

The University of Arizona College of Medicine-Phoenix

GME Program Milestone Project

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GME Program Milestones Work
Group

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Intent of the University of Arizona College of Medicine-Phoenix GME Program Milestones

The GME Program Milestones provide a framework for evaluation of programs in domains that are current challenges in GME to provide a shared mental model and integrated tools to facilitate continuous improvement. They may change over time as structure and process makes achieving high levels for all programs routine. Programs will use these milestones for self-assessment and program performance will guide institutional improvements. They are designed for:

- Program Directors
- Program Evaluation Committee Members
- Institutional GME leaders

Each subcompetency covers a different area of educational programs and offers stand-alone assessment of a specific program requirement. While all programs will self-assess on all subcompetencies as part of the APE, it will only select a few for annual action plans.

Project goals:

1. **Defining Program Competencies, Sub-Competencies & Milestones to Create a Shared Mental Model:** The first step in CBME was establishing the 6 general competencies which serve as scaffolding for subcompetencies and specific milestones. Milestones 2.0 created more consistency across specialties in competencies other than medical knowledge and patient care.
2. **Enhance Program and Institutional Evaluation:** Having Program Milestones creates the opportunity to define the outcomes for Program Evaluation Committees (PEC) to evaluate the program and implement action plans for improvement. Just as the CCC Milestones synthesis is as much a measure about the program's performance as it is about the performance of the individual resident or fellow, the evaluation of program milestones will serve as a measure of the institution.
3. **Modify Evaluation Tools to Match the Milestones:** When data sources are aligned to inform specific program competencies and sub-competencies, it will provide programs with more meaningful data to recognize strengths and areas of opportunities for growth.
4. **Impact of Programs Model Behaviors of Master Adaptive Learners:** With programs and trainees each utilizing the same construct, it can build empathy and understanding in how to best communicate the opportunities for change and the power of "yet".
5. **Display data in a way to drive improvement and connect with resources:** A comprehensive and efficient data system will free time to focus on action plans and other high yield efforts.
6. **Enhance Faculty and Trainee Understanding of Milestones:** When defining the program milestones, the language, anchors and construct used for resident and fellow assessment milestones was deliberately used to reinforce the connections and understanding.
7. **Create a Model That May Be Adopted by Other Institutions:** By evaluating the outcomes, other institutions/programs can consider the value of implementation, and by preparing tools to facilitate adoption, they can replicate and modify for their institution/program.

Understanding Milestone Levels

This document presents the UArizona COM Phoenix GME Program Milestones. Milestones are knowledge, skills, attitudes, and other attributes organized in a developmental framework. The narrative descriptions are targets for performance. Milestones are arranged into levels. Tracking from Level 1 to Level 5 is synonymous with moving from novice (ACGME minimal compliance) to expert (institutional/national leader).

Selection of a level implies the program substantially demonstrates the milestones in that level, as well as those in lower levels (see the diagram on page 4).

Level 1: A novice program that is meeting the ACGME defined minimum expectations in the subcompetency

Level 2: Program who demonstrates the attributes of an advanced beginner

Level 3: Program is competent in achieving subcompetency related outcomes

Level 4: Program is a proficient learner in achieving subcompetency related outcomes

Level 5 Program's attributes represent an expert in achieving subcompetency related outcomes

Milestones are designed for formative, developmental purposes to support continuous quality improvement for individual learners, education programs, and the specialty. The UArizona COM Phoenix will continue to evaluate and perform research on the Milestones to evaluate their impact and value.

Milestones have been developed by the Accreditation Council for Graduate Medical Education (ACGME) for [every accredited specialty and subspecialty](#). Additionally, Educator Milestones have been created for clinician teachers. This is the first known example of milestones where the program as the learner

The diagram below presents an example set of milestones for one subcompetency. Performance on the milestones for each subcompetency will be indicated by selecting the level of milestones that best describes knowledge, skill, and/or ability in relation to those milestones.

