# TRANSITIONS IN MEDICAL EDUCATION

Practical Guidance to Support Important Transitions:
Residency to Fellowship

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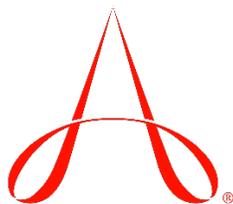
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# Acknowledgements

# Executive Summary

The COVID-19 pandemic has resulted in variable but persistent levels of disruptions of graduate medical education (GME) for over two years, affecting clinical education and training for residents and fellows across multiple specialties. COVID-19 frontline specialties, such as emergency medicine, family medicine, internal medicine, pediatrics, and pulmonary and critical care, experienced intense periods of caring for COVID-19 patients while sacrificing other educational experiences. Those residents not directly involved in caring for COVID-19 patients experienced variable disruptions, such as reduction in procedures and elective and required rotations, as their institutions adjusted to pandemic surges. Residents have likely acquired increased competence in many abilities while, in others they may not be as fully developed due to the pandemic. This does not mean these residents are not ready to enter fellowship, but rather that they may require a modified transition.

This toolkit is offered as a resource to all residency and fellowship programs to assist residents making the upcoming transition to fellowship programs. The development of the toolkit was coordinated by a team from the ACGME, American Board of Medical Specialties (ABMS), and the American Osteopathic Association (AOA). The toolkit was also shared with multiple organizations to seek feedback and input into the contents. Each section in this toolkit provides more detailed guidance on what residency and fellowship programs can do to facilitate a smooth transition into fellowship for learners this summer. The summary core recommendations are:

1. The residency program should strive to complete as accurate an assessment as they possibly can of each graduating resident this spring. The results of the various assessments during the final year of residency (e.g., direct observations, faculty and multi-source evaluations, in-training examination scores) should be reflected on the final Milestones assessment. This will facilitate the development of a more effective transition plan and set of actions for a graduating resident, should the program director determine the resident is ready to transition to fellowship. As noted below, this will also support the receiving fellowship program director in creating an effective initial individualized learning plan (ILP) with their new fellow(s).
2. The graduating resident should complete a self-assessment and ILP around their upcoming transition, ideally as part of a conversation and/or exit interview with their residency program director or advisor. This initial ILP should be shared with the receiving fellowship program director. The self-assessment should include an inventory of the resident's actual clinical rotations and experiences satisfactorily completed, and those rotations and electives that were not able to be completed due to the pandemic.
3. The receiving fellowship program directors should meet before or during orientation with each new fellow to review the final Milestones and self-assessment, and create, or update and revise the initial ILP.
4. Both the residency and fellowship program should provide and review the ACGME's *Milestone Guidebook for Resident and Fellows* with new fellows.
5. Fellowship programs might consider some version of an orientation bootcamp focused on essential competencies needed to successfully begin fellowship in the subspecialty.

These recommendations are ***not mandates***; each residency and fellowship program will need to tailor approaches based on local needs and resources. These are intended as tools to assist the transition for those who have experienced education and training disruption because of COVID-19.

Practical Guidance to Support Important Transitions: Residency to Fellowship

# Table of Contents

Practical Guidance to Support Important Transitions: Residency to Fellowship

# Background

The COVID-19 pandemic took firm root in March 2020. Multiple additional surges have occurred affecting different regions of the US at different times. The Omicron Variant surge in late 2021 and early 2022 has been different – almost all regions of the country experienced the surge at the same time or within weeks of each other.

Over the last two years, the graduate medical education (GME) system has experienced variable but persistent levels of disruption, affecting the majority of clinical education and training for graduating residents and fellows. These reductions, disruptions, and alterations affected both the quantity and quality of educational and clinical experiences. A summary of these issues and factors is provided below.

## Summary of Key Factors and Issues

- Breadth of clinical experience. GME programs are deliberately designed to provide a breadth of clinical experience within a discipline; this has been impacted during the pandemic.
    - Altered clinical rotations. This includes scheduled rotations that were disrupted by either a high load of COVID-19 patients or loss of exposure to other diseases and clinical conditions.

    - Loss of elective time and/or rotations (e.g., pulled to care for COVID-19 patients). This was a major issue in the winter of 2021-2022 due to residents and fellows contracting COVID-19 necessitating quarantine and pulling of other learners to cover clinical services.

    - Loss of ambulatory or research experiences (e.g., pulled to care for COVID-19 patients during surges or experiences canceled due to safety concerns).

- Procedural education and training. Disruptions due to the pandemic affected many specialties but have been substantial in the surgical specialties, obstetrics and gynecology, and anesthesia and have impacted:
    - Types of procedures performed

    - Volume

    - Resident/fellow role in the procedure

    - Nature of supervision by faculty members

- Repetition and depth of clinical experience. Repetition and depth of clinical experience are essential for the development of ultimate expertise and mastery. GME lays the foundation for continued professional development into practice. Many experienced fewer opportunities.

- Disrupted flow of patients for procedures. This impacted experience with diagnostic and interventional testing and treatments, such as screening tests (i.e., mammography, diagnostic endoscopy), low acuity conditions (i.e., neurophysiologic testing), and interventional procedures (i.e., stent placement for non-urgent vascular conditions).

- The epidemiology of patients seen was substantially disrupted in many specialties, especially primary care.

- Assessments. Assessments have been substantially altered in multiple competency domains. The pandemic has also exposed the serious limitations of an over-reliance on "proxy" measures, such as "dwell time," examinations, and judgments about competence made using proxies, such as case presentations and sign-outs about patients, including:

    o Reduction in direct observation assessments

    o Lack of assessments of the other essential, non-medical knowledge and patient care competencies: interpersonal and communication skills, practice-based learning and improvement, and systems-based practice. This was a significant problem prior to the pandemic, and it has been exacerbated over the last two years. The situation with assessing professionalism has been more mixed given the heroism demonstrated by many residents and fellows.

- Feedback, coaching, and mentoring. All have been disrupted. These are all essential to effective professional development.

This toolkit was created by a work group with members from the GME-to-practice continuum to help address these issues in support of graduating residents. The toolkit is divided into three sections.

**Section I** provides a framework and list of possible questions residencies, fellowships, and learners should review during this transition.

**Section II** provides a matrix of possible activities to help learners and residency and fellowship programs implement a successful transition. The recommendations are ***not mandates***; each residency and fellowship program will need to tailor approaches based on specific local needs and resources.

