the patient's complaints Identifies st patient's complaints Elicits and concisely reports a hypothesis driven patient history for common patient presentations Elicits and concisely reports a hypothesis driven patient history for common patient presentations Elicits and concisely reports a hypothesis driven patient history for common patient presentations Elicits and concisely reports a hypothesis driven patient history for common patient presentations Elicits and concisely reports a hypothesis driven patient history for common patient presentations Elicits and concisely reports a hypothesis driven patient history for common patient presentations Elicits and concisely reports a hypothesis driven patient history for common patient presentations Elicits and concisely reports a hypothesis driven patient history for common patient presentations Elicits and concisely reports a hypothesis driven patient history for common patient presentations Elicits and concisely reports a hypothesis driven patient history for common patient presentations Elicits and concisely reports a hypothesis driven patient history for common patient presentations Elicits and concisely reports a hypothesis driven patient history for common patient presentations Fails to recognize potentially | accurate historical data | acquire accurate historical information in an organized | and relevant histories from patients | from patients in an efficient, prioritized, and hypothesis- | subtleties, i information | | ory | | | |
| Fails to recognize potentially life threatening | physical exam to confirm history Relies exclusively on documentation of others to generate own database or differential diagnosis Fails to recognize patient's central | appropriately thorough physical exam or misses key physical exam findings Does not seek or is overly reliant on secondary data Inconsistently recognizes patients' central clinical problem or develops | secondary sources when needed Consistently performs accurate and appropriately thorough physical exams Uses collected data to define a patient's central clinical | exams that are targeted to the patient's complaints Synthesizes data to generate a prioritized differential diagnosis and problem list Effectively uses history and physical examination skills to minimize the need for further | physical exa Efficiently u of secondar differential Role model: effective us physical exa minimize th | Elicits and reports ar accurate history for common patient presentations Seeks data from secondary sources, s | Elicits and concisely reports a hypothesis driven patient history for common patient presentations Independently obtains data from secondary | Elicits and concisely reports a hypothesis driven patient history for complex patient presentations Reconciles current data | Level 4 Efficiently elicits and concisely reports a patient history, incorporating pertinent psychosocial and other determinants of health Utilizes history and secondary data to guide the need for further diagnostic testing | Level 5 Efficiently and effectively tailors the history taking, including relevant historical subtleties, based on patient, family, and system needs Models effective use of history to guide the need for further diagnostic testing |
| Comments: Patient Care 2: Physical Examination | Fails to recognize potentially life threatening problems | | | | | | | | | Completed Level 1 |

| Patient Gare 2: Physical | Examination | | | | | | | |
|--|---|--|---|---|--|--|--|--|
| Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | | | | |
| Performs a general physical examination while attending to patient comfort and safety | Performs a hypothesis driven physical examination for a common patient presentation | Performs a hypothesis driven physical examination for a complex patient presentation | Uses advanced maneuvers to elicit subtle findings | Models effective evidence-based physical examination technique | | | | |
| Identifies common abnormal findings | Interprets common abnormal findings | Identifies and interprets uncommon and complex abnormal findings | Integrates subtle physical examination findings to guide diagnosis and management | Teaches the predictive values of the examination findings to guide diagnosis and management | | | | |
| | | | | | | | | |
| Comments: Not Yet Completed Level 1 | | | | | | | | |

Milestones 2.0 Implementation

In effect January 2024

Map curriculum and assessments

Follow good change management processes

Include learners in the conversations



| memarmedicine ouppememar outle pran | | | | |
|---|---|---|--|---|
| Patient Care 1: 0 | Sathers and utilizes clinic | al information; Performs history | | |
| Overall Intent: Competently interact with patien | ts and uses all available re | ient | | |
| presentation | | | | |
| Milestones | | Examples | | |
| Level 1 Elicits and reports an accurate history | Attending observes resi | dent taking a history from a 30-year-old patient with | a red swollen | |
| for common patient presentations | | ns accurate patient centered history using open-end | | |
| | | without exploring clear underlying hypotheses | | |
| | | tten report that is organized but not focused on the | chief complaint | |
| Seeks data from secondary and collateral | | k data from outside pharmacy, outside labs, and da | | |
| sources, with guidance | controlled substances | and and a second pharmacy, catolac labo, and ac | | |
| Level 2 Elicits and concisely reports a | | a patient with a red swollen joint, is febrile, and has | a history of | |
| hypothesis driven patient history for | | the patient about recent alcohol use, diet, trauma, | | |
| | | | | |
| uncomplicated patient presentations | facts | stions. Reports history limited to pertinent positive a | | |
| Independently obtains data from secondary and | | ews and presents relevant data from previous medi | | |
| collateral sources | | primary care provider notes. Proactively reviews pre | | |
| | | atabases and calls the patient's pharmacy for recen | prescriptions | |
| | | s not been refilled in months. | | |
| Level 3 Elicits and concisely reports a | | 85 year old with a history of CHF, coronary artery di | | |
| hypothesis driven patient history for complex | | with several weeks of shortness of breath. The res | | |
| patient presentations | | ietary adherence. Reports on the presence of angin | a or heart | |
| | | t URI, and allergen exposure. | | |
| Reconciles current data with secondary and | Completes accurate me | dication reconciliation using multiple sources. Clarif | ies history | |
| collateral sources | based on new information | on as it becomes available from care givers who no | e recent | |
| | weight gain. | | | |
| Level 4 Efficiently elicits and concisely reports a | Same patient as in Leve | mornar moaron o cappionionar carao pran | Resident take | es a history from an injured patient and realizes that the boyfriend answers all |
| hypothesis driven patient history for complex | Resident discovers that | | | ns. Identifies that the patient is likely a victim of intimate partner violence |
| patient presentations, incorporating pertinent | was due to insurance la | | based on non | |
| psychosocial and other determinants of health | Resident determines the | Role models effective use of history to minimize | | uates a patient with a complaint of headache. Illustrates to the junior |
| | | the need for further diagnostic testing Assessment Models or Tools | Direct observ | elements of the history that preclude the need for additional testing. |
| Utilizes history and secondary and collateral | Resident determines pa | Assessment models of Tools | Chart stimula | |
| data to minimize the need for further diagnostic | ago and does not order | | Simulation Tr | |
| testing | - | | OSCE | |
| Level 5 Obtains relevant historical subtleties. | Resident obtains a histo | | Self assessm Medical record | |
| including sensitive information that informs the | tive information that informs the test abnormalities. Resi Curriculum Mapping | | | |
| differential diagnosis | | | | lagyi PG. Bares' Guide to Physical Examination and History-Taking. 11th ed. |
| | | | Philadelphia, | PA: Lippincott Williams & Wilkins; 2012. |
| | | | | tient-Centered Interviewing: An Evidence-Based Method. 4th ed. |
| | | | | PA: Lippincott Williams & Wilkins; 2018. Firozzi KJ, Manchanda R, Burns AR, Sandel MT. Moving electronic medical |
| А | | | | eam: incorporating social determinants of health. American Journal of |
| | | | | edicine. 2015;48(2):215-218. |
| ACGME | | | | cbi.nlm.nih.gov/pubmed/25217095. Accessed 2019. |
| | | | www.acponlin Caringwithcom | ne.org/clinical-information/high-value-care |
| | | | Caringwithcol | mpassion.org |

Purpose is to help Better Understand the Thought Process of the Milestones Development Group

Offer Suggestions for Assessment Methods and Resources

Starting Point for creating a CCC Shared Mental Model

Not intended to "tell you what to do"





Review the Milestones with your CCC, Faculty, and Residents



Identify the Assessment Method in your Toolbox that will provide the best information



Determine which Rotation(s) the Milestone will be Evaluated



What does YOUR Resident Need To Do/Know for the Milestone at each level

Develop a Shared Mental Model of the Meaning of the Milestone and the various Levels

What does YOUR PROGRAM Expect to see at each Level





Milestones Resources

Clinician Educator Milestones

Guidebooks

Faculty Development Courses Learn at ACGME





https://acgme.org/What-We-Do/Accreditation/Milestones/Resources

Assessment Tools

TEAM – Multisource Feedback DOCC – Direct Observation



TEAM: Teamwork Effectiveness Assessment Module

A web-based assessment tool for residency and fellowship programs.

Available for free on Learn at ACGME

DIRECT OBSERVATION OF CLINICAL PRACTICE

Acceeditation Council for Graduate Medical Education



https://dl.acgme.org/pages/assessment

April 2021 Supplement The Official Journal of the According on Control II In Griddente Medical Information 1955, 1946, 2040



Milestones 2.0 Assessment, Implementation, and Clinical Competency Committees





https://meridian.allenpress.com/jgme/issue/13/2s





Thank you







Dr. Latifa Al Ketbi Chairperson of Academic Affairs Department, AHS DIO and Family Medicine Program Director Adjunct Professor UAE University, College of Medicine. Qualifications are Arab Board in Family Medicine and Ph.D. degree. A medical educator with 20 years of experience as faculty and program director of the Alain Family Medicine Program. Led the AHS through multiple accreditations in the field of medical education, Arab Board, ACGME-I, and recently NIHS Emirati Board. Researcher with publications in peer-reviewed journals. Led the AHS project in "Patients' Centered Medical Homes" from 2013 to date, aiming to implement Best Practices through unique initiatives utilizing system change, building capacity, and EMR optimization. Member of several national committees in the field of primary care

Adopting a competency-based medical education framework and ACGME-I accreditation.