Faculty Teaching 1: Faculty Evaluation				
Level 1	Level 2	Level 3	Level 4	Level 5
The program has a process to provide actionable feedback that is anonymous and confidential, from multiple sources, and part of a broader discussion with the PD or other leader on an annual basis (and as needed)e	The program provides education to faculty regarding the process for annual feedback as a sign of the program valuing the topic	When asked, faculty know the program's process for distributing anonymous feedback from multiple sources on at least an annual basis.	Program has evidence that the process to provide actionable feedback that is anonymous and confidential, from multiple sources, and part of a broader discussion with the PD or other leader, is occurring on an annual basis (and as needed)	The Program has evidence of outcomes as a result of the distribution of feedback to faculty
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: <div style="float: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				

Selecting a response box in the middle of a level implies that milestones in that level and in lower levels have been substantially demonstrated

Selecting a response box on the line in between levels indicates that milestones in lower levels have been substantially demonstrated as well as **some** milestones in the higher level(s).

Faculty Teaching 1: Faculty Evaluation				
Level 1	Level 2	Level 3	Level 4	Level 5
The program has a process to provide actionable feedback that is anonymous and confidential, from multiple sources, and part of a broader discussion with the PD or other leader on an annual basis (and as needed)e	The program provides education to faculty regarding the process for annual feedback as a sign of the program valuing the topic	When asked, faculty know the program's process for distributing anonymous feedback from multiple sources on at least an annual basis.	Program has evidence that the process to provide actionable feedback that is anonymous and confidential, from multiple sources, and part of a broader discussion with the PD or other leader, is occurring on an annual basis (and as needed)	The Program has evidence of outcomes as a result of the distribution of feedback to faculty
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Faculty Teaching 2: Faculty Development in Teaching				
Level 1	Level 2	Level 3	Level 4	Level 5
The program provides opportunities or faculty development as a sign of the program valuing the topic	When asked, faculty know how to access faculty development opportunities Core faculty, APDs and residency/fellowship faculty are satisfied with the opportunities for faculty development	Core faculty, APDs and residency/fellowship faculty are attending faculty development	The program has evidence that the faculty are actively participating in faculty development and use it to inform future sessions and the programs FD offerings.	The Program has evidence of educational outcomes as a result of the regular integration of faculty development this in the work of the faculty.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Faculty Teaching 3: Quality of Teaching - didactic and clinical				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>The Program has written expectations that faculty be present at conferences and spend time teaching on rounds and in didactics.</p> <p>The program has a supervision policy that meets the ACGME requirements and reviews it annually with residents/fellows and faculty.</p>	<p>Residents/fellows agree to some of the following- that the program and faculty are committed to education, that the didactics are high quality.</p> <p>Residents/fellows and faculty are aware of the supervision policy.</p>	<p>Residents/fellows agree to most of the following- that the program and faculty are committed to education, that the didactics are high quality.</p> <p>Residents/fellows and faculty regularly apply the supervision policy with communicating when needed and providing direct supervision when required in the policy.</p>	<p>The program has evidence beyond general resident/fellow & faculty perception that the didactics are high quality through demonstrated outcomes).</p> <p>The program tracks the occurrence of situations requiring direct communication and direct supervision and uses it to improve patient care and education.</p>	<p>The Program has evidence of educational and patient care outcomes as a result of the didactics and supervision process.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Feedback & Assessment 1: Timeliness				
Level 1	Level 2	Level 3	Level 4	Level 5
The program assigns evaluations to faculty and sends out reminders for completion of assessments within two weeks of the completion of the rotation.	When asked, faculty, residents/fellows know that the program has a requirement for all faculty to complete evaluations in a timely fashion.	Residents/fellows are satisfied with the timeliness of assessments.	Program regularly uses data about timely completion of assessments to maintain or improve the process.	Program is sharing its best practices for achieving timely completion of assessments with other programs.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Feedback & Assessment 2: Assessment Methods/Process				
Level 1	Level 2	Level 3	Level 4	Level 5
