

TRANSITION IN A TIME OF DISRUPTION

Practical Guidance to Support the Move
from Undergraduate Medical Education
to Graduate Medical Education

March 2021



Introduction

The COVID-19 global pandemic has disrupted almost all aspects of life. Medical education has been no exception, but through it all, our community has exhibited remarkable innovation and resilience. Throughout the crisis, both medical students and residents have selflessly provided care for patients, oftentimes sacrificing elements of their own professional development, while deepening care to others.

As we approach a new academic year, the American Association of Colleges of Osteopathic Medicine (AACOM), the Association of American Medical Colleges (AAMC), the Accreditation Council for Graduate Medical Education (ACGME), and the Educational Commission for Foreign Medical Graduates | Foundation for Advancement of International Medical Education and Research (ECFMG | FAIMER) have come together to develop voluntary guidance, toolkits, and other resources to assist in the transition of 2021 medical school graduates into their first post-graduate year of medical education and training. This assistance is designed to support residency programs in delivering safe, high-quality patient care, as well as the well-being, professional development, and equitable treatment of incoming residents as they begin their journey to the independent practice of medicine.

Our four organizations, along with our multiple partner organizations involved in undergraduate and graduate medical education, recognize we are all in this together. It is imperative we all recognize the remarkable challenges the incoming interns have faced over the last year and the challenges they will face as they transition to residency. The incoming intern class has already demonstrated a high level of professionalism and commitment to excellent care. Medical school and residency are intensely developmental experiences, made even more so in the face of an ongoing and unprecedented pandemic. Medical schools and residency programs must take on the work of transition, emphasizing learners' well-being and professional development while also ensuring patient safety.

This toolkit was created by a work group with members from the undergraduate-to-graduate medical education continuum. It begins with an important message from the work groups' student members. The toolkit is divided into three sections.

Section I provides a framework and list of questions medical schools, residencies, and learners should review during this transition.

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

Section III provides a compendium of resources to support the transition for both learners and programs. The primary goals of this guidance and resources are to facilitate a successful and seamless transition from medical school to residency, 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 learner self-needs assessment.

Email questions regarding the transition to residency and this toolkit to umegmetoolkit@acgme.org.

A Message from Peer Colleagues to Fellow Students Entering the Transition

It should come as no surprise to hear that our final year of medical school was unlike that of any class that came before us. The global pandemic disrupted clerkships, cancelled electives, rescheduled exams, and moved residency interviews online. More gravely, some of us lost loved ones, friends, and maybe suffered illness ourselves. Now, as we look forward to the transition to residency, we once again find ourselves in uncharted territory, preparing to begin the next phase of our careers amidst uncertainty of an ongoing global pandemic, and following an interview cycle like none before.

The transition from medical school to internship is both exciting and daunting, as this new phase brings the responsibility and autonomy we have worked towards for so many years. Throughout the last year, stakeholders across the academic medicine community have worked to minimize the long-term effects of this tumultuous time on our career progression and our ability to fulfill the duties of our profession: providing safe, compassionate care for our patients. The AACOM, AAMC, ACGME, and ECFMG | FAIMER have collaborated to create this toolkit to aid incoming interns in all programs and specialties, and from all schools in the transition to residency during the unprecedentedly challenging times COVID-19 has created for our community.

This year more than ever, it is essential to ensure that the incoming intern class has a robust educational experience, especially considering some experiences in medical school may have been interrupted or cancelled entirely. To that end, we have prepared these resources to help incoming interns and program directors optimize the graduate medical education curriculum for incoming interns. Paramount in every decision we make is patient and learner safety. As you reflect on your training thus far and what the future holds, consider disruptions and missed experiences not as shortcomings but rather as a feature and opportunity for education and training in residency. No two students had the same educational experience prior to residency, but there is one commonality: every student had some portion of their experience disrupted.

The residency match and transition would bring excitement and anxiety in a normal year. Although we are members of an evidence-based profession, sometimes we fail to realize the evidence that supports our own resiliency and aptitude. As you look forward to this exciting time, there is no group of learners better equipped to successfully transition to residency. What evidence do we have? We made it through 2020.