**Section III** provides a compendium of resources to support the transition for both learners and programs. The primary goal of this guidance and resources is to facilitate a successful and seamless transition from residency to fellowship, and to create the necessary conditions to fully support young physicians' early professional development during unprecedented times. Investing in supporting all new physicians entering internship can help to facilitate their success throughout the entire residency.

Finally, an appendix provides questions to guide a resident's self-needs assessment.

# A Message from Peer Colleagues to Resident/Fellow Physicians

As we enter another year of the COVID-19 pandemic, it feels as though we have spent the majority of our education and training, whether in residency or fellowship, on the frontlines of a pandemic. We have operated on skeleton crews within our programs, sacrificed educational learning opportunities and elective time, and overcome these hardships despite physical, emotional, and mental exhaustion. We are witnesses of these unprecedented times and there is no doubt that the global pandemic has had a significant impact on our experiences; we are, in fact, united by our resiliency.

As you complete your residency and fellowship, take time to celebrate your success and accomplishments, as it has been no easy feat. The next step as you transition from residency to fellowship or to practicing physician will be both thrilling and terrifying. You have finished your foundational years and now you are about to embark on this new journey.

The ABMS, ACGME, and AOA have collaborated to create this toolkit to aid residents transitioning to fellowship or practice, and also for fellows transitioning to practice during these challenging times. It includes recommendations and guidance for you and your future institution on how to support your transition. Additionally, the toolkit includes resources on well-being and assessment to ensure that we are well-equipped with the skills needed as we endeavor to provide the best care for our patients.

We hope that this toolkit will serve as a guide in your pursuit and practice of medicine!

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Practical Guidance to Support Important Transitions: Residency to Fellowship

# Key Topics and Questions for the 2022 Transition from Residency to Fellowship

> NOTE: The topics and questions listed below are intended as a guide only. Given the COVID-19 pandemic is still evolving, residency and fellowship programs should consult their institutional policies, local health departments, and the Centers for Disease Control (CDC) regarding specific guidance for COVID-19 illness and vaccination.

## Introduction

Despite recent improvements in the Omicron Variant-fueled surge, the pandemic is still active, and is expected to continue at some level of activity into 2023. Program directors should review, update, and share with their new fellows their travel, quarantine, and sick leave policies before the new fellows matriculate into the program.

- Fellowship programs should share their COVID-19 vaccine and testing policies with incoming fellows as soon as possible. This should include the program's plans for vaccinating new fellows who may have not yet been vaccinated or have not received their booster to minimize disruption to the transition and the beginning of clinical rotations.
    - Residencies should strive to offer COVID-19 vaccines to all graduating residents if they have not yet received their vaccine or recommended booster(s).
    - Fellowships should educate fellows regarding requirements for COVID-19 testing during orientation if they become ill and how to access COVID-19 testing if needed.

- To the fullest extent possible, the leadership of residencies should meet and guide graduating residents to identify any possible gaps in their educational program or personal competencies that could affect their transition to fellowship. This needs assessment by the graduating residents in partnership with their residency and future fellowship, if possible, should address any gaps in clinical experiences, procedural practice, etc., particularly those important for the chosen subspecialty into which an individual resident has matched. The goal is to empower the graduating resident to engage in a systematic, "warm hand-off" with the fellowship program.

- Fellowship programs should work with incoming fellows to identify specific needs, review with new fellows their clinical experiences, conduct a needs assessment, and address any needs related to relocation. This initial review should result in an initial individualized learning plan (ILP) to guide the first three to six months of fellowship. Fellowship programs should consider whether they may need to organize schedules based on the incoming residents' experiences and needs assessment, the type of supervision that will be needed in the first three to six months, any changes that might be required during orientation, and specific didactics or skills labs that could be used to further identify and fill gaps.

- Fellowship programs should inform and coordinate their transition activities with their designated institutional officials (DIOs) and Graduate Medical Education Committee (GMEC). Many of the challenges and issues will be similar across fellowship programs and within each institution.

- Residency and fellowship programs should help graduating residents understand their options for access to health insurance during the transition as gaps in coverage may occur.

Provided below is a list of topic areas and specific questions that may be helpful to residency and fellowship programs. Many of these issues have been or are already being addressed by residency programs and institutions for all learners across the continuum. The questions below are provided only as a guide to assist in the transition.

## Readiness/Patient Safety

GME experiences for most incoming fellows were altered/interrupted. The entire GME system needs to ensure a culture that supports identification of possible competency gaps in new fellows because of the pandemic and supports filling those gaps while ensuring patient safety. Some key questions and issues include:

- What can the residency program and the resident do to ensure an effective hand-off from residency to fellowship?

- How should fellowship programs' orientations change (assessment and training) to identify individual learner needs?

- How should supervision change to ensure patient safety, support fellow growth positively, and not negatively impact supervisor (fellow and faculty member) well-being?

- How can graduating residents be supported in an informed self-assessment and review of their residency experience, including any significant experiential gaps?

- How will the fellowship program monitor and ensure incoming fellows are not inappropriately labeled or judged (e.g., labeling bias, first impression bias, stereotyping, racial and ethnic bias)?

- How will the fellowship programs tailor schedules if needed based on individual needs assessments and review of possible gaps encountered during residency due to COVID-19?

## Resident and Fellow Well-Being

- How can residency and fellowship programs support learners during transition pressures, such as relocation and meeting new peers?
  - Many new fellows will not have visited the community during interviews.
  - Travel and housing limitations are likely still present to varying degrees.
  - Foreign national IMGs may face additional challenges and transition pressures.

- How can life events be accommodated? Much has been put on hold; there will be needs for celebrations and memorials.

- How can fellowship programs support incoming learners' concerns about their professional competence and preparedness for fellowship?

- How will fellowship programs support the fellows' ongoing concerns and impacts on family, personal development and well-being, and overall community impacts of COVID-19?

- How will fellowship programs address the ongoing impact of current national issues in racism—personal, family, and community impacts?

- How will programs create a sense of community and belonging, especially for underrepresented minorities and foreign national IMGs challenged during the COVID-19 pandemic?

## Transition Logistics
- How will fellowship programs connect incoming learners with current fellows or faculty members who have similar life experiences?
  - Consider polling current fellows and faculty members to identify those who may have families, significant others, etc. who are willing to be linked to an incoming fellow with similar experiences/needs.
    - Connection for identification of local systems
    - Finding housing and family resources in the community

## Questions to Guide a Self-Needs Assessment
Below is a set of questions to help guide the self-reflective process for both program directors and incoming fellows regarding the experiences that may have been interrupted during residency due to the pandemic.