The processes and educational outcomes in a Family Medicine residency program in Abu Dhabi Emirate, UAE.

Latifa AlKetbi

Ambulatory Healthcare Services

DIO and AlAin-AHS Family Medicine Program Director





Background:

- Competency is the core outcome of residency training.
- Competency-Based Medical Education CBME is now mandated by many graduate and undergraduate accreditation standards.
- CBME organizes the educational experience around competencies, synchronizing the training of residents, as not all trainees progress at the same speed.





Background:

- Ambulatory Healthcare Services (AHS) family medicine residency program first group of residents joined on October 1st, 1994.
- Since then, it has graduated more than 160 family physicians.
- Its curriculum and process were modified to meet the ACGME-I, and it has been ACGME-I accredited since 2013 and NIHS accredited in 2022.
- Milestone was reported semi-annually since 2014
- EPA was introduced in 2018 but became fully implemented in 2021.

Objectives

- Describe the Al Ain-AHS Family Medicine Program CCC experience over the ten years of adopting a competency-based medical education framework.
- Highlight **the processes** in Al Ain-AHS Family Medicine residency program in adapting this framework.
- Highlight the educational outcomes measured.
- Discuss lessons learned.





The structure

"A CCC is A 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."

- The ultimate purpose is to demonstrate accountability as medical educators to the public: that graduates will provide high-quality, safe care to patients while in training and be well prepared to do so once in practice.
- At the CCC meetings, discussions on assessment and competency are tailored to the specific specialty and program.
- Provide information on the effectiveness of individual programs' curricula.



Clinical Competency Committees

A Guidebook for Programs 3rd Edition

> Kathryn Andolsek Duke University

Jamie Padmore Medstar-Georgetown

Karen E. Hauer University of California at San Francisco

> Andem Ekpenyong Rush University Hospital

> > Laura Edgar ACGME

Eric Holmboe ACGME

This information is current as of January 2020

his information is current as of January 2020





Clinical Competency Committee.

- It looks at the individual residents and follows progress,
- It recommends appropriate action.
- The suggested resident's action plan becomes the plan for the PD for each resident, the coordinator, and supervisors until the next CCC discussion.
- Send recommendations to other committees through PD when a pattern is recognized in residents' performance (PEC, Educational program, Rotations, scholarly activities...etc).





CCC variability in structure and function

Acad Emerg Med. 2015 Nov;22(11):1351-4. doi: 10.1111/acem.12804. Epub 2015 Oct 16.

How Do Emergency Medicine Residency Programs Structure Their Clinical Competency Committees? A Survey

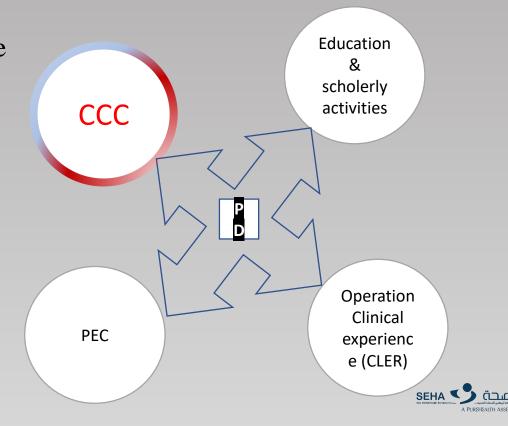
Christopher I Doty ¹, Lynn P Roppolo ², Shellie Asher ³, Jason P Seamon ⁴, Rahul Bhat ⁵

• **Results:** A total of 116 of the 160 programs responded, giving a 73% response rate. Of responders, most (71.6%) CCCs are chaired by the associate or assistant program director, while a small number (14.7%) are chaired by a core faculty member. Program directors (PDs) chair 12.1% of CCCs. Most CCCs are attended by the PD (85.3%) and selected core faculty members (78.5%), leaving the remaining committees attended by any core faculty. Voting members of the CCC consist of the residency leadership either with the PD (53.9%) or without the PD (36.5%) as a voting member. CCCs have an average attendance of 7.4 members with a range of three to 15 members. Of respondents, 53.1% of CCCs meet quarterly while 37% meet monthly. The majority of programs (76.4%) report a system to match residents with a faculty mentor or advisor. Of respondents, 36% include the resident's faculty mentor or advisor to discuss a particular resident. Milestone summaries (determination of level for each milestone) are the primary focus of discussion (93.8%), utilizing multiple sources of information. sources of information. SEHA



Within the program

- It meets its roles and, at the same time, provides data for other committees to improve:
- Residents' learning,
- Residents' performance and progress,
- Program efficiency and quality.





The coordinator role is essential and Continuous

- From the first day of the program, data gathering is planned, and residents are aware of it.
- Following previous actions and preparing with the CCC chair for the next meeting depending on the time of the academic year (end of rotation exams, milestones, EPA completion, interim promotion criteria completion or promotion and graduation).
- Completing the residents' files with the CCC notes (not the CCC private comments)
- Following the residents of concern or probations to prepare for the next CCC meeting
- THE MEETING,
- After repeating the same and sending performance data to those involved.





Platform

- Excel dashboard
- Email and watsup reminders
- Microsoft forms





Implemnting Milestones and EPA

- Milestones, as defined by the ACGME, are stages in the development of specific competencies.
- While EPA is an essential professional work activity or task for medical practice that requires specialized knowledge and skills and encompasses multiple competencies.

"Competencies are descriptors of physicians, and EPAs are descriptors of work"

- Milestones completed twice annually have helped programs identify individual residents who are struggling globally or in a specific area earlier in residency.
- Its importance as a standard structured tool within the program to collect data for CCC use.
- The implementation can be labor-intensive for supervisors and educators, so we needed data on the different competencies included in the milestones.
- EPA mapped to these milestones facilitates a meaningful translation of observations to these milestones.
- This made our work easier as we could SEE MORE CLEARLY the residents' performance and then make the needed action plan.





First, the overall change...

How were we before, and how have we changed?





Al Ain Family Medicine Program before the ACGME-I accreditation (before 2011)

- No CCC
- Many assessments at different points of the program.
- Clinical and oral exams are more related to 3 main blocks, A (medicine and peds), B (Ob and Gyne and Surg), and C (family medicine).
- Annual ITE since 1996.
- OSCE and evaluations from rotations
- There is a program committee that meets to discuss all program-related matters. We had difficulty to keep with the meetings as there was no FTE.
- Every thing is discussed within the committee but the PD decides after reviewing results and has one-to-one discussions with residents about their performance. No required meetings, mainly if residents have issues or need to discuss.
- There is a lot of informal and unstructured, and undocumented discussions with core faculty supervisors and residents.
- Data is archived by residents and by categories (exams, evaluations, research,..etc)





After the ACGME-I accreditation (after 2013)

Relating to Competency assessment:

- CCC was formed and started its meetings.
- Learning took a while to move from "all responsibility on the PD" to a functioning committee.
- Initially, PD was the chair, which made the work less on others.
- Later the chair was a core faculty, and other members gradually accepted more authority. Now associate PD.
- One Coordinator is responsible for the CCC.
- Data on residents' performance is streamed to these meetings to facilitate the members' judgment.





EPA's era started....

- In 2017 the discussion on EPA started in the CCC
- CCC structure was well established.
- We attended some faculty developments in this area (ACGME and Ottawa conference in Abu Dhabi.
- The CCC intends to implement the best tools to judge residents' competency, not because it is required only.
- The members became more competent in using the Milestones, but it took a long time to complete the milestones to do it properly. As if something is missing. Because we need to review all data for each resident.
- So we started to work on the EPA's





Data sources:

- 1. Rotation evaluations
- 2. Family Medicine Center 360 evaluations
- 3. Family Medicine Center Preceptor evaluations
- 4. Resident patient panel data
- 5. Chart Review

chite .