The evaluations of the trainees are linked to specialty specific milestones.	Residents/fellows agree that they receive semi-annual feedback on their progress towards the milestones and the evaluation is documented in new innovations.	Annually, all trainees have at least one documented assessment focused on direct observation of a specific clinical skill relevant to the specialty/sub-specialty.	The program annually makes adjustments to enhance the value of assigned assessments.	The program's process is a role model for competency-based assessment utilizing emerging tools and making regular updates. They regularly share best practices with others.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Feedback & Assessment 3: Quality of Feedback				
Level 1	Level 2	Level 3	Level 4	Level 5
Faculty members directly observe, evaluate, and frequently provide feedback on resident performance during each rotation or similar educational assignment.	Most narrative feedback comments from faculty are clear, specific, frequent, focused on actions.	The CCC and or PD provide at least annual program (and individual when appropriate) level faculty development on methods to improve the quality and reliability of completed assessments.	Members of the CCC agree that the quality of assessment feedback is sufficient to make decisions regarding progression, disciplinary action, and independent learning plans. In general, Residents/Fellows are satisfied with the quantity and quality of feedback they receive.	Program is sharing its best practices for achieving high quality feedback with other programs.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Patient Safety & Quality Improvement 1: Event Reporting				
Level 1	Level 2	Level 3	Level 4	Level 5
Education provided to residents/fellows and faculty on an annual basis regarding how to report an event and what happens after reporting	When asked, residents/fellows know how to report a patient safety event	Residents/fellows apply the knowledge of how to report an event in the system by reporting at least one event per year.	Program has evidence that the residents/fellows can show how to report events and discuss the importance of such.	The Program has evidence of patient level outcomes as a result of the regular integration of this in the work of the residents/fellows
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Patient Safety & Quality Improvement 2: Event Analysis				
Level 1	Level 2	Level 3	Level 4	Level 5
Education provided to residents/fellows and faculty on how to analyze a patient safety event	When asked, residents/fellows know how to analyze a patient safety event	Residents/fellows apply the knowledge of how to analyze an event in the system by participating in simulated or real event analysis.	Program measures how many residents participate in the analysis of a patient safety event and uses the data to improve.	The Program has evidence of patient level outcomes as a result of the program/resident engagement in patient safety event analysis.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Patient Safety & Quality Improvement 3: QI Project				
Level 1	Level 2	Level 3	Level 4	Level 5
Education provided to residents/fellows and faculty on quality improvement principles	When asked, residents/fellows indicate that they have opportunities to be or are involved in a quality improvement project	Residents/fellows apply the knowledge of quality improvement in a project that aims at improving patient outcomes and serves as a lead in the work.	Program measures how many residents participate in QI projects and uses the data to improve.	The Program has evidence of patient level outcomes as a result of the program/resident engagement in QI activities.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Equity, Diversity & Inclusion 1: Pathway/Recruitment				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Program engages in practices that focus on mission-driven, ongoing, systematic recruitment and retention of a diverse and inclusive workforce of residents/fellows</p>	<p>Program has conducted a basic SWOT analysis to identify strengths and weaknesses in current recruitment strategies and has started to gather data on recruitment practices and demographics.</p> <p>Program has constructed a strategic plan for DEI recruitment including at least one of the following:</p> <ul style="list-style-type: none"> • Holistic review • diversity/bias training of interviewers • Standardization of interview structure • digital/virtual interview of all applicants • participation in recruitment fairs/events of Underrepresented in Medicine (URiM) applicants or pathway programs 	<p>Program utilizes data-driven* approaches to assess the effectiveness of recruitment efforts</p> <p>AND is engaging in at least 1 of the following:</p> <ul style="list-style-type: none"> • Engages with URiM communities and organizations for recruitment purposes • Implemented universal Faculty and staff training in diversity recruitment <p>*Data Sources: ERAS reports, ACGME survey, retention and other data sources</p>	<p>The program is meeting its mission-driven recruitment goals and has quantitative or qualitative data that demonstrate success.</p> <p>Program regularly reviews and updates recruitment strategies based on data and feedback.</p> <p>Program has active participation in DEI recruitment initiatives at an institutional and regional level.