### Incoming Fellow Questions
- Which educational experience in residency was the *most* disrupted?

- What educational experiences in residency were *not* disrupted or were enhanced?

- Did the pandemic cause you to miss any of your core rotations or electives? If yes, which ones?

- Which clinical experiences were done in a virtual setting versus the clinical setting?

- Did the pandemic impact your ability to observe or perform procedures that are relevant to your subspecialty?

- Did the pandemic affect the nature of diversity of clinical conditions seen?

- What procedures do you believe you need additional training in due to missed opportunities given the circumstances?

- What concerns you most about the disruptions to your medical education with respect to beginning fellowship?

- How confident do you feel in your ability to look up evidence-based recommendations and access point-of-care diagnostic aids in your new subspecialty?

- Based on your residency experiences, are there additional education/training or other experiences you would like to receive during the transition period to fellowship?

- Were you able to complete elective experiences germane to your subspecialty, and if so, what skills are you bringing with you from these experiences as you transition to fellowship?

- Based upon this reflection, what education and training schedule adjustments and learning resources or experiences would be of most assistance to you? How do these reflections change your ILP?

- Did the pandemic interrupt your ability to complete rotations in certain clinical settings during residency?

- Have you taken or do you plan to take your initial certification examination this year? What have been your scores on your in-training examinations? What are your preparation plans?

## Program Director Questions

- What information would be helpful to have about your incoming fellows with respect to disruptions to their individual medical education?

- Did the pandemic interrupt incoming fellows' ability to complete rotations in certain clinical settings during residency?

- Are there specific clinical procedures or skills that you feel incoming fellows should have been exposed to be prepared for starting the F1 year in your program's subspecialty?

- What additional education and/or training could our program provide to assist incoming fellows in closing perceived gaps in their knowledge or confidence?

- How can program administrators and directors assess the skill set of their incoming fellows, considering some were able to complete elective experiences while others may not have had that opportunity?

- Some boards have seen lower pass rates on the initial certification examinations for recent graduates. How will your program be ready to support residents who may not pass their initial certification examination?

# A Message to Designated Institutional Officials (DIOs), Institutional Coordinators, and Other Leaders of ACGME-Accredited Sponsoring Institutions

The COVID-19 pandemic has introduced widespread, protracted disruption to the medical education process in the US, creating new challenges for ACGME-accredited Sponsoring Institutions as they fulfill required responsibilities for oversight and support of GME. Designated institutional officials (DIOs), institutional coordinators, clinical and academic officers, and other leaders within Sponsoring Institutions are responsible for ensuring that clinical learning environments facilitate safe, successful transitions from undergraduate medical education (UME) to GME in these altered circumstances.

Individuals with authority for overseeing GME in Sponsoring Institutions are encouraged to review this toolkit and to consider how its framework, matrix, and compendium of resources can be employed across ACGME-accredited programs. DIOs, in collaboration with GMECs at their respective Sponsoring Institutions, may wish to use this toolkit to ensure appropriate oversight and coordination of programs' efforts to address the common and specialty-specific needs of learners making the residency to fellowship transition in 2022. The DIO and GMEC may consider referring to this toolkit or its contents when providing guidance to Clinical Competency Committees (CCCs). Consistent with ACGME Institutional Review Committee (IRC) guidance, to avoid sharing information about resident/fellow performance with GMEC members (e.g., other residents) who should not have access, GMECs should not engage in CCC activities related to the assessment and remediation of individual residents/fellows.

Institutional leaders can support programs by reviewing professional development opportunities for program directors and core faculty members to ensure appropriate support for modified supervisory and educational responsibilities within and across programs. To optimize the likelihood of successful learner transitions, DIOs, GMECs, and others who engage in GME oversight may consider providing enhanced monitoring of the clinical learning environment for first-year fellows in areas including, but not limited to, supervision, clinical and educational work hours, patient safety, transitions of care, and well-being. Sponsoring Institutions can enhance efforts to optimize learner transitions by engaging clinical leaders of GME participating sites in institutional planning for the UME to GME transition in 2022. By providing targeted and integrated oversight, Sponsoring Institutions are contributing to systematic approaches that mitigate pandemic-related risks to the educational progression of new physicians.

# II. Recommendations to Facilitate the Residency to Fellowship Transition during the COVID-19 Pandemic

| Focus | March – June:<br>Residency Program | June (Orientation):<br>Fellowship Program | July – September:<br>Fellowship Program |
|---|---|---|---|
| Curricular | • Introduce residents to pertinent subspecialty Milestones.<br>• Review core clinical and evidence-based practice skills; consider using online resources for practice and self-assessments of medical knowledge in the subspecialty.<br>• Complete a needs assessment of residency experiences, including disrupted rotations and/or clinical experiences.<br>• Complete ILPs, guided by mid-year and/or final Milestones assessment.<br>• Review in-training exam scores and assist residents in thinking through preparation for their initial certification examinations. | • Review clinical and curricular residency experiences with a program director/associate program director/advisor to identify strengths and gaps.<br>• Review "can't miss" conditions in the subspecialty and/or provide a refresher education and training early in the program.<br>• Introduce and discuss with the new fellows the subspecialty Milestones.<br>• Review the ACGME's *Milestones Guidebook for Residents and Fellows* (Eno et al. 2021) in conjunction with the fellowship schedule (especially during the first three months). | • Consider revising the initial clinical rotation schedule and/or didactic curriculum based on a needs assessment.<br>• Consider pairing new fellows with more senior fellows and core faculty members for the first three months of the program.<br>• Provide more oversight and direct supervision (and define what that means, and the behaviors involved) for the new fellows as indicated (DOCC App).<br>• Continue providing didactics of "can't miss" conditions in the subspecialty.<br>• Maintain a heightened focus on core subspecialty clinical skills, consultative skills, evidence-based practice, acclimation to institutional systems. |

| Focus | March – June: Residency Program | June (Orientation): Fellowship Program | July – September: Fellowship Program |
|---|---|---|---|
| Assessment* | • Consider conducting an initial needs assessment using the subspecialty Milestones examination content outlines; can be combined with guided self-assessment (Sargeant et al 2008; Sargeant et al. 2010). <br> • Create an ILP based on the mid-year and/or final. residency Milestones assessment, using the subspecialty Milestones as the guiding framework. | • Introduce and discuss the subspecialty Milestones. <br> • Conduct or review (if completed prior to matriculation) a guided self-assessment with the subspecialty Milestones. <br> • Distribute and review the ACGME's *Milestones Guidebook for Residents and Fellows* (Eno et al. 2021). | • Frontload direct observations of core subspecialty clinical skills. <br> • Empower fellows to use evidenced-based clinical skills frameworks to request to be observed and to use for guided self-assessment (Seargant et al. 2008). <br> • Consider earlier CCC review of fellows as a check-in. |
| Advising | • Perform review of residency experiences to identify. strengths and potential gaps <br> • Develop a transition strategy or draft learning plan for fellowship that accounts for these strengths and gaps. | • Develop initial ILP (see above). <br> • Review initial six-month schedule to set goals and identify potential challenges. | • New fellows should meet with their program director or an assigned advisor monthly for the first three months. <br> • Review initial assessments and experiences with the program director and/or advisor; at a minimum, ensure at least one meeting within the first three months. <br> • Review initial ILP and revise it if needed. |