Samuel Bunting (Class 2021)
Adiba Matin MD (Class 2021)
Shawn Hamm, DO, MPH (Class 2018)

Statement Regarding the Impact of Implicit Bias on Intern Performance Evaluation

Because of the variation in clinical experiences for this year's intern class caused by COVID-19, consideration of how receiving residency programs will determine the level of preparedness of its starting interns presents a unique challenge. In 2020, we saw the recrudescence of racial, ethnic, and immigrant animus, and the biases within our societal structures have been further illuminated more carefully than ever before. As we seek to increase the diversity of our GME workforce and to provide inclusive learning environments, we must remain cognizant that implicit bias can adversely influence performance evaluations. We may overvalue some and undervalue others based on these perceptions, perhaps to the detriment of each. We have included an opportunity for faculty development on bias, specifically focused on evaluation of interns for competencies they bring to a new learning environment. Fair assessment, free from harmful bias, is at the core our professionalism, our commitment to duty and expertise, in any competency evaluation process for determination of readiness, performance, or promotion. We urge you to engage your faculty members to review the material we have provided on the recognition and mitigation of the various types of implicit bias common in medical education in preparation for welcoming the entering interns. Making our learning environments work for everyone is essential to our mission to provide safe care to patients and to successfully educate the diverse learners we so desperately need.

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I. Key Topics and Questions for the 2021 Transition to Residency

NOTE: The topics and questions listed below are intended as a guide only. Given the COVID-19 pandemic is still evolving, medical schools and residency 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

The pandemic is still highly active, and it is expected to continue into 2022. Program directors should review, update, and share with their new interns their travel, quarantine, and sick leave policies as soon as possible after the Match.

Residency programs should establish and share their COVID-19 vaccine policies with incoming interns immediately after the Match, including the program's plans for vaccinating new interns who have not yet been vaccinated, in order to minimize disruption to the transition and the beginning of clinical rotations.

- Medical schools should strive to offer a COVID-19 vaccine to all graduating students as they are or will be 1A frontline workers and qualify for vaccination.

To the fullest extent possible, medical schools should meet with and guide students to identify any possible gaps in their educational program or personal competencies that could affect their transition to internship. This needs assessment by the graduating student in partnership with the medical school should address any gaps in clinical experiences, procedural practice etc., particularly those important for the specialty into which an individual resident has matched. The goal is to empower the graduating student to engage in a systematic, "warm hand-off" with the residency program.

Residency programs should work with incoming interns to identify specific needs, review with the student their clinical experiences, conduct a needs assessment, and address any needs related to relocation. Residency programs should consider whether they may need to organize schedules based on the incoming interns 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. Residency programs should inform and coordinate their transition activities with their designated institutional official (DIO) and Graduate Medical Education Committees (GMEC). Many of the challenges and issues will be similar across the residency programs and within each institution.

Medical schools and residency programs should help graduating students 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 medical schools and residency programs. We recognize that many of these issues have been, or are already being addressed by medical schools, residency programs, and institutions for all learners across the UME to GME continuum. The questions below are provided only as a guide to assist in the transition.

COVID-19 Safety

Vaccination Issues

How will residency programs ensure vaccination of all incoming interns?

- Will it be required?
- If so, how will tracking of which interns are vaccinated/which still need to be vaccinated be maintained?
 - How will exceptions to vaccination be managed?
 - Can medical schools ensure all graduating students have an opportunity to be vaccinated?
 - If medical schools will vaccinate, how will vaccination status be documented and what kind of vaccination documentation will suffice for the residency programs?

How will the residency program track and monitor the impact of SARS-CoV-2 variants?

- How will the residency program help to ensure booster vaccinations if they are deemed necessary?

Will there be quarantine rules? And if so, how will the residency program manage the transition to allow timely starts?

- How will the residency program establish “re-opening rules” related to vaccination status?

Will the residency program continue current COVID-19 infection policies or will revisions be needed, such as:

- Quarantine/alternate work
- Sick time

Are there visa implications for foreign national medical graduates (i.e. non-US citizens) in need of extended sick time/leave as a result of COVID-19 infection?