</p>	<p>The program is exceeding national benchmarks and is emerging or established as a recognized national leader in DEI recruitment practices.</p> <p>Has published or is working on scholarly work aimed at successful DEI recruitment strategies.</p> <p>Routinely shares best practices and mentorship with other programs nationally.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Equity, Diversity & Inclusion 2: Health Disparities and Curriculum				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Program engages in practices that focus on mission-driven initiatives focused on addressing health disparities (AHD).</p> <p>These practices are present in the curriculum, reviewed in the PEC, and the program has performed a SWOT analysis for these issues.</p>	<p>The program has integrated health disparities (HD) content into the core curriculum which is regularly assessed and updated.</p> <p>Formal Faculty development has been offered to provide training on HD.</p> <p>The program evaluates and collects data on the impact of ADH and social determinants of health (SDOH) in at least one setting.</p>	<p>The program utilizes data-driven approaches to assess the effectiveness of HD curricula</p> <p>AND is engaging in at least 1 of the following:</p> <ul style="list-style-type: none"> Engaging community leaders on strategy, outreach, and events Implemented universal faculty and staff training on HD. 	<p>The program has comprehensive integration of HD in the curriculum and a formal structure for trainee evaluation in this area.</p> <p>Uses data and feedback to guide at least one program led longitudinal project in ADH/SDOH</p> <p>Has at least 1 specific community partnership that address specific HD issues.</p> <p>Program has created a formalized trainee roles focused on ADH/SDOH issues.</p>	<p>The program is a national leader on health disparities education/curricula.</p> <p>Program has collected and demonstrated outcome data that shows success in a strategic plan focused on ADH/SDOH.</p> <p>Routinely shares best practices and mentorship with other programs nationally.</p> <p>Curriculum serves as a model for other programs.</p> <p>Program is regularly generating QI/scholarly work and share best practices widely.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Equity, Diversity & Inclusion 3: Inclusive Environment				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Program engages in practices that focus on mission-driven, ongoing, systematic recruitment and retention of a diverse and inclusive workforce of residents/fellows</p> <p>Has identified opportunities to develop formal practices that promote inclusivity.</p> <p>Program recognizes the importance of an inclusive environment and has identified specific goals for improvement in this area.</p>	<p>The program has conducted an initial climate survey to assess inclusivity and culture.</p> <p>Program has developed basic practices to address inclusivity but lacks comprehensive implementation.</p> <p>Program has begun implementing faculty development/training in creating inclusive culture.</p>	<p>Program regularly conducts climate surveys and uses the data to make improvements.</p> <p>Program has implemented at least one of the following for trainees and faculty:</p> <ul style="list-style-type: none"> • Implicit bias training • Anti-racism training • Upstander training • Identifying Microaggressions • Changes to the orientation/welcoming process for new matriculants that focus on inclusive culture • Implemented a formal faculty-trainee mentorship infrastructure aimed at addressing gaps with URiM trainees. 	<p>The program is using collected data to further guide strategic interventions in inclusive culture (training, team building, etc)</p> <p>Program can demonstrate the following:</p> <ul style="list-style-type: none"> • Faculty and program leadership make-up that reflects community demographics • Measurable improvements in inclusivity and resident/fellow satisfaction on GME/ACME surveys • Trainee mentorship focused on supporting underrepresented individuals/groups 	<p>Program is a national example for creating and sustaining an inclusive environment as demonstrated by nationally/regionally recognized QI/scholarly work in this area.</p> <p>Routinely shares best practices and mentorship with other programs internally and nationally.</p> <p>Program is routinely performing above national benchmarks/averages for inclusion of URiM trainees .</p> <p>Has demonstrated successful interventions aimed at retention of diverse internal candidates for faculty.</p> <p>Program leadership and core faculty closely mirror local/regional demographics.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Well-being 1: Access to Mental Health and PCP Appointments				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>The program supports residents and fellows who request time off for personal/family* medical and mental health appointments by following the banner health and GME policies.</p>	<p>The program has a written procedure shared with residents/ fellows annually for residents/fellows to allow time off in advance for personal/immediate family medical and mental health appointments.</p>	<p>The program’s residents/ fellows and faculty can describe the procedures for requesting and accessing time off in advance for personal/immediate family medical and mental health appointments.