- 6. Direct observation
- 7. Resident referral pattern review
- 8. Resident portfolio (scholarly activity)
- 10. Procedure evaluations

11. Practice improvement projects 12. Tele-consultation of patient encounters 13. Patient satisfaction surveys 14. American Board of Family Medicine In-training exam results 15. Journal club or evidencebased answers presentation. 16. home and nursing home visits **17. OSCE, OSTAD, FACES**



Deliberate

Observed



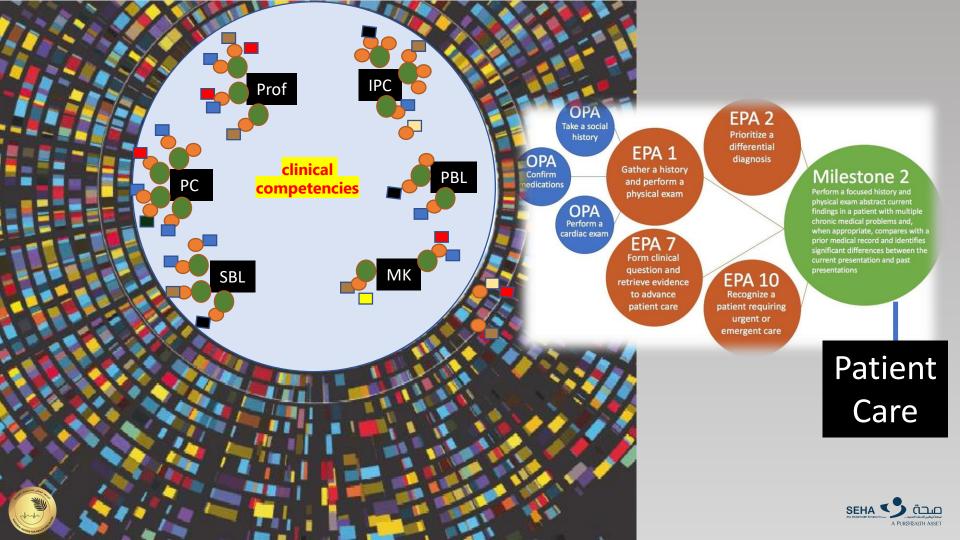


| Milestone | Milestone The knowledge, skills, and attitudes required to be competent in a particular specialty |
|-----------|---|
| EPA | Entrustable Professional Activities A task that a physician performs daily in the clinical environment |
| OPA | Observable Professional Activities An action that can be observed in the professional workplace |
| | |





https://www.aliem.com/users-guide-assessment-with-epas/



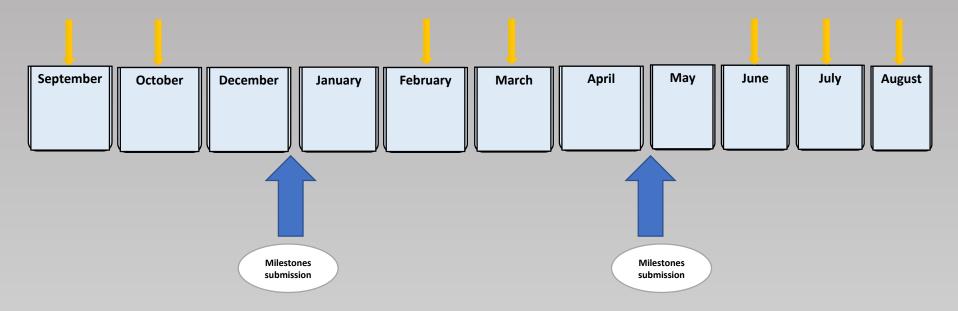
During Evaluation and Assessment of ResidentS (EARS) meetings for the EPA.

- Each center has at least two core faculties.
- They meet and complete the EPAs.
- They request information as needed from the team.
- They utilize data entered already in the resident's dashboard.





Meetings







Data gathering is ongoing from day 1

- The dashboard is sent to the residents and explained in the introductory course.
- Coordinators monitor data collection and send reminders.
- CCC chair requests for data to be submitted before the anticipated meetings
- For the core faculty to complete the EPAs within EARS
- Online evaluation form sent for rotation supervisors

| | level 1 Need constant directions starting to do | level 2 Demonstrate Some independence but requires some directions | Lower 3 Independence e but unaware of risk and requires supervision for safe practice | Level 4 Complete independence , understand | Level 5 Supervise others | Clear |
|--|--|--|---|---|--------------------------------|-------|
| 1-Provide a usual source of comprehensive, continuous longitudinal medical care for all age groups | 0 | 0 | 0 | 0 | 0 | |
| 2-Take responsibility for the care of patients in multiple settings, including the office, home, hospital, and community | 0 | 0 | 0 | 0 | 0 | |
| 3-Provide first-contact access to care for health issues and medical problems. | 0 | 0 | 0 | 0 | 0 | |
| 4-Provide preventive care that improves wellness, modifies risk factors for illness and injury, and detects illness early, treatable stages. | 0 | 0 | 0 | 0 | 0 | |
| 5-Provide care that speeds recovery from | | | | | | |





Family Medicine for America's Health developed 20 <u>Entrustable Professional Activities (EPAs)</u> for family medicine.

Entrustable Professional Activities

- 1. Provide a usual source of comprehensive, longitudinal medical care for people of all ages.
- 2. Care for patients and families in multiple settings.
- 3. Provide first-contact access to care for health issues and medical problems.
- 4. Provide preventive care that improves wellness, modifies risk factors for illness and injury, and detects illness in early, treatable stages.
- 5. Provide care that speeds recovery from illness and improves function.
- 6. Evaluate and manage undifferentiated symptoms and complex conditions.
- 7. Diagnose and manage chronic medical conditions and multiple co-morbidities.
- 8. Diagnose and manage mental health conditions.
- 9. Diagnose and manage acute illness and injury.
- 10. Perform common procedures in the outpatient or inpatient setting.

- 11. Manage prenatal, labor, delivery and post-partum care.
- 12. Manage end-of-life and palliative care.
- 13. Manage inpatient care, discharge planning, transitions of care.
- 14. Manage care for patients with medical emergencies.
- 15. Develop trusting relationships and sustained partnerships with patients, families and communities.
- 16. Use data to optimize the care of individuals, families and populations.
- 17. In the context of culture and health beliefs of patients and families, use the best science to set mutual health goals and provide services most likely to benefit health.
- 18. Advocate for patients, families and communities to optimize health care equity and minimize health outcome disparities.
- 19. Provide leadership within interprofessional health care teams.
- 20. Coordinate care and evaluate specialty consultation as the condition of the patient requires.







Examples

EPA 16



Use data to optimize the care of individuals, families and

populations.

Interpretation

Graduates of Family Medicine residencies will access, interpret, and apply individual and population-based data using a systematic improvement process to enhance patientoriented health outcomes.

Suggested Global Evaluation Opportunities:

- 1. Direct Observation
- 2. Practice Improvement Project
- 3. Journal Club or Evidence Based Answers Presentations