What are the residency program’s personal protective equipment (PPE) training and verification processes? Will these need to be revised?

Readiness/Patient Safety

UME experiences for most incoming interns were altered/interrupted. The exception is foreign national/international medical graduates, who likely would have had graduated pre-pandemic. The entire GME system needs to ensure a culture that supports identification of possible competency gaps in new/rising interns as a result of the pandemic and supports filling those gaps while ensuring patient safety.

Some key questions and issues include:

- Post-Match, how can the medical school continue to prepare their graduating students to enter residency?
- What can the medical school and learner do to ensure an effective hand-off from UME to GME?
- What role can medical schools play in new or enhanced transition-to-residency courses?
- How should the residency program's orientation change (assessment and training) to identify individual learner needs?
- How should supervision change to ensure patient safety, support intern growth positively, and not negatively impact supervisor (resident and faculty member) wellness?
- How can graduating students be supported in an informed self-assessment and review of their medical school experience, including any significant experiential gaps?
- How will the residency program monitor and ensure incoming interns are not inappropriately labeled or judged (e.g., labeling bias, first impression bias, stereotyping, racial and ethnic bias)?
- How will the residency programs tailor intern schedules if needed based on individual needs assessments and review of possible gaps encountered during medical school due to COVID-19?

Intern Wellness

- How can medical schools and residency programs support learners during transition pressures, such as relocation and meeting new peers?
 - Many learners will not have visited the community during interviews.
 - Travel and housing limitations are likely still present to varying degrees.
 - Foreign national medical graduates may face additional challenges and transition pressures.
- How can life events be accommodated? Much has been put on hold for a year; there will be needs for celebrations and memorials.
- How can residency programs support incoming interns' concerns about their professional competence and preparedness for residency?
- How will residency programs support interns' ongoing concerns and impacts of family, personal development and well-being, and overall community impacts of COVID-19?
- How will residency programs address and support intern fears of exposures/becoming ill?
- How will residency programs address the ongoing impact of current national spotlight on racism—personal, family, and community impacts?
- How will residency programs create a sense of community and belonging, especially for underrepresented minorities and foreign national medical graduates challenged during the COVID-19 pandemic?
- How will residency programs address the ongoing burden of caring for increased numbers of very ill and dying patients?

Transition Logistics

- How will residency programs handle licensure due to disruptions in the United States Medical Licensing Examination (USMLE)?
- How will residency programs connect incoming interns with current residents who have similar life experiences?
 - Consider polling current residents to identify those who may have families, significant others, etc. to help identify residents willing to be linked to an incoming intern with similar experiences/needs.
 - Connection for identification of school systems
 - Finding housing, family resources in the community
 - Consider polling current residents prior to the Match to be able to link incoming interns with a current resident as soon as possible.

Questions to Guide a Self-Needs Assessment

The following are a set of questions to help guide the self-reflective process for both program directors and incoming interns regarding the experiences that may have been interrupted during medical education due to the pandemic.

Intern Questions

- Which educational experience in medical school was the *most* disrupted?
- Did the pandemic cause you to miss any of your clerkships 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 specialty?
- In which procedures do you believe you need additional training due to missed opportunities given the circumstances?
- What concerns you most about the disruptions to your medical education with respect to beginning residency?
- How confident do you feel in your ability to look up evidence-based recommendations and access point-of-care diagnostic aids?
- Based on your medical education experiences, is there additional training or experiences that you would like to receive during the transition period to internship?
- Were you able to complete elective experiences germane to your specialty, and if so, what skills are you bringing with you from these experiences as you transition to internship?
- Based upon this reflection, what training schedule adjustments and learning resources or experiences would be of most assistance to you? How do these reflections change your learning plan?
- Did the pandemic interrupt your ability to complete rotations in certain clinical settings (ICU, inpatient, emergency department, outpatient clinic, etc.) during medical school?