</p> <p>The program has dedicated time in the schedule for all residents/fellows to attend to medical and mental health appointments at least several times a year.</p>	<p>The program’s residents/fellows actively apply and utilize the procedure for requesting and accessing time off in advance for personal/immediate family medical and mental health appointments.</p> <p>The program reminds and reinforces the value of residents/fellows utilizing their dedicated time in the schedule to attend to medical and mental health appointments at least several times a year.</p>	<p>The program is an institutional and/or national model for policy, resources, education, and positive culture around providing time away for personal/immediate family medical and mental health appointments. Other programs look to your program for guidance and advice on this topic.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Well-being 2: Fatigue Management				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>The program supports residents and fellows who request transition of care when maximally fatigued.</p> <p>All residents/fellows & faculty receive training to recognize the signs of fatigue and sleep deprivation, alertness management & fatigue mitigation processes.</p>	<p>The program has a written procedure shared with residents/ fellows annually that highlights resources and processes for getting assistance when house staff are maximally fatigued.</p>	<p>The program's residents/ fellows and faculty can describe the procedures for identifying and supporting a resident/fellow who is maximally fatigued.</p>	<p>The program's faculty and residents/fellows are comfortable requesting and apply the procedure when maximally fatigued and utilize it.</p>	<p>The program is an institutional and/or national model for policy, resources, education, and positive culture around fatigue mitigation. Other programs look to your program for guidance and advice on this topic</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Well-being 3: Psychological Safety				
Level 1	Level 2	Level 3	Level 4	Level 5
The program is inclusive of all residents/fellows and keeps them from harm. It allows them to be themselves and accepts them for who they are, including their unique attributes and defining characteristics.	The program satisfies the needs of all residents/fellows to learn and grow. They feel safe to ask questions, give and receive feedback, try new things, and even make mistakes.	The program regularly engages residents/fellow to share ideas for improvement and incorporates these ideas in meaningful ways to improve the program.	The program welcomes challenging feedback provided by residents/fellows to make the program better. Residents/fellows feel safe to speak up and challenge the status quo. The program communicates progress on the desired opportunities to change or improve.	The program is an institutional and/or national model for policy, resources, education, and positive culture around improvement and gathering and receiving feedback. Others look to your program for guidance and advice on this topic
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scholarly Activity 1: Education about Research				
Level 1	Level 2	Level 3	Level 4	Level 5
Education about research principles is provided as a sign of the program valuing the topic.	Residents/fellows indicate that the education provided meets their needs.	Residents/fellows apply their education around research principles to pursuing scholarly projects to investigate clinical questions.	Program has evidence that the residents/fellows apply their knowledge of research principles through the implementation.	The Program has evidence of improved patient level outcomes because of the regular integration of education about research to clinical questions.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scholarly Activity 2: Resources				
Level 1	Level 2	Level 3	Level 4	Level 5
Education is provided regarding existing resources to support the pursuit of scholarly questions.	Residents/fellows can demonstrate how to access mentors and resources to support their scholarly questions.	Residents/fellows utilize faculty mentors to pursue scholarly activity.	Program tracks data about the use of faculty mentors and other resources to support the aims around scholarly activity.	<p>The Program has evidence of patient level outcomes improved because of the scholarly activity conducted by residents/fellows.</p> <p>The program shares their model for supporting scholarly activity with other programs locally and nationally.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scholarly Activity 3: Dissemination				
Level 1	Level 2	Level 3	Level 4	Level 5
The program promotes the value of dissemination by allowing time for presentations	<p>Faculty mentor residents/fellows on the dissemination of their projects.</p> <p>The majority of residents/fellows disseminate their projects through scholarly presentations within AZ</p>	The majority of residents/fellows disseminate their projects through scholarly presentations outside of AZ or with publication	The program tracks scholarly output to implement changes in the process of mentoring and support.	The Program has evidence of improved patient or system level outcomes because of the scholarly activity of residents/fellows
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>