| | | | PC | | | N | 1K | | SI | 3P | | | PBL | | | P | rof | | | | с | | ntrusmer |
|--|---------------------------------------|--|----------------------------------|---|--|--|---|---------------------------|---------------------------------|--|-----------------------------------|--|------------------------------|---------------------|---|---|------------------------------|--|---|--|--------------------------------------|------------------|------------|
| Family Medicine EPA | Care of the Acutely III Patient | Care of Patients with Chronic Illness | Health Promotion and Wellness | Ongoing Care of Patients with Undifferentiated Signs, Symptoms, or Health Concerns | Management t of Procedural Care | Demonstrat es Medical Knowledge of Sufficient Breadth and Depth to | Critical Thinking and Decision Making | Cost conscious care | Emphasizes patient safety | Advocates for individual and community health | Coordinates team based care | Evidence- Based and Informed Practice | Self Directed learning | Improves systems | Completes process of professional izati on | Professiona l conduct and accountabili ty | Demonstrat es humanism | Maintain emotional, physical and mental health | Develops relationship s with pts and families | Communic stes effectively with pts and families | Relationshi ps within Medicine | use techology | |
| | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 1 | 2 | | 4 | tools |
| Provide a usual source of comprehensive, continuous longitudinal medical care for all age groups | | level 3 | level 3 | level 3 | | | | - | - | | level 3 | level 3 | level 3 | level 3 | level 3 | | level 3 | level 3 | level 3 | | | level 3 | 2,4,5,6,8 |
| Take responsibility for the care of patients in multiple settings, including the office, home, hospital, and | level 3 | | level 3 | | | | | level 3 | level 3 | | level 3 | | | - | level 4 | | level 4 | - | level 4 | | | level 4 | 1.2 |
| Provide first-contact access to care for health issues and medical problems. | level 2 | level 3 | - | - | - | | | level 3 | - | | level 3 | - | - | - | - | - | level 4 | - | level 4 | level 4 | | - | 1,2,3 |
| Provide preventive care that improves wellness, modifies risk factors for illness and injury, and detects illness | | | level 3 | - | - | level 3 | level 3 | | - | level 3 | | level 3 | - | level 3 | | | level 4 | - | level 4 | level 4 | | | 5.6 |
| Provide care that speeds recovery from illness and improves function. | level 2 | level 3 | | level 2 | | | | level 3 | | | level 3 | | | - | | | level 4 | - | level 4 | level 4 | | level 4 | 13 |
| Evaluate and manage undifferentiated symptoms and complex conditions and patients who are highly | | - | - | level 2 | | level 3 | | level 2 | - | | - | level 2 | - | - | level 3 | | level 3 | level 3 | level 3 | level 3 | • | - | 1.3 |
| Diagnose and manage chronic medical conditions and multiple co-morbidities. | - | level 3 | level 3 | - | - | | | - | level 3 | - | level 3 | level 2 | - | level 3 | - | - | level 4 | - | level 4 | level 4 | level 4 | level4 | 3.16 |
| Diagnose and manage mental health conditions. | level 2 | level 2 | | level 2 | - | | | - | - | - | level 2 | - | - | - | - | level 2 | level 3 | - | level 3 | level 3 | - | - | 1,2,3,9 |
| Diagnose and manage acute illness and injury. | level 2 | | - | | level 1 | | | | - | | level 2 | - | - | - | - | - | - | level 3 | - | level 3 | • | - | 1,3, |
| Perform common procedures in the outpatient or inpatient setting. | - | | | | level 1 | level 1 | level 1 | - | level 1 | - | - | - | - | level 1 | - | | - | - | - | - | - | level 2 | 3,6,10 |
| Manage prenatal, labor, delivery and post-partum care. | level 2 | | level 2 | | level 1 | level 2 | Level 2 | | level 2 | | level 2 | | | - | | level 3 | level 3 | level 3 | level 3 | | level 3 | level 2 | 1.3.10.13 |
| Manage end-of-life and palliative care. | level 2 | level 1 | - | - | - | | | - | - | - | level 1 | - | | - | level 1 | | level 1 | - | level 1 | level 1 | - | - | 1.2.3 |
| Manage inpatient care, discharge planning, transitions of care. | level 2 | | - | - | level 1 | | - | level 1 | level 1 | - | level 1 | | | - | level 3 | level 3 | level 3 | - | - | level 3 | level 3 | level 3 | 1,2,3 |
| Manage care for patients with medical emergencies | level 2 | | | | | level 2 | | | level 1 | | level 1 | | | - | | | - | | level 1 | level 1 | level 1 | - | 1 |
| Develop trusting relationships and sustained partnerships with patients, families, and communities | - | level 3 | level 3 | level 3 | | | | - | | | level 3 | | | - | level 3 | level 4 | | - | level 4 | level 4 | | level 4 | 1.2.3.7.12 |
| Use data to optimize the care of individuals, families and populations. | - | | level 3 | | | | - | level 3 | level 3 | level 3 | | | level 3 | level 3 | | | | - | | | | level 3 | 2.3.11 |
| In the context of culture and health beliefs of patients and families, use the best science to set mutual | | level 3 | level 3 | | | - | | | | | | level 3 | | | level 3 | | level 3 | | level 3 | level 3 | | | 3.6.14.15 |
| Advocate for patients, families, and communities to optimize health care equity and minimize health outcome | | | level 3 | | | - | | | | level 3 | | | | - | - | | level 3 | - | - | level 3 | | | 1,2,3,6 |
| Provide leadership within interprofessional health care teams. | | level 3 | level 3 | | | | | | level 3 | | level 3 | | | | | level 3 | - | level 3 | | - | level 3 | | 1,2,9 |
| Coordinate care and evaluate specialty consultation as the condition of the patient requires. | | - | - | level 3 | level 1 | | | level 3 | | | level 3 | | | | | | - | - | - | | level 3 | | 1.3.5.7 |
| Perform comprehensive histories and through physical examination and identify abnormalities. | level 3 | level 3 | level 3 | level 3 | iciter r | level 3 | level 3 | iever 5 | | | icrei 5 | | level 3 | - | level 4 | level 4 | level 4 | level 4 | level 4 | level 4 | ierer 5 | - | 1.2.3.6.17 |
| Knowing the Indications, contraindications of the investigation and interpretation of laboratory data | level 3 | level 3 | level 3 | level 3 | - | level 3 | level 3 | level 3 | level 3 | level 3 | | level 3 | level 3 | | 10101 4 | 101014 | level 3 | ICVCI T | 10401 4 | level 3 | | level 3 | 1.6.14 |
| | level 3 | level 3 | level 3 | level 3 | - | level 3 | level 3 | level 3 | level 5 | level 5 | level 3 | level 3 | level 5 | level 3 | | | ievel 5 | 1 12 | level 3 | level 3 | level 3 | level 3 | 3.5.6.13 |
| assists the PCP and health care team set and achieve long-term goals | level 3 | level 3 | level 5 | level 3 | | level 3 | level 3 | level 3 | | | level 3 | level 3 | | level 3 | | | | level 3 | level 3 | level 3 | level 3 | | |
| Provide comprehensive medication review, reconcilation and conselling. | | | | | | | | | level 4 | | | | | | | | | | | | | level 4 | 5 |
| Resuscitate, stabilize, and care for unstable or critically ill patients | level 2 | | | | level 2 | level 2 | level 2 | | | | level 2 | | | | | | | | | | level 2 | | 1,3,17,6 |
| Demonstrate the ability to provide counselling skills and behavioural modification techniques for patient and families | | | | | | | | | | | | | | | | | level 4 | level 4 | level 4 | level 4 | | | 2,6,17 |
| Incorporate considerations of cost awareness and risk benefit. Contribute to the fiscally sound and ethical | | | | | | | | | | | | | | | | | | | | | | | 2,5 |
| management of a practice (e.g. through billing, scheduling, coding, and record keeping practices) | | | | | | | | level 2 | | | | | | level 2 | | | | | | | | level 2 | 2,5 |
| Able to correctly approach an ethical situation and manage it appropriately. | | | | | | | | | | | | | | | | level 2 | level 2 | level 2 | level 2 | level 2 | | | 6,17 |
| Apply public health principles and quality improvement methods to improve care and safety for populations, | | | level 3 | | | level 3 | | | level 2 | level 2 | level 2 | | | level 2 | | | | | | | | level 2 | 11 |
| communities, and systems | | | inter 5 | | | ierers | | | 101012 | lever 2 | lever 2 | | | 101012 | | | | | | | | ierei 2 | |
| Engage in meaningful educational activities and learning opportunities to fill knowledge/skills gaps and demonstrate deliberate practice | | | | | | level 3 | level 2 | | | | | level 3 | level 3 | level 3 | | | | | | | | | 15 |
| Develop a professional identify, including understanding, appreciation, and internalization of the professional role as it relates to patient, community, or specialty. | | | | | | | | | | | level 3 | | | | level 3 | level 3 | level 3 | level 3 | level 3 | level 3 | level 3 | | 1,2 |
| Ability to do or participate to conceptulise, plan, conduct and write a research project. | | | | | | | level 1 | | | | - | level 1 | level 3 | level 3 | | | | | | | | | |
| Ability to do or participate to conceptunise, plan, conduct and write a research project. | | | | | | | inver 1 | | | | | aver 1 | icrei 5 | icver 5 | June 2 | level 3 | level 3 | level 3 | | | | | 3.6 |
| Flexibility and maturity in adjusting to change with the capacity to alter one's own behaviors and resilience. | | | | | | 1 | | 1 | | | | | | | level 3 | ievel 3 | ievel 3 | ievel 3 | | | | | 3.0 |
| Provide care through differnet consultation modles: Telehealth and home visits. | level 3 | level 3 | level 3 | | | level 3 | level 3 | level 3 | level 3 | level 3 | | | | | | | level 3 | | level 3 | level 3 | level 3 | level 3 | 12,16 |
| Average | | | | | · | - | | | | | | | | · . | · | | | | | | | | |
| Average | _ | | | | | | | | | | | _ | | | | | | | _ | | | | |

| | | | PC | | | L | ак | 0 | S | 5 P / | | | PBL | | | | ef . | | | | | |
|-------|-----------------------------------|--|---|---|---|---|---|---------------------------|--------------------------------------|--------------------------------------|---|---|--|---------------------|---|-------------------------------------|--|---|---|---|---|--|
| | Care of the Acutely II Patient | Care of Patients with Chronic Illness | Health Promotion and Wellness | Symptoms, or Health Concerns | Managem ent of Procedura i Care | nies Medical Knowledg c of | Critical Thinking and Decision Making | Cost censcious care | Emphasiz es patient safety | for Individual and communit | Coordinat es team based care | EvidenceB ased and Informed Practice | Self Directed learning | Improves systems | Completes process of profession slization | al conduct and accountab | Demonstr ates humanism | emotional, physical and mental | Develops relationshi ps with pts and families | cates effectively with pts and | Relationsh ips within Medicine | use techology |
| | Urgent and Emergent | Conditions | Patient, Family, and Community to Improve Health through Disease Prevention and Health Brometion | Signs, Symptoms, or Health Concerns that Remain over Time | Specialty Appropria te Procedur es to | Medical Knowledg e of Sufficient Breadth and Depth to | Critical | | Safety and Quality Improvem | Navigatio n for Patient- | Physician Role in Health Care Systems | Evidence- Based and Informed Practice | Reflective Practice and Commitm ent to Personal Growth | | and | Accounta bility/Con scientiou | Self- Awarenes s and Help- Seeking | | | and Family- Centered Communi | professio nal and Team Communi | Communi cation within Health Care Systems |
| Final | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |





| Advocate for patients, families, and communities to optimize health care equity and minimize health outcome | - |
|---|---------|
| Provide leadership within interprofessional health care teams. | - |
| Coordinate care and evaluate specialty consultation as the condition of the patient requires. | - |
| Perform comprehensive histories and through physical examination and identify abnormalities. | level 3 |
| Knowing the Indications, contraindications of the investigation and interpretation of laboratory data | level 3 |
| assists the PCP and health care team set and achieve long-term goals | level 3 |
| Provide comprehensive medication review, reconcilation and conselling. | |
| Resuscitate, stabilize, and care for unstable or critically ill patients | level 2 |
| Demonstrate the ability to provide counselling skills and behavioural modification techniques for patient and families | |
| Incorporate considerations of cost awareness and risk benefit. Contribute to the fiscally sound and ethical | |
| management of a practice (e.g. through billing, scheduling, coding, and record keeping practices) | |
| Able to correctly approach an ethical situation and manage it appropriately. | |
| Apply public health principles and quality improvement methods to improve care and safety for populations, communities, and systems | |
| Engage in meaningful educational activities and learning opportunities to fill knowledge/skills gaps and demonstrate deliberate practice | |
| Develop a professional identify, including understanding, appreciation, and internalization of the professional role as it relates to patient, community, or specialty. | |
| Ability to do or participate to conceptulise, plan, conduct and write a research project. | |
| | |
| Flexibility and maturity in adjusting to change with the capacity to alter one's own behaviors and resilience. | |
| Provide care through differnet consultation modles; Telehealth and home visits. | level 3 |





| | | | PC | | | М | к | | S | BP | | | PBL | | | P | rof | | | C | 2 | | ntrusmer |
|-----------------------------|---------------------------------------|--|----------------------------------|---|---|--|---|---------------------------|---------------------------------|--|-----------------------------------|--|------------------------------|---------------------|---|---|------------------------------|--|---|--|--------------------------------------|------------------|-----------|
| | Care of the Acutely Ill Patient | Care of Patients with Chronic Illness | Health Promotion and Wellness | Ongoing Care of Patients with Undifferentiated Signs, Symptoms, or Health Concerns | Managemen t of Procedural Care | es Medical Knowledge of Sufficient Breadth and Depth to | Critical Thinking and Decision Making | Cost conscious care | Emphasizes patient safety | Advocates for individual and community health | Coordinates team based care | Evidence- Based and Informed Practice | Self Directed learning | Improves systems | Completes process of professional izati on | Professiona l conduct and accountabili ty | Demonstrat es humanism | Maintain emotional, physical and mental health | Develops relationship s with pts and families | Communic ates effectively with pts and families | Relationshi ps within Medicine | use techology | |
| | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 1 | 2 | | 4 | tools |
| e for all age groups | | level 3 | level 3 | level 3 | - | | | - | - | - | level 3 | level 3 | level 3 | level 3 | level 3 | - | level 3 | level 3 | level 3 | - | - | level 3 | 2,4,5,6,8 |
| office, home, hospital, and | level 3 | - | level 3 | - | - | | | level 3 | level 3 | - | level 3 | - | - | - | level 4 | - | level 4 | - | level 4 | - | - | level 4 | 1.2 |
| | level 2 | level 3 | - | - | - | | | level 3 | - | - | level 3 | - | - | - | - | - | level 4 | - | level 4 | level 4 | - | - | 1,2,3 |

Global evaluation methods

- 1. Rotation evaluations
- 2. Family Medicine Center 360 evaluations
- 3. Family Medicine Center Preceptor evaluations
- 4. Resident patient panel data
- 5. Chart Review
- 6. Direct observation
- 7. Resident referral pattern review
- 8. Resident portfolio
- 9. Behaviorist evaluation of residents
- 10. Procedure evaluations
- 11. Practice improvement projects
- 12. Tele-consultation of patient encounters
- 13. Patient satisfaction surveys
- 14. American Board of Family Medicine In-training exam results
- 15. Journal club or evidence based answers presentation.
- 16. home and nursing home visits 17. OSCE, OSTAD, FACES





| Provide care through differnet consultation | n modles; Telehealth and | l home visits. | | | | | | | | | | | | | | | | | | | | <u> </u> |
|---|---|--|--|--|--|---|---|---------------------------|-------------------------------------|--------------------------------------|----------------|---|--|---------------------|--|-------------------------------------|--|---|---|---|---|------------------|
| Average | | | | | | | | | | | | | | | | | | | | | | |
| | | | PC | | | N | ſK | | s | BP | | 1 | PBL | | | Pr | of | | | 4 | c | |
| | Care of the Acutely Ill Patient | Care of Patients with Chronic Illness | Health Promotion and Wellness | Symptoms, or Health Concerns | Managem ent of Procedura l Care | Medical | Critical Thinking and Decision Making | Cost conscious care | Emphasiz es patient safety | for individual and communit | Coordina | EvidenceB ased and Informed Practice | Self Directed learning | Improves systems | Completes process of profession alizati on | | Demonstr ates humanism | emotional, physical and mental | Develops relationshi ps with pts and families | cates effectively with pts and | Relationsh ips within Medicine | use techology |
| | Cares for Acutely III or Injured Patients in Urgent and Emergent Situations and in All Settings | Cares for Patients | Partners with the Patient, Family, and Community to Improve Health through Disease Prevention and Health Promotion | Signs, Symptoms, or Health Concerns that Remain over Time without Clear | Appropria te Procedur es to | Medical Knowledg e of Sufficient Breadth and Depth to | | | Quality | System | Health Care | Evidence- Based and Informed | Reflective Practice and Commitm ent to Personal Growth | | Benavior | Accounta bility/Con scientiou | Self- Awarenes s and Help- Seeking | | | Patient- and Family- Centered Communi | professio nal and Team Communi | within Health |
| Final | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |





| | | | PC | | | N | 1K | | SI | 3P | | | PBL | | | P | rof | | | | с | | ntrusmer |
|--|---------------------------------------|--|----------------------------------|---|--|--|---|---------------------------|---------------------------------|--|-----------------------------------|--|------------------------------|---------------------|---|---|------------------------------|--|---|--|--------------------------------------|------------------|------------|
| Family Medicine EPA | Care of the Acutely III Patient | Care of Patients with Chronic Illness | Health Promotion and Wellness | Ongoing Care of Patients with Undifferentiated Signs, Symptoms, or Health Concerns | Management t of Procedural Care | Demonstrat es Medical Knowledge of Sufficient Breadth and Depth to | Critical Thinking and Decision Making | Cost conscious care | Emphasizes patient safety | Advocates for individual and community health | Coordinates team based care | Evidence- Based and Informed Practice | Self Directed learning | Improves systems | Completes process of professional izati on | Professiona l conduct and accountabili ty | Demonstrat es humanism | Maintain emotional, physical and mental health | Develops relationship s with pts and families | Communic stes effectively with pts and families | Relationshi ps within Medicine | use techology | |
| | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 1 | 2 | | 4 | tools |
| Provide a usual source of comprehensive, continuous longitudinal medical care for all age groups | | level 3 | level 3 | level 3 | | | | - | - | | level 3 | level 3 | level 3 | level 3 | level 3 | | level 3 | level 3 | level 3 | | | level 3 | 2,4,5,6,8 |
| Take responsibility for the care of patients in multiple settings, including the office, home, hospital, and | level 3 | | level 3 | | | | | level 3 | level 3 | | level 3 | | | - | level 4 | | level 4 | - | level 4 | | | level 4 | 1.2 |
| Provide first-contact access to care for health issues and medical problems. | level 2 | level 3 | - | - | - | | | level 3 | - | | level 3 | - | - | - | - | - | level 4 | - | level 4 | level 4 | | - | 1,2,3 |
| Provide preventive care that improves wellness, modifies risk factors for illness and injury, and detects illness | | | level 3 | - | - | level 3 | level 3 | | - | level 3 | | level 3 | - | level 3 | | | level 4 | - | level 4 | level 4 | | | 5.6 |
| Provide care that speeds recovery from illness and improves function. | level 2 | level 3 | | level 2 | | | | level 3 | | | level 3 | | | - | - | | level 4 | - | level 4 | level 4 | | level 4 | 13 |
| Evaluate and manage undifferentiated symptoms and complex conditions and patients who are highly | | - | - | level 2 | | level 3 | | level 2 | - | | - | level 2 | - | - | level 3 | | level 3 | level 3 | level 3 | level 3 | • | - | 1.3 |
| Diagnose and manage chronic medical conditions and multiple co-morbidities. | - | level 3 | level 3 | - | - | | | - | level 3 | - | level 3 | level 2 | - | level 3 | - | - | level 4 | - | level 4 | level 4 | level 4 | level4 | 3.16 |
| Diagnose and manage mental health conditions. | level 2 | level 2 | | level 2 | - | | | - | - | - | level 2 | - | - | - | - | level 2 | level 3 | - | level 3 | level 3 | - | - | 1,2,3,9 |
| Diagnose and manage acute illness and injury. | level 2 | | - | | level 1 | | | | - | | level 2 | - | - | - | - | - | - | level 3 | - | level 3 | • | - | 1,3, |
| Perform common procedures in the outpatient or inpatient setting. | - | | | | level 1 | level 1 | level 1 | - | level 1 | - | - | - | - | level 1 | - | | - | - | - | - | - | level 2 | 3,6,10 |
| Manage prenatal, labor, delivery and post-partum care. | level 2 | | level 2 | | level 1 | level 2 | Level 2 | | level 2 | | level 2 | | | - | | level 3 | level 3 | level 3 | level 3 | | level 3 | level 2 | 1.3.10.13 |
| Manage end-of-life and palliative care. | level 2 | level 1 | - | - | - | | | - | - | - | level 1 | - | | - | level 1 | | level 1 | - | level 1 | level 1 | - | - | 1.2.3 |
| Manage inpatient care, discharge planning, transitions of care. | level 2 | | - | - | level 1 | | - | level 1 | level 1 | - | level 1 | | | - | level 3 | level 3 | level 3 | - | - | level 3 | level 3 | level 3 | 1,2,3 |
| Manage care for patients with medical emergencies | level 2 | | | | | level 2 | | | level 1 | | level 1 | | | - | | | - | | level 1 | level 1 | level 1 | - | 1 |
| Develop trusting relationships and sustained partnerships with patients, families, and communities | - | level 3 | level 3 | level 3 | | | | - | | | level 3 | | | - | level 3 | level 4 | | - | level 4 | level 4 | | level 4 | 1.2.3.7.12 |
| Use data to optimize the care of individuals, families and populations. | - | | level 3 | | | | - | level 3 | level 3 | level 3 | | | level 3 | level 3 | | | | - | | | | level 3 | 2.3.11 |
| In the context of culture and health beliefs of patients and families, use the best science to set mutual | | level 3 | level 3 | | | - | | | | | | level 3 | | | level 3 | | level 3 | | level 3 | level 3 | | | 3.6.14.15 |
| Advocate for patients, families, and communities to optimize health care equity and minimize health outcome | | | level 3 | | | - | | | | level 3 | | | | - | - | | level 3 | - | - | level 3 | | | 1,2,3,6 |
| Provide leadership within interprofessional health care teams. | | level 3 | level 3 | | | | | | level 3 | | level 3 | | | | | level 3 | - | level 3 | | - | level 3 | | 1,2,9 |
| Coordinate care and evaluate specialty consultation as the condition of the patient requires. | | - | - | level 3 | level 1 | | | level 3 | | | level 3 | | | | | | - | - | - | | level 3 | | 1.3.5.7 |
| Perform comprehensive histories and through physical examination and identify abnormalities. | level 3 | level 3 | level 3 | level 3 | iciter r | level 3 | level 3 | iever 5 | | | icrei 5 | | level 3 | - | level 4 | level 4 | level 4 | level 4 | level 4 | level 4 | ierer 5 | - | 1.2.3.6.17 |
| Knowing the Indications, contraindications of the investigation and interpretation of laboratory data | level 3 | level 3 | level 3 | level 3 | - | level 3 | level 3 | level 3 | level 3 | level 3 | | level 3 | level 3 | | 10101 4 | 101014 | level 3 | ICVCI T | 10401 4 | level 3 | | level 3 | 1.6.14 |
| | level 3 | level 3 | level 3 | level 3 | - | level 3 | level 3 | level 3 | level 5 | level 5 | level 3 | level 3 | level 5 | level 3 | | | ievel 5 | 1 12 | level 3 | level 3 | level 3 | level 3 | 3.5.6.13 |
| assists the PCP and health care team set and achieve long-term goals | level 3 | level 3 | level 5 | level 3 | | level 3 | level 3 | level 3 | | | level 3 | level 3 | | level 3 | | | | level 3 | level 3 | level 3 | level 3 | | |
| Provide comprehensive medication review, reconcilation and conselling. | | | | | | | | | level 4 | | | | | | | | | | | | | level 4 | 5 |
| Resuscitate, stabilize, and care for unstable or critically ill patients | level 2 | | | | level 2 | level 2 | level 2 | | | | level 2 | | | | | | | | | | level 2 | | 1,3,17,6 |
| Demonstrate the ability to provide counselling skills and behavioural modification techniques for patient and families | | | | | | | | | | | | | | | | | level 4 | level 4 | level 4 | level 4 | | | 2,6,17 |
| Incorporate considerations of cost awareness and risk benefit. Contribute to the fiscally sound and ethical | | | | | | | | | | | | | | | | | | | | | | | 2,5 |
| management of a practice (e.g. through billing, scheduling, coding, and record keeping practices) | | | | | | | | level 2 | | | | | | level 2 | | | | | | | | level 2 | 2,5 |
| Able to correctly approach an ethical situation and manage it appropriately. | | | | | | | | | | | | | | | | level 2 | level 2 | level 2 | level 2 | level 2 | | | 6,17 |
| Apply public health principles and quality improvement methods to improve care and safety for populations, | | | level 3 | | | level 3 | | | level 2 | level 2 | level 2 | | | level 2 | | | | | | | | level 2 | 11 |
| communities, and systems | | | inter 5 | | | ierers | | | 101012 | lever 2 | lever 2 | | | 101012 | | | | | | | | ierei 2 | |
| Engage in meaningful educational activities and learning opportunities to fill knowledge/skills gaps and demonstrate deliberate practice | | | | | | level 3 | level 2 | | | | | level 3 | level 3 | level 3 | | | | | | | | | 15 |
| Develop a professional identify, including understanding, appreciation, and internalization of the professional role as it relates to patient, community, or specialty. | | | | | | | | | | | level 3 | | | | level 3 | level 3 | level 3 | level 3 | level 3 | level 3 | level 3 | | 1,2 |
| Ability to do or participate to conceptulise, plan, conduct and write a research project. | | | | | | | level 1 | | | | _ | level 1 | level 3 | level 3 | | | | | | | | | |
| Ability to do or participate to conceptunise, plan, conduct and write a research project. | | | | | | | inver 1 | | | | | aver 1 | icrei 5 | icver 5 | June 2 | level 3 | level 3 | level 3 | | | | | 3.6 |
| Flexibility and maturity in adjusting to change with the capacity to alter one's own behaviors and resilience. | | | | | | 1 | | 1 | | | | | | | level 3 | ievel 3 | ievel 3 | ievel 3 | | | | | 3.0 |
| Provide care through differnet consultation modles: Telehealth and home visits. | level 3 | level 3 | level 3 | | | level 3 | level 3 | level 3 | level 3 | level 3 | | | | | | | level 3 | | level 3 | level 3 | level 3 | level 3 | 12,16 |
| Average | | | | | · | - | | | | | | | | · . | · | | | | | | | | |
| Average | _ | | | | | | | | | | | _ | | | | | | | _ | | | | |

| | | | PC | | | L | ак | 0 | S | 5 P / | | | PBL | | | | ef . | | | | | |
|-------|-----------------------------------|--|---|---|---|---|---|---------------------------|--------------------------------------|--------------------------------------|---|---|--|---------------------|---|-------------------------------------|--|---|---|---|---|--|
| | Care of the Acutely II Patient | Care of Patients with Chronic Illness | Health Promotion and Wellness | Symptoms, or Health Concerns | Managem ent of Procedura i Care | nies Medical Knowledg c of | Critical Thinking and Decision Making | Cost censcious care | Emphasiz es patient safety | for Individual and communit | Coordinat es team based care | EvidenceB ased and Informed Practice | Self Directed learning | Improves systems | Completes process of profession slization | al conduct and accountab | Demonstr ates humanism | emotional, physical and mental | Develops relationshi ps with pts and families | cates effectively with pts and | Relationsh ips within Medicine | use techology |
| | Urgent and Emergent | Conditions | Patient, Family, and Community to Improve Health through Disease Prevention and Health Brometion | Signs, Symptoms, or Health Concerns that Remain over Time | Specialty Appropria te Procedur es to | Medical Knowledg e of Sufficient Breadth and Depth to | Critical | | Safety and Quality Improvem | Navigatio n for Patient- | Physician Role in Health Care Systems | Evidence- Based and Informed Practice | Reflective Practice and Commitm ent to Personal Growth | | and | Accounta bility/Con scientiou | Self- Awarenes s and Help- Seeking | | | and Family- Centered Communi | professio nal and Team Communi | Communi cation within Health Care Systems |
| Final | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |





Lessons learned. (from others' experiences and ours)

- Decision is based on information triangulated with other data sources before a performance standard could be set at the competency level
- competency decisions have <u>periodicity</u>, perhaps annually, rather than being a one-time 'final' decision.
- <u>early</u> decision to allow remediation but higher quality decisions result from more data points
- <u>later</u> occurring decisions would be made with maximum information.
- <u>integrated</u> performances rather than the individual pieces that can be scattered with no meaning.







Lessons learned.

William Jobst, MD

| | Better | Worse |
|---------------------------------|--|---|
| Member characteristics | Heterogeneous groups perform better than homogeneous | |
| Group size | large groups tend to outperform small groups. large groups, members may go with group opinion rather than think their own opinion (social loafing) | o along |
| Group understanding of its work | A shared mental model is a shared understanding of a group's work that important group performance | roves |
| Group leader role | A leader inviting participation counteracts the tendency for members lower of hierarchy to be passive | on the more senior, powerful, or confident members can dominate |
| Effects of time pressures | New or unshared information is more likely to emerge with longer discussion | s Time pressures lead to lower-quality decisions. |
| Information-sharing procedures | Information-sharing procedures leads groups to better decisions Information sharing enhanced with structured discussion process that invites elaboration. Sharing written information versus just relying on group member memory inconduction being incorporated into group decisions. Information that all group members know (shared information) carries more than information Group processes members. Ensuring Resident Competence: A Narrative Review of the Literature on Group Decision Making to Inform the Work of Clinical Competency Committees | of diverse opinions. creases weight |
| | Karen E. Hauer, MD, PhD Eric S. Holmboe, MD Olle ten Cate, PhD Benjamin Chesluk, PhD Christy K. Boscardin, PhD Robert B. Baron, MD | AF THE MAN THE AFTER A PURPHALTH ASSET |

Patricia S. O'Sullivan, EdD

Highlight what can go wrong

- Privacy in our setting
- Time factor (no early judgment and no late decisions)
- Misleading information, therefore, team feedback through CCC meetings is essential, especially at the workplace. (especially in case one supervisor is responsible for the resident, or if supervisors are busy or inexperienced!