# Guidance Regarding Transition Assessments

Traditional time-based or volume-based measures for completing a residency or fellowship may not be fully achievable due to the pandemic. Each residency and fellowship program should use the principles of competency-based medical education (CBME) and the guidance below to make informed decisions about advancement, graduation, and board eligibility. Educational experiences may have been modified or disrupted through alternative forms of education, such as virtual learning, deployment to another clinical rotation or activity (e.g., ICU, ED, wards, telemedicine), or by missing a required rotation. Also, qualifications for some specialty Boards may not be program requirements, but they are typically completed during a residency or fellowship (e.g., Fundamentals of Laparoscopic Surgery (FLS) or a research thesis) and each specialty should check with the respective certification board regarding any changes. Programs should work to ensure these important activities are also completed.

CBME principles and activities have grown over the years and are used to support an entrustment decision-making process that determines whether individual residents or fellows are ready to progress to the next stage in their professional career (**Table 1**). "Entrustment decision-making" focuses on the conscientiousness, trustworthiness, discernment, and competence of the resident or fellow. The demonstration of conscientiousness, trustworthiness, and discernment supports confidence in assessment outcomes. Entrustment is grounded in the patient and educational outcomes that a graduate can deliver on the Quadruple Aim. The Quadruple Aim simultaneously improves patient experience of care, population health, and health care provider work life, while lowering per capita cost.

The ABMS, ACGME, and AOA recognize that typical metrics, such as time, volume, and specific rotations completed, may be unavailable for all residents and fellows graduating in 2022. The principles provided are the minimum required to make a defensible, high-stakes entrustment decision for an individual to complete a residency or fellowship and advance to the next stage of one's professional career during this period of disruption. It is possible that these principles will inform future CBME decisions using more robust and deeper data. The ACGME will work with programs, CCCs, the Review Committees, and the ABMS and AOA certifying boards to learn about what works for the implementation of CBME over time. **Table 2** provides guidance on assessments that programs may want to include as part of a transitional assessment if such assessments have not yet occurred. The goal is to facilitate an effective transition for residents and fellows into fellowship, clinical practice, and long-term professional development.

Practical Guidance to Support Important Transitions: Residency to Fellowship

## Table 1: Van Melle Framework for Competency-Based Medical Education

| Component | Description |
|---|---|
| **An Outcomes-Based Competency Framework** | • Desired outcomes of training are identified based on societal needs<br>• Outcomes are paramount so that the graduate functions as an effective health professional |
| **Progressive Sequencing of Competencies** | • In CBME, competencies and their developmental markers must be explicitly sequenced to support learner progression from novice to master clinician<br>• Sequencing must consider that some competencies form building blocks for the development of further competence<br>• Progression is not always a smooth, predictable curve |
| **Learning Experiences Tailored to Competencies in CBME** | • Time is a resource, not a driver or criterion<br>• Learning experiences should be sequenced in a way that supports the progression of competence<br>• There must be flexibility to accommodate variation in individual learner progression<br>• Learning experiences should resemble the practice environment<br>• Learning experiences should be carefully selected to enable acquisition of one or many abilities<br>• Most learning experiences should be tied to an essential graduate ability |
| **Teaching Tailored to Competencies** | • Clinical teaching emphasizes learning through experience and application, not just knowledge acquisition<br>• Teachers use coaching techniques to diagnose a learner in clinical situations and give actionable feedback<br>• Teaching is responsive to individual learner needs<br>• Learners are actively engaged in determining their learning needs<br>• Teachers and learners co-produce learning |
| **Programmatic Assessment (i.e., Program of Assessment)** | • There are multiple points and methods for data collection<br>• Methods for data collection match the quality of the competency being assessed<br>• Emphasis is on workplace-based assessment<br>• Emphasis is on providing personalized, timely, meaningful feedback<br>• Progression is based on entrustment<br>• There is a robust system for decision-making<br>• Good assessment requires attention to issues of implicit and explicit bias that can adversely affect the assessment process. |

**Table 2:** Core Competencies and Examples of Minimal Required Competency-Based Assessments that Could be Used during COVID-19 Disruption

| Competency | Competency-Based Assessment Options |
|---|---|
| **Medical Knowledge** | • In-training exam<br>• Feedback from multiple faculty member evaluations |
| **Patient Care** | • Work-based clinical assessment through direct observation of the individual during care delivery<br>• Feedback from multiple faculty member and peer evaluations<br>• External structured curriculums, standardized assessments, and simulation |
| **Professionalism** | • Informed self-assessment<br>• Feedback from multiple faculty member and peer evaluations<br>• Multisource feedback, such as a 360-degree evaluation |
| **Communication** | • Patient-reported feedback<br>• Feedback from multiple faculty member and peer evaluations<br>• Multisource feedback, such as a 360-degree evaluation, especially regarding interprofessional care |
| **Practice-based Learning and Improvement** | • Evaluation of knowledge, skills, and attitudes from participation in systematic efforts to improve the quality, safety, or value of health care services |
| **Systems-based Practice** | • Feedback from multiple faculty member evaluations regarding ability to practice in a complex health care system<br>• Multisource feedback, such as a 360-degree evaluation, especially regarding interprofessional care |