Program Director Questions

- What information would be helpful to have about your incoming interns with respect to disruptions to their individual medical education?
- Did the pandemic interrupt incoming interns' ability to complete rotations in certain clinical settings (ICU, inpatient, emergency department, outpatient clinic, etc.) during medical school?
- Are there specific clinical procedures or skills that you feel students should have been exposed to in order to be prepared for starting the PGY-1 in your program's specialty?
- What additional education and/or training could your program provide to assist incoming interns in closing perceived gaps in their knowledge or confidence? For example, could you provide extra didactic lectures, simulation experiences, or clinical observations?
- How can program administrators and directors assess the skill sets of their incoming interns, considering some were able to complete elective experiences while others may not have had that opportunity?

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 United States, creating new challenges for ACGME-accredited Sponsoring Institutions as they fulfill required responsibilities for oversight and support of graduate medical education (GME). 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 the Graduate Medical Education Committees (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 UME to GME transition in 2021. 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 guidance, to avoid sharing information about resident 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.

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 residents 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 2021. 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 UME to GME Transition during COVID-19 Pandemic

Focus	March-June: Medical Schools	June (Orientation): Residency Program	July-September: Residency Program
Curricular	<ul style="list-style-type: none"> Consider hosting a “specialty bootcamp” or “introduction to the specialty” if the graduating student cannot attend a national one or one does not exist for the specialty. Review “can’t miss” conditions in the specialty or provide a refresher course (could be mini one-to-two-week clinical clerkship) Introduce learners to the specialty Milestones Review core clinical and evidence-based practice skills; consider using online resources for practice and self-assessment Complete a needs assessment of medical school experiences, including disrupted rotations and/or clinical experiences (<i>refer to Section I: Questions to Guide a Self-Needs Assessment</i>) 	<ul style="list-style-type: none"> Review clinical and curricular medical school experiences with a program director/associate program director/advisor to identify strengths and gaps Review “can’t miss” conditions in the specialty; provide a refresher course Introduce learners to the specialty Milestones Review the Milestones Guidebook for Residents and Fellows (Eno et al 2020) in conjunction with the internship schedule (especially during the first six months) Provide training in hand-offs, etc. Consider standardized hand-offs for rotational transitions (not just daily transitions) 	<ul style="list-style-type: none"> Consider revising the initial clinical rotation schedule and/or didactic curriculum based on a needs assessment Consider pairing interns with more senior residents and core faculty members for the first months of the program Provide more oversight and direct supervision (and define what that means, and the behaviors involved) for the new interns Continue providing didactics of “can’t miss” conditions in the specialty Maintain a heightened focus on core clinical skills, evidence-based practice, acclimation to institutional systems
Special Considerations for all International Medical Graduates (i.e., foreign national medical graduates and US citizen graduates of international medical schools)	<ul style="list-style-type: none"> These activities may be difficult for IMGs as many will have graduated from a medical school several years prior to matriculating to a US residency this year. The ECFMG will communicate information related to specialty milestones to incoming J-1 Visa physicians. 	<ul style="list-style-type: none"> All activities apply to IMGs. 	<ul style="list-style-type: none"> All activities apply to IMGs.