What can help in having CBME framework better implemented?

- Can technology help?
- Residents' specific issues (advocate but objective judgment)
- CCC Leadership and close conversation with PD.
- Coordinators crucial support
- Faculty development
- Reflection through research
- Residents involvement. What they understand is what they do. The translation is the CCC work





| Define the committee's | guiding purpose. |
|------------------------|------------------|
|------------------------|------------------|

Identify and collate assessment data from multiple sources

Recruit the right members

Conduct regular committee member training

Develop methods for real-time sharing of assessment data during CCC meetings

Establish ground rules for committee meetings

Use a structured format for committee discussion

Employ strategies for time efficient member participation before and during the meeting

Integrate the CCC into a program of assessment

Have standard CCC output for stakeholders (program, learner, and accrediting bodies)

Use a standard framework to provide feedback on performance and learning planning

Engage in continuous quality improvement of the committee



Summary tips..



Medical Teacher

ISSN: 0142-159X (Print) 1466-187X (Online) Journal homepage: http://www.tandfonline.com/loi/imte20

Twelve tips to maximize the value of a clinical competency committee in postgraduate medical education

Benjamin Kinnear, Eric J. Warm & Karen E. Hauer



Outcome

- A total of 112 family medicine residents were included: 36 residents in cohort one and 76 residents in cohort two.
- The significant prediction of graduation ITE score by the early sub-competencies is an important observation as the ITE is very similar to the exit certifying exam.

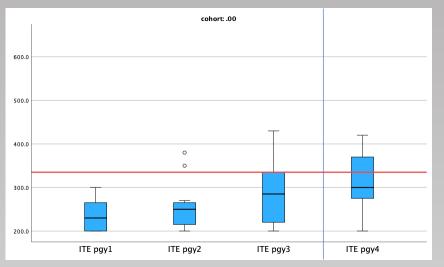
| Pearson's | | | | | | Γ. | | | | - |
|-----------------|---------|---------|------------|------------|------------|------------|------------|---------|--------|--------|
| Correlations | | | | | | | | | | |
| | Mid All | End All | | | | | | End All | | |
| | Average | Average | Mid All | End All | MD All | End All | MD All | Average | | |
| | y1 | y1 | Average Y2 | Average Y2 | Average Y3 | Average Y3 | Average Y4 | Y4 | ITE y4 | ITE y5 |
| Mid All Average | | | | | | | | | | |
| y1 | 1 | .480* | .402* | .400* | .255 | 0.194 | 0.23 | 0.375 | .321* | .646* |
| End All Average | | | | | | | | | | |
| y1 | .480* | 1 | .699* | .603* | .506* | .501* | .557* | .595* | .466* | .559* |
| Mid All Average | | | | | | | | | | |
| Y2 | .402* | .699* | 1 | .778* | .598* | .600* | .697* | .798* | .654* | .650* |
| End All Average | | | | | | | | | | |
| Y2 | .400* | .603* | .778* | 1 | .775* | .730* | .786* | .713* | .710* | .717* |
| MD All Average | | | | | | | | | | |
| Y3 | .255 | .506* | .598* | .775* | 1 | .863* | .758* | .670* | .685* | .654* |
| End All Average | | | | | | | | | | |
| Y3 | 0.194 | .501* | .600* | .730* | .863* | 1 | .858* | .834* | .681* | .637* |
| MD All Average | | | | | | | | | | |
| Y4 | 0.23 | .557* | .697* | .786* | .758* | .858* | 1 | .855* | .629* | .641* |
| End All Average | | | | | | | | | | |
| Y4 | 0.375 | .595* | .798* | .713* | .670* | .834* | .855* | 1 | .680* | .705* |
| ITE y4 | .321 | .466* | .654* | .710* | .685* | .681* | .629* | .680* | 1 | .841* |
| ITE y5 | .646* | .559* | .650* | .717* | .654* | .637* | .641* | .705* | .841* | 1 |

* Significant correlations

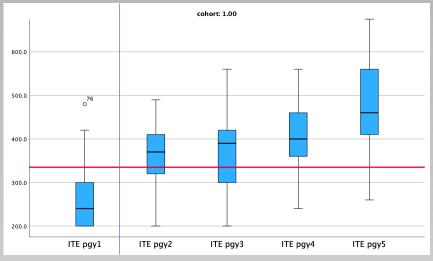
Correlation between the Milestones assessed at different training years for cohort 2, which had the milestones implemented

Outcome c

The intake from 2008 to 2012 before the ACGME accreditation



The intake from 2013 to 2019 after the ACGME accreditation



Early milestones predicted graduation ITE

- Linear regression showed a significant prediction of almost all sub-competencies with the ITE in year 4 after completion of the three ACGME-I programs' requirements.
- This was for all years' sub-competencies from PGY1 to PGY3.
- Competency development continues in years 4 and 5 in residency as residents' achievement 5 continues to improve.

Outcome

Table 4 B- Linear regression of PGY4 ITE score with early (PGY1- PGY2) milestones subcompetencies and exams in cohort Two.

| | Unstandardized Coefficients | | Standardized Coefficients | | Sig. | | | | | |
|--|--------------------------------|---------------|------------------------------|-------|-------|--|--|--|--|--|
| | В | Std. Error | Beta | t | | | | | | |
| Individual average of sub-competencies | | | | | | | | | | |
| Patient care | | | | | | | | | | |
| Mid Patient Care Y1 | 32.912 | 30.414 | 0.167 | 1.082 | 0.286 | | | | | |
| End Patient Care Y1 | 59.359 | 25.888 | 0.337 | 2.293 | 0.027 | | | | | |
| Mid Patient Care Y2 | 68.726 | 20.108 | 0.471 | 3.418 | 0.001 | | | | | |
| End Patient Care Y2 | 92.792 | 22.36 | 0.544 | 4.15 | <.001 | | | | | |
| Mid Patient Care Y3 | 101.82 | 16.713 | 0.689 | 6.092 | <.001 | | | | | |
| End Patient Care Y3 | 104.44 | 21.588 | 0.603 | 4.838 | <.001 | | | | | |
| Medical Knowledge | | | | | | | | | | |
| Mid Medical Knowledge Y1 | 47.688 | 19.094 | 0.363 | 2.498 | 0.017 | | | | | |
| End Medical Knowledge Y1 | 79.86 | 25.399 | 0.441 | 3.144 | 0.003 | | | | | |
| Mid Medical Knowledge Y2 | 97.87 | 18.412 | 0.639 | 5.316 | <.001 | | | | | |
| End Medical Knowledge Y2 | 81.79 | 23.979 | 0.47 | 3.411 | 0.001 | | | | | |
| System - Based Practice | | | | | | | | | | |
| Mid System - Based Practice Y1 | 56.508 | 24.321 | 0.345 | 2.323 | 0.025 | | | | | |
| End System - Based Practice Y1 | 51.153 | 22.869 | 0.33 | 2.237 | 0.031 | | | | | |
| Mid System - Based Practice Y2 | 79.461 | 23.691 | 0.464 | 3.354 | 0.002 | | | | | |
| End System - Based Practice Y2 | 80.518 | 22.62 | 0.486 | 3.56 | <.001 | | | | | |