Practical Guidance to Support Important Transitions: Residency to Fellowship

# Statement Regarding the Impact of Implicit Bias on Performance Evaluations

Because of the variation in clinical experiences caused by COVID-19, consideration of how residency programs will determine the level of preparedness of its graduates for continued education and training in fellowships or transition into practice presents a unique challenge. 2020 saw the recrudescence of racial, ethnic, and immigrant animus, and the biases within societal structures have been further illuminated more carefully than ever before. The pandemic also further exposed deep inequities in health care with underrepresented groups experiencing worse outcomes during the pandemic. To increase the diversity of the health care workforce and provide inclusive learning environments, all must remain cognizant that implicit bias can adversely influence performance evaluations. Some may be overvalued and others undervalued based on these perceptions, perhaps to the detriment of each. An opportunity for faculty development on bias, specifically focused on evaluation of learners for competencies they bring to a new learning or clinical practice environment is included. Fair assessment, free from harmful bias, is at the core professionalism, commitment to duty and expertise, in any competency evaluation process for determination of readiness, performance, or promotion. Engage faculty members to review the material provided on recognizing and mitigating the various types of implicit bias common in medical education in preparation for welcoming the entering fellows or ensuring graduates entering clinical practice receive an accurate exit assessment that will support their transition. Making learning environments work for everyone is essential to the mission to provide safe care to patients and to successfully educate diverse learners.

# Guidance Regarding Assessment and Bias in Transition Activities

Valid, accurate assessment is essential for effective professional development. However, assessment in medical education has a long and unfortunate history of bias in the ratings and judgments of medical students and residents. Residency programs must be cognizant of and monitor for bias in assessment, especially given the major disruptions many incoming fellows have experienced during their residency education and training. As a result, bias issues may be heightened for incoming fellows this year.

There are three major categories of bias:
- **Implicit Bias**: relatively **unconscious** and relatively **automatic** features of prejudiced judgment and social behavior (Stanford Encyclopedia)
- **Explicit Bias**: the attitudes and beliefs we have about a person or group on a conscious level (Perception Institute)
- **Microaggressions**: brief, everyday exchanges that send **demeaning messages** to people because of their group affiliation (Stanford Encyclopedia)

Residency and fellowship programs must continue to actively work to reduce gender and racial/ethnic bias in assessment, and must also be vigilant for additional common biases in ratings that may be more prevalent toward incoming interns including (Dickey et al. 2017):

- **First Impression Bias**: too much weight placed on initial impressions that subsequently affects future assessments
- **Labeling Bias**: Assessment in residency affected by misinterpreting assessments or data from medical school or residency, or future assessments too heavily influenced by initial ratings and/or performance
- **Confirmation Bias**: Focusing on data that confirm an opinion and overlooking evidence that refutes it

Institutions, programs, and individual faculty members can mitigate bias through a variety of efforts and activities. On the institutional and program level, the following can be helpful (Black 2021):

- Implement unconscious bias training
- Schedule open forums to discuss diversity, equity, and inclusion
- Survey students and residents regarding their experience
- Conduct more real-time assessments and interventions that convey support and improve the learning environment more quickly
- Develop strategic plans to increase diversity among learners
- Support learners who engage in diversity work

Dr. Aba Black, who conducts implicit bias training as part of an assessment course at Yale University, notes, "while unconscious bias training has demonstrated a reduction in implicit bias, the evidence suggests we can't fully eliminate bias. More multidimensional bias training can decrease implicit bias for as many as eight weeks after training (e.g., awareness activities, training participants to be concerned about its effects, and de-bias training)" (Atewologun et al. 2018).

Work has shown that training on the nature of implicit bias is useful in recognition of that form of bias when practiced by others, but insufficient to eliminate those same biases in one's own behaviors (Pronin and Kugler 2007). Strategies that assume bias, focus on understanding the mechanism of those biases, and focus on subsequently undermining those mechanisms are the most effective in reducing implicit bias in management evaluation (Jost et al. 2009). Putative assessment of the capabilities of incoming fellows from marginalized groups based on medical school and/or residency evaluations may benefit from considering mechanisms by which implicit bias may have colored the strength of those evaluations.

Finally, the following individual-level activities can be helpful for faculty members (Black 2021):

- Be aware of your personal biases and the spectrum of social inequities
- Know your program's performance metrics for trainees and use them
- Use behavior-based, specific language when evaluating learners
- Practice mindfulness
- Use self-directed tools:
  - Gender Bias Calculator (https://www.tomforth.co.uk/genderbias/)
  - Implicit Association Test via Project Implicit. (Take a Test (harvard.edu)

Practical Guidance to Support Important Transitions: Residency to Fellowship

## References on Bias

Atewologun, Doyin, Tinu Cornish, and Fatima Tresh. 2018. "Unconscious Bias Training: An Assessment of the Evidence for Effectiveness." *Equality and Human Rights Commission Research Report 113*, accessed March 4, 2021, https://www.equalityhumanrights.com/sites/default/files/research-report-113-unconcious-bais-training-an-assessment-of-the-evidence-for-effectiveness-pdf.pdf.

Black, Aba. 2021. "Hidden Costs: Implicit Bias in Medical Education." (Presentation, Yale-ACGME Regional Hub Assessment Course, New Haven, Connecticut, February 25, 2021).

Dickey, Chandlee C., Christopher Thomas, Usama Feroze, Firas Nakshabandi , and Barbara Cannon. 2017. "Cognitive Demands and Bias: Challenges Facing Clinical Competency Committees." *Journal of Graduate Medical Education 9, no*. 2 162-164. https://doi.org/10.4300/jgme-d-16-00411.1

"Explicit Bias," Perception Institute, accessed March 4, 2021, https://perception.org/research/explicit-bias/

"Implicit Bias," Stanford Encyclopedia of Philosophy, accessed March 4, 2021, https://plato.stanford.edu/entries/implicit-bias/

Jost, J.T., L.A. Rudman, I.V. Blair, D.R. Carney, N. Dasgupta, J. Glaser, and C.D. Hardin. 2009. "The Existence of Implicit Bias is Beyond Reasonable Doubt: A Refutation of Ideological and Methodological Objections and Executive Summary of Ten Studies that No Manager Should Ignore." *Research in Organizational Behavior*, *29*, 39-69.

Pronin, E. and M.B. Kugler. 2007. "Valuing Thoughts, Ignoring Behavior: The Introspection Illusion as a Source of the Bias Blind Spot." *Journal of Experimental Social Psychology*, *43*(4), pp.565-578.

# Equity Practice and Inclusive Pedagogy for Faculty Members in GME

The ACGME has created a new course in its online learning portal, Learn at ACGME, based on a presentation by Dr. Sunny Nakae, senior associate dean for Equity, Inclusion, Diversity, and Partnership, and associate professor of medical education at the California University of Science and Medicine. The course focuses on implicit bias in performance reviews and will be especially helpful for program directors. Access the materials in Learn at ACGME. Note that a free account is required for access to most content in Learn at ACGME.