Focus	March-June: • Medical Schools	June (Orientation): • Residency Program	July-September: • Residency Program
Assessment	<ul style="list-style-type: none"> Consider conducting an initial assessment using the specialty Milestones; can be combined with guided self-assessment (DOCC App; Hauff et al 2014; Santen et al 2015) Encourage faculty members to perform three to four direct observations of core clinical skills (could use frameworks from the Direct Observation of Clinical Care (DOCC) app) 	<ul style="list-style-type: none"> Introduce learners to the specialty Milestones Conduct a guided self-assessment using the specialty Milestones Distribute and review the Milestones Guidebook for Residents and Fellows (Eno et al 2020) Perform a baseline objective structured clinical examination (OSCE) formative assessment (Lypson et al 2004; Pandya, Bhagwat, Kini 2010; CarlLee et al 2019) 	<ul style="list-style-type: none"> Frontload direct observations of core clinical skills Empower interns to use evidenced-based clinical skills frameworks to both ask to be observed and to use for guided self-assessment (Sargeant et al 2010; Sargeant et al 2008) Consider earlier CCC review of interns as a check-in
Special Considerations for International Medical Graduates (IMGs)	<ul style="list-style-type: none"> These activities may be difficult for IMGs as many will have graduated from a medical school several years prior to matriculating to a US residency this year. If an IMG is still clinically active between the Match and entry into residency, the individual could ask a peer or colleague to observe and assist them in these activities. 	<ul style="list-style-type: none"> All activities apply to IMGs. 	<ul style="list-style-type: none"> All activities apply to IMGs.
Advising	<ul style="list-style-type: none"> Perform review of third- and fourth-year clinical experiences to identify strengths and potential gaps Develop a transition strategy or draft a learning plan for internship that accounts for these strengths and gaps 	<ul style="list-style-type: none"> Develop an initial individualized learning plan Review initial six-month schedule to set goals and identify potential challenges 	<ul style="list-style-type: none"> New interns should meet with their assigned advisor monthly for the first three months, review initial assessments and experiences; at a minimum, ensure at least one meeting within the first three months Review initial individualized learning plan and revise if needed
Special Considerations for International Medical Graduates (IMGs)	<ul style="list-style-type: none"> This activity may be difficult with respect to IMGs. Programs could include questions about clinical experiences in their initial outreach to newly matched IMGs. 	<ul style="list-style-type: none"> All activities apply to IMGs. 	<ul style="list-style-type: none"> All activities apply to IMGs.

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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 interns have experienced during their medical school clinical education and training. As a result, bias issues may be heightened for incoming interns 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 of Philosophy 2021)
- **Explicit Bias:** the attitudes and beliefs we have about a person or group on a conscious level (Perception Institute 2021)
- **Microaggressions:** brief, everyday exchanges that send **demeaning messages** to people because of their group affiliation (Stanford Encyclopedia of Philosophy 2021)

Residency 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 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 levels, the following can be helpful (Black 2021):

- Implement unconscious bias training
- Schedule open forums to discuss diversity and inclusion
- Survey students and residents regarding their experience
- A more real-time assessment and intervention conveys support and improves the learning environment more quickly
- Develop strategic plan to increase diversity among trainees
- Support trainees 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 8 weeks after training (e.g., awareness activities, training participants to be concerned about its effects, and de-bias training)” (Atewologun 2018).

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](#)
 - [Implicit Association Test via Project Implicit](#)

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Equity Practice and Inclusive Pedagogy for Faculty Members in Graduate Medical Education

The ACGME has created a new course in its online learning portal, Learn at ACGME. The course is 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, "[Equity Practice and Inclusive Pedagogy for Faculty in Graduate Medical Education](#)", focuses on implicit bias in performance reviews and will be especially helpful for program directors. Note that a Learn at ACGME account is required for access; registration is free.

"[Equity Practice Inclusive Pedogagy for Faculty in Graduate Medical Education](#)" is another free presentation by Dr. Nakae available for use.

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III. Available Resources to Support Transition

Resources by Competency

Medical Knowledge/Patient Care

- [HumanDx](#)
A useful resource, especially for internal medicine
- [Society to Improve Diagnosis in Medicine](#)
This society offers videos to view, including some on [clinical reasoning](#)
- [Bedside Medicine Exam Skills | Stanford Medicine 25 | Stanford Medicine](#)
Excellent resource on bedside and physical examination skills

Clinical Skills

- [University of Utah Review Laboratory Medicine Curriculum](#)
For interpreting laboratory results
- [Suturing Videos and Online Lessons](#)
- Heart Sound Auscultation and Interpretation:
 - <https://www.practicalclinicalskills.com/heart-sounds-murmurs>
 - <https://www.easyauscultation.com/heart-sounds>
- [Harvard University Wave-Maven](#)
For electrocardiogram (EKG) interpretation
- [Yale University Neuroexam.com](#) for neurological exam review
- [East Virginia Medical School](#) imaging review course
- [Penn Medicine](#) chest x-ray review course
- [Society of US in Medical Education ultrasound review modules](#)