| Practice based learning and Improvement | | | | | | | | | |
|--|---------|--------|--------|-------|-------|--|--|--|--|
| Mid learning and Improvement Y1 | 57.034 | 23.803 | 0.35 | 2.396 | 0.021 | | | | |
| End learning and Improvement Y1 | 60.755 | 18.743 | 0.452 | 3.241 | 0.002 | | | | |
| Mid learning and Improvement Y2 | 66.268 | 17.326 | 0.513 | 3.825 | <.001 | | | | |
| End learning and Improvement Y2 | 80.85 | 18.52 | 0.563 | 4.366 | <.001 | | | | |
| Professionalism | | | | | | | | | |
| Mid Professionalism Y1 | 13.822 | 20.431 | 0.105 | 0.677 | 0.503 | | | | |
| End Professionalism Y1 | 23.16 | 34.368 | 0.105 | 0.674 | 0.504 | | | | |
| Mid Professionalism Y2 | 104.56 | 32.115 | 0.453 | 3.256 | 0.002 | | | | |
| End Professionalism Y2 | 87.359 | 31.182 | 0.401 | 2.802 | 0.008 | | | | |
| Interpersonal and Communication Skills | | | | | | | | | |
| Mid Interpersonal and Communication Skills Y1 | 20.483 | 22.076 | 0.143 | 0.928 | 0.359 | | | | |
| End Interpersonal and Communication Skills Y1 | -19.909 | 32.479 | -0.095 | -0.61 | 0.543 | | | | |
| Mid Interpersonal and Communication Skills Y2 | 94.462 | 28.732 | 0.457 | 3.288 | 0.002 | | | | |
| End Interpersonal and Communication Skills Y2 | 84.921 | 25.009 | 0.469 | 3.396 | 0.002 | | | | |
| Overall milestones average of all sub-competencies | | | | | | | | | |
| Mid Y1 Average of All | 65.673 | 30.282 | 0.321 | 2.169 | 0.036 | | | | |
| End Y1 Average of All | 132.41 | 39.243 | 0.466 | 3.374 | 0.002 | | | | |
| Mid Y2 Average of All | 140.57 | 25.406 | 0.654 | 5.533 | <.001 | | | | |
| End Y2 Average of All | 162.42 | 25.138 | 0.71 | 6.461 | <.001 | | | | |
| Mid Y3 Average of All | 133.76 | 22.214 | 0.685 | 6.021 | <.001 | | | | |
| End Y3 Average of All | 146.7 | 24.655 | 0.681 | 5.95 | <.001 | | | | |
| Exams | | | | | | | | | |
| Clinical exam Y1 | 35.617 | 18.143 | 0.293 | 1.963 | 0.056 | | | | |
| Oral exam Y1 | 54.392 | 16.705 | 0.453 | 3.256 | 0.002 | | | | |
| OSCE Y1 | 5.351 | 2.292 | 0.363 | 2.335 | 0.025 | | | | |
| OSCE Y2 | 4.605 | 2.232 | 0.329 | 2.063 | 0.047 | | | | |

Interpretation

- The accreditation standards required structure and processes such as Clinical Competency Committee (CCC) and Program Evaluation Committee (PEC).
- These, for example, provided a demand for time and resources for the program that supported the residents and faculty.
- Quantitative and qualitative data for both committees at different data points from different sources need to be processed by committee members to be acted upon by PD, faculty, and residents.

Interpretation

- According to Holmboe and others, milestones data offers a valid and reliable predictive tool that offers guidance for the programs to make formal decisions according to the resident's progress and needs. Also, this might even extend to provide some prediction on the level of the resident's readiness to face clinical practice.
- Local factors may have played a role such as that more supervisors were program graduates in cohort two than in cohort one. Still, as accreditation standards stress investment in faculty development, we can still attribute success to accreditation.

Conclusion

- The introduction of the ACGME-I accreditation was associated with increasing residents' achievements.
- Similar to other international studies, Milestones proved to be a promising instrument for competency acquisition in Abu Dhabi AHS family medicine program.
- The correlation between the graduation in-training exam and graduation milestones with earlier milestones suggests a possible use of early milestones in predicting outcomes.
- Processes used and work in progress with EPA can show better outcome
- Involving residents more is an area of work in the future



Thank You





Dr. James Arrighi President and Chief Executive Officer ACGME-International

Dr. James Arrighi is the President and Chief Executive Officer of ACGME-International. He completed his Bachelor of Science and Medical Doctor degrees at Brown University in Rhode Island, USA. He then completed training in internal medicine, cardiology, and nuclear medicine at Washington University in St. Louis, the National Institutes of Health, and Yale University School of Medicine. Before joining ACGME, Dr. Arrighi served as a program director for the cardiology fellowship, and as director of graduate medical education, at Brown University and Rhode Island Hospital. He is a Professor of Medicine, Diagnostic Imaging, and Medical Science at Brown, and received several faculty awards for teaching. For over two decades, he has mentored residents and fellows; he has published over 70 peer-reviewed publications and has delivered over 130 national or international invited lectures. He joined the ACGME-International in September 2021





Introduction to Clinical Educator Milestones

Dr. James Arrighi, M.D.* President and CEO ACGME-International Professor of Medicine, Brown University

Laura Edgar, EdD* Vice President, Milestones Development ACGME



*Employee of ACGME, otherwise no disclosures

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The Need for Clinician-Educator Milestones

- How do you define a competent clinician-educator?
- How is this different from a competent clinician?
- How should clinician-educators be assessed?

ACGME-I has heard from you that there is a need to answer these questions!



Clinician-Educator Milestones: Background

- CEM are designed to aid Clinician Educators in their educator professional development
- They are designed for educators across the continuum of medical education
- Can be used as a self-assessment tool to improve in specific subcompetencies or to develop skills in areas you are hoping to work (e.g., planning to become a program director)



Milestones: Review

| Level | Dreyfus Stage | Description (clinical reasoning example) |
|-------|-------------------|---|
| 1 | Novice | Rule driven; analytic thinking; little ability to prioritize information |
| 2 | Advanced beginner | Able to sort through rules based on experience; analytic and non-analytic for some common problems |
| 3 | Competent | Embraces appropriate level of responsibility; dual processing of reasoning for most common problems; can see big picture; Complex problems default to analytic reasoning. Performance can be exhausting. |
| 4 | Proficient | More fully developed non-analytic and dual process thinking; comfortable with evolving situations; able to extrapolate; situational discrimination; can live with ambiguity |
| 5 | Expert | Experience in subtle variations; distinguishes situations |

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Structure of C-E Milestones

UNIVERSAL PILLARS

Reflective Practice and Commitment to Personal Growth Well-Being Recognition and Mitigation of Bias Commitment to Professional Responsibilities

EDUCATIONAL THEORY AND PRACTICE

Teaching and Faculty Learning Professionalism in the Learning Environment Learner Assessment Feedback Performance Improvement and Remediation Programmatic Evaluation Learner Professional Development Science of Learning Medical Education Scholarship Learning Environment Curriculum



The Clinician Educator Milestones are not an ACGME accreditation requirement and are not intended to become one in the future.

DIVERSITY, EQUITY, AND INCLUSION IN THE LEARNING ENVIRONMENT

Diversity, Equity, and Inclusion in the Learning Environment

ADMINISTRATION

Administration Skills Leadership Skills Change Management Version 1

Clinician Educator Milestones, ACGME, ACCME, AAMC, AACOM Worksheet

| Level 1 | Level 2 | Level 3 | Level 4 | Level 5 |
|--|--|---|--|--|
| Discusses the goals and principles of both formative and summative assessment | Uses appropriate methods and tools for assessment in a specific setting | Uses assessment data to identify strengths and opportunities for improvement of learners | Educates others, and when necessary, advises on selection and use of appropriate assessment methods and tools | Designs and implements evidence- based assessment methods and tools |
| Comments: | | | | |

Educational Theory and Practice 3: Learner Assessment Overall Intent: To apply and develop principles of formative and summative assessment to improve performance

| Milestones | Examples |
|--|--|
| Level 1 Discusses the goals and principles of both formative and summative assessment | (U/G/C): Explains the difference between summative and formative assessment to a learner |
| | (U/G/C): Describes when a formative versus summative evaluation should be used |
| Level 2 Uses appropriate methods and tools for assessment in a specific setting | (U/G/C): Differentiates when to use a global assessment versus more focused assessment of performance |
| | (U/G/C): Employs pre/post-test to assess knowledge/skill/competence after an educational activity |
| | (U/G/C): Uses daily feedback forms to provide formative assessment |
| | • (U/G/C): Provides daily verbal feedback to learners to help learners prepare for similar |
| | cases during a subspecialty rotation |
| | (U/G/C) Ensures assessment is based on learning objectives |
| Level 3 Uses assessment data to identify strengths and opportunities for improvement for | (U/G): Utilizes training exam data and faculty evaluations from a clinical rotation and identifies areas for improvement |
| the learner | • (G/C): Uses patient outcomes and patient experience surveys to identify areas of |
| | strength for a learner |
| Level 4 Educates others on selection and use | • (U/G/C): Assists faculty members in selecting optimal assessment, (e.g., intent to |
| of appropriate assessment methods and tools | change, knowledge tests, practice improvement measurement) |
| | (U/G/C): Advises colleagues against using the Milestone Reporting Worksheet as an |
| Level C Desima endimentemente evidence | assessment tool |
| Level 5 Designs and implements evidence- based assessment methods and tools | (U/G/C): Creates post-activity assessment tools such as intent to change and/or practice improvement measurement |
| | (U/G/C): Develops daily feedback forms to use in a clinical setting |
| | • (U/G): Develops and guides the use of a summative rotation assessment form that |
| | collates all feedback from the rotation in a manner that lets the learner know how they |
| | performed during the entire educational experience |
| | • (G): Designs and creates evaluations or assessments with the intent of informing Milestone evaluations |
| Assessment Models or Tools | Direct observation |
| | Education portfolio |
| | Continuing professional development/maintenance of certification activities in practice |
| | Multisource feedback |
| | • OSTE |
| Notes or Resources | Learn at ACGME https://dl.acgme.org/ |
| | • Twelve Tips for Programmatic Assessment DOI: 10.3109/0142159X.2014.973388 |



The Ultimate Goal: Application to Career Development