## References on Implicit Bias in Performance Evaluation

Amodio, David M., and Jillian K. Swencionis. 2018. "Proactive Control of Implicit Bias: A Theoretical Model and Implications for Behavior Change." *Journal of Personality and Social Psychology* 115(2): 255-75. doi:10.1037/pspi0000128.

Axelson, Rick D., Catherine M. Solow, Kristi J. Ferguson, and Michael B. Cohen. 2010. "Assessing Implicit Gender Bias in Medical Student Performance Evaluations." *Evaluation & the Health Professions* 33(3): 365-85. doi:10.1177/0163278710375097.

Babcock, Linda, and George Loewenstein. 1997. "Explaining Bargaining Impasse: The Role of Self-Serving Biases." *Journal of Economic Perspectives* 11(1): 109-26. doi:10.1257/jep.11.1.109.

Biernat, Monica, M. J. Tocci, and Joan C. Williams. 2011. "The Language of Performance Evaluations." *Social Psychological and Personality Science* 3(2): 186-92. doi:10.1177/1948550611415693.

Boatright, Dowin, David Ross, Patrick O'Connor, Edward Moore, and Marcella Nunez-Smith. 2017. "Racial Disparities in Medical Student Membership in the Alpha Omega Alpha Honor Society." *JAMA Internal Medicine* 177(5): 659. doi:10.1001/jamainternmed.2016.9623.

Bohnet, Iris, Alexandra van Geen, and Max Bazerman. 2016. "When Performance Trumps Gender Bias: Joint vs. Separate Evaluation." *Management Science* 62 (5): 1225-34. doi:10.1287/mnsc.2015.2186.

Goldin, Claudia, and Cecilia Rouse. 2000. "Orchestrating Impartiality: The Impact of 'Blind' Auditions on Female Musicians." *American Economic Review* 90 (4): 715-41. doi:10.1257/aer.90.4.715.

Isaac, Carol, Jocelyn Chertoff, Barbara Lee, and Molly Carnes. 2011. "Do Students' and Authors' Genders Affect Evaluations? A Linguistic Analysis of Medical Student Performance Evaluations." *Academic Medicine* 86 (1): 59-66. doi:10.1097/acm.0b013e318200561d.

Lee, Katherine B., Sanjeev N. Vaishnavi, Steven K.M. Lau, Dorothy A. Andriole, and Donna B. Jeffe. 2009. "Cultural Competency in Medical Education: Demographic Differences Associated with Medical Student Communication Styles and Clinical Clerkship Feedback." *Journal of the National Medical Association* 101(2): 116-26. doi:10.1016/s0027-9684(15)30823-3.

Mackenzie, Lori Nishiura, Shelley J. Correll, and JoAnne Wehner. 2019. "Why Most Performance Evaluations Are Biased, and How to Fix Them." *Harvard Business Review*. January 15. https://hbr.org/2019/01/why-most-performance-evaluations-are-biased-and-how-to-fix-them.

Nunez-Smith, Marcella, Maria M. Ciarleglio, Teresa Sandoval-Schaefer, Johanna Elumn, Laura Castillo-Page, Peter Peduzzi, and Elizabeth H. Bradley. 2012. "Institutional Variation in the Promotion of Racial/Ethnic Minority Faculty at US Medical Schools." *American Journal of Public Health* 102(5): 852-58. doi:10.2105/ajph.2011.300552.

Reeves, Arin N. 2014. "Yellow Paper Series. Written in Black and White: Exploring Confirmation Bias in Racialized Perceptions of Writing Skills." *Nextations*. https://nextions.com/wp-content/uploads/2017/05/written-in-black-and-white- yellow-paper-series.pdf.

Rojek, Alexandra E., Raman Khanna, Joanne W. Yim, Rebekah Gardner, Sarah Lisker, Karen E. Hauer, Catherine Lucey, and Urmimala Sarkar. 2019. "Differences in Narrative Language in Evaluations of Medical Students by Gender and Under-Represented Minority Status." Journal of General Internal Medicine 34 (5): 684–91. doi:10.1007/s11606-019-04889-9.

Ross, David A., Dowin Boatright, Marcella Nunez-Smith, Ayana Jordan, Adam Chekroud, and Edward Z. Moore. 2017. "Differences in Words Used to Describe Racial and Gender Groups in Medical Student Performance Evaluations." PLOS ONE 12 (8). doi:10.1371/journal.pone.0181659.

Sukhera, Javeed, and Chris Watling. 2018. "A Framework for Integrating Implicit Bias Recognition Into Health Professions Education." Academic Medicine 93 (1): 35–40. doi:10.1097/acm.0000000000001819.

Teherani, Arianne, Karen E. Hauer, Alicia Fernandez, Talmadge E. King, and Catherine Lucey. 2018. "How Small Differences in Assessed Clinical Performance Amplify to Large Differences in Grades and Awards." Academic Medicine 93 (9): 1286–92. doi:10.1097/acm.0000000000002323.

Trix, Frances, and Carolyn Psenka. 2003. "Exploring the Color of Glass: Letters of Recommendation for Female and Male Medical Faculty." Discourse &amp; Society 14 (2): 191–220. doi:10.1177/0957926503014002277.

# III. Available Resources to Support Transition

## Resources by Competency

### Medical Knowledge/Patient Care

- Check the resources available through the relevant **specialty society**. Many specialty societies provide multiple resources for medical knowledge and patient care skills, including board preparation materials and in-training type practice exams.

- HumanDx is a useful resource (especially for internal medicine): www.humandx.org

- View the short videos on the Society to Improve Diagnosis in Medicine (SIDM) website: https://www.improvediagnosis.org/. Here is the link to videos on clinical reasoning: https://www.improvediagnosis.org/art/

- Stanford Medicine 25 is a resource on bedside and physical examination skills: Bedside Medicine Exam Skills | Stanford Medicine 25 | Stanford Medicine

### Communication and Interpersonal Skills

- Check out DocCom for web-based modules on communication skills:
  - Three free modules

  - View a demo

- Review breaking bad or difficult news frameworks, including this one from the American Academy of Family Physicians: Delivering Bad or Life-Altering News - American Family Physician (aafp.org)

- Use the VitalTalk app to review communication skills:

- Review interprofessional teamwork competencies: Core Competencies for Interprofessional Collaborative Practice: 2016 Update

## Professionalism

- Review the [American Board of Internal Medicine Foundation Charter on Medical Professionalism](#)

- Review the [specialty-specific Milestones](#)

- Review the [ACGME's AWARE suite of well-being resources](#) in Learn at ACGME
  Note: A free account is required.