Mobile Apps for Clinical Skills

- VisualDx – PoC DDX aid ([iOS](#) | [Google Play](#))
- Sanford AntiMicrobial Therapy Guide ([iOS](#) | [Google Play](#))
- Sublux Radiology PoC aid ([iOS](#) | [Google Play](#))
- MDCalc ([iOS](#) | [Google Play](#))
- CDC Vaccine Schedules ([iOS](#) | [Google Play](#))
- AHRQ and USPSTF Preventive Screening Guidelines ([iOS](#) | [Google Play](#))
- Epocrates ([iOS](#) | [Google Play](#))
- Canopy Speak Medical Translation App ([iOS](#) | [Google Play](#))

Communication and Interpersonal Skills

- [DocCom](#)
Web-based modules on communication skills. This is a paid subscription service, but its free resources include:
 - [Three free modules](#)
 - [A demonstration](#)
- [Delivering Bad or Life-Altering News](#)
Review breaking bad or difficult news frameworks from the American Academy of Family Physicians
- [VitalTalk App](#)
- [Interprofessional Education Collaborative](#)
Communication teamwork competencies
- [AAMC Telehealth Competencies](#)

Professionalism

- [American Board of Internal Medicine Foundation Charter on Medical Professionalism](#)
- Review the [specialty-specific Milestones](#)
- [ACGME AWARE Well-Being Resources](#)
These resources are accessed in the Learn at ACGME platform; they require registering for a free account.

Practice-Based Learning and Improvement and Systems-Based Practice

- Review an individualized learning plan template and write an initial draft
- [Evidence-Based Practice](#)
Review constructing a PICO(T) question using information from the University of Toronto
- Review I-PASS or another hand-off framework
- Understand the basics of reflective practice, motivation, and self-regulated learning
- Understand feedback and how to seek it
- Review [R2C2 framework](#) from Sargeant and colleagues at Dalhousie University.
 - [R2C2 framework for residents](#)
- Review the ADAPT model of Feedback, via the University of Washington: <https://sites.uw.edu/uwgme/adapt/>
- Read the book *Thanks for the Feedback* (by Stone and Heen), on how to **receive** feedback

AACOM Resources

Osteopathic Considerations for Core Entrustable Professional Activities (EPAs) for Entering Residency

Residency Readiness Resources

The AACOM Clinical Education Transformation Working Group compiled curriculum elements and resources for fourth-year medical students as they prepare to transition to residency. The resources include selected curriculum elements linked to Entrustable Professional Activities (EPAs) and resources to help students and faculty assess and review the content. The resources are organized by EPA, highlighting the minimum threshold a student is expected to achieve for each EPA, and where possible, resources are also included. Specific resources include: history and physical script; patient encounter rubric; EHR Facilitator Guide; Differential Diagnosis resources; understanding and applying information on laboratory data; urinalysis; interpreting the X-ray; pharmacology: how to write and understand prescriptions; 14-minute patient encounter; documentation example; guidelines for oral presentation; central line procedure and more. The focus of these resources is on the graduating physician, not specific to a specialty. Access the residency readiness resources.

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Varma, Bhavya, Leonid Mirson, Rachel Vanderberg, and Anna K. Donovan. "A Survey of Internal Medicine Interns Regarding the Most Useful Topics to Include in an Internal Medicine Track of a 'Get Ready for Residency Boot Camp' Course." *Medical Science Educator* 31, no. 1 (2020): 37-40.

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AAMC Resources

MedEdPORTAL Resources

- Bongers, K.S. and L.A. Heidemann. 2020. "Cross-Cover Curriculum for Senior Medical Students." 16: 10944.
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- Hartke, A. et al. 2019. "Building a Boot Camp: Pediatric Residency Preparatory Course Design Workshop and Tool Kit." 15: 10860.
- Katz, C. et al. 2020. "The Acculturation Toolkit: An Orientation for Pediatric International Medical Graduates Transitioning to the United States Medical System." 16: 10922.
- Lescinskas, E. et al. 2020. "Preparing for Medical Internship: A Case-Based Strategy to Teach Management of Common Overnight Calls to Students." 16: 10966.
- Pitre, C. 2016. "Diagnostic Reasoning Assessment Toolkit: Guided Reflection and Standardized Cases for At-Risk Final-Year Medical Students." 12: 10428.
- Tischendorf, J. et al. 2018. "Mock Paging and Consult Curriculum to Prepare Fourth-Year Medical Students for Medical Internship." 14: 10708.
- Wald, D. et al. 2016. "A Simulated Night on Call Experience for Graduating Medical Students." 12: 10483.

Additional AAMC Resources

- [Preparing for GME during 2020 building better curriculum season](#)
Three recorded sessions with strong resources within our new collection.
- [Managing Your Medical Career](#)
This helpful site also provides guidance on financial issues.

The following specialty-specific resources may have restricted availability and/or require a fee to access.

- [Surgery Prep Curriculum](#)
This was developed by general surgery program directors, but much of it will be applicable across surgical specialties.
- [OBGYN](#) via the Association of Professors of Obstetrics and Gynecology
This is largely knowledge-based prep.

ACGME Resources

The following resources can be found on the ACGME website or in the ACGME's online learning portal, [Learn at ACGME](#). Links are embedded below.

All Milestones resources can be found on the [Resources](#) page in the Milestones section of the ACGME website.

Milestones Guidebooks and Research Publications

- [Assessment Guidebook](#)
- [Clinical Competency Committee Guidebook](#) – Third edition
- [Implementation Guidebook](#)
- [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](#)
These short, 15-20-minute modules cover basics of assessment and the Milestones:
 - Assessment 101
 - A Milestones Primer
- [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 multisource feedback assessment tool that specifically targets interprofessional teamwork.

Resources for International Medical Graduates

- [ECFMG Well-Being Module](#)
Addresses common transitional and ongoing wellness challenges for foreign national medical graduates
- [ECFMG Pre-Arrival Information](#)
Addresses issues such as arrival in the United States, housing, transportation, and more
- [National Academy of Medicine \(NAM\)](#)
A robust library of resources for physicians working during COVID-19.
- [Interim Clinical Guidance](#)
The US Centers for Disease Control and Prevention guidance for the management of patients with confirmed coronavirus disease (COVID-19)
- Review data on [COVID-19 vaccinations around the world](#) (updated each morning Greenwich Mean Time)
- [US State Department](#)
This website contains up-to-date travel requirements

Well-Being Resources

AAMC

- Review this AAMC resource for [mindfulness in GME](#).
- [National Academy of Medicine \(NAM\) Action Collaborative on Clinician Well-Being and Resilience](#)

NAM has a portfolio of resources that can be helpful, including a Clinician Well-being Knowledge Hub (linked above).

- [WellConnect](#) (commercial)
The WellConnect site has several programs that medical schools and residencies may find helpful. There is a fee for their products.
- [Compendium of Resources related to Clinician Wellbeing](#)
- [New England Journal of Medicine: Preventing a Parallel Pandemic — A National Strategy to Protect Clinicians' Well-Being](#)
Article by Victor J. Dzau, MD; Darrell Kirch, MD; and Thomas Nasca, MD
- [Edge for Scholars Suicide Prevention Resource](#)
This includes content for medical students and residents/fellows

ACGME

- [Well-Being in the Time of COVID-19](#)
The ACGME developed COVID-19-specific well-being resources, including information about the AWARE suite of resources and app, available in Learn at ACGME.
- 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**
 - [Transition Challenges: Medical School to Residency and Residency to Practice](#)
 - [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.
 - [Episode 1](#)
 - [Episode 2](#)
 - [Episode 3](#)
 - [Episode 4](#)

Search "ACGME AWARE" on your chosen podcast platform for additional well-being-related podcasts from the ACGME. Other AWARE well-being resources can be found in [Learn at ACGME](#).

Financial Guidance

Many graduating students face substantial financial pressures. The following resources may be helpful to learners during the transition.