## Practice-based Learning and Improvement and Systems-based Practice

### Self-Directed Activities

- Review an ILP template and write an initial draft

- Understand the basics of reflective practice, motivation, and self-regulated learning

- Understand feedback and how to seek it

- Read the book *Thanks for the Feedback* (by Stone and Heen), on how to **receive** feedback.

### Resources

- Construct a [PICO question](#) for evidence-based practice (via University of Toronto):

- Review **R**apport, Explore **R**eactions, Explore **C**ontent, **C**oach for Change (R2C2) framework from Sargeant and colleagues at Dalhousie University

  - [R2C2 for residents](#)

- Review the ADAPT (Ask-Discuss-Ask-Plan Together) model of Feedback, via the University of Washington: [https://sites.uw.edu/uwgme/adapt/](https://sites.uw.edu/uwgme/adapt/)

# ACGME Assessment Resources

All the following resources can be found on the ACGME website. Links are embedded.

All Milestones resources can be found [here](#).

## Milestones Guidebooks and Research Publications
- [Assessment Guidebook](#) – First edition
- [Clinical Competency Committee Guidebook](#) – Third edition
- [Implementation Guidebook](#) – First edition
- [Milestones Guidebook](#) – Second edition
- [Milestones Guidebook for Residents and Fellows](#) – Second edition
- [Milestones National Data Reports with PPVs](#) – 2019 and 2020
- [Milestones Research and Reports](#)
- [Milestones Bibliography of Research](#)

## Faculty Development
- Faculty Development in Assessment courses
  - Course information, including information on the regional hubs, and registration links (when available) can be found [here](#).

- Web-based interactive [modules are available in the ACGME's online learning portal, Learn at ACGME](#)
  - These are short, 15-20-minute modules that cover basics of assessment and the Milestones.
    - Assessment 101
    - Milestones primer

## Open Access Assessment Tools
- [Direct Observation of Clinical Care (DOCC) app](#)
  - This app contains a set of evidence-based frameworks that can guide medical interviewing, clinical reasoning, informed decision-making, handoffs, breaking bad news.

- [Teamwork Effectiveness Assessment Module (TEAM)](#)
  - This is a web-based multi-source feedback assessment tool that specifically targets interprofessional teamwork.

## AOA Resources

- [Career Resources](): links to free resume review, career articles, and a database of Public Service Loan Forgiveness (PSLF) jobs

- [Career Center](): fellowship and job listings and practices

- [Financial planning resources]()

# Well-Being Resources

## ACGME

The ACGME developed COVID-19-specific well-being resources, including information about the AWARE suite of resources and app, available in Learn at ACGME: https://dl.acgme.org/pages/well-being-in-the-time-of-covid-19.

To address the challenges of the global COVID-19 pandemic on residents and fellows and their teachers, the ACGME assembled and engaged some of the nation's experts to create *Well-being in the Time of COVID: A Guidebook for Promoting Well-Being during the COVID-19 Pandemic*.

### AWARE Podcasts

- ACGME AWARE Podcast. Transition Challenges: Medical School to Residency and Residency to Practice

- ACGME AWARE Podcast. The Impact of COVID-19 on Well-Being during Training

- A four-podcast series "Cognitive Skill-Building for Well-being" explores mindsets such as impostor phenomenon and maladaptive perfectionism and how they can be managed. These can be found at the following links.
    - Episode 1
    - Episode 2
    - Episode 3
    - Episode 4

Search "ACGME AWARE" on any podcast platform for additional well-being-related podcasts from the ACGME. Other AWARE well-being resources can be found in Learn at ACGME. A free account is required to access these resources.

Practical Guidance to Support Important Transitions: Residency to Fellowship

### AAMC

Review this resource for [mindfulness in GME](#)

### AOA

[Wellness resources](#) include links to free webinars

### National Academy of Medicine (NAM)

NAM's Action Collaborative on Clinician Well-Being and Resilience has a portfolio of resources that can be helpful, including a [Clinician Well-being Knowledge Hub](#).

### WellConnect (Commercial)

The [WellConnect](#) site has several programs that medical schools, residencies, and fellowships may find helpful. There is a fee for these products.

## Resources for International Medical Graduates (IMGs)

- The [ECFMG Well-being Module](#) addresses common transitional and ongoing wellness challenges for foreign national physicians

- The [ECFMG Pre-arrival Information](#) addresses issues such as arrival in the United States, housing, transportation, and more.

- NAM has a robust library of [resources for physicians working during COVID-19](#).

- The US Centers for Disease Control and Prevention offers [Interim Clinical Guidance](#) for Management of Patients with Confirmed Coronavirus Disease (COVID-19).

- The [US State Department](#) site contains up-to-date travel requirements.

## CDC

- [COVID-19 Information](#)

- [Vaccines for COVID-19](#)

- [Science and Research](#)

# References

Direct Observation of Clinical Care (DOCC) App. n.d. ACGME. Accessible at
https://dl.acgme.org/pages/assessment.

E. Van Melle, J.R. Frank, E.S. Holmboe, D. Dagnone, D. Stockley, and J. Sherbino
(International Competency-Based Medical Education Collaborators). 2019. "A Core
Components Framework for Evaluating Implementation of Competency-Based Medical
Education Programs." *Academic Medicine* 94 (7):1002-1009.

Eno, Celeste, Ricardo Correa, Nancy H. Stewart, Jonathan Lim, Mary Elizabeth Westerman,
Eric S. Holmboe, and Laura Edgar. 2020. "Milestones Guidebook for Residents and
Fellows." Second Edition. ACGME. Accessed February 16, 2021.
https://www.acgme.org/Portals/0/PDFs/Milestones/MilestonesGuidebookforResidentsFel
lows.pdf

Sargeant, Joan, Heather Armson, Ben Chesluk, Timothy Dornan, Kevin Eva, Eric Holmboe,
Jocelyn Lockyer, Elaine Loney, Karen Mann, and Cees van der Vleuten. 2010. "The
Processes and Dimensions of Informed Self-Assessment: A Conceptual Model."
*Academic Medicine* 85(7): 1212-20. https://doi.org/10.1097/acm.0b013e3181d85a4e.

Sargeant, Joan, Karen Mann, Cees van der Vleuten, and Job Metsemakers. 2008. "'Directed'
Self-Assessment: Practice and Feedback within a Social Context." *Journal of Continuing
Education in the Health Professions* 28(1): 47-54. https://doi.org/10.1002/chp.155.

# Appendix A

# Preparing for Your Transition to Fellowship: Questions for a Self-Needs Assessment

The transition from residency to fellowship is uniquely challenging this year due to the ongoing pandemic. Some portion of most residents' residency experience was likely disrupted. Prior to arriving at the new fellowship program graduating residents/incoming fellows are encouraged perform a self-needs assessment, ideally in partnership with a trusted faculty member or advisor, to help ensure as smooth a transition as possible.

## Questions for a Self-Needs Assessment

- Which educational and clinical experiences in residency were the *most* disrupted?

- What educational experiences in residency were *not* disrupted or were enhanced?

- Did the pandemic cause you to miss any of your electives or core rotations? If yes, which ones?

- Which clinical experiences were done in a virtual setting vs. clinical setting?

- Did the pandemic impact your ability to observe or perform procedures that are relevant to your specialty and the subspecialty fellowship you are beginning?

- In what procedures do you believe you need additional education and/or training due to missed opportunities given the circumstances?

- What concerns you most about the disruptions to your residency education with respect to beginning fellowship?

- How confident do you feel in your ability to look up evidence-based recommendations and access point-of-care diagnostic aids as part of your fellowship?

- Based on your residency experiences, are there additional education/training or other experiences you would like to have during the transition period to fellowship?

- Were you able to complete elective experiences germane to your chosen subspecialty, and if so, what skills are you bringing with you from these experiences as you transition to fellowship?

- Based on this reflection, what education and training schedule adjustments and learning resources or experiences would be of most assistance to you? How do these reflections change your learning plan?

- Have you taken or do you plan to take your initial certification examination this year? What have been your scores on your in-training examinations? What are your preparation plans?

## Additional Recommendations

- Review the core clinical competencies needed for your new fellowship.

- Perform review of your residency clinical experiences – identify strengths and potential gaps that may affect your transition into fellowship.

- Ask to be observed by faculty members, if possible, seeing several patients for some last-minute coaching on clinical skills.

- Review the specialty- or subspecialty-specific Milestones (access from the applicable specialty section) and the *Milestones Guidebook for Residents and Fellows*, prior to entering your fellowship program.

- Talk with your new fellowship program director before arriving for orientation. Consider sharing your needs assessment with your new program director.

# Appendix B: Examples of Individualized Learning Plans (ILPs)

Graduating residents can use this structured worksheet to complete a learning needs assessment as they transition into the next phase of their career. After completing a draft, work with the program director, an advisor, or mentor to review and consult about the ILP.

## Example 1

### Step 1: Completing a Learning Needs Assessment

**Define Career Goals:**
Long-Term (over fellowship or into practice and beyond)

a.

b.

c.

Short-Term (next six to 12 months)

a.

b.

c.

**SELF-ASSESSMENT**

**I) Patient Care**
Compassionate, appropriate, and effective for the treatment of health problems and the promotion of health

STRENGTHS:

AREAS FOR IMPROVEMENT:

**II) Medical Knowledge**
Established and evolving biomedical, clinical, and cognate (e.g., epidemiology and social-behavioral) sciences and the application of this knowledge to patient care

STRENGTHS:

AREAS FOR IMPROVEMENT:

**III) Practice-based Learning and Improvement**
Involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care

STRENGTHS:

AREAS FOR IMPROVEMENT:

Practical Guidance to Support Important Transitions: Residency to Fellowship

## IV) Interpersonal and Communication Skills
Result in effective information exchange and teaming with patients, their families, and other health professionals

STRENGTHS:

AREAS FOR IMPROVEMENT:

## V) Professionalism
Commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population

STRENGTHS:

AREAS FOR IMPROVEMENT:

## VI) Systems-based Practice
Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value

STRENGTHS:

AREAS FOR IMPROVEMENT:

Practical Guidance to Support Important Transitions: Residency to Fellowship

## Step Two: Defining Learning Objectives

Try to come up with three objectives you will work to achieve over the next six months. Take into consideration the strengths and weaknesses you just identified earlier in the ILP process. Each Objective should try to follow the SMART criteria: Specific, Measurable, Achievable, Relevant, Time-based.

## Step Three: Identifying Strategies/Tools/Resources

Once you have set your objectives, decide what you will need to accomplish them. There may be books, new journal subscriptions, online resources, or courses you wish to take. There may be tools you need, such as an electronic calendar, a dry erase board in your office, or other organizational equipment from an office store. People may also be resource, and you may plan to set up a meeting or to have coffee with a prospective mentor or more senior faculty member to arrange research strategies, clinical experiences, career counseling, etc. You may even set up time with a peer to coordinate group study, research efforts, or board review plans.

## Step Four: Evaluating Your Learning

You need to state how you will evaluate the results of what you have planned. How will you know that you have accomplished the above? Some measures are simply that you have completed a set task. Some require more specific outcome measures. Examples for fellowship may be improved scores on in-training exams, a specific percentile on practice tests, or passing the board exam. For those entering practice, specific goals may target procedural experience, or setting goals for performance on quality and patient safety measures. Others are publication or submission of a research idea. The organizational pieces can be measured by observations from colleagues or family or self. Competencies for many positions have systems in place already to measure those.

Lastly, set a time to follow up with your practice advisor/mentor for those entering clinical practice or with the fellowship program director if entering subspecialty education and training. Decide when you will review how you did on these plans you have set forth, and likely continue to make further plans at that time.

*Created by: Moutsios, Sandra A. 2009. Adapted from Burke, Amy. "Individualized Learning Plans: Faculty as Facilitators. MedEdPORTAL. Accepted Dec. 15, 2008.*

## Example 2

| Goal | Timeline 1 | Timeline 2 | Resources Required | Challenges | Identifiable Results |
|---|---|---|---|---|---|
| Describe a specific, observable learning objective or goal (can be a milestone subcompetency) | When will you begin? | When do you expect to see results? | Identify the resources needed.<br><br>Who else will you involve?<br><br>What learning will be necessary? | What may get in the way of accomplishing the objective or goal? | How will you know the results are obtained?<br><br>What observable measures demonstrate you have achieved this objective or goal? |
| 1) | | | | | |
| 2) | | | | | |
| 3) | | | | | |

Template courtesy of Joan Sargeant. Dalhousie University, Canada