- [Federal Student Aid \(US Government\)](#)
This site provides information about coronavirus and forbearance for students, borrowers, and parents.
- [AACOM Chat with the Residents Post-Election and PSLF](#)
A useful webinar on public service loan forgiveness (PSLF)
- [AAMC Financial Information, Resource, Services and Tools \(FIRST\)](#)
This website contains useful resources for learners, including helpful tip sheets, videos, and webinars including:
 - [Videos on financial aid](#)
 - [A budget worksheet](#)

Transition Resources Offered by Program Director Groups

American College of Radiology – TEACHES Program

[Radiology-TEACHES](#) uses case vignettes integrated with the ACR Select® clinical decision support (CDS) to simulate the process of ordering imaging studies. ACR Select is a digital representation of the ACR Appropriateness Criteria® for diagnostic imaging. Learners receive evidence-based feedback at the virtual point of order entry, thereby better understanding appropriate imaging utilization and empowering them to reduce waste. Programs register for the program which provides modules based on clerkship rotation. Scores and reporting are available through the education portal.

Council on Resident Education in Obstetrics and Gynecology (CREOG)

- CREG has a [post-Match curriculum](#) for learner entering residency.

Association of Program Directors in Internal Medicine (APDIM)

- [Faculty Development Resources](#)
Resources for UME to GME transition
- [Resident-Led Handoffs Training for Interns: Online Versus Live Instruction with Subsequent Skills Assessment](#)
Published in 2017, incoming residents may find the overall themes helpful
- [IM Sub-Internship Curriculum 2.0](#)
This resource is part of the UME–UME Program Resources page and the curriculum highlights skills program directors wish to see in rising residents
- [Transition to Residency Course Educators](#)
Social media posts that share best practices to help incoming residents
- [In-Training: The Agora of the Medical Student Community](#)
These articles are written by medical students

Coalition for Physician Accountability

The [Coalition for Physician Accountability](#) created guidance for the UME to GME transition in May of 2020 that was updated in [January 2021](#) and can be helpful to programs.

A work group of the Coalition also answered [Frequently Asked Questions regarding away rotations](#).

Appendix: Preparing for Your Transition: Questions for a Self-Needs Assessment

The transition from medical school to residency is uniquely challenging this year due to the ongoing pandemic. We recognize that some portion of your medical school experience was likely disrupted. We recommend that prior to arriving at your new residency program you perform a self-needs assessment, ideally in partnership with a trusted medical school faculty member or advisor, to help ensure as smooth a transition as possible.

Questions for a Self-Needs Assessment

- Which educational experience in medical school was the *most* disrupted?
- Did the pandemic cause you to miss any of your clerkships or rotations? If yes, which ones?
- Which clinical experiences were done in a virtual setting vs. a clinical setting?
- Did the pandemic impact your ability to observe or perform procedures that are relevant to your specialty?
- In which procedures do you believe you need additional training due to missed opportunities given the circumstances?
- What concerns you most about the disruptions to your medical education with respect to beginning residency?
- How confident do you feel in your ability to look up evidence-based recommendations and access point-of-care diagnostic aids?
- Based on your medical education experiences, is there additional training or experiences that you would like to receive during the transition period to internship?
- Were you able to complete elective experiences germane to your specialty, and if so, what skills are you bringing with you from these experiences as you transition to internship?
- Based upon this reflection, what training schedule adjustments and learning resources or experiences would be of most assistance to you? How do these reflections change your learning plan?
- Did the pandemic interrupt your ability to complete rotations in certain clinical settings (ICU, inpatient, emergency department, outpatient clinic, etc.) during medical school?

Additional Recommendations

- Review the core clinical skills needed for your new residency.
- Perform review of your third- and fourth-year clinical experiences – identify strengths and potential gaps.
- Ask to be observed by faculty members, if possible, seeing several patients for some last-minute coaching on clinical skills.
- Review your specialty's Milestones (www.acgme.org, select the applicable specialty from the "Specialties" menu and then click on the Milestones link in the menu on the right-hand side of the page), as well as the Milestones Guidebook for Residents and Fellows, [here](#)
- Review the basics of proper patient hand-offs (i.e., daily sign-outs).
- Talk with your new program director before arriving for orientation. Consider sharing your needs assessment with your